



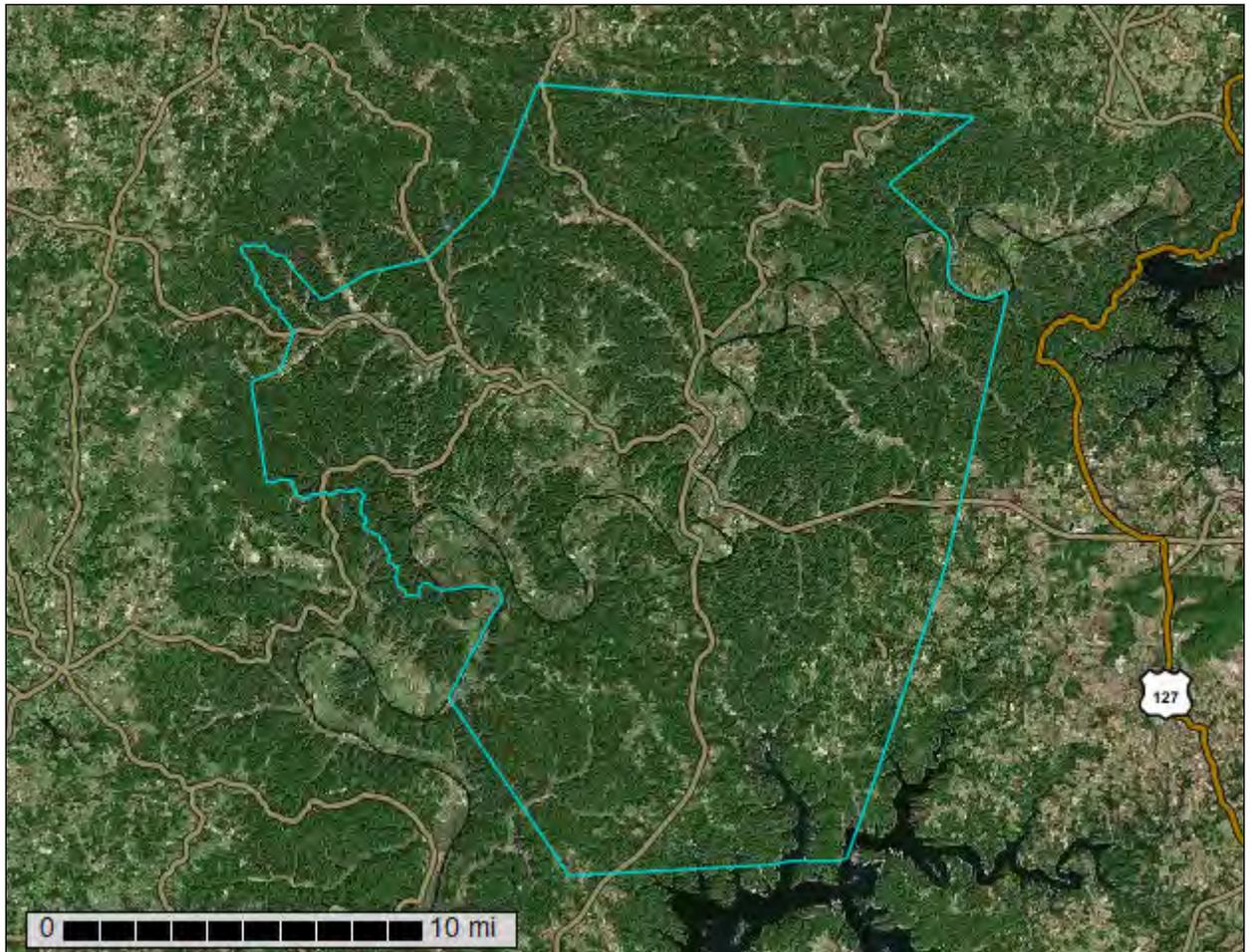
United States
Department of
Agriculture

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 **Cumberland County, Kentucky**



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.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (<http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/>) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (<https://offices.sc.egov.usda.gov/locator/app?agency=nrcs>) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951).

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 Web Soil Survey, the site for official soil survey information.

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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

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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.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

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

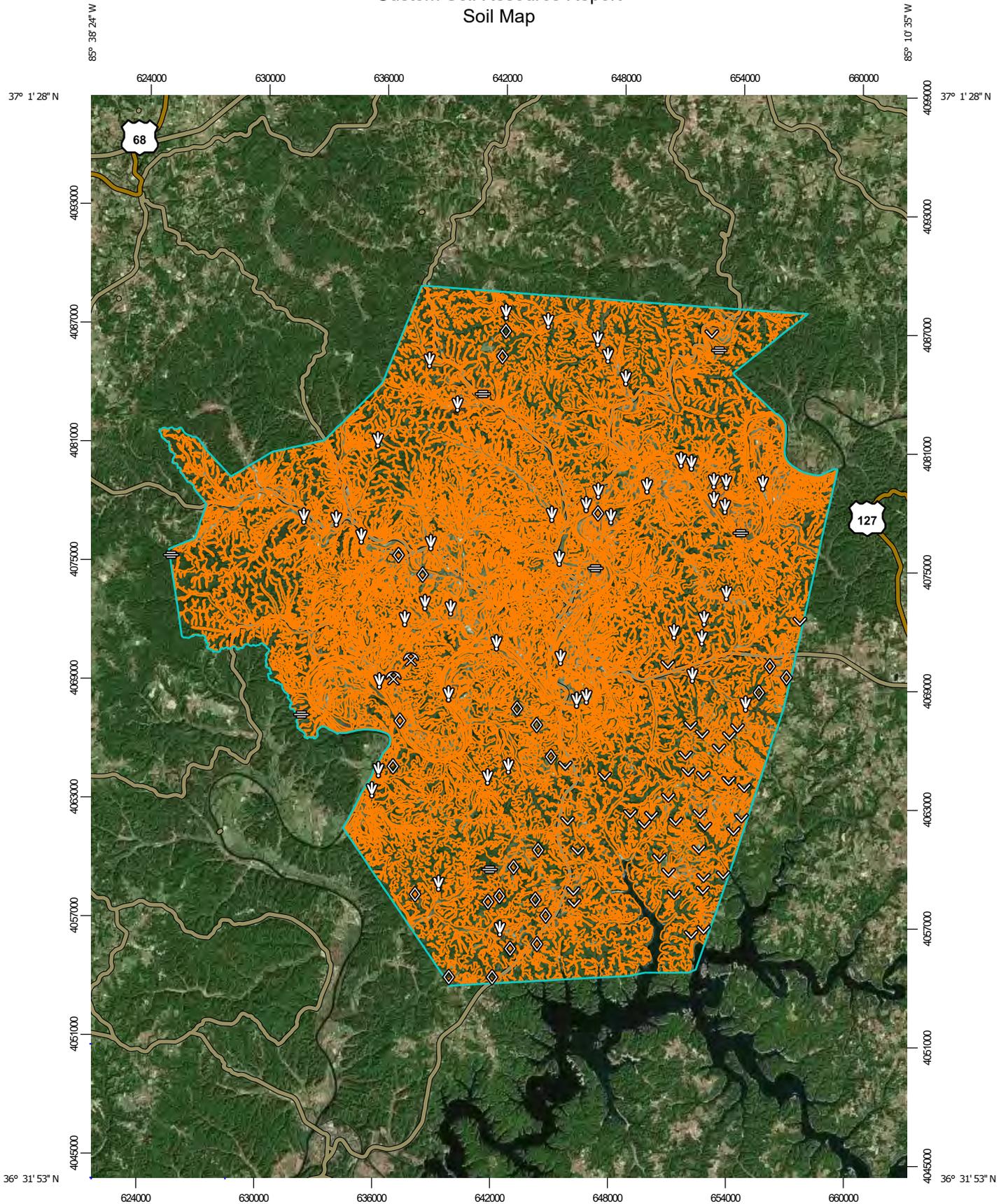
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identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

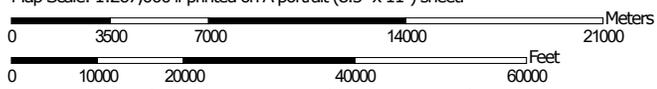
Soil Map

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



Map Scale: 1:267,000 if printed on A portrait (8.5" x 11") sheet.



Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 16N WGS84

MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)

Soils

 Soil Map Unit Polygons

 Soil Map Unit Lines

 Soil Map Unit Points

Special Point Features

-  Blowout
-  Borrow Pit
-  Clay Spot
-  Closed Depression
-  Gravel Pit
-  Gravelly Spot
-  Landfill
-  Lava Flow
-  Marsh or swamp
-  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

Water Features

 Streams and Canals

Transportation

-  Rails
-  Interstate Highways
-  US Routes
-  Major Roads
-  Local Roads

Background

 Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:20,000.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
 Web Soil Survey URL:
 Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

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

Soil Survey Area: Cumberland County, Kentucky
 Survey Area Data: Version 16, Sep 8, 2021

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Jan 1, 1999—Dec 31, 2003

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

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
CaD2	Caneyville-Lonewood complex, rocky, 6 to 25 percent slopes, eroded	8,049.5	4.0%
Cg	Chagrin loam, occasionally flooded	5,339.1	2.7%
CrB	Crider silt loam, 2 to 6 percent slopes	153.6	0.1%
CrC2	Crider silt loam, 6 to 12 percent slopes, eroded	250.5	0.1%
CyF2	Cynthiana-Faywood-Rock outcrop complex, 12 to 50 percent slopes, eroded	9,903.9	5.0%
DeB	Dewey loam, 2 to 6 percent slopes	248.8	0.1%
DeC2	Dewey loam, 6 to 12 percent slopes, eroded	4,247.1	2.1%
DeD2	Dewey loam, 12 to 25 percent slopes, eroded	3,861.5	1.9%
DmD	Dewey-Lonewood complex, 12 to 25 percent slopes	9,937.2	5.0%
Eg	Egam silty clay loam, rarely flooded	120.2	0.1%
EkA	Elk silt loam, 0 to 2 percent slopes	288.1	0.1%
EkB	Elk silt loam, 2 to 6 percent slopes	2,266.0	1.1%
EkC2	Elk silt loam, 6 to 12 percent slopes, eroded	884.2	0.4%
EkD2	Elk silt loam, 12 to 25 percent slopes, eroded	116.7	0.1%
FcC2	Faywood-Cynthiana complex, rocky, 6 to 12 percent slopes, eroded	514.3	0.3%
FcD2	Faywood-Cynthiana complex, rocky, 12 to 25 percent slopes, eroded	2,240.0	1.1%
GcF	Garmon-Carpenter-Newbern complex, rocky, 30 to 65 percent slopes	80,012.5	40.2%
Gr	Grigsby fine sandy loam	915.9	0.5%
HoB	Holston silt loam, 2 to 6 percent slopes	997.9	0.5%
HoC2	Holston silt loam, 6 to 12 percent slopes, eroded	1,533.4	0.8%

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Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
HsD2	Holston-Waynesboro complex, 12 to 25 percent slopes, eroded	1,618.6	0.8%
Hu	Huntington silt loam, overwash	1,965.3	1.0%
La	Lawrence silt loam, 0 to 4 percent slopes	933.1	0.5%
LdB	Lonewood silt loam, 2 to 6 percent slopes	601.3	0.3%
LdC2	Lonewood silt loam, 6 to 12 percent slopes, eroded	3,140.6	1.6%
LoB	Lowell silt loam, 2 to 6 percent slopes	193.0	0.1%
LoC2	Lowell silt loam, 6 to 12 percent slopes, eroded	1,275.8	0.6%
LoD2	Lowell silt loam, 12 to 25 percent slopes, eroded	1,282.7	0.6%
Me	Melvin silt loam, occasionally flooded	835.5	0.4%
MnB	Monongahela silt loam, 2 to 6 percent slopes	2,214.6	1.1%
MnC2	Monongahela silt loam, 6 to 12 percent slopes, eroded	207.9	0.1%
NeD	Nelse fine sandy loam, 10 to 25 percent slopes, frequently flooded	2,165.7	1.1%
Nk	Newark silt loam, occasionally flooded	1,677.8	0.8%
NrE	Newbern-Garmon complex, very rocky, 12 to 30 percent slopes	17,304.0	8.7%
ReC2	Renox gravelly loam, 6 to 12 percent slopes, eroded	4,691.8	2.4%
ReD2	Renox gravelly loam, 12 to 25 percent slopes, eroded	807.2	0.4%
RfF2	Renox-Faywood complex, 20 to 50 percent slopes, eroded	10,175.4	5.1%
RoF3	Rohan channery silt loam, 20 to 50 percent slopes, gullied	4,162.4	2.1%
Se	Sensabaugh gravelly loam, 0 to 4 percent slopes, occasionally flooded	3,792.3	1.9%
SgB	Sensabaugh gravelly loam, 2 to 6 percent slopes	1,672.4	0.8%
St	Stokly sandy loam, occasionally flooded	316.5	0.2%
TeB	Teddy loam, 1 to 6 percent slopes	370.7	0.2%
ToC2	Trappist silt loam, 6 to 12 percent slopes, eroded	123.9	0.1%

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Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
TpD2	Trappist-Rohan complex, rocky, 12 to 25 percent slopes, eroded	219.4	0.1%
TrB	Trimble cobbly silt loam, 2 to 6 percent slopes	74.5	0.0%
TrC2	Trimble cobbly silt loam, 6 to 12 percent slopes, eroded	835.0	0.4%
TrD2	Trimble cobbly silt loam, 12 to 25 percent slopes, eroded	546.1	0.3%
W	Water	3,050.2	1.5%
WaC2	Waynesboro loam, 6 to 12 percent slopes, eroded	753.0	0.4%
Totals for Area of Interest		198,887.1	100.0%

Map Unit Descriptions

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

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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.

Cumberland County, Kentucky

CaD2—Caneyville-Lonewood complex, rocky, 6 to 25 percent slopes, eroded

Map Unit Setting

National map unit symbol: lht6
Elevation: 650 to 1,110 feet
Mean annual precipitation: 43 to 58 inches
Mean annual air temperature: 45 to 68 degrees F
Frost-free period: 159 to 199 days
Farmland classification: Not prime farmland

Map Unit Composition

Caneyville and similar soils: 40 percent
Lonewood and similar soils: 35 percent
Minor components: 25 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Caneyville

Setting

Landform: Hills
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Clayey residuum weathered from limestone

Typical profile

H1 - 0 to 10 inches: silt loam
H2 - 10 to 19 inches: loam
H3 - 19 to 36 inches: silty clay
R - 36 to 46 inches: bedrock

Properties and qualities

Slope: 6 to 25 percent
Depth to restrictive feature: 20 to 40 inches to lithic bedrock
Drainage class: Well drained
Runoff class: High
Capacity of the most limiting layer to transmit water (Ksat): Moderately high (0.20 to 0.60 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Low (about 5.8 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 6s
Hydrologic Soil Group: C
Hydric soil rating: No

Description of Lonewood

Setting

Landform: Hills

Landform position (two-dimensional): Backslope

Landform position (three-dimensional): Side slope

Down-slope shape: Convex

Across-slope shape: Convex

Parent material: Fine-loamy noncalcareous loess over residuum weathered from sandstone and shale and/or siltstone

Typical profile

H1 - 0 to 14 inches: silt loam

H2 - 14 to 34 inches: clay loam

H3 - 34 to 59 inches: gravelly sandy loam

Cr - 59 to 69 inches: bedrock

Properties and qualities

Slope: 6 to 25 percent

Depth to restrictive feature: 40 to 72 inches to lithic bedrock

Drainage class: Well drained

Runoff class: High

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 supply, 0 to 60 inches: Moderate (about 8.1 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 4e

Hydrologic Soil Group: B

Hydric soil rating: No

Minor Components

Deep slowly permeable soils

Percent of map unit: 8 percent

Hydric soil rating: No

Dewey

Percent of map unit: 8 percent

Hydric soil rating: No

Very deep slowly permeable soils

Percent of map unit: 8 percent

Hydric soil rating: No

Rock outcrop

Percent of map unit: 1 percent

Hydric soil rating: No

Cg—Chagrin loam, occasionally flooded

Map Unit Setting

National map unit symbol: lht7
Elevation: 520 to 950 feet
Mean annual precipitation: 43 to 58 inches
Mean annual air temperature: 45 to 68 degrees F
Frost-free period: 159 to 199 days
Farmland classification: All areas are prime farmland

Map Unit Composition

Chagrin, occasionally flooded, and similar soils: 90 percent
Minor components: 10 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Chagrin, Occasionally Flooded

Setting

Landform: Flood plains
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Mixed fine-loamy alluvium

Typical profile

H1 - 0 to 10 inches: loam
H2 - 10 to 41 inches: loam
H3 - 41 to 75 inches: stratified gravelly fine sand to silt loam

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Low
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: About 48 to 72 inches
Frequency of flooding: NoneOccasional
Frequency of ponding: None
Available water supply, 0 to 60 inches: High (about 10.1 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 2w
Hydrologic Soil Group: B
Hydric soil rating: No

Minor Components

Newark

Percent of map unit: 2 percent
Landform: Flood plains
Hydric soil rating: No

Egam

Percent of map unit: 2 percent
Landform: Flood plains
Hydric soil rating: No

Grigsby

Percent of map unit: 2 percent
Landform: Flood plains
Hydric soil rating: No

Sensabaugh

Percent of map unit: 2 percent
Landform: Flood plains
Hydric soil rating: No

Melvin, occasionally flooded

Percent of map unit: 2 percent
Landform: Flood plains
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: Yes

CrB—Crider silt loam, 2 to 6 percent slopes

Map Unit Setting

National map unit symbol: 2v5b2
Elevation: 350 to 1,340 feet
Mean annual precipitation: 39 to 60 inches
Mean annual air temperature: 44 to 69 degrees F
Frost-free period: 154 to 219 days
Farmland classification: All areas are prime farmland

Map Unit Composition

Crider and similar soils: 88 percent
Minor components: 12 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Crider

Setting

Landform: Ridges
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Interfluve
Down-slope shape: Linear

Custom Soil Resource Report

Across-slope shape: Linear

Parent material: Thin fine-silty noncalcareous loess over clayey residuum weathered from limestone

Typical profile

Ap - 0 to 8 inches: silt loam

Bt1 - 8 to 38 inches: silt loam

2Bt2 - 38 to 100 inches: clay

2R - 100 to 110 inches: bedrock

Properties and qualities

Slope: 2 to 6 percent

Depth to restrictive feature: 59 to 157 inches to lithic bedrock

Drainage class: Well drained

Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately high (0.00 to 0.20 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Available water supply, 0 to 60 inches: High (about 11.3 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 2e

Hydrologic Soil Group: B

Hydric soil rating: No

Minor Components

Baxter

Percent of map unit: 5 percent

Landform: Ridges

Landform position (two-dimensional): Summit

Landform position (three-dimensional): Interfluve

Down-slope shape: Linear

Across-slope shape: Linear

Hydric soil rating: No

Bedford

Percent of map unit: 4 percent

Landform: Ridges

Landform position (two-dimensional): Summit

Landform position (three-dimensional): Interfluve

Down-slope shape: Linear

Across-slope shape: Linear

Hydric soil rating: No

Pembroke

Percent of map unit: 3 percent

Landform: Ridges

Landform position (two-dimensional): Summit

Landform position (three-dimensional): Interfluve

Down-slope shape: Linear

Across-slope shape: Linear

Hydric soil rating: No

CrC2—Crider silt loam, 6 to 12 percent slopes, eroded

Map Unit Setting

National map unit symbol: 2v5b3

Elevation: 370 to 1,120 feet

Mean annual precipitation: 39 to 60 inches

Mean annual air temperature: 44 to 69 degrees F

Frost-free period: 154 to 219 days

Farmland classification: Farmland of statewide importance

Map Unit Composition

Crider and similar soils: 85 percent

Minor components: 15 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Crider

Setting

Landform: Ridges

Landform position (two-dimensional): Summit

Landform position (three-dimensional): Interfluve

Down-slope shape: Linear

Across-slope shape: Linear

Parent material: Thin fine-silty noncalcareous loess over clayey residuum weathered from limestone

Typical profile

Ap - 0 to 5 inches: silt loam

Bt1 - 5 to 38 inches: silt loam

2Bt2 - 38 to 100 inches: clay

2R - 100 to 110 inches: bedrock

Properties and qualities

Slope: 6 to 12 percent

Depth to restrictive feature: 59 to 157 inches to lithic bedrock

Drainage class: Well drained

Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately high (0.00 to 0.20 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Available water supply, 0 to 60 inches: High (about 11.3 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 3e

Hydrologic Soil Group: B

Hydric soil rating: No

Minor Components

Baxter

Percent of map unit: 7 percent
Landform: Ridges
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Interfluve
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: No

Pembroke

Percent of map unit: 3 percent
Landform: Ridges
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Interfluve
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: No

Bedford

Percent of map unit: 3 percent
Landform: Ridges
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Interfluve
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: No

Nolin, occasionally flooded

Percent of map unit: 2 percent
Landform: Sinkholes
Down-slope shape: Concave
Across-slope shape: Concave
Hydric soil rating: No

CyF2—Cynthiana-Faywood-Rock outcrop complex, 12 to 50 percent slopes, eroded

Map Unit Setting

National map unit symbol: lhtb
Elevation: 510 to 960 feet
Mean annual precipitation: 43 to 58 inches
Mean annual air temperature: 45 to 68 degrees F
Frost-free period: 159 to 199 days
Farmland classification: Not prime farmland

Map Unit Composition

Cynthiana and similar soils: 40 percent
Faywood and similar soils: 30 percent

Custom Soil Resource Report

Rock outcrop: 15 percent

Minor components: 15 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Cynthiana

Setting

Landform: Hills

Landform position (two-dimensional): Backslope

Landform position (three-dimensional): Side slope

Down-slope shape: Convex

Across-slope shape: Convex

Parent material: Clayey residuum weathered from limestone

Typical profile

H1 - 0 to 5 inches: silty clay loam

H2 - 5 to 18 inches: clay

R - 18 to 28 inches: bedrock

Properties and qualities

Slope: 12 to 50 percent

Depth to restrictive feature: 10 to 20 inches to lithic bedrock

Drainage class: Well drained

Runoff class: High

Capacity of the most limiting layer to transmit water (Ksat): Moderately high (0.20 to 0.60 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Available water supply, 0 to 60 inches: Very low (about 2.5 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 7s

Hydrologic Soil Group: D

Hydric soil rating: No

Description of Faywood

Setting

Landform: Hills

Landform position (two-dimensional): Backslope

Landform position (three-dimensional): Side slope

Down-slope shape: Convex

Across-slope shape: Convex

Parent material: Clayey residuum weathered from limestone and shale

Typical profile

H1 - 0 to 6 inches: silty clay loam

H2 - 6 to 30 inches: clay

R - 30 to 40 inches: bedrock

Properties and qualities

Slope: 12 to 50 percent

Depth to restrictive feature: 20 to 40 inches to lithic bedrock

Drainage class: Well drained

Runoff class: High

Custom Soil Resource Report

Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.60 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Available water supply, 0 to 60 inches: Low (about 4.8 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 7s

Hydrologic Soil Group: C

Hydric soil rating: No

Description of Rock Outcrop

Setting

Landform: Hills

Landform position (three-dimensional): Free face

Parent material: Limestone

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 8

Hydric soil rating: No

Minor Components

Lowell

Percent of map unit: 5 percent

Hydric soil rating: No

Severely eroded soils

Percent of map unit: 5 percent

Hydric soil rating: No

Shallow loamy soils

Percent of map unit: 5 percent

Hydric soil rating: No

DeB—Dewey loam, 2 to 6 percent slopes

Map Unit Setting

National map unit symbol: lhtc

Elevation: 860 to 1,110 feet

Mean annual precipitation: 43 to 58 inches

Mean annual air temperature: 45 to 68 degrees F

Frost-free period: 159 to 199 days

Farmland classification: All areas are prime farmland

Map Unit Composition

Dewey and similar soils: 90 percent

Minor components: 10 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Dewey

Setting

Landform: Ridges

Landform position (two-dimensional): Summit

Landform position (three-dimensional): Interfluve

Down-slope shape: Convex

Across-slope shape: Linear

Parent material: Clayey residuum weathered from limestone

Typical profile

H1 - 0 to 10 inches: loam

H2 - 10 to 51 inches: clay

H3 - 51 to 79 inches: clay

Properties and qualities

Slope: 2 to 6 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Well drained

Runoff class: Medium

*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 supply, 0 to 60 inches: High (about 9.2 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 2e

Hydrologic Soil Group: B

Hydric soil rating: No

Minor Components

Caneyville

Percent of map unit: 2 percent

Hydric soil rating: No

Crider

Percent of map unit: 2 percent

Hydric soil rating: No

Dewey, eroded

Percent of map unit: 2 percent

Hydric soil rating: No

Lonewood

Percent of map unit: 2 percent

Hydric soil rating: No

Trimble

Percent of map unit: 2 percent

Hydric soil rating: No

DeC2—Dewey loam, 6 to 12 percent slopes, eroded

Map Unit Setting

National map unit symbol: lhtd
Elevation: 770 to 1,120 feet
Mean annual precipitation: 43 to 58 inches
Mean annual air temperature: 45 to 68 degrees F
Frost-free period: 159 to 199 days
Farmland classification: Farmland of statewide importance

Map Unit Composition

Dewey and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Dewey

Setting

Landform: Ridges
Landform position (two-dimensional): Shoulder
Landform position (three-dimensional): Side slope
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Clayey residuum weathered from limestone

Typical profile

H1 - 0 to 10 inches: loam
H2 - 10 to 51 inches: clay
H3 - 51 to 79 inches: clay

Properties and qualities

Slope: 6 to 12 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Medium
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 supply, 0 to 60 inches: High (about 9.2 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 3e
Hydrologic Soil Group: B
Hydric soil rating: No

Minor Components

Caneyville

Percent of map unit: 4 percent
Hydric soil rating: No

Dewey, eroded

Percent of map unit: 4 percent
Hydric soil rating: No

Lonewood

Percent of map unit: 4 percent
Hydric soil rating: No

Trimble

Percent of map unit: 3 percent
Hydric soil rating: No

DeD2—Dewey loam, 12 to 25 percent slopes, eroded

Map Unit Setting

National map unit symbol: lhtf
Elevation: 640 to 1,100 feet
Mean annual precipitation: 43 to 58 inches
Mean annual air temperature: 45 to 68 degrees F
Frost-free period: 159 to 199 days
Farmland classification: Not prime farmland

Map Unit Composition

Dewey and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Dewey

Setting

Landform: Hills
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Clayey residuum weathered from limestone

Typical profile

H1 - 0 to 7 inches: loam
H2 - 7 to 51 inches: clay
H3 - 51 to 62 inches: clay

Properties and qualities

Slope: 12 to 25 percent
Depth to restrictive feature: More than 80 inches

Custom Soil Resource Report

Drainage class: Well drained
Runoff class: High
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 supply, 0 to 60 inches: High (about 9.1 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 4e
Hydrologic Soil Group: B
Hydric soil rating: No

Minor Components

Caneyville

Percent of map unit: 3 percent
Hydric soil rating: No

Deep loamy soils

Percent of map unit: 3 percent
Hydric soil rating: No

Dewey, eroded

Percent of map unit: 3 percent
Hydric soil rating: No

Lonewood

Percent of map unit: 3 percent
Hydric soil rating: No

Trimble

Percent of map unit: 3 percent
Hydric soil rating: No

DmD—Dewey-Lonewood complex, 12 to 25 percent slopes

Map Unit Setting

National map unit symbol: lhtg
Elevation: 560 to 1,120 feet
Mean annual precipitation: 43 to 58 inches
Mean annual air temperature: 45 to 68 degrees F
Frost-free period: 159 to 199 days
Farmland classification: Not prime farmland

Map Unit Composition

Dewey and similar soils: 60 percent
Lonewood and similar soils: 20 percent
Minor components: 20 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Dewey

Setting

Landform: Hills
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Clayey residuum weathered from limestone

Typical profile

H1 - 0 to 10 inches: loam
H2 - 10 to 51 inches: clay
H3 - 51 to 79 inches: clay

Properties and qualities

Slope: 12 to 25 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: High
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 supply, 0 to 60 inches: High (about 9.4 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 4e
Hydrologic Soil Group: B
Hydric soil rating: No

Description of Lonewood

Setting

Landform: Hills
Landform position (two-dimensional): Shoulder
Landform position (three-dimensional): Side slope
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Fine-loamy noncalcareous loess over residuum weathered from sandstone and shale and/or siltstone

Typical profile

H1 - 0 to 7 inches: silt loam
H2 - 7 to 34 inches: clay loam
H3 - 34 to 59 inches: gravelly sandy loam
Cr - 59 to 69 inches: bedrock

Properties and qualities

Slope: 12 to 25 percent
Depth to restrictive feature: 40 to 72 inches to lithic bedrock
Drainage class: Well drained
Runoff class: High
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high
(0.60 to 2.00 in/hr)

Custom Soil Resource Report

Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Moderate (about 7.9 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 4e
Hydrologic Soil Group: B
Hydric soil rating: No

Minor Components

Garmon

Percent of map unit: 7 percent
Hydric soil rating: No

Newbern

Percent of map unit: 7 percent
Hydric soil rating: No

Slowly permeable soils

Percent of map unit: 6 percent
Hydric soil rating: No

Eg—Egam silty clay loam, rarely flooded

Map Unit Setting

National map unit symbol: lhth
Elevation: 540 to 620 feet
Mean annual precipitation: 43 to 58 inches
Mean annual air temperature: 45 to 68 degrees F
Frost-free period: 159 to 199 days
Farmland classification: All areas are prime farmland

Map Unit Composition

Egam, rarely flooded, and similar soils: 90 percent
Minor components: 10 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Egam, Rarely Flooded

Setting

Landform: Flood plains
Down-slope shape: Concave
Across-slope shape: Linear
Parent material: Clayey alluvium derived from limestone

Typical profile

H1 - 0 to 16 inches: silty clay loam
H2 - 16 to 50 inches: clay

Custom Soil Resource Report

H3 - 50 to 64 inches: clay

Properties and qualities

Slope: 0 to 3 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Well drained

Runoff class: Low

Capacity of the most limiting layer to transmit water (Ksat): Moderately high (0.20 to 0.60 in/hr)

Depth to water table: About 36 to 48 inches

Frequency of flooding: NoneRare

Frequency of ponding: None

Available water supply, 0 to 60 inches: High (about 10.5 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 2w

Hydrologic Soil Group: C

Hydric soil rating: No

Minor Components

Chagrin

Percent of map unit: 2 percent

Landform: Flood plains

Hydric soil rating: No

Grigsby

Percent of map unit: 2 percent

Landform: Flood plains

Hydric soil rating: No

Huntington

Percent of map unit: 2 percent

Landform: Flood plains

Hydric soil rating: No

Occasionally flooded soils

Percent of map unit: 2 percent

Hydric soil rating: No

Newark

Percent of map unit: 1 percent

Landform: Flood plains

Hydric soil rating: No

Sensabaugh

Percent of map unit: 1 percent

Landform: Flood plains

Hydric soil rating: No

EKA—Elk silt loam, 0 to 2 percent slopes

Map Unit Setting

National map unit symbol: lhtj
Elevation: 540 to 620 feet
Mean annual precipitation: 43 to 58 inches
Mean annual air temperature: 45 to 68 degrees F
Frost-free period: 159 to 199 days
Farmland classification: All areas are prime farmland

Map Unit Composition

Elk and similar soils: 90 percent
Minor components: 10 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Elk

Setting

Landform: Stream terraces
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Mixed fine-silty alluvium

Typical profile

H1 - 0 to 8 inches: silt loam
H2 - 8 to 43 inches: silty clay loam
H3 - 43 to 62 inches: silty clay loam

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Low
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 supply, 0 to 60 inches: High (about 11.5 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 1
Hydrologic Soil Group: B
Hydric soil rating: No

Minor Components

Elk, eroded

Percent of map unit: 2 percent
Hydric soil rating: No

Holston

Percent of map unit: 2 percent
Hydric soil rating: No

Lawrence

Percent of map unit: 2 percent
Hydric soil rating: No

Monongahela

Percent of map unit: 2 percent
Hydric soil rating: No

Renox

Percent of map unit: 2 percent
Hydric soil rating: No

EkB—Elk silt loam, 2 to 6 percent slopes

Map Unit Setting

National map unit symbol: lhtk
Elevation: 520 to 720 feet
Mean annual precipitation: 43 to 58 inches
Mean annual air temperature: 45 to 68 degrees F
Frost-free period: 159 to 199 days
Farmland classification: All areas are prime farmland

Map Unit Composition

Elk and similar soils: 90 percent
Minor components: 10 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Elk

Setting

Landform: Stream terraces
Landform position (three-dimensional): Tread
Down-slope shape: Convex
Across-slope shape: Linear
Parent material: Mixed fine-silty alluvium

Typical profile

H1 - 0 to 8 inches: silt loam
H2 - 8 to 43 inches: silty clay loam
H3 - 43 to 62 inches: silty clay loam

Custom Soil Resource Report

Properties and qualities

Slope: 2 to 6 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Medium
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 supply, 0 to 60 inches: High (about 11.5 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 2e
Hydrologic Soil Group: B
Hydric soil rating: No

Minor Components

Elk, eroded

Percent of map unit: 2 percent
Hydric soil rating: No

Holston

Percent of map unit: 2 percent
Hydric soil rating: No

Lawrence

Percent of map unit: 2 percent
Hydric soil rating: No

Monongahela

Percent of map unit: 2 percent
Hydric soil rating: No

Renox

Percent of map unit: 2 percent
Hydric soil rating: No

EkC2—Elk silt loam, 6 to 12 percent slopes, eroded

Map Unit Setting

National map unit symbol: lhtl
Elevation: 530 to 850 feet
Mean annual precipitation: 43 to 58 inches
Mean annual air temperature: 45 to 68 degrees F
Frost-free period: 159 to 199 days
Farmland classification: Farmland of statewide importance

Map Unit Composition

Elk and similar soils: 90 percent

Minor components: 10 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Elk

Setting

Landform: Stream terraces

Landform position (three-dimensional): Riser

Down-slope shape: Convex

Across-slope shape: Convex

Parent material: Mixed fine-silty alluvium

Typical profile

H1 - 0 to 5 inches: silt loam

H2 - 5 to 40 inches: silty clay loam

H3 - 40 to 62 inches: silty clay loam

Properties and qualities

Slope: 6 to 12 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Well drained

Runoff class: Medium

*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 supply, 0 to 60 inches: High (about 11.4 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 3e

Hydrologic Soil Group: B

Hydric soil rating: No

Minor Components

Elk, severely eroded

Percent of map unit: 2 percent

Hydric soil rating: No

Holston

Percent of map unit: 2 percent

Hydric soil rating: No

Lawrence

Percent of map unit: 2 percent

Hydric soil rating: No

Monongahela

Percent of map unit: 2 percent

Hydric soil rating: No

Renox

Percent of map unit: 2 percent

Hydric soil rating: No

EkD2—Elk silt loam, 12 to 25 percent slopes, eroded

Map Unit Setting

National map unit symbol: lhtm
Elevation: 540 to 770 feet
Mean annual precipitation: 43 to 58 inches
Mean annual air temperature: 45 to 68 degrees F
Frost-free period: 159 to 199 days
Farmland classification: Not prime farmland

Map Unit Composition

Elk and similar soils: 90 percent
Minor components: 10 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Elk

Setting

Landform: Stream terraces
Landform position (three-dimensional): Riser
Down-slope shape: Concave
Across-slope shape: Convex
Parent material: Mixed fine-silty alluvium

Typical profile

H1 - 0 to 5 inches: silt loam
H2 - 5 to 40 inches: silty clay loam
H3 - 40 to 62 inches: silty clay loam

Properties and qualities

Slope: 12 to 25 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: High
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 supply, 0 to 60 inches: High (about 11.4 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 4e
Hydrologic Soil Group: B
Hydric soil rating: No

Minor Components

Holston

Percent of map unit: 3 percent
Hydric soil rating: No

Lowell

Percent of map unit: 3 percent
Hydric soil rating: No

Elk, severely eroded

Percent of map unit: 2 percent
Hydric soil rating: No

Waynesboro

Percent of map unit: 2 percent
Hydric soil rating: No

FcC2—Faywood-Cynthiana complex, rocky, 6 to 12 percent slopes, eroded

Map Unit Setting

National map unit symbol: lhtn
Elevation: 550 to 770 feet
Mean annual precipitation: 43 to 58 inches
Mean annual air temperature: 45 to 68 degrees F
Frost-free period: 159 to 199 days
Farmland classification: Not prime farmland

Map Unit Composition

Faywood and similar soils: 40 percent
Cynthiana and similar soils: 30 percent
Minor components: 30 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Faywood

Setting

Landform: Ridges
Landform position (two-dimensional): Shoulder
Landform position (three-dimensional): Side slope
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Clayey residuum weathered from limestone and shale

Typical profile

H1 - 0 to 6 inches: silty clay loam
H2 - 6 to 30 inches: flaggy clay
R - 30 to 40 inches: bedrock

Custom Soil Resource Report

Properties and qualities

Slope: 6 to 12 percent
Depth to restrictive feature: 20 to 40 inches to lithic bedrock
Drainage class: Well drained
Runoff class: Medium
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.60 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Low (about 4.8 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 6s
Hydrologic Soil Group: C
Hydric soil rating: No

Description of Cynthiana

Setting

Landform: Ridges
Landform position (two-dimensional): Shoulder
Landform position (three-dimensional): Side slope
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Clayey residuum weathered from limestone

Typical profile

H1 - 0 to 5 inches: silty clay loam
H2 - 5 to 18 inches: clay
R - 18 to 28 inches: bedrock

Properties and qualities

Slope: 6 to 12 percent
Depth to restrictive feature: 10 to 20 inches to lithic bedrock
Drainage class: Well drained
Runoff class: Medium
Capacity of the most limiting layer to transmit water (Ksat): Moderately high (0.20 to 0.60 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Very low (about 2.5 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 6s
Hydrologic Soil Group: D
Hydric soil rating: No

Minor Components

Lowell

Percent of map unit: 10 percent
Hydric soil rating: No

Moderately deep loamy soils

Percent of map unit: 10 percent
Hydric soil rating: No

Shallow loamy soils

Percent of map unit: 9 percent
Hydric soil rating: No

Rock outcrop

Percent of map unit: 1 percent
Hydric soil rating: No

FcD2—Faywood-Cynthiana complex, rocky, 12 to 25 percent slopes, eroded

Map Unit Setting

National map unit symbol: lhtp
Elevation: 550 to 900 feet
Mean annual precipitation: 43 to 58 inches
Mean annual air temperature: 45 to 68 degrees F
Frost-free period: 159 to 199 days
Farmland classification: Not prime farmland

Map Unit Composition

Faywood and similar soils: 40 percent
Cynthiana and similar soils: 30 percent
Minor components: 30 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Faywood

Setting

Landform: Hills
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Clayey residuum weathered from limestone and shale

Typical profile

H1 - 0 to 6 inches: silty clay loam
H2 - 6 to 30 inches: flaggy clay
R - 30 to 40 inches: bedrock

Properties and qualities

Slope: 12 to 25 percent
Depth to restrictive feature: 20 to 40 inches to lithic bedrock
Drainage class: Well drained
Runoff class: High

Custom Soil Resource Report

Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.60 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Available water supply, 0 to 60 inches: Low (about 4.8 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 6s

Hydrologic Soil Group: C

Hydric soil rating: No

Description of Cynthiana

Setting

Landform: Hills

Landform position (two-dimensional): Backslope

Landform position (three-dimensional): Side slope

Down-slope shape: Convex

Across-slope shape: Convex

Parent material: Clayey residuum weathered from limestone

Typical profile

H1 - 0 to 5 inches: silty clay loam

H2 - 5 to 18 inches: clay

R - 18 to 28 inches: bedrock

Properties and qualities

Slope: 12 to 25 percent

Depth to restrictive feature: 10 to 20 inches to lithic bedrock

Drainage class: Well drained

Runoff class: High

Capacity of the most limiting layer to transmit water (Ksat): Moderately high (0.20 to 0.60 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Available water supply, 0 to 60 inches: Very low (about 2.5 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 6s

Hydrologic Soil Group: D

Hydric soil rating: No

Minor Components

Lowell

Percent of map unit: 10 percent

Hydric soil rating: No

Moderately deep loamy soils

Percent of map unit: 10 percent

Hydric soil rating: No

Shallow loamy soils

Percent of map unit: 9 percent

Hydric soil rating: No

Rock outcrop

Percent of map unit: 1 percent

Hydric soil rating: No

GcF—Garmon-Carpenter-Newbern complex, rocky, 30 to 65 percent slopes

Map Unit Setting

National map unit symbol: lhtq

Elevation: 530 to 1,100 feet

Mean annual precipitation: 43 to 58 inches

Mean annual air temperature: 45 to 68 degrees F

Frost-free period: 159 to 199 days

Farmland classification: Not prime farmland

Map Unit Composition

Garmon and similar soils: 35 percent

Carpenter and similar soils: 30 percent

Newbern and similar soils: 25 percent

Minor components: 10 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Garmon

Setting

Landform: Hills

Landform position (two-dimensional): Backslope

Landform position (three-dimensional): Side slope

Down-slope shape: Concave

Across-slope shape: Convex

Parent material: Fine-loamy residuum weathered from limestone and shale and/or calcareous siltstone

Typical profile

H1 - 0 to 3 inches: loam

H2 - 3 to 24 inches: channery silt loam

R - 24 to 34 inches: bedrock

Properties and qualities

Slope: 30 to 65 percent

Depth to restrictive feature: 20 to 40 inches to lithic bedrock

Drainage class: Well drained

Runoff class: Very high

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: None

Custom Soil Resource Report

Frequency of ponding: None

Available water supply, 0 to 60 inches: Very low (about 2.8 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 7e

Hydrologic Soil Group: B

Hydric soil rating: No

Description of Carpenter

Setting

Landform: Hills

Landform position (two-dimensional): Backslope

Landform position (three-dimensional): Side slope

Down-slope shape: Concave

Across-slope shape: Convex

Parent material: Fine-loamy colluvium over clayey residuum weathered from shale and siltstone

Typical profile

H1 - 0 to 8 inches: silt loam

H2 - 8 to 13 inches: silt loam

H3 - 13 to 39 inches: channery silty clay loam

H4 - 39 to 48 inches: channery silty clay

Cr - 48 to 58 inches: bedrock

Properties and qualities

Slope: 30 to 65 percent

Depth to restrictive feature: 39 to 79 inches to paralithic bedrock

Drainage class: Well drained

Runoff class: Very high

Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.60 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Available water supply, 0 to 60 inches: Moderate (about 7.2 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 7e

Hydrologic Soil Group: C

Hydric soil rating: No

Description of Newbern

Setting

Landform: Hills

Landform position (two-dimensional): Backslope

Landform position (three-dimensional): Side slope

Down-slope shape: Concave

Across-slope shape: Convex

Parent material: Loamy residuum weathered from limestone and shale and/or calcareous siltstone

Typical profile

H1 - 0 to 2 inches: channery silt loam

Custom Soil Resource Report

H2 - 2 to 17 inches: channery silt loam

R - 17 to 27 inches: bedrock

Properties and qualities

Slope: 30 to 65 percent

Depth to restrictive feature: 10 to 20 inches to lithic bedrock

Drainage class: Somewhat excessively drained

Runoff class: Very high

*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 supply, 0 to 60 inches: Very low (about 2.4 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 7e

Hydrologic Soil Group: D

Hydric soil rating: No

Minor Components

Caneyville

Percent of map unit: 2 percent

Hydric soil rating: No

Dewey

Percent of map unit: 1 percent

Hydric soil rating: No

Lonewood

Percent of map unit: 1 percent

Hydric soil rating: No

Renox

Percent of map unit: 1 percent

Hydric soil rating: No

Rock outcrop

Percent of map unit: 1 percent

Hydric soil rating: No

Rohan

Percent of map unit: 1 percent

Hydric soil rating: No

Soils < 30% slopes

Percent of map unit: 1 percent

Hydric soil rating: No

Trappist

Percent of map unit: 1 percent

Hydric soil rating: No

Very gravelly soils

Percent of map unit: 1 percent

Hydric soil rating: No

Gr—Grigsby fine sandy loam

Map Unit Setting

National map unit symbol: lhtr
Elevation: 510 to 630 feet
Mean annual precipitation: 43 to 58 inches
Mean annual air temperature: 45 to 68 degrees F
Frost-free period: 159 to 199 days
Farmland classification: All areas are prime farmland

Map Unit Composition

Grigsby and similar soils: 90 percent
Minor components: 10 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Grigsby

Setting

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

Typical profile

H1 - 0 to 10 inches: fine sandy loam
H2 - 10 to 34 inches: fine sandy loam
H3 - 34 to 62 inches: fine sandy loam

Properties and qualities

Slope: 0 to 4 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high
(0.60 to 6.00 in/hr)
Depth to water table: About 42 to 62 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Moderate (about 7.3 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 1
Hydrologic Soil Group: A
Hydric soil rating: No

Minor Components

Newark

Percent of map unit: 2 percent
Landform: Flood plains
Hydric soil rating: No

Chagrin

Percent of map unit: 2 percent
Landform: Flood plains
Hydric soil rating: No

Huntington

Percent of map unit: 2 percent
Landform: Flood plains
Hydric soil rating: No

Nelse

Percent of map unit: 2 percent
Hydric soil rating: No

Soils with frequent flooding

Percent of map unit: 1 percent
Landform: Flood plains
Hydric soil rating: No

Soils with rare flooding

Percent of map unit: 1 percent
Hydric soil rating: No

HoB—Holston silt loam, 2 to 6 percent slopes

Map Unit Setting

National map unit symbol: lhts
Elevation: 540 to 710 feet
Mean annual precipitation: 43 to 58 inches
Mean annual air temperature: 45 to 68 degrees F
Frost-free period: 159 to 199 days
Farmland classification: All areas are prime farmland

Map Unit Composition

Holston and similar soils: 90 percent
Minor components: 10 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Holston

Setting

Landform: Stream terraces
Landform position (three-dimensional): Tread
Down-slope shape: Convex

Custom Soil Resource Report

Across-slope shape: Linear
Parent material: Old fine-loamy alluvium

Typical profile

H1 - 0 to 10 inches: silt loam
H2 - 10 to 75 inches: clay loam

Properties and qualities

Slope: 2 to 6 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Medium
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 supply, 0 to 60 inches: High (about 10.3 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 2e
Hydrologic Soil Group: B
Hydric soil rating: No

Minor Components

Elk

Percent of map unit: 2 percent
Hydric soil rating: No

Holston, eroded

Percent of map unit: 2 percent
Hydric soil rating: No

Lowell

Percent of map unit: 2 percent
Hydric soil rating: No

Monongahela

Percent of map unit: 2 percent
Hydric soil rating: No

Waynesboro

Percent of map unit: 2 percent
Hydric soil rating: No

HoC2—Holston silt loam, 6 to 12 percent slopes, eroded

Map Unit Setting

National map unit symbol: lhtt
Elevation: 540 to 710 feet
Mean annual precipitation: 43 to 58 inches

Custom Soil Resource Report

Mean annual air temperature: 45 to 68 degrees F
Frost-free period: 159 to 199 days
Farmland classification: Farmland of statewide importance

Map Unit Composition

Holston and similar soils: 90 percent
Minor components: 10 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Holston

Setting

Landform: Stream terraces
Landform position (three-dimensional): Riser
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Old fine-loamy alluvium

Typical profile

H1 - 0 to 8 inches: silt loam
H2 - 8 to 62 inches: clay loam

Properties and qualities

Slope: 6 to 12 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Medium
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 supply, 0 to 60 inches: High (about 10.3 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 3e
Hydrologic Soil Group: B
Hydric soil rating: No

Minor Components

Elk

Percent of map unit: 2 percent
Hydric soil rating: No

Holston, eroded

Percent of map unit: 2 percent
Hydric soil rating: No

Lowell

Percent of map unit: 2 percent
Hydric soil rating: No

Monongahela

Percent of map unit: 2 percent
Hydric soil rating: No

Waynesboro

Percent of map unit: 2 percent
Hydric soil rating: No

HsD2—Holston-Waynesboro complex, 12 to 25 percent slopes, eroded

Map Unit Setting

National map unit symbol: lhtv
Elevation: 520 to 930 feet
Mean annual precipitation: 43 to 58 inches
Mean annual air temperature: 45 to 68 degrees F
Frost-free period: 159 to 199 days
Farmland classification: Not prime farmland

Map Unit Composition

Holston and similar soils: 50 percent
Waynesboro and similar soils: 40 percent
Minor components: 10 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Holston

Setting

Landform: Stream terraces
Landform position (three-dimensional): Riser
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Old fine-loamy alluvium

Typical profile

H1 - 0 to 8 inches: silt loam
H2 - 8 to 62 inches: clay loam

Properties and qualities

Slope: 12 to 25 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: High
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 supply, 0 to 60 inches: High (about 10.3 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 4e
Hydrologic Soil Group: B
Hydric soil rating: No

Description of Waynesboro

Setting

Landform: Stream terraces
Landform position (three-dimensional): Riser
Down-slope shape: Linear
Across-slope shape: Convex
Parent material: Old clayey alluvium

Typical profile

H1 - 0 to 6 inches: loam
H2 - 6 to 58 inches: clay
H3 - 58 to 74 inches: loam

Properties and qualities

Slope: 12 to 25 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: High
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 supply, 0 to 60 inches: High (about 10.2 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 4e
Hydrologic Soil Group: B
Hydric soil rating: No

Minor Components

Elk

Percent of map unit: 3 percent
Hydric soil rating: No

Monongahela

Percent of map unit: 3 percent
Hydric soil rating: No

Elk, severely eroded

Percent of map unit: 2 percent
Hydric soil rating: No

Monongahela, severely eroded

Percent of map unit: 2 percent
Hydric soil rating: No

Hu—Huntington silt loam, overwash

Map Unit Setting

National map unit symbol: lhtw
Elevation: 520 to 670 feet
Mean annual precipitation: 43 to 58 inches
Mean annual air temperature: 45 to 68 degrees F
Frost-free period: 159 to 199 days
Farmland classification: All areas are prime farmland

Map Unit Composition

Huntington, overwash, and similar soils: 90 percent
Minor components: 10 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Huntington, Overwash

Setting

Landform: Flood plains
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Mixed fine-silty alluvium

Typical profile

H1 - 0 to 10 inches: silt loam
H2 - 10 to 75 inches: silty clay loam

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Low
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 supply, 0 to 60 inches: High (about 11.6 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 1
Hydrologic Soil Group: B
Hydric soil rating: No

Minor Components

Newark

Percent of map unit: 2 percent

Custom Soil Resource Report

Landform: Flood plains
Hydric soil rating: No

Chagrin

Percent of map unit: 2 percent
Landform: Flood plains
Hydric soil rating: No

Grigsby

Percent of map unit: 2 percent
Landform: Flood plains
Hydric soil rating: No

Soils with rare flooding

Percent of map unit: 2 percent
Landform: Flood plains
Hydric soil rating: No

Stokly

Percent of map unit: 2 percent
Landform: Flood plains
Hydric soil rating: No

La—Lawrence silt loam, 0 to 4 percent slopes

Map Unit Setting

National map unit symbol: lhtx
Elevation: 540 to 800 feet
Mean annual precipitation: 43 to 58 inches
Mean annual air temperature: 45 to 68 degrees F
Frost-free period: 159 to 199 days
Farmland classification: Prime farmland if drained

Map Unit Composition

Lawrence and similar soils: 90 percent
Minor components: 10 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Lawrence

Setting

Landform: Stream terraces
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Concave
Parent material: Old mixed fine-silty alluvium

Typical profile

H1 - 0 to 8 inches: silt loam
H2 - 8 to 20 inches: silty clay loam
H3 - 20 to 48 inches: silt loam
H4 - 48 to 68 inches: silty clay

Properties and qualities

Slope: 0 to 4 percent
Depth to restrictive feature: 18 to 32 inches to fragipan
Drainage class: Somewhat poorly drained
Runoff class: Low
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 12 to 24 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Low (about 4.1 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 3w
Hydrologic Soil Group: D
Hydric soil rating: No

Minor Components

Newark

Percent of map unit: 2 percent
Landform: Flood plains
Hydric soil rating: No

Monongahela

Percent of map unit: 2 percent
Hydric soil rating: No

Soils with rare flooding

Percent of map unit: 2 percent
Hydric soil rating: No

Melvin, occasionally flooded

Percent of map unit: 2 percent
Landform: Flood plains
Down-slope shape: Concave
Across-slope shape: Linear
Hydric soil rating: Yes

Ponded soils

Percent of map unit: 1 percent
Landform: Flood plains
Down-slope shape: Concave
Across-slope shape: Concave
Hydric soil rating: Yes

Other poorly drained soils

Percent of map unit: 1 percent
Landform: Flood plains
Down-slope shape: Linear
Across-slope shape: Concave
Hydric soil rating: Yes

LdB—Lonewood silt loam, 2 to 6 percent slopes

Map Unit Setting

National map unit symbol: lhty
Elevation: 820 to 1,030 feet
Mean annual precipitation: 43 to 58 inches
Mean annual air temperature: 45 to 68 degrees F
Frost-free period: 159 to 199 days
Farmland classification: All areas are prime farmland

Map Unit Composition

Lonewood and similar soils: 90 percent
Minor components: 10 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Lonewood

Setting

Landform: Ridges
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Interfluve
Down-slope shape: Convex
Across-slope shape: Linear
Parent material: Fine-loamy noncalcareous loess over residuum weathered from sandstone and shale and/or siltstone

Typical profile

H1 - 0 to 10 inches: silt loam
H2 - 10 to 25 inches: silt loam
H3 - 25 to 60 inches: loam

Properties and qualities

Slope: 2 to 6 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Medium
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 supply, 0 to 60 inches: High (about 10.0 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 2e
Hydrologic Soil Group: B
Hydric soil rating: No

Minor Components

Caneyville

Percent of map unit: 2 percent
Hydric soil rating: No

Dewey

Percent of map unit: 2 percent
Hydric soil rating: No

Moderately deep soils

Percent of map unit: 2 percent
Hydric soil rating: No

Soils with loamy surface

Percent of map unit: 2 percent
Hydric soil rating: No

Soils with red upper subsoils

Percent of map unit: 2 percent
Hydric soil rating: No

LdC2—Lonewood silt loam, 6 to 12 percent slopes, eroded

Map Unit Setting

National map unit symbol: lhtz
Elevation: 730 to 1,050 feet
Mean annual precipitation: 43 to 58 inches
Mean annual air temperature: 45 to 68 degrees F
Frost-free period: 159 to 199 days
Farmland classification: Farmland of statewide importance

Map Unit Composition

Lonewood and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Lonewood

Setting

Landform: Ridges
Landform position (two-dimensional): Shoulder
Landform position (three-dimensional): Side slope
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Fine-loamy noncalcareous loess over residuum weathered from sandstone and shale and/or siltstone

Typical profile

H1 - 0 to 7 inches: silt loam
H2 - 7 to 34 inches: clay loam

Custom Soil Resource Report

H3 - 34 to 59 inches: gravelly sandy loam

2Cr - 59 to 69 inches: bedrock

Properties and qualities

Slope: 6 to 12 percent

Depth to restrictive feature: 40 to 72 inches to lithic bedrock

Drainage class: Well drained

Runoff class: Medium

*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 supply, 0 to 60 inches: Moderate (about 7.9 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 3e

Hydrologic Soil Group: B

Hydric soil rating: No

Minor Components

Caneyville

Percent of map unit: 3 percent

Hydric soil rating: No

Dewey

Percent of map unit: 3 percent

Hydric soil rating: No

Moderately deep soils

Percent of map unit: 3 percent

Hydric soil rating: No

Less sloping soils

Percent of map unit: 2 percent

Hydric soil rating: No

Soils with loamy surface

Percent of map unit: 2 percent

Hydric soil rating: No

Soils with red upper subsoils

Percent of map unit: 2 percent

Hydric soil rating: No

LoB—Lowell silt loam, 2 to 6 percent slopes

Map Unit Setting

National map unit symbol: lhv0

Elevation: 550 to 950 feet

Mean annual precipitation: 43 to 58 inches

Custom Soil Resource Report

Mean annual air temperature: 45 to 68 degrees F
Frost-free period: 159 to 199 days
Farmland classification: All areas are prime farmland

Map Unit Composition

Lowell and similar soils: 90 percent
Minor components: 10 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Lowell

Setting

Landform: Ridges
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Interfluve
Down-slope shape: Convex
Across-slope shape: Linear
Parent material: Clayey residuum weathered from limestone and shale

Typical profile

H1 - 0 to 10 inches: silt loam
H2 - 10 to 26 inches: silty clay loam
H3 - 26 to 60 inches: clay

Properties and qualities

Slope: 2 to 6 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Medium
Capacity of the most limiting layer to transmit water (Ksat): Moderately high (0.20 to 0.60 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 3 percent
Available water supply, 0 to 60 inches: High (about 9.7 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 2e
Hydrologic Soil Group: C
Hydric soil rating: No

Minor Components

Cynthiana

Percent of map unit: 3 percent
Hydric soil rating: No

Elk

Percent of map unit: 3 percent
Hydric soil rating: No

Faywood

Percent of map unit: 2 percent
Hydric soil rating: No

Fine-silty soils

Percent of map unit: 2 percent
Hydric soil rating: No

LoC2—Lowell silt loam, 6 to 12 percent slopes, eroded

Map Unit Setting

National map unit symbol: lhv1
Elevation: 540 to 770 feet
Mean annual precipitation: 43 to 58 inches
Mean annual air temperature: 45 to 68 degrees F
Frost-free period: 159 to 199 days
Farmland classification: Farmland of statewide importance

Map Unit Composition

Lowell and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Lowell

Setting

Landform: Ridges
Landform position (two-dimensional): Shoulder
Landform position (three-dimensional): Side slope
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Clayey residuum weathered from limestone and shale

Typical profile

H1 - 0 to 8 inches: silt loam
H2 - 8 to 47 inches: clay
H3 - 47 to 60 inches: silty clay loam

Properties and qualities

Slope: 6 to 12 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Medium
Capacity of the most limiting layer to transmit water (Ksat): Moderately high (0.20 to 0.60 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 3 percent
Available water supply, 0 to 60 inches: High (about 9.8 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 3e

Custom Soil Resource Report

Hydrologic Soil Group: B
Hydric soil rating: No

Minor Components

Elk

Percent of map unit: 3 percent
Hydric soil rating: No

Cynthiana

Percent of map unit: 2 percent
Hydric soil rating: No

Faywood

Percent of map unit: 2 percent
Hydric soil rating: No

Fine-silty soils

Percent of map unit: 2 percent
Hydric soil rating: No

Lowell, severely eroded

Percent of map unit: 2 percent
Hydric soil rating: No

Renox

Percent of map unit: 2 percent
Hydric soil rating: No

Soils with gravelly surface

Percent of map unit: 2 percent
Hydric soil rating: No

LoD2—Lowell silt loam, 12 to 25 percent slopes, eroded

Map Unit Setting

National map unit symbol: lhv2
Elevation: 520 to 750 feet
Mean annual precipitation: 43 to 58 inches
Mean annual air temperature: 45 to 68 degrees F
Frost-free period: 159 to 199 days
Farmland classification: Not prime farmland

Map Unit Composition

Lowell and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Lowell

Setting

Landform: Hills
Landform position (two-dimensional): Backslope

Custom Soil Resource Report

Landform position (three-dimensional): Side slope

Down-slope shape: Convex

Across-slope shape: Convex

Parent material: Clayey residuum weathered from limestone and shale

Typical profile

H1 - 0 to 8 inches: silt loam

H2 - 8 to 47 inches: clay

H3 - 47 to 60 inches: silty clay loam

Properties and qualities

Slope: 12 to 25 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Well drained

Runoff class: High

Capacity of the most limiting layer to transmit water (Ksat): Moderately high (0.20 to 0.60 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Calcium carbonate, maximum content: 3 percent

Available water supply, 0 to 60 inches: High (about 9.8 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 4e

Hydrologic Soil Group: B

Hydric soil rating: No

Minor Components

Cynthiana

Percent of map unit: 3 percent

Hydric soil rating: No

Faywood

Percent of map unit: 3 percent

Hydric soil rating: No

Fine-silty soils

Percent of map unit: 3 percent

Hydric soil rating: No

Lowell, severely eroded

Percent of map unit: 3 percent

Hydric soil rating: No

Soils with gravelly surface

Percent of map unit: 3 percent

Hydric soil rating: No

Me—Melvin silt loam, occasionally flooded

Map Unit Setting

National map unit symbol: lhv3
Elevation: 530 to 920 feet
Mean annual precipitation: 43 to 58 inches
Mean annual air temperature: 45 to 68 degrees F
Frost-free period: 159 to 199 days
Farmland classification: Prime farmland if drained

Map Unit Composition

Melvin, occasionally flooded, and similar soils: 90 percent
Minor components: 10 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Melvin, Occasionally Flooded

Setting

Landform: Flood plains
Down-slope shape: Concave
Across-slope shape: Linear
Parent material: Mixed fine-silty alluvium

Typical profile

H1 - 0 to 10 inches: silt loam
H2 - 10 to 36 inches: silt loam
H3 - 36 to 62 inches: silty clay loam

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Poorly drained
Runoff class: Low
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: About 0 to 12 inches
Frequency of flooding: NoneOccasional
Frequency of ponding: None
Available water supply, 0 to 60 inches: Very high (about 12.3 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 3w
Hydrologic Soil Group: B/D
Hydric soil rating: Yes

Minor Components

Chagrin

Percent of map unit: 3 percent

Custom Soil Resource Report

Landform: Flood plains
Hydric soil rating: No

Huntington

Percent of map unit: 3 percent
Landform: Flood plains
Hydric soil rating: No

Newark

Percent of map unit: 2 percent
Landform: Flood plains
Hydric soil rating: No

Stokly

Percent of map unit: 2 percent
Landform: Flood plains
Hydric soil rating: No

MnB—Monongahela silt loam, 2 to 6 percent slopes

Map Unit Setting

National map unit symbol: lhv4
Elevation: 510 to 770 feet
Mean annual precipitation: 43 to 58 inches
Mean annual air temperature: 45 to 68 degrees F
Frost-free period: 159 to 199 days
Farmland classification: All areas are prime farmland

Map Unit Composition

Monongahela and similar soils: 90 percent
Minor components: 10 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Monongahela

Setting

Landform: Stream terraces
Landform position (three-dimensional): Tread
Down-slope shape: Convex
Across-slope shape: Linear
Parent material: Mixed fine-loamy alluvium

Typical profile

H1 - 0 to 11 inches: silt loam
H2 - 11 to 22 inches: loam
H3 - 22 to 53 inches: sandy clay loam
H4 - 53 to 83 inches: fine sandy loam

Properties and qualities

Slope: 2 to 6 percent
Depth to restrictive feature: 18 to 32 inches to fragipan
Drainage class: Moderately well drained

Custom Soil Resource Report

Runoff class: Medium

Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.60 in/hr)

Depth to water table: About 17 to 34 inches

Frequency of flooding: None

Frequency of ponding: None

Available water supply, 0 to 60 inches: Low (about 4.1 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 2e

Hydrologic Soil Group: C/D

Hydric soil rating: No

Minor Components

Elk

Percent of map unit: 2 percent

Hydric soil rating: No

Holston

Percent of map unit: 2 percent

Hydric soil rating: No

Lawrence

Percent of map unit: 2 percent

Hydric soil rating: No

Less sandy soils

Percent of map unit: 2 percent

Hydric soil rating: No

Monongahela, eroded

Percent of map unit: 2 percent

Hydric soil rating: No

MnC2—Monongahela silt loam, 6 to 12 percent slopes, eroded

Map Unit Setting

National map unit symbol: lhv5

Elevation: 540 to 690 feet

Mean annual precipitation: 43 to 58 inches

Mean annual air temperature: 45 to 68 degrees F

Frost-free period: 159 to 199 days

Farmland classification: Farmland of statewide importance

Map Unit Composition

Monongahela and similar soils: 90 percent

Minor components: 10 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Monongahela

Setting

Landform: Stream terraces
Landform position (three-dimensional): Riser
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Mixed fine-loamy alluvium

Typical profile

H1 - 0 to 6 inches: silt loam
H2 - 6 to 12 inches: silt loam
H3 - 12 to 32 inches: clay loam
H4 - 32 to 62 inches: loam

Properties and qualities

Slope: 6 to 12 percent
Depth to restrictive feature: 12 to 26 inches to fragipan
Drainage class: Moderately well drained
Runoff class: Medium
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.60 in/hr)
Depth to water table: About 16 to 24 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Very low (about 2.2 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 3e
Hydrologic Soil Group: C/D
Hydric soil rating: No

Minor Components

Elk

Percent of map unit: 2 percent
Hydric soil rating: No

Holston

Percent of map unit: 2 percent
Hydric soil rating: No

Lawrence

Percent of map unit: 2 percent
Hydric soil rating: No

Less sandy soils

Percent of map unit: 2 percent
Hydric soil rating: No

Severely eroded soils

Percent of map unit: 2 percent
Hydric soil rating: No

NeD—Nelse fine sandy loam, 10 to 25 percent slopes, frequently flooded

Map Unit Setting

National map unit symbol: lhv6
Elevation: 510 to 780 feet
Mean annual precipitation: 43 to 58 inches
Mean annual air temperature: 45 to 68 degrees F
Frost-free period: 159 to 199 days
Farmland classification: Not prime farmland

Map Unit Composition

Nelse, frequently flooded, and similar soils: 80 percent
Minor components: 20 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Nelse, Frequently Flooded

Setting

Landform: Flood plains
Down-slope shape: Concave
Across-slope shape: Concave
Parent material: Coarse-loamy alluvium

Typical profile

H1 - 0 to 6 inches: fine sandy loam
H2 - 6 to 56 inches: sandy loam
H3 - 56 to 62 inches: stratified fine sandy loam to silt loam to silty clay loam

Properties and qualities

Slope: 10 to 25 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Medium
Capacity of the most limiting layer to transmit water (Ksat): High (2.00 to 6.00 in/hr)
Depth to water table: About 48 to 62 inches
Frequency of flooding: Frequent
Frequency of ponding: None
Available water supply, 0 to 60 inches: Moderate (about 7.0 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 4e
Hydrologic Soil Group: A
Hydric soil rating: No

Minor Components

Chagrin

Percent of map unit: 4 percent

Custom Soil Resource Report

Landform: Flood plains
Hydric soil rating: No

Grigsby

Percent of map unit: 4 percent
Landform: Flood plains
Hydric soil rating: No

Huntington

Percent of map unit: 4 percent
Landform: Flood plains
Hydric soil rating: No

Soils with no flooding

Percent of map unit: 4 percent
Hydric soil rating: No

Soils with slopes > 25%

Percent of map unit: 4 percent
Hydric soil rating: No

Nk—Newark silt loam, occasionally flooded

Map Unit Setting

National map unit symbol: lhv7
Elevation: 520 to 830 feet
Mean annual precipitation: 43 to 58 inches
Mean annual air temperature: 45 to 68 degrees F
Frost-free period: 159 to 199 days
Farmland classification: Prime farmland if drained

Map Unit Composition

Newark, occasionally flooded, and similar soils: 90 percent
Minor components: 10 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Newark, Occasionally Flooded

Setting

Landform: Flood plains
Down-slope shape: Concave
Across-slope shape: Linear
Parent material: Mixed fine-silty alluvium

Typical profile

H1 - 0 to 6 inches: silt loam
H2 - 6 to 37 inches: silt loam
H3 - 37 to 62 inches: silt loam

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches

Custom Soil Resource Report

Drainage class: Somewhat poorly drained
Runoff class: Low
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: About 6 to 18 inches
Frequency of flooding: NoneOccasional
Frequency of ponding: None
Available water supply, 0 to 60 inches: High (about 12.0 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 2w
Hydrologic Soil Group: B/D
Hydric soil rating: No

Minor Components

Chagrin

Percent of map unit: 2 percent
Landform: Flood plains
Hydric soil rating: No

Sensabaugh

Percent of map unit: 2 percent
Landform: Flood plains
Hydric soil rating: No

Soils with rare flooding

Percent of map unit: 2 percent
Landform: Flood plains
Hydric soil rating: No

Stokly

Percent of map unit: 2 percent
Landform: Flood plains
Hydric soil rating: No

Melvin, occasionally flooded

Percent of map unit: 2 percent
Landform: Flood plains
Down-slope shape: Concave
Across-slope shape: Linear
Hydric soil rating: Yes

NrE—Newbern-Garmon complex, very rocky, 12 to 30 percent slopes

Map Unit Setting

National map unit symbol: lhv8
Elevation: 560 to 1,070 feet
Mean annual precipitation: 43 to 58 inches
Mean annual air temperature: 45 to 68 degrees F
Frost-free period: 159 to 199 days

Custom Soil Resource Report

Farmland classification: Not prime farmland

Map Unit Composition

Newbern and similar soils: 50 percent

Garmon and similar soils: 30 percent

Minor components: 20 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Newbern

Setting

Landform: Hills

Landform position (two-dimensional): Backslope

Landform position (three-dimensional): Side slope

Down-slope shape: Concave

Across-slope shape: Convex

Parent material: Loamy residuum weathered from limestone and shale and/or calcareous siltstone

Typical profile

H1 - 0 to 2 inches: channery silt loam

H2 - 2 to 17 inches: channery silt loam

R - 17 to 27 inches: bedrock

Properties and qualities

Slope: 12 to 30 percent

Depth to restrictive feature: 10 to 20 inches to lithic bedrock

Drainage class: Somewhat excessively drained

Runoff class: High

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 supply, 0 to 60 inches: Very low (about 2.4 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 7e

Hydrologic Soil Group: D

Hydric soil rating: No

Description of Garmon

Setting

Landform: Hills

Landform position (two-dimensional): Backslope

Landform position (three-dimensional): Side slope

Down-slope shape: Concave

Across-slope shape: Convex

Parent material: Fine-loamy residuum weathered from limestone and shale and/or calcareous siltstone

Typical profile

H1 - 0 to 3 inches: loam

H2 - 3 to 24 inches: channery silt loam

R - 24 to 34 inches: bedrock

Custom Soil Resource Report

Properties and qualities

Slope: 12 to 30 percent

Depth to restrictive feature: 20 to 40 inches to lithic bedrock

Drainage class: Well drained

Runoff class: High

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: None

Frequency of ponding: None

Available water supply, 0 to 60 inches: Very low (about 2.8 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 7e

Hydrologic Soil Group: B

Hydric soil rating: No

Minor Components

Caneyville

Percent of map unit: 4 percent

Hydric soil rating: No

Lonewood

Percent of map unit: 4 percent

Hydric soil rating: No

Renox

Percent of map unit: 3 percent

Hydric soil rating: No

Rohan

Percent of map unit: 3 percent

Hydric soil rating: No

Trappist

Percent of map unit: 3 percent

Hydric soil rating: No

Very gravelly soils

Percent of map unit: 3 percent

Hydric soil rating: No

ReC2—Renox gravelly loam, 6 to 12 percent slopes, eroded

Map Unit Setting

National map unit symbol: lhv9

Elevation: 520 to 870 feet

Mean annual precipitation: 43 to 58 inches

Mean annual air temperature: 45 to 68 degrees F

Custom Soil Resource Report

Frost-free period: 159 to 199 days

Farmland classification: Farmland of statewide importance

Map Unit Composition

Renox and similar soils: 90 percent

Minor components: 10 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Renox

Setting

Landform: Alluvial fans

Landform position (two-dimensional): Footslope

Landform position (three-dimensional): Base slope

Down-slope shape: Convex

Across-slope shape: Convex

Parent material: Fine-loamy colluvium derived from limestone, sandstone, and shale and/or siltstone

Typical profile

H1 - 0 to 6 inches: gravelly loam

H2 - 6 to 24 inches: gravelly loam

H3 - 24 to 67 inches: loam

Properties and qualities

Slope: 6 to 12 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Well drained

Runoff class: Medium

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 supply, 0 to 60 inches: High (about 10.3 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 3e

Hydrologic Soil Group: B

Hydric soil rating: No

Minor Components

Elk

Percent of map unit: 2 percent

Hydric soil rating: No

Lowell

Percent of map unit: 2 percent

Hydric soil rating: No

Sensabaugh

Percent of map unit: 2 percent

Hydric soil rating: No

Very gravelly surface soils

Percent of map unit: 2 percent

Custom Soil Resource Report

Hydric soil rating: No

Moderately deep soils

Percent of map unit: 1 percent

Hydric soil rating: No

Moderately well drained soils

Percent of map unit: 1 percent

Hydric soil rating: No

ReD2—Renox gravelly loam, 12 to 25 percent slopes, eroded

Map Unit Setting

National map unit symbol: lhvb

Elevation: 540 to 860 feet

Mean annual precipitation: 43 to 58 inches

Mean annual air temperature: 45 to 68 degrees F

Frost-free period: 159 to 199 days

Farmland classification: Not prime farmland

Map Unit Composition

Renox and similar soils: 85 percent

Minor components: 15 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Renox

Setting

Landform: Hills

Landform position (two-dimensional): Footslope

Landform position (three-dimensional): Base slope

Down-slope shape: Concave

Across-slope shape: Convex

Parent material: Fine-loamy colluvium derived from limestone, sandstone, and shale and/or siltstone

Typical profile

H1 - 0 to 6 inches: gravelly loam

H2 - 6 to 24 inches: gravelly loam

H3 - 24 to 67 inches: loam

Properties and qualities

Slope: 12 to 25 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Well drained

Runoff class: Medium

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

Custom Soil Resource Report

Available water supply, 0 to 60 inches: High (about 10.3 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 4e

Hydrologic Soil Group: B

Hydric soil rating: No

Minor Components

Carpenter

Percent of map unit: 3 percent

Hydric soil rating: No

Faywood

Percent of map unit: 3 percent

Hydric soil rating: No

Garmon

Percent of map unit: 3 percent

Hydric soil rating: No

Gravelly soils

Percent of map unit: 3 percent

Hydric soil rating: No

Very gravelly surface soils

Percent of map unit: 3 percent

Hydric soil rating: No

RfF2—Renox-Faywood complex, 20 to 50 percent slopes, eroded

Map Unit Setting

National map unit symbol: lhvc

Elevation: 510 to 950 feet

Mean annual precipitation: 43 to 58 inches

Mean annual air temperature: 45 to 68 degrees F

Frost-free period: 159 to 199 days

Farmland classification: Not prime farmland

Map Unit Composition

Renox and similar soils: 50 percent

Faywood and similar soils: 30 percent

Minor components: 20 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Renox

Setting

Landform: Hills

Landform position (two-dimensional): Backslope

Landform position (three-dimensional): Base slope

Custom Soil Resource Report

Down-slope shape: Concave

Across-slope shape: Convex

Parent material: Fine-loamy colluvium derived from limestone, sandstone, and shale and/or siltstone

Typical profile

H1 - 0 to 6 inches: gravelly loam

H2 - 6 to 24 inches: gravelly loam

H3 - 24 to 67 inches: loam

Properties and qualities

Slope: 20 to 50 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Well drained

Runoff class: High

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 supply, 0 to 60 inches: High (about 10.3 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 7e

Hydrologic Soil Group: B

Hydric soil rating: No

Description of Faywood

Setting

Landform: Hills

Landform position (two-dimensional): Backslope

Landform position (three-dimensional): Side slope

Down-slope shape: Concave

Across-slope shape: Convex

Parent material: Clayey residuum weathered from limestone and shale

Typical profile

H1 - 0 to 6 inches: silty clay loam

H2 - 6 to 30 inches: flaggy clay

R - 30 to 40 inches: bedrock

Properties and qualities

Slope: 20 to 50 percent

Depth to restrictive feature: 20 to 40 inches to lithic bedrock

Drainage class: Well drained

Runoff class: Very high

Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.60 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Available water supply, 0 to 60 inches: Low (about 4.8 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 7e

Custom Soil Resource Report

Hydrologic Soil Group: C
Hydric soil rating: No

Minor Components

Cynthiana

Percent of map unit: 5 percent
Hydric soil rating: No

Faywood, severely eroded

Percent of map unit: 5 percent
Hydric soil rating: No

Lowell

Percent of map unit: 5 percent
Hydric soil rating: No

Renox, severely eroded

Percent of map unit: 5 percent
Hydric soil rating: No

RoF3—Rohan channery silt loam, 20 to 50 percent slopes, gullied

Map Unit Setting

National map unit symbol: lhvd
Elevation: 560 to 880 feet
Mean annual precipitation: 43 to 58 inches
Mean annual air temperature: 45 to 68 degrees F
Frost-free period: 159 to 199 days
Farmland classification: Not prime farmland

Map Unit Composition

Rohan, severely eroded, and similar soils: 75 percent
Minor components: 25 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Rohan, Severely Eroded

Setting

Landform: Hills
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope
Down-slope shape: Linear
Across-slope shape: Convex
Parent material: Loamy-skeletal residuum weathered from acid shale

Typical profile

H1 - 0 to 4 inches: channery silt loam
H2 - 4 to 18 inches: very channery silty clay loam
Cr - 18 to 20 inches: bedrock
R - 20 to 30 inches: bedrock

Properties and qualities

Slope: 20 to 50 percent
Depth to restrictive feature: 10 to 20 inches to paralithic bedrock; 12 to 39 inches to lithic bedrock
Drainage class: Well drained
Runoff class: Very high
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.20 to 2.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Very low (about 1.5 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7e
Hydrologic Soil Group: D
Hydric soil rating: No

Minor Components

Shallow loamy soils

Percent of map unit: 7 percent
Hydric soil rating: No

Shallow clayey soils

Percent of map unit: 6 percent
Hydric soil rating: No

Soils with < 35% fragments

Percent of map unit: 6 percent
Hydric soil rating: No

Trappist

Percent of map unit: 6 percent
Hydric soil rating: No

Se—Sensabaugh gravelly loam, 0 to 4 percent slopes, occasionally flooded

Map Unit Setting

National map unit symbol: lhvf
Elevation: 530 to 940 feet
Mean annual precipitation: 43 to 58 inches
Mean annual air temperature: 45 to 68 degrees F
Frost-free period: 159 to 199 days
Farmland classification: All areas are prime farmland

Map Unit Composition

Sensabaugh, occasionally flooded, and similar soils: 85 percent
Minor components: 15 percent

Custom Soil Resource Report

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Sensabaugh, Occasionally Flooded

Setting

Landform: Flood plains

Down-slope shape: Concave

Across-slope shape: Linear

Parent material: Fine-loamy alluvium derived from limestone, sandstone, and shale and/or siltstone

Typical profile

H1 - 0 to 11 inches: gravelly loam

H2 - 11 to 25 inches: silt loam

H3 - 25 to 64 inches: gravelly loam

H4 - 64 to 79 inches: extremely gravelly sandy clay loam

Properties and qualities

Slope: 0 to 4 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Well drained

Runoff class: Low

Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high
(0.60 to 6.00 in/hr)

Depth to water table: About 48 to 72 inches

Frequency of flooding: NoneOccasional

Frequency of ponding: None

Available water supply, 0 to 60 inches: Moderate (about 7.8 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 2w

Hydrologic Soil Group: A

Hydric soil rating: No

Minor Components

Newark

Percent of map unit: 3 percent

Landform: Flood plains

Hydric soil rating: No

Chagrin

Percent of map unit: 3 percent

Landform: Flood plains

Hydric soil rating: No

Grigsby

Percent of map unit: 3 percent

Landform: Flood plains

Hydric soil rating: No

Renox

Percent of map unit: 3 percent

Hydric soil rating: No

Soils with rare flooding

Percent of map unit: 3 percent

Hydric soil rating: No

SgB—Sensabaugh gravelly loam, 2 to 6 percent slopes

Map Unit Setting

National map unit symbol: lhvg
Elevation: 530 to 820 feet
Mean annual precipitation: 43 to 58 inches
Mean annual air temperature: 45 to 68 degrees F
Frost-free period: 159 to 199 days
Farmland classification: All areas are prime farmland

Map Unit Composition

Sensabaugh and similar soils: 90 percent
Minor components: 10 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Sensabaugh

Setting

Landform: Alluvial fans
Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Base slope
Down-slope shape: Linear
Across-slope shape: Convex
Parent material: Fine-loamy alluvium derived from limestone, sandstone, and shale and/or siltstone

Typical profile

H1 - 0 to 11 inches: gravelly loam
H2 - 11 to 25 inches: silt loam
H3 - 25 to 64 inches: gravelly loam
H4 - 64 to 79 inches: extremely gravelly sandy clay loam

Properties and qualities

Slope: 2 to 6 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Medium
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.60 to 6.00 in/hr)
Depth to water table: About 48 to 72 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Moderate (about 7.8 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 2e
Hydrologic Soil Group: A
Hydric soil rating: No

Minor Components

Elk

Percent of map unit: 2 percent
Hydric soil rating: No

Extremely gravelly soils

Percent of map unit: 2 percent
Hydric soil rating: No

Holston

Percent of map unit: 2 percent
Hydric soil rating: No

Lowell

Percent of map unit: 2 percent
Hydric soil rating: No

Renox

Percent of map unit: 2 percent
Hydric soil rating: No

St—Stokly sandy loam, occasionally flooded

Map Unit Setting

National map unit symbol: lhvh
Elevation: 540 to 950 feet
Mean annual precipitation: 43 to 58 inches
Mean annual air temperature: 45 to 68 degrees F
Frost-free period: 159 to 199 days
Farmland classification: Prime farmland if drained

Map Unit Composition

Stokly, occasionally flooded, and similar soils: 90 percent
Minor components: 10 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Stokly, Occasionally Flooded

Setting

Landform: Flood plains
Down-slope shape: Concave
Across-slope shape: Linear
Parent material: Coarse-loamy alluvium derived from sandstone and siltstone

Typical profile

H1 - 0 to 38 inches: sandy loam
H2 - 38 to 62 inches: loamy sand

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: More than 80 inches

Custom Soil Resource Report

Drainage class: Somewhat poorly drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): High (2.00 to 6.00 in/hr)
Depth to water table: About 6 to 12 inches
Frequency of flooding: NoneOccasional
Frequency of ponding: None
Available water supply, 0 to 60 inches: Moderate (about 8.2 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 2w
Hydrologic Soil Group: A/D
Hydric soil rating: No

Minor Components

Newark

Percent of map unit: 2 percent
Landform: Flood plains
Hydric soil rating: No

Chagrin

Percent of map unit: 2 percent
Landform: Flood plains
Hydric soil rating: No

Soils with rare flooding

Percent of map unit: 2 percent
Landform: Flood plains
Hydric soil rating: No

Melvin, occasionally flooded

Percent of map unit: 2 percent
Landform: Flood plains
Down-slope shape: Concave
Across-slope shape: Linear
Hydric soil rating: Yes

Ponded soils

Percent of map unit: 2 percent
Landform: Flood plains
Down-slope shape: Concave
Across-slope shape: Concave
Hydric soil rating: Yes

TeB—Teddy loam, 1 to 6 percent slopes

Map Unit Setting

National map unit symbol: lhvj
Elevation: 870 to 1,040 feet
Mean annual precipitation: 43 to 58 inches

Custom Soil Resource Report

Mean annual air temperature: 45 to 68 degrees F
Frost-free period: 159 to 199 days
Farmland classification: All areas are prime farmland

Map Unit Composition

Teddy and similar soils: 90 percent
Minor components: 10 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Teddy

Setting

Landform: Ridges
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Interfluve
Down-slope shape: Convex
Across-slope shape: Linear
Parent material: Fine-loamy residuum weathered from limestone, sandstone, and shale and/or siltstone

Typical profile

H1 - 0 to 5 inches: loam
H2 - 5 to 22 inches: loam
H3 - 22 to 62 inches: loam

Properties and qualities

Slope: 1 to 6 percent
Depth to restrictive feature: 20 to 36 inches to fragipan
Drainage class: Moderately well drained
Runoff class: Medium
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 18 to 28 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Low (about 4.3 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 2e
Hydrologic Soil Group: D
Hydric soil rating: No

Minor Components

Newark

Percent of map unit: 2 percent
Landform: Flood plains
Hydric soil rating: No

Dewey

Percent of map unit: 2 percent
Hydric soil rating: No

Lonewood

Percent of map unit: 2 percent
Hydric soil rating: No

Stokly

Percent of map unit: 2 percent
Landform: Flood plains
Hydric soil rating: No

Soils with bedrock at < 60

Percent of map unit: 1 percent
Hydric soil rating: No

Somewhat poorly drained soils

Percent of map unit: 1 percent
Hydric soil rating: No

ToC2—Trappist silt loam, 6 to 12 percent slopes, eroded

Map Unit Setting

National map unit symbol: lhvk
Elevation: 590 to 770 feet
Mean annual precipitation: 43 to 58 inches
Mean annual air temperature: 45 to 68 degrees F
Frost-free period: 159 to 199 days
Farmland classification: Farmland of statewide importance

Map Unit Composition

Trappist and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Trappist

Setting

Landform: Ridges
Landform position (two-dimensional): Shoulder
Landform position (three-dimensional): Side slope
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Clayey residuum weathered from acid shale

Typical profile

H1 - 0 to 7 inches: silt loam
H2 - 7 to 29 inches: clay
R - 29 to 39 inches: bedrock

Properties and qualities

Slope: 6 to 12 percent
Depth to restrictive feature: 20 to 40 inches to lithic bedrock
Drainage class: Well drained
Runoff class: High
Capacity of the most limiting layer to transmit water (Ksat): Moderately high (0.20 to 0.60 in/hr)
Depth to water table: More than 80 inches

Custom Soil Resource Report

Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Low (about 4.2 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 3e
Hydrologic Soil Group: C
Hydric soil rating: No

Minor Components

Soils with gravelly surface

Percent of map unit: 4 percent
Hydric soil rating: No

Trappist, severely eroded

Percent of map unit: 4 percent
Hydric soil rating: No

Rohan

Percent of map unit: 4 percent
Hydric soil rating: No

Shallow clayey soils

Percent of map unit: 3 percent
Hydric soil rating: No

TpD2—Trappist-Rohan complex, rocky, 12 to 25 percent slopes, eroded

Map Unit Setting

National map unit symbol: lhvl
Elevation: 580 to 850 feet
Mean annual precipitation: 43 to 58 inches
Mean annual air temperature: 45 to 68 degrees F
Frost-free period: 159 to 199 days
Farmland classification: Not prime farmland

Map Unit Composition

Trappist and similar soils: 40 percent
Rohan and similar soils: 30 percent
Minor components: 30 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Trappist

Setting

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

Custom Soil Resource Report

Parent material: Clayey residuum weathered from acid shale

Typical profile

H1 - 0 to 7 inches: silt loam
H2 - 7 to 29 inches: clay
R - 29 to 39 inches: bedrock

Properties and qualities

Slope: 12 to 25 percent
Depth to restrictive feature: 20 to 40 inches to lithic bedrock
Drainage class: Well drained
Runoff class: High
Capacity of the most limiting layer to transmit water (Ksat): Moderately high (0.20 to 0.60 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Low (about 4.2 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 6s
Hydrologic Soil Group: C
Hydric soil rating: No

Description of Rohan

Setting

Landform: Hills
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Loamy-skeletal residuum weathered from acid shale

Typical profile

H1 - 0 to 4 inches: channery silt loam
H2 - 4 to 18 inches: very channery silty clay loam
Cr - 18 to 20 inches: bedrock
R - 20 to 30 inches: bedrock

Properties and qualities

Slope: 12 to 25 percent
Depth to restrictive feature: 10 to 20 inches to paralithic bedrock; 12 to 39 inches to lithic bedrock
Drainage class: Well drained
Runoff class: High
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.20 to 2.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Very low (about 1.5 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 6s
Hydrologic Soil Group: D

Hydric soil rating: No

Minor Components

Deep loamy soils

Percent of map unit: 8 percent

Hydric soil rating: No

Moderately deep loamy soils

Percent of map unit: 8 percent

Hydric soil rating: No

Rohan, severely eroded

Percent of map unit: 7 percent

Hydric soil rating: No

Trappist, severely eroded

Percent of map unit: 7 percent

Hydric soil rating: No

TrB—Trimble cobbly silt loam, 2 to 6 percent slopes

Map Unit Setting

National map unit symbol: lhvm

Elevation: 870 to 1,020 feet

Mean annual precipitation: 43 to 58 inches

Mean annual air temperature: 45 to 68 degrees F

Frost-free period: 159 to 199 days

Farmland classification: Not prime farmland

Map Unit Composition

Trimble and similar soils: 90 percent

Minor components: 10 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Trimble

Setting

Landform: Ridges

Landform position (two-dimensional): Summit

Landform position (three-dimensional): Interfluve

Down-slope shape: Convex

Across-slope shape: Linear

Parent material: Fine-loamy residuum weathered from cherty limestone

Typical profile

H1 - 0 to 10 inches: cobbly silt loam

H2 - 10 to 34 inches: cobbly clay loam

H3 - 34 to 62 inches: cobbly clay loam

Custom Soil Resource Report

Properties and qualities

Slope: 2 to 6 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Medium
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 supply, 0 to 60 inches: High (about 10.2 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 2e
Hydrologic Soil Group: B
Hydric soil rating: No

Minor Components

Caneyville

Percent of map unit: 3 percent
Hydric soil rating: No

Dewey

Percent of map unit: 3 percent
Hydric soil rating: No

Lonewood

Percent of map unit: 2 percent
Hydric soil rating: No

Trimble, eroded

Percent of map unit: 2 percent
Hydric soil rating: No

TrC2—Trimble cobbly silt loam, 6 to 12 percent slopes, eroded

Map Unit Setting

National map unit symbol: lhvn
Elevation: 670 to 1,050 feet
Mean annual precipitation: 43 to 58 inches
Mean annual air temperature: 45 to 68 degrees F
Frost-free period: 159 to 199 days
Farmland classification: Not prime farmland

Map Unit Composition

Trimble and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Trimble

Setting

Landform: Ridges
Landform position (two-dimensional): Shoulder
Landform position (three-dimensional): Side slope
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Fine-loamy residuum weathered from cherty limestone

Typical profile

H1 - 0 to 8 inches: cobbly silt loam
H2 - 8 to 26 inches: cobbly loam
H3 - 26 to 62 inches: cobbly silty clay loam

Properties and qualities

Slope: 6 to 12 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Medium
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 supply, 0 to 60 inches: High (about 10.2 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 3e
Hydrologic Soil Group: B
Hydric soil rating: No

Minor Components

Caneyville

Percent of map unit: 4 percent
Hydric soil rating: No

Dewey

Percent of map unit: 4 percent
Hydric soil rating: No

Lonewood

Percent of map unit: 4 percent
Hydric soil rating: No

Trimble, severely eroded

Percent of map unit: 3 percent
Hydric soil rating: No

TrD2—Trimble cobbly silt loam, 12 to 25 percent slopes, eroded

Map Unit Setting

National map unit symbol: lhvp
Elevation: 660 to 1,000 feet
Mean annual precipitation: 43 to 58 inches
Mean annual air temperature: 45 to 68 degrees F
Frost-free period: 159 to 199 days
Farmland classification: Not prime farmland

Map Unit Composition

Trimble and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Trimble

Setting

Landform: Hills
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope
Down-slope shape: Linear
Across-slope shape: Convex
Parent material: Fine-loamy residuum weathered from cherty limestone

Typical profile

H1 - 0 to 8 inches: cobbly silt loam
H2 - 8 to 26 inches: cobbly loam
H3 - 26 to 62 inches: cobbly silty clay loam

Properties and qualities

Slope: 12 to 25 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: High
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 supply, 0 to 60 inches: High (about 10.2 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 4e
Hydrologic Soil Group: B
Hydric soil rating: No

Minor Components

Caneyville

Percent of map unit: 4 percent
Hydric soil rating: No

Dewey

Percent of map unit: 4 percent
Hydric soil rating: No

Lonewood

Percent of map unit: 4 percent
Hydric soil rating: No

Trimble, severely eroded

Percent of map unit: 3 percent
Hydric soil rating: No

W—Water

Map Unit Setting

National map unit symbol: lhvq
Mean annual precipitation: 43 to 58 inches
Mean annual air temperature: 45 to 68 degrees F
Frost-free period: 159 to 199 days
Farmland classification: Not prime farmland

Map Unit Composition

Water: 100 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

WaC2—Waynesboro loam, 6 to 12 percent slopes, eroded

Map Unit Setting

National map unit symbol: lhvr
Elevation: 530 to 720 feet
Mean annual precipitation: 43 to 58 inches
Mean annual air temperature: 45 to 68 degrees F
Frost-free period: 159 to 199 days
Farmland classification: Farmland of statewide importance

Map Unit Composition

Waynesboro and similar soils: 90 percent
Minor components: 10 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Waynesboro

Setting

Landform: Stream terraces
Landform position (three-dimensional): Tread
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Old clayey alluvium

Typical profile

H1 - 0 to 6 inches: loam
H2 - 6 to 58 inches: clay
H3 - 58 to 74 inches: loam

Properties and qualities

Slope: 6 to 12 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Medium
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 supply, 0 to 60 inches: High (about 10.2 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 3e
Hydrologic Soil Group: B
Hydric soil rating: No

Minor Components

Elk

Percent of map unit: 3 percent
Hydric soil rating: No

Holston

Percent of map unit: 3 percent
Hydric soil rating: No

Lowell

Percent of map unit: 2 percent
Hydric soil rating: No

Monongahela

Percent of map unit: 2 percent
Hydric soil rating: No

References

- American Association of State Highway and Transportation Officials (AASHTO). 2004. Standard specifications for transportation materials and methods of sampling and testing. 24th edition.
- American Society for Testing and Materials (ASTM). 2005. Standard classification of soils for engineering purposes. ASTM Standard D2487-00.
- Cowardin, L.M., V. Carter, F.C. Golet, and E.T. LaRoe. 1979. Classification of wetlands and deep-water habitats of the United States. U.S. Fish and Wildlife Service FWS/OBS-79/31.
- Federal Register. July 13, 1994. Changes in hydric soils of the United States.
- Federal Register. September 18, 2002. Hydric soils of the United States.
- Hurt, G.W., and L.M. Vasilas, editors. Version 6.0, 2006. Field indicators of hydric soils in the United States.
- National Research Council. 1995. Wetlands: Characteristics and boundaries.
- Soil Survey Division Staff. 1993. Soil survey manual. Soil Conservation Service. U.S. Department of Agriculture Handbook 18. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_054262
- Soil Survey Staff. 1999. Soil taxonomy: A basic system of soil classification for making and interpreting soil surveys. 2nd edition. Natural Resources Conservation Service, U.S. Department of Agriculture Handbook 436. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053577
- Soil Survey Staff. 2010. Keys to soil taxonomy. 11th edition. U.S. Department of Agriculture, Natural Resources Conservation Service. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053580
- Tiner, R.W., Jr. 1985. Wetlands of Delaware. U.S. Fish and Wildlife Service and Delaware Department of Natural Resources and Environmental Control, Wetlands Section.
- United States Army Corps of Engineers, Environmental Laboratory. 1987. Corps of Engineers wetlands delineation manual. Waterways Experiment Station Technical Report Y-87-1.
- United States Department of Agriculture, Natural Resources Conservation Service. National forestry manual. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/home/?cid=nrcs142p2_053374
- United States Department of Agriculture, Natural Resources Conservation Service. National range and pasture handbook. <http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/landuse/rangepasture/?cid=stelprdb1043084>

Custom Soil Resource Report

United States Department of Agriculture, Natural Resources Conservation Service. National soil survey handbook, title 430-VI. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/scientists/?cid=nrcs142p2_054242

United States Department of Agriculture, Natural Resources Conservation Service. 2006. Land resource regions and major land resource areas of the United States, the Caribbean, and the Pacific Basin. U.S. Department of Agriculture Handbook 296. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053624

United States Department of Agriculture, Soil Conservation Service. 1961. Land capability classification. U.S. Department of Agriculture Handbook 210. http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_052290.pdf