

# Map Unit Description (Brief, Generated)

Madison County, Tennessee

[Minor map unit components are excluded from this report]

Map unit: Ar - Arents-Urban land complex

Component: Arents (50%)

*The Arents component makes up 50 percent of the map unit. Slopes are 1 to 5 percent. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is well drained. Available water to a depth of 60 inches is very low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Nonirrigated land capability classification is 2e. This soil does not meet hydric criteria.*

Component: Urban land (50%)

*Generated brief soil descriptions are created for major soil components. The Urban land is a miscellaneous area.*

Map unit: Ca - Calhoun and Henry silt loams

Component: Calhoun (50%)

*The Calhoun component makes up 50 percent of the map unit. Slopes are 0 to 1 percent. This component is on -- Error in Exists On --. The parent material consists of loess. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is poorly drained. Water movement in the most restrictive layer is moderately low. Available water to a depth of 60 inches is very high. Shrink-swell potential is moderate. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 6 inches during January, February, March, April, December. Organic matter content in the surface horizon is about 2 percent. Nonirrigated land capability classification is 3w. This soil meets hydric criteria.*

Component: Henry (50%)

*The Henry component makes up 50 percent of the map unit. Slopes are 0 to 2 percent. This component is on stream terraces on plains. The parent material consists of loess. Depth to a root restrictive layer, fragipan, is 18 to 37 inches. The natural drainage class is poorly drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 12 inches during January, February, March, April, December. Organic matter content in the surface horizon is about 1 percent. Nonirrigated land capability classification is 3w. This soil meets hydric criteria.*

Map unit: Co - Calloway silt loam

Component: Calloway (100%)

*The Calloway component makes up 100 percent of the map unit. Slopes are 0 to 2 percent. This component is on loess hills on plains. The parent material consists of loess. Depth to a root restrictive layer, fragipan, is 18 to 30 inches. The natural drainage class is somewhat poorly drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 18 inches during January, February, March, April, December. Organic matter content in the surface horizon is about 1 percent. Nonirrigated land capability classification is 2e. This soil does not meet hydric criteria.*

Map unit: Cs - Collins silt loam

Component: Collins (100%)

*The Collins component makes up 100 percent of the map unit. Slopes are 0 to 2 percent. This component is on flood plains on plains. The parent material consists of silty alluvium. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is moderately well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is very high. Shrink-swell potential is low. This soil is frequently flooded. It is not ponded. A seasonal zone of water saturation is at 26 inches during January, February, March, April, December. Organic matter content in the surface horizon is about 1 percent. Nonirrigated land capability classification is 2w. This soil does not meet hydric criteria.*

## Map Unit Description (Brief, Generated)

Madison County, Tennessee

Map unit: DuB - Dulac silt loam, 2 to 5 percent slopes

Component: Dulac (100%)

*The Dulac component makes up 100 percent of the map unit. Slopes are 2 to 5 percent. This component is on interfluvial areas on coastal plains. The parent material consists of loess over clayey marine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is moderately well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 18 inches during January, February, March, April, December. Organic matter content in the surface horizon is about 1 percent. Nonirrigated land capability classification is 2e. This soil does not meet hydric criteria.*

Map unit: DuB3 - Dulac silt loam, 2 to 5 percent slopes, severely eroded

Component: Dulac (100%)

*The Dulac component makes up 100 percent of the map unit. Slopes are 2 to 5 percent. This component is on interfluvial areas on coastal plains. The parent material consists of loess over clayey marine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is moderately well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 14 inches during January, February, March, April, December. Organic matter content in the surface horizon is about 1 percent. Nonirrigated land capability classification is 3e. This soil does not meet hydric criteria.*

Map unit: DuC3 - Dulac silt loam, 5 to 8 percent slopes, severely eroded

Component: Dulac (100%)

*The Dulac component makes up 100 percent of the map unit. Slopes are 5 to 8 percent. This component is on hillslopes on coastal plains. The parent material consists of loess over clayey marine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is moderately well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 14 inches during January, February, March, April, December. Organic matter content in the surface horizon is about 1 percent. Nonirrigated land capability classification is 4e. This soil does not meet hydric criteria.*

Map unit: DuD3 - Dulac silt loam, 8 to 12 percent slopes, severely eroded

Component: Dulac (100%)

*The Dulac component makes up 100 percent of the map unit. Slopes are 8 to 12 percent. This component is on hillslopes on coastal plains. The parent material consists of loess over clayey marine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is moderately well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 14 inches during January, February, March, April, December. Organic matter content in the surface horizon is about 1 percent. Nonirrigated land capability classification is 6e. This soil does not meet hydric criteria.*

Map unit: EuE - Eustis sandy loam, 12 to 35 percent slopes

Component: Eustis (100%)

*The Eustis component makes up 100 percent of the map unit. Slopes are 12 to 35 percent. This component is on hillslopes on coastal plains. The parent material consists of sandy marine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is somewhat excessively drained. Water movement in the most restrictive layer is high. Available water to a depth of 60 inches is low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 1 percent. Nonirrigated land capability classification is 7s. This soil does not meet hydric criteria.*

## Map Unit Description (Brief, Generated)

Madison County, Tennessee

Map unit: Fa - Falaya silt loam

Component: Falaya (91%)

*The Falaya component makes up 91 percent of the map unit. Slopes are 0 to 2 percent. This component is on flood plains on plains. The parent material consists of silty alluvium. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is somewhat poorly drained. Water movement in the most restrictive layer is moderately low. Available water to a depth of 60 inches is very high. Shrink-swell potential is low. This soil is frequently flooded. It is not ponded. A seasonal zone of water saturation is at 18 inches during January, February, March, April, December. Organic matter content in the surface horizon is about 2 percent. Nonirrigated land capability classification is 2w. This soil does not meet hydric criteria.*

Map unit: GrA - Grenada silt loam, 0 to 2 percent slopes

Component: Grenada (100%)

*The Grenada component makes up 100 percent of the map unit. Slopes are 0 to 2 percent. This component is on loess hills on plains. The parent material consists of loess. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is moderately well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is moderate. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 20 inches during January, February, March, April, December. Organic matter content in the surface horizon is about 1 percent. Nonirrigated land capability classification is 2e. This soil does not meet hydric criteria.*

Map unit: GrB - Grenada silt loam, 2 to 5 percent slopes

Component: Grenada (100%)

*The Grenada component makes up 100 percent of the map unit. Slopes are 2 to 5 percent. This component is on loess hills on plains. The parent material consists of loess. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is moderately well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is moderate. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 20 inches during January, February, March, April, December. Organic matter content in the surface horizon is about 1 percent. Nonirrigated land capability classification is 2e. This soil does not meet hydric criteria.*

Map unit: GrB3 - Grenada silt loam, 2 to 5 percent slopes, severely eroded

Component: Grenada (100%)

*The Grenada component makes up 100 percent of the map unit. Slopes are 2 to 5 percent. This component is on loess hills on plains. The parent material consists of loess. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is moderately well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 18 inches during January, February, March, April, December. Organic matter content in the surface horizon is about 1 percent. Nonirrigated land capability classification is 3e. This soil does not meet hydric criteria.*

Map unit: GrC3 - Grenada silt loam, 5 to 8 percent slopes, severely eroded

Component: Grenada (100%)

*The Grenada component makes up 100 percent of the map unit. Slopes are 5 to 8 percent. This component is on loess hills on plains. The parent material consists of loess. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is moderately well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 18 inches during January, February, March, April, December. Organic matter content in the surface horizon is about 1 percent. Nonirrigated land capability classification is 4e. This soil does not meet hydric criteria.*

## Map Unit Description (Brief, Generated)

Madison County, Tennessee

Map unit: lu - luka fine sandy loam

Component: luka (100%)

*The luka component makes up 100 percent of the map unit. Slopes are 0 to 2 percent. This component is on flood plains on coastal plains. The parent material consists of loamy alluvium. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is moderately well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is moderate. Shrink-swell potential is low. This soil is frequently flooded. It is not ponded. A seasonal zone of water saturation is at 30 inches during January, February, March, April, December. Organic matter content in the surface horizon is about 1 percent. Nonirrigated land capability classification is 2w. This soil does not meet hydric criteria.*

Map unit: LeB - Lexington silt loam, 2 to 5 percent slopes

Component: Lexington (100%)

*The Lexington component makes up 100 percent of the map unit. Slopes are 2 to 5 percent. This component is on interfluves on coastal plains. The parent material consists of loess over loamy marine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is high. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 1 percent. Nonirrigated land capability classification is 2e. This soil does not meet hydric criteria.*

Map unit: LeB3 - Lexington silt loam, 2 to 5 percent slopes, severely eroded

Component: Lexington (100%)

*The Lexington component makes up 100 percent of the map unit. Slopes are 2 to 5 percent. This component is on interfluves on coastal plains. The parent material consists of loess over loamy marine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is moderate. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 1 percent. Nonirrigated land capability classification is 3e. This soil does not meet hydric criteria.*

Map unit: LeC - Lexington silt loam, 5 to 8 percent slopes

Component: Lexington (100%)

*The Lexington component makes up 100 percent of the map unit. Slopes are 5 to 8 percent. This component is on hillslopes on coastal plains. The parent material consists of loess over loamy marine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is moderate. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 1 percent. Nonirrigated land capability classification is 3e. This soil does not meet hydric criteria.*

Map unit: LeC3 - Lexington silt loam, 5 to 8 percent slopes, severely eroded

Component: Lexington (100%)

*The Lexington component makes up 100 percent of the map unit. Slopes are 5 to 8 percent. This component is on hillslopes on coastal plains. The parent material consists of loess over loamy marine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is moderate. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 1 percent. Nonirrigated land capability classification is 4e. This soil does not meet hydric criteria.*

## Map Unit Description (Brief, Generated)

Madison County, Tennessee

Map unit: LeD - Lexington silt loam, 8 to 12 percent slopes

Component: Lexington (100%)

*The Lexington component makes up 100 percent of the map unit. Slopes are 8 to 12 percent. This component is on hillslopes on coastal plains. The parent material consists of loess over loamy marine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is moderate. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 1 percent. Nonirrigated land capability classification is 4e. This soil does not meet hydric criteria.*

Map unit: LeD3 - Lexington silt loam, 8 to 12 percent slopes, severely eroded

Component: Lexington (100%)

*The Lexington component makes up 100 percent of the map unit. Slopes are 8 to 12 percent. This component is on hillslopes on coastal plains. The parent material consists of loess over loamy marine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is moderate. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 1 percent. Nonirrigated land capability classification is 6e. This soil does not meet hydric criteria.*

Map unit: LeE - Lexington silt loam, 12 to 20 percent slopes

Component: Lexington (100%)

*The Lexington component makes up 100 percent of the map unit. Slopes are 12 to 20 percent. This component is on hillslopes on coastal plains. The parent material consists of loess over loamy marine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is moderate. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 1 percent. Nonirrigated land capability classification is 6e. This soil does not meet hydric criteria.*

Map unit: LgC - Lexington-Urban land complex, 1 to 12 percent slopes

Component: Lexington (50%)

*The Lexington component makes up 50 percent of the map unit. Slopes are 1 to 12 percent. This component is on hillslopes on coastal plains. The parent material consists of loess over loamy marine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is high. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 1 percent. Nonirrigated land capability classification is 3e. This soil does not meet hydric criteria.*

Component: Urban land (50%)

*Generated brief soil descriptions are created for major soil components. The Urban land is a miscellaneous area.*

Map unit: LmE3 - Lexington and Smithdale soils, 10 to 30 percent slopes, severely eroded

Component: Lexington (50%)

*The Lexington component makes up 50 percent of the map unit. Slopes are 10 to 20 percent. This component is on hillslopes on coastal plains. The parent material consists of loess over loamy marine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is moderate. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 1 percent. Nonirrigated land capability classification is 6e. This soil does not meet hydric criteria.*

## Map Unit Description (Brief, Generated)

Madison County, Tennessee

Map unit: LmE3 - Lexington and Smithdale soils, 10 to 30 percent slopes, severely eroded

Component: Smithdale (50%)

*The Smithdale component makes up 50 percent of the map unit. Slopes are 15 to 30 percent. This component is on hillslopes on coastal plains. The parent material consists of loamy marine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is high. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 1 percent. Nonirrigated land capability classification is 7e. This soil does not meet hydric criteria.*

Map unit: LoB - Loring silt loam, 2 to 5 percent slopes

Component: Loring (100%)

*The Loring component makes up 100 percent of the map unit. Slopes are 2 to 5 percent. This component is on loess hills on plains. The parent material consists of loess. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is moderately well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is moderate. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 24 inches during January, February, March, April, December. Organic matter content in the surface horizon is about 1 percent. Nonirrigated land capability classification is 2e. This soil does not meet hydric criteria.*

Map unit: LoB3 - Loring silt loam, 2 to 5 percent slopes, severely eroded

Component: Loring (100%)

*The Loring component makes up 100 percent of the map unit. Slopes are 2 to 5 percent. This component is on loess hills on plains. The parent material consists of loess. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is moderately well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is moderate. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 24 inches during January, February, March, April, December. Organic matter content in the surface horizon is about 1 percent. Nonirrigated land capability classification is 3e. This soil does not meet hydric criteria.*

Map unit: LoC3 - Loring silt loam, 5 to 8 percent slopes, severely eroded

Component: Loring (100%)

*The Loring component makes up 100 percent of the map unit. Slopes are 5 to 8 percent. This component is on loess hills on plains. The parent material consists of loess. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is moderately well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 18 inches during January, February, March, April, December. Organic matter content in the surface horizon is about 1 percent. Nonirrigated land capability classification is 4e. This soil does not meet hydric criteria.*

Map unit: Ma - Mantachie fine sandy loam

Component: Mantachie (100%)

*The Mantachie component makes up 100 percent of the map unit. Slopes are 0 to 2 percent. This component is on flood plains on coastal plains. The parent material consists of loamy alluvium. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is somewhat poorly drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is high. Shrink-swell potential is low. This soil is occasionally flooded. It is not ponded. A seasonal zone of water saturation is at 15 inches during January, February, March, April, December. Organic matter content in the surface horizon is about 2 percent. Nonirrigated land capability classification is 2w. This soil does not meet hydric criteria.*

## Map Unit Description (Brief, Generated)

Madison County, Tennessee

Map unit: MeA - Memphis silt loam, 0 to 2 percent slopes

Component: Memphis (100%)

*The Memphis component makes up 100 percent of the map unit. Slopes are 0 to 2 percent. This component is on stream terraces on plains. The parent material consists of loess. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is very high. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 2 percent. Nonirrigated land capability classification is 1. This soil does not meet hydric criteria.*

Map unit: MeB - Memphis silt loam, 2 to 5 percent slopes

Component: Memphis (100%)

*The Memphis component makes up 100 percent of the map unit. Slopes are 2 to 5 percent. This component is on loess hills on plains. The parent material consists of loess. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is very high. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 2 percent. Nonirrigated land capability classification is 2e. This soil does not meet hydric criteria.*

Map unit: MeB2 - Memphis silt loam, 2 to 5 percent slopes, eroded

Component: Memphis (100%)

*The Memphis component makes up 100 percent of the map unit. Slopes are 2 to 5 percent. This component is on loess hills on plains. The parent material consists of loess. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is very high. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 2 percent. Nonirrigated land capability classification is 2e. This soil does not meet hydric criteria.*

Map unit: MeC3 - Memphis silt loam, 5 to 8 percent slopes, severely eroded

Component: Memphis (100%)

*The Memphis component makes up 100 percent of the map unit. Slopes are 5 to 8 percent. This component is on loess hills on plains. The parent material consists of loess. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is very high. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 2 percent. Nonirrigated land capability classification is 4e. This soil does not meet hydric criteria.*

Map unit: Oc - Ochlockonee fine sandy loam

Component: Ochlockonee (100%)

*The Ochlockonee component makes up 100 percent of the map unit. Slopes are 0 to 2 percent. This component is on flood plains on coastal plains. The parent material consists of loamy alluvium. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is moderate. Shrink-swell potential is low. This soil is frequently flooded. It is not ponded. A seasonal zone of water saturation is at 48 inches during January, February, March, April, December. Organic matter content in the surface horizon is about 1 percent. Nonirrigated land capability classification is 2w. This soil does not meet hydric criteria.*

## Map Unit Description (Brief, Generated)

Madison County, Tennessee

Map unit: PrB - Providence silt loam, 2 to 5 percent slopes

Component: Providence (100%)

*The Providence component makes up 100 percent of the map unit. Slopes are 2 to 5 percent. This component is on interfluvial coastal plains. The parent material consists of loess over loamy marine deposits. Depth to a root restrictive layer, fragipan, is 18 to 38 inches. The natural drainage class is moderately well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is moderate. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 18 inches during January, February, March, April, December. Organic matter content in the surface horizon is about 2 percent. Nonirrigated land capability classification is 2e. This soil does not meet hydric criteria.*

Map unit: PrC3 - Providence silt loam, 5 to 8 percent slopes, severely eroded

Component: Providence (100%)

*The Providence component makes up 100 percent of the map unit. Slopes are 5 to 8 percent. This component is on hillslopes on coastal plains. The parent material consists of loess over loamy marine deposits. Depth to a root restrictive layer, fragipan, is 18 to 38 inches. The natural drainage class is moderately well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 18 inches during January, February, March, April, December. Organic matter content in the surface horizon is about 2 percent. Nonirrigated land capability classification is 4e. This soil does not meet hydric criteria.*

Map unit: PrD3 - Providence silt loam, 8 to 12 percent slopes, severely eroded

Component: Providence (100%)

*The Providence component makes up 100 percent of the map unit. Slopes are 8 to 12 percent. This component is on hillslopes on coastal plains. The parent material consists of loess over loamy marine deposits. Depth to a root restrictive layer, fragipan, is 18 to 38 inches. The natural drainage class is moderately well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 14 inches during January, February, March, April, December. Organic matter content in the surface horizon is about 2 percent. Nonirrigated land capability classification is 6e. This soil does not meet hydric criteria.*

Map unit: SmE - Smithdale soils, 10 to 20 percent slopes

Component: Smithdale (100%)

*The Smithdale component makes up 100 percent of the map unit. Slopes are 10 to 20 percent. This component is on hillslopes on coastal plains. The parent material consists of loamy marine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is high. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 1 percent. Nonirrigated land capability classification is 6e. This soil does not meet hydric criteria.*

Map unit: SmF - Smithdale soils, 20 to 30 percent slopes

Component: Smithdale (100%)

*The Smithdale component makes up 100 percent of the map unit. Slopes are 20 to 30 percent. This component is on hillslopes on coastal plains. The parent material consists of loamy marine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is high. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 1 percent. Nonirrigated land capability classification is 7e. This soil does not meet hydric criteria.*

## Map Unit Description (Brief, Generated)

Madison County, Tennessee

Map unit: SwD - Sweatman soils, 5 to 12 percent slopes

Component: Sweatman (100%)

*The Sweatman component makes up 100 percent of the map unit. Slopes are 5 to 12 percent. This component is on hillslopes on coastal plains. The parent material consists of clayey marine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is high. Shrink-swell potential is moderate. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 1 percent. Nonirrigated land capability classification is 6e. This soil does not meet hydric criteria.*

Map unit: SwE - Sweatman soils, 12 to 25 percent slopes

Component: Sweatman (100%)

*The Sweatman component makes up 100 percent of the map unit. Slopes are 12 to 25 percent. This component is on hillslopes on coastal plains. The parent material consists of clayey marine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is high. Shrink-swell potential is moderate. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 1 percent. Nonirrigated land capability classification is 7e. This soil does not meet hydric criteria.*

Map unit: Vk - Vicksburg silt loam

Component: Vicksburg (100%)

*The Vicksburg component makes up 100 percent of the map unit. Slopes are 0 to 2 percent. This component is on flood plains on plains. The parent material consists of silty alluvium. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is very high. Shrink-swell potential is low. This soil is rarely flooded. It is not ponded. A seasonal zone of water saturation is at 50 inches during January, February, March, April, December. Organic matter content in the surface horizon is about 2 percent. Nonirrigated land capability classification is 2w. This soil does not meet hydric criteria.*

Map unit: Wa - Waverly silt loam

Component: Waverly (100%)

*The Waverly component makes up 100 percent of the map unit. Slopes are 0 to 2 percent. This component is on flood plains on plains. The parent material consists of silty alluvium. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is poorly drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is very high. Shrink-swell potential is low. This soil is frequently flooded. It is not ponded. A seasonal zone of water saturation is at 6 inches during January, February, March, April, May, June, November, December. Organic matter content in the surface horizon is about 2 percent. Nonirrigated land capability classification is 5w. This soil meets hydric criteria.*

Map unit: Wf - Waverly silt loam, frequently flooded

Component: Waverly (100%)

*The Waverly component makes up 100 percent of the map unit. Slopes are 0 to 2 percent. This component is on flood plains on plains. The parent material consists of silty alluvium. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is poorly drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is very high. Shrink-swell potential is low. This soil is frequently flooded. It is frequently ponded. A seasonal zone of water saturation is at 6 inches during January, February, March, April, May, June, November, December. Organic matter content in the surface horizon is about 2 percent. Nonirrigated land capability classification is 5w. This soil meets hydric criteria.*

## Map Unit Description (Brief, Generated)

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 in this report, 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.

The Map Unit Description (Brief, Generated) report displays a generated description of the major soils that occur in a map unit. Descriptions of non-soil (miscellaneous areas) and minor map unit components are not included. This description is generated from the underlying soil attribute data.

Additional information about the map units described in this report is available in other Soil Data Mart reports, which give properties of the soils and the limitations, capabilities, and potentials for many uses. Also, the narratives that accompany the Soil Data Mart reports define some of the properties included in the map unit descriptions.