

**TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION**

Division of Water Resources


William R. Snodgrass Tennessee Tower, 312 Rosa L. Parks Avenue, 11th Floor, Nashville, Tennessee 37243

1-888-891-8332 (TDEC)

Notice of Intent (NOI) for General NPDES Permit for Stormwater Discharges from Construction Activities (TNR100000)

Site or Project Name: Autumn Woods Subdivision		NPDES Tracking Number: TNR	
Street Address or Location: Cumby Road near Tulip Lane		Construction Start Date: 02/22	
		Estimated End Date: 10/23	
Site Description: Approximately 60 single family resident subdivision		Latitude (dd.dddd): 36.211	
		Longitude (-dd.dddd): -85.584	
County(ies): Putnam		MS4 (if applicable):	
Check box if a SWPPP is attached : <input checked="" type="checkbox"/>		Check box if a site location map is attached: <input checked="" type="checkbox"/>	
Acres Disturbed: 42.8		Total Acres: 74.6	
Check the appropriate box(s) if there are streams and/or wetlands on or adjacent to the construction site: Streams <input type="checkbox"/> Wetlands <input type="checkbox"/>			
Has a jurisdictional determination been made by the USACE or EPA identifying waters of the United States?: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>			
Note: if yes, attach the jurisdictional determination			
If an Aquatic Resource Alteration Permit (ARAP) has been obtained for this site, what is the permit number? NR(S)			
Receiving waters: West Blackburn Fork			

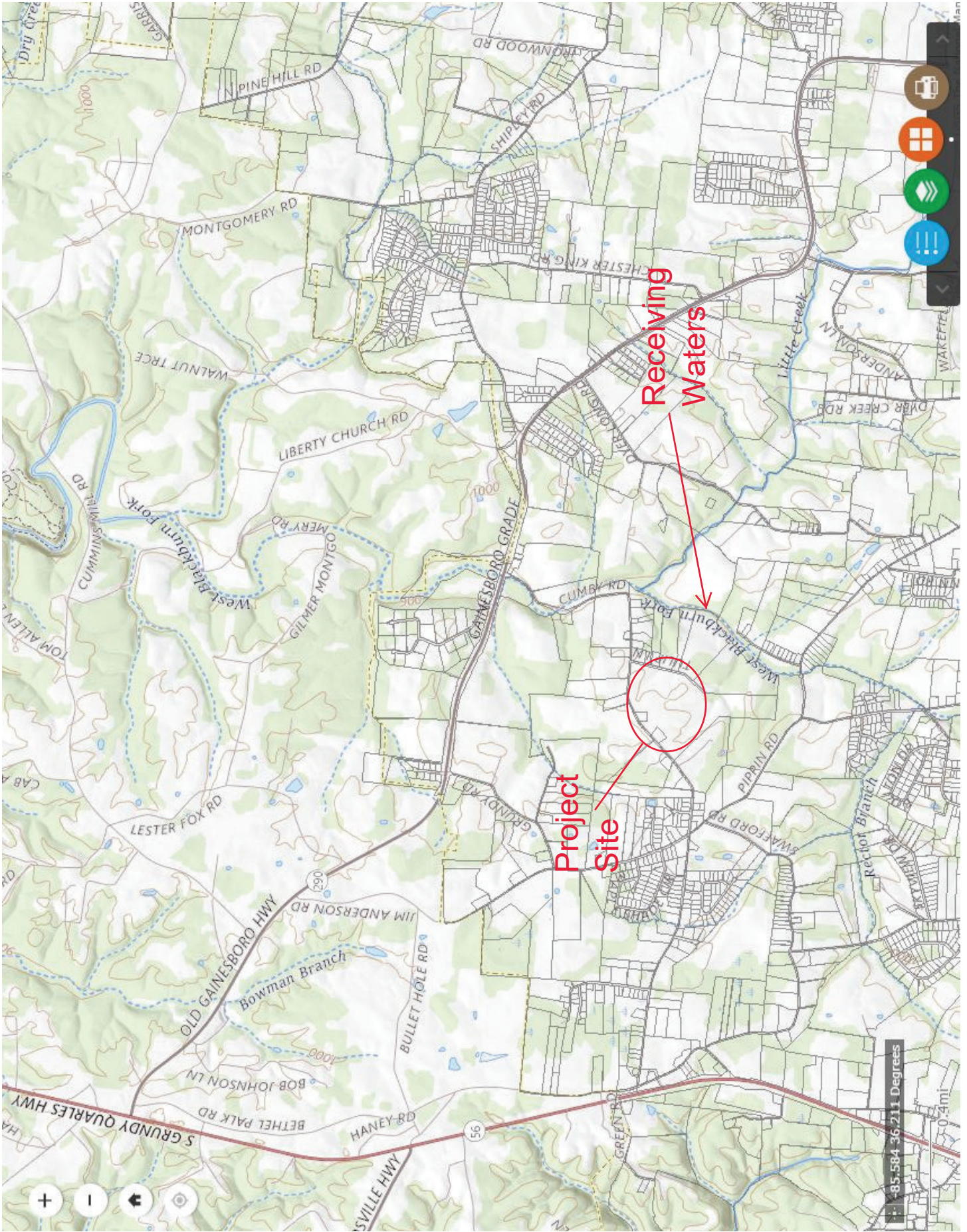
Site Owner/Developer (Primary Permittee): (Provide person, company, or entity that has operational or design control over construction plans and specifications): Ron Brown			
For corporate entities only, provide correct Tennessee Secretary of State (SOS) Control Number: (an incorrect SOS control number may delay NOI processing)			
Site Owner or Developer Contact Name: (signs the certification below) Ron Brown		Title or Position: Owner	
Mailing Address: 1513 Randy Street		City: Cookeville	State: TN
Phone: (931) 252-1106		Fax: ()	Zip: 38501
Optional Contact:		E-mail: joyceallred@ymail.com	
Mailing Address:		City:	State:
Phone: ()		Fax: ()	Zip:
E-mail:			

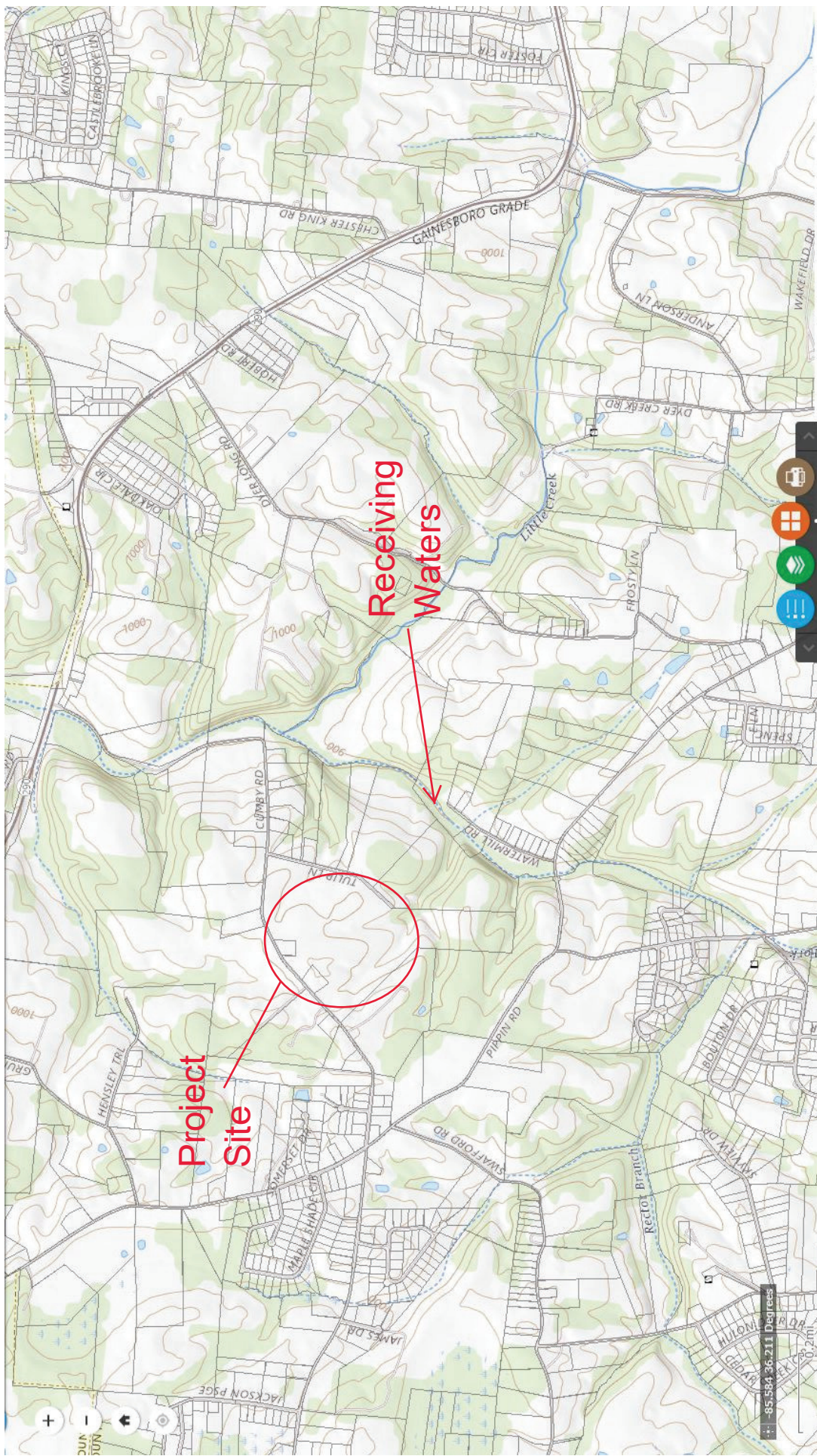
Owner/Developer(s) Certification: (must be signed by president, vice-president or equivalent, or ranking elected official) (Primary Permittee)		
I certify under penalty of law that this document and all attachments were prepared by me, or under my direction or supervision. The submitted information is to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. As specified in Tennessee Code Annotated Section 39-16-702(a)(4), this declaration is made under penalty of perjury.		
Owner/Developer Name (print/type): Ron Brown	Signature: 	Date: 2-1-22
Owner/Developer Name (print/type):	Signature:	Date:

Contractor Certification: (must be signed by president, vice-president or equivalent, or ranking elected official) (Secondary Permittee)		
I certify under penalty of law that I have reviewed this document, any attachments, and the SWPPP referenced above. Based on my inquiry of the construction site owner/developer identified above and/or my inquiry of the person directly responsible for assembling this NOI and SWPPP, I believe the information submitted is accurate. I am aware that this NOI, if approved, makes the above-described construction activity subject to NPDES permit number TNR100000, and that certain of my activities on-site are thereby regulated. I am aware that there are significant penalties, including the possibility of fine and imprisonment for knowing violations, and for failure to comply with these permit requirements. As specified in Tennessee Code Annotated Section 39-16- 702(a)(4), this declaration is made under penalty of perjury.		
Contractor name, address, and SOS control number (if applicable):	Signature:	Date:

OFFICIAL STATE USE ONLY

Received Date:	Reviewer:	Field Office:	Permit Tracking Number: TNR	Exceptional TN Water:
Fee(s):	T & E Aquatic Flora/Fauna:	SOS Corporate Status:	Waters with Unavailable Parameters:	Notice of Coverage Date:





STORM WATER POLLUTION PREVENTION PLAN

Prepared for:

Autumn Woods Subdivision

Cumby Road near Tulip Lane
Cookeville, Tennessee

Prepared by:

Clinton Engineering
380 S. Lowe Ave., Suite 6
Cookeville, TN 38501
931-372-0427

Feb 1, 2022

Table of Contents

General Information	3
Site Description	4-5
Stormwater Runoff Controls	5
Stormwater Management	5
Site Assessment	6
Inspections	6
Pollution Prevention Measures for Non-Stormwater Discharges	6-7
Total Maximum Daily Loads	7
Owner/Contractor Information	8

GENERAL INFORMATION

This Storm Water Pollution Prevention Plan (SWPPP) is developed in accordance with the Tennessee General NPDES Permit (TNR100000) for Storm Water Discharges Associated with Construction Activity (TNCGP), and is prepared using sound engineering practices. Clinton Engineering personnel involved with the development of this plan have completed the *Design of vegetative and Structural Measures for Erosion Prevention and Sediment Control* course available from the State of Tennessee.

As instructed by section 2.4 of the TNCGP, this plan and all attachments are hereby submitted to the local Environmental Assistance Center (EAC), along with the complete, correctly signed Notice of Intent (NOI). Construction will not be initiated prior to receipt of a Notice of Coverage (NOC) from the Tennessee Department of Environment and Conservation (TDEC).

Current versions of this SWPPP, the NOI, ARAP's and the NOC will be kept on the site for the duration of the project. These items will be available for the use of all operators and site personnel involved with erosion and sediment controls, and will be available to TDEC personnel visiting the site. A notice will be posted near the construction entrance during the Pre-construction phase and construction phase containing a copy of the NOC with the tracking number assigned by the EAC, the name and telephone number of a contact person for the development, and a brief description of the project.

Any new roadway/utility contractor on the project that has any responsibility to install, inspect, or maintain erosion or sediment control measures will sign the contractor's certification on a copy of the NOI and will submit it to the local EAC. **Any home owner/contractor on the project that begins home construction on any lot shall be required to obtain subsequent coverage using TDEC form CN-1249.** Any correspondence with TDEC or any EAC will reference the tracking number assigned by TDEC to the project. The General Contractor will submit a Notice of Termination (NOT) after the complete installation and successful establishment of the final stabilization activities at the site.

It is the intention and goal of the TNCGP and this SWPPP that any discharge from the property described in this document have no objectionable color contrast to the water body that receives it. The construction activity will be carried out in such a manner as will prevent any discharge that would cause a condition in which visible solids, bottom deposits, or turbidity impairs the usefulness of the waters on the property or downstream of the property for fish and aquatic life, livestock watering and wildlife, recreation, irrigation, navigation, or industrial or domestic water supply.

This plan may be amended for reasons described below, or for other reasons. When the plans are revised, the contractor will implement the changes to erosion protection and sediment controls within 48 hours after the need for modification is identified.

SITE DESCRIPTION

Existing Site Conditions

The total property area consists of approximately 74 acres, but the new development is occurring on the northern 50 acres of the property with the southern 25 acres to possibly be developed at some time in the future after establishment of the subdivision. The area of development is primarily farm pasture with a few trees. The property currently drains to the southeast through three valleys with ditches along the bottom. The side slopes of the valleys range around approximately 10-15 percent slope with the bottom slope of the ditches around an average of 4-6 percent slope. The southern two valleys converge on the property just south of the developed area. They exist the property to the east approximately 1500 feet from West Blackburn Fork. The northern valley exits to the east as well approximately 1400 feet north of the southern outfall, also approximately 1500 feet from West Blackburn Fork. West Blackburn Fork is part of the Upper Cumberland Cordell Hull watershed. The site is located in Putnam County, Tennessee. (See attached USGS map).

Project Description

The project consists disturbing approximately 42.8 acres with the grading, drainage and paving of approximately 5350 lf of new roadway as well as grading and house construction on approximately 60 new residential lots. The total new impervious surface for the roadway is approximately 2.69 acres and the estimated impervious surface for the developed lots is approximately 4.8 acres. The storm water from the proposed development will flow to the same outfall locations as pre-development. It is the responsibility of the contractor to revise this SWPPP to include areas offsite (not permitted) where additional fill material or disposal of excess material is accessed. If the new area is used solely by the project outlined in this plan, the new area is considered to be part of this project, and the erosion prevention and sediment control at that location will also be the responsibility of the contractor.

Construction Activities

Construction activities on this site include installation of erosion control measures, grading of site and roads, placing base stone and paving, building construction, and seeding and stabilization of site.

Construction Sequencing

The Contractor shall adhere to the following guidelines when preparing a construction sequencing plan:

- Limits of construction per the Erosion Control Plan shall be marked in the field.

- All erosion prevention and sediment control best management practices (BMP's) identified in this SWPPP will be installed as recommended in the Tennessee Erosion and Sediment Control (TEPSC) Handbook.
- If any erosion control measure proves to be inadequate, or fails, it shall be corrected within 7 days.
- Land-disturbing activity at the project site will begin with the installation of temporary construction entrance, silt fence and other BMP's as shown on the Erosion Control Plan.
- Sediment will be removed from silt fences, check dams, sediment pond, etc. before the design capacity of the structure has been reduced by 50%. Litter, construction debris, and construction chemicals exposed to storm water will be picked up prior to anticipated storm events (e.g. forecasted by local weather sources), or otherwise prevented from becoming a pollutant source for storm water discharges (e.g. screening outfalls, daily pick, etc.) After use, silt fences will be removed or otherwise prevented from becoming a pollutant source for storm water discharges. Temporary measures may be removed at the beginning of the workday, but will be replaced at the end of the workday.
- Stabilization will be accomplished as soon as practicable after attainment of final grade and no later than seven (7) days after attaining final grade. Where earth-disturbing activity has temporarily ceased, temporary stabilization will be applied within seven days if the activity will not resume within 15 days. The dates when major grading activities occur, the dates when construction activities temporarily or permanently cease on a portion of the site, and the dates when stabilization measures are initiated will be recorded and maintained on the site. Stabilization methods include seed and mulch and sodding. The contractor shall use erosion control blankets on slopes steeper than 3:1.
- Any modification to this SWPPP shall be prior approved by the Designer and in strict accordance with the TEPSC Handbook.
- The BMP's established in this plan are a minimum. The contractor shall take necessary measures to ensure that no sediment is lost from the site.

The sequence of construction shall be as follows:

- Installation of erosion control measures in accordance with Section 3.5.3.1 of TNR 100000
- Grading of site and roads
- Placement of gravel base over paved areas
- Seeding and stabilization of site in accordance with Section 3.5.3.2 of TNR100000
- Installation of asphalt paving, sidewalks and curbs
- Construction of houses at each lot (requires subsequent coverage by home builder)
- Removal of any remaining erosion control measures

STORMWATER RUNOFF CONTROLS

A sediment pond is required for this site for the outfall areas that exceed 10 acres (Outfalls 2 and 3). Due to the constraints of the project and the availability of ample distancing between disturbed areas, equivalent measures of multiple rock filter ring protection berms have been used in lieu of the sediment ponds. **The receiving stream has not been listed as a 303(d) stream.** The erosion and sediment controls shown on the drawings include silt fence and rock check dams and are a minimum for a 2-year 24-hr storm event. All erosion and sediment control measures shall be installed and maintained in accordance with Tennessee General Permit No. TNR100000.

STORMWATER MANAGEMENT

Storm water management for this site will be provided by grading for positive drainage away from all buildings and directed to the existing storm system that flows into the existing detention pond as shown on the Erosion Control Plan.

SITE ASSESSMENT

A Site Assessment shall be conducted at each outfall draining 10 or more acres or 5 or more acres if draining to waters with unavailable parameters or Exceptional Tennessee Waters. Site assessments shall cover the entire disturbed area and occur within 30 days of construction commencing at each portion of the site that drains the qualifying acreage. A follow-up monthly assessment is required until the BMPs are constructed per the SWPPP. Site Assessments shall be conducted by a licensed professional engineer or landscape architect, a Certified Professional in Erosion and Sediment Control, or a person who has successfully completed the Level II course for Erosion Prevention and Sediment Control. **A Site Assessment is required for this project.**

INSPECTIONS

Site inspections will be required twice each calendar week at least 72 hours apart. Inspection results and notes about any repairs made shall be kept in a log and maintained on site. Other data to be maintained includes: grading dates, cease work dates, inspection dates, rainfall amounts, etc. Construction storm water inspection certifications shall be filled out at each time of inspection (Appendix C of the General permit) to document inspections. The inspector must be qualified, and every inspector must have completed the State's Level I course on Erosion Prevention and Sediment Control. A copy of the certification or training record for inspector certification should be kept on site.

If a discharge is causing a violation of water quality standards or contributing to the impairment of water identified as impaired on the 303(d) list, the discharger will be notified that the discharge is no longer eligible for coverage under the general permit and that additional discharges must be covered under an individual permit.

POLLUTION PREVENTION MEASURES FOR NON-STORMWATER DISCHARGES

All fueling of equipment and vehicles on site will be conducted near the construction entrance/staging area. Any spillage will be removed immediately. Contaminated soils will be placed on heavy plastic and covered or placed into approved containers to prevent contact with storm water. All fuel tanks will be in the containment area. Oils, other vehicle fluids, paints, and solvents will be stored in the construction trailer. Any spill in excess of two (2) gallons will be reported to a representative of the general contractor.

If a release containing a hazardous substance in an amount equal to or in excess of a reporting quantity established under either 40 CFR 117 or 40 CFR 302 occurs during a 24-hour period, the contractor will immediately notify the permittee who shall then do the following: notify the National Response Center (NRC) (800-424-88023) and the Tennessee Emergency Management Agency (TEMA) (emergencies: 800-262-3300; non-emergencies: 800-262-3400); as well as the local Environmental Assistance Center. Also, the General Contractor will prepare a revision of this document to identify measures to prevent the reoccurrence of such releases.

Concrete trucks will wash out at the designated area near the construction entrance. Each contractor is responsible to provide litter control for trash generated by his crew. A dumpster for garbage will be located near the construction trailer and is limited to garbage and paper trash only. Paint cans, oil cans, used oil, and filters will be contained and disposed of by the contractor by taking them to the County Hazardous Waste Disposal Center.

Pollution prevention measures shall be in accordance with TNR 100000 Section 3.5.9.

TOTAL MAXIMUM DAILY LOADS

All storm water from this site discharges into ditches that lead to West Blackburn Fork within the Upper Cumberland-Cordell Hull Reservoir Watershed. The Total Maximum Daily Load (TMDL) for the tributary have been assessed by the EPA but no TMDL data has been recorded for this waterbody; therefore, no limitations should be applicable. Waste load allocations for NPDES regulated construction activities disturbing one or more acres should be implemented through Best Management Practices (BMP's) as specified by the General NPDES Permit for Storm Water Discharges Associated with Construction Activity. Please refer to the grading and erosion control sheets located within the Construction Plans for structural BMP's and to this document for all other BMP's.

STORM WATER POLLUTION PREVENTION PLAN

GENERAL INFORMATION:

This Storm Water Pollution Prevention Plan (SWPPP) has been developed in accordance with the Tennessee General NPDES Permit for Storm Water Discharges Associated with Construction Activity (TNCGP), and is prepared using sound engineering practices. As instructed by Part III.F of the TNCGP, this plan and all attachments are hereby submitted to the local Environmental Assistance Center (EAC), along with the complete, correctly signed Notice of Intent (NOI). Construction will not be initiated prior to 30 days from the date of submittal of this document, or prior to receipt of a Notice of Coverage (NOC) from the Tennessee Department of Environment and Conservation (TDEC).

Owner/Developer:	Ron Brown
Address:	Ron Brown 1513 Randy Street Cookeville, TN 38501
Phone:	931-252-1106
Contact Person:	Ron Brown
Email:	joyceallred@ymail.com

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision, in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based upon my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Representative of Owner/Developer and title; print or type	Signature (must be signed by President, V.P. or equivalent or ranking elected official)	Date
Ron Brown, Owner	<i>Ron Brown</i>	2-22-22

Primary Contractor:
Address:
Phone:

I certify under penalty of law that I have reviewed this document and any attachments. Based on my inquiry of the construction site Owner/Developer identified above, and/or my inquiry of the person directly responsible for assembling this Storm Water Pollution Prevention Plan, I believe the information submitted is accurate. I am aware that this Plan, if approved, makes the above-described construction activity subject to NPDES permit number TNR100000, and that certain of my activities on-site are thereby regulated. I am aware that there are significant penalties, including the possibility of fine and imprisonment, for knowing violations and for failure to comply with these permit requirements.

Representative of Owner/Developer and title; print or type	Signature (must be signed by President, V.P. or equivalent or ranking elected official)	Date



Waterbody Quality Assessment Report

[Return to home page](#)

On This Page

2012 Waterbody Report for West Blackburn Fork

- [Water Quality Assessment Status](#)
- [Causes of Impairment](#)
- [Probable Sources Contributing to Impairments](#)
- [TMDLs That Apply to This Waterbody](#)

State: Tennessee

Waterbody ID:

TN05130106008_0300

Location: West

Blackburn Fork from

Blackburn Fork to

headwaters.

Ecoregion 71g

Putnam County

State Waterbody

Type: River

EPA Waterbody

Type: Rivers and

Streams

Water Size: 17.8

Units: miles

Watershed Name:

Upper Cumberland-

Cordell Hull

Reservoir

[Waterbody History](#)

[Report](#)

**Data are also
available for these
years:** 2016 2014
2010 2008 2006 2004
2002

Water Quality Assessment Status for Reporting Year 2012

The overall status of this waterbody is Not _Assessed.

Description of this table

Designated Use	Designated Use Group	Status
Fish And Aquatic Life	Fish, Shellfish, And Wildlife Protection And Propagation	Not Assessed
Irrigation	Agricultural	Not Assessed
Livestock Watering And Wildlife	Agricultural	Not Assessed
Recreation	Recreation	Not Assessed

Causes of Impairment for Reporting Year 2012

No impairment data have been reported to EPA for this waterbody.

Probable Sources Contributing to Impairment for Reporting Year 2012

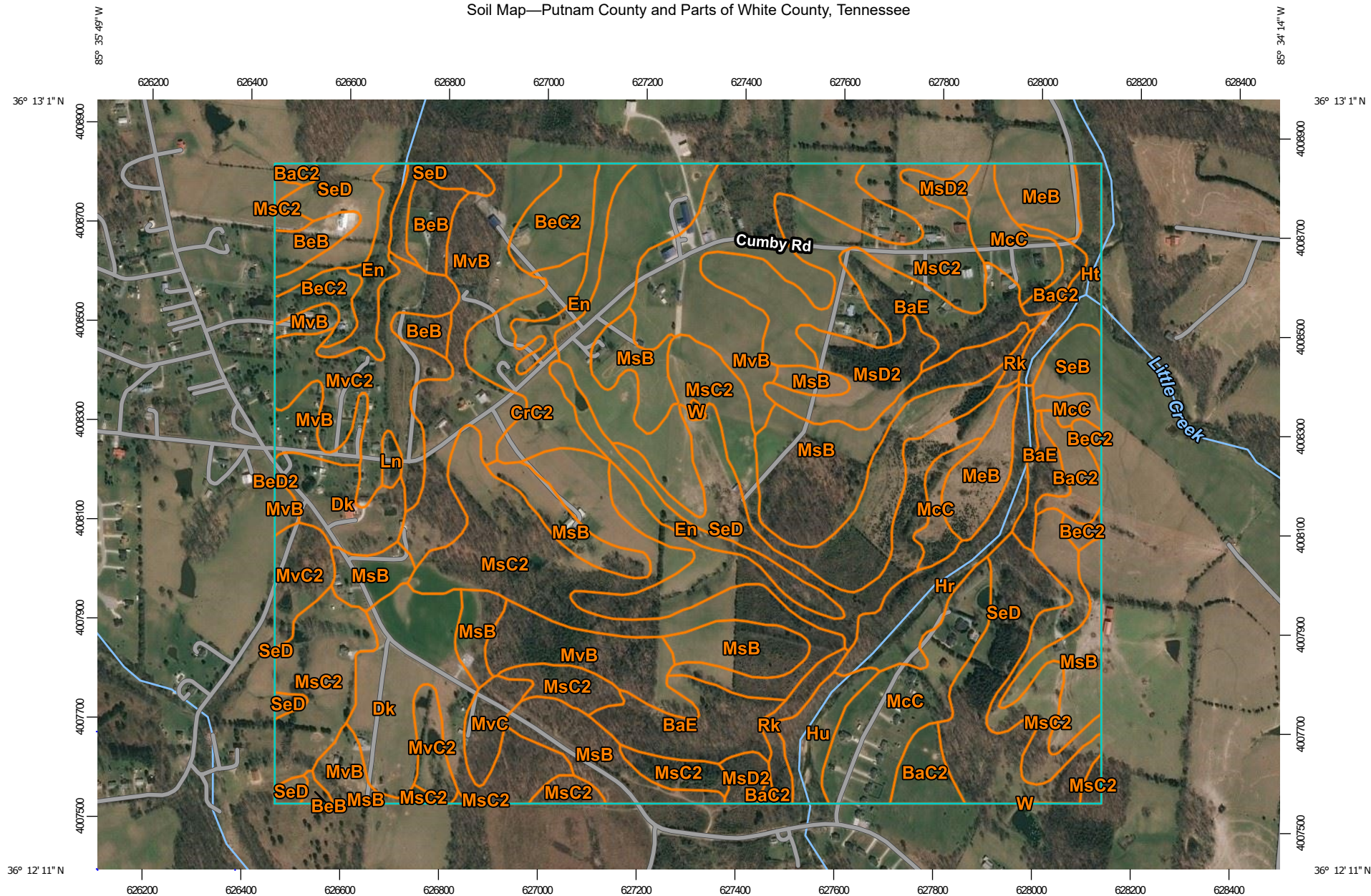
No probable source data have been reported to EPA for this waterbody.

TMDLs That Apply to this waterbody

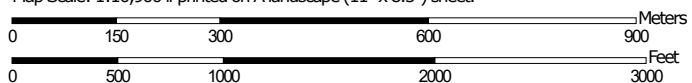
No TMDL data have been recorded by EPA for this waterbody.

May 20, 2020

Soil Map—Putnam County and Parts of White County, Tennessee



Map Scale: 1:10,900 if printed on A landscape (11" x 8.5") sheet.



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




**Natural Resources
Conservation Service**

Web Soil Survey
National Cooperative Soil Survey

5/21/2020
Page 1 of 4

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 1:15,800.

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: Putnam County and Parts of White County, Tennessee

Survey Area Data: Version 10, Sep 16, 2019

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

Date(s) aerial images were photographed: Feb 3, 2019—Mar 20, 2019

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
BaC2	Sengtown gravelly silt loam, 5 to 12 percent slopes	10.7	2.0%
BaE	Baxter cherty silt loam, 20 to 30 percent slopes	22.3	4.2%
BeB	Bewleyville silt loam, 2 to 5 percent slopes	9.1	1.7%
BeC2	Bewleyville silt loam, 5 to 12 percent slopes, eroded	11.5	2.1%
BeD2	Bewleyville silt loam, 12 to 20 percent slopes, eroded	0.0	0.0%
CrC2	Christian silt loam, 5 to 12 percent slopes, eroded	11.8	2.2%
Dk	Dickson silt loam, 2 to 5 percent slopes	30.5	5.7%
En	Ennis silt loam, local alluvium	15.4	2.9%
Hr	Huntington cherty silt loam	12.0	2.2%
Ht	Huntington fine sandy loam	6.2	1.2%
Hu	Huntington silt loam	5.7	1.1%
Ln	Lindell silt loam, 0 to 2 percent slopes, occasionally flooded	0.9	0.2%
McC	Minvale cherty silt loam, 2 to 12 percent slopes	26.7	5.0%
MeB	Minvale silt loam, 2 to 5 percent slopes	10.9	2.0%
MsB	Mountview silt loam, shallow, 2 to 5 percent slopes	57.2	10.7%
MsC2	Mountview silt loam, shallow, 5 to 12 percent slopes, eroded	127.5	23.8%
MsD2	Mountview silt loam, shallow, 12 to 20 percent slopes, eroded	13.2	2.5%
MvB	Mountview silt loam, 2 to 5 percent slopes	70.1	13.1%
MvC	Mountview silt loam, 5 to 12 percent slopes	4.0	0.7%
MvC2	Mountview silt loam, 5 to 12 percent slopes, eroded	27.3	5.1%
Rk	Rock land, limestone	3.8	0.7%
SeB	Sequatchie loam, 2 to 5 percent slopes	3.9	0.7%
SeD	Sengtown gravelly silt loam, 12 to 20 percent slopes	54.7	10.2%
W	Water	0.3	0.0%

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
Totals for Area of Interest		535.6	100.0%

Map Unit Description

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

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

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

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

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

Soils that have profiles that are almost alike make up a *soil series*. All the soils of a series have major horizons that are similar in composition, thickness, and arrangement. Soils of a given 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.

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

Report—Map Unit Description

Putnam County and Parts of White County, Tennessee

BaC2—Sengtown gravelly silt loam, 5 to 12 percent slopes

Map Unit Setting

National map unit symbol: 2td2n

Elevation: 600 to 1,300 feet
Mean annual precipitation: 47 to 58 inches
Mean annual air temperature: 56 to 59 degrees F
Frost-free period: 190 to 230 days
Farmland classification: Not prime farmland

Map Unit Composition

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

Description of Sengtown

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 cherty limestone

Typical profile

Ap - 0 to 8 inches: gravelly silt loam
E - 8 to 11 inches: gravelly silt loam
Bt - 11 to 79 inches: gravelly clay

Properties and qualities

Slope: 5 to 12 percent
Depth to restrictive feature: More than 80 inches
Natural 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
Salinity, maximum in profile: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water storage in profile: Moderate (about 7.5 inches)

Interpretive groups

Land capability classification (irrigated): 3e
Land capability classification (nonirrigated): 3e
Hydrologic Soil Group: B
Hydric soil rating: No

Minor Components

Mountview

Percent of map unit: 7 percent
Landform: Hills
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope

Down-slope shape: Convex
Across-slope shape: Convex
Hydric soil rating: No

Minvale

Percent of map unit: 4 percent
Landform: Hills
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope
Down-slope shape: Convex
Across-slope shape: Convex
Hydric soil rating: No

Waynesboro

Percent of map unit: 4 percent
Landform: Hills
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope
Down-slope shape: Convex
Across-slope shape: Convex
Hydric soil rating: No

BaE—Baxter cherty silt loam, 20 to 30 percent slopes

Map Unit Setting

National map unit symbol: 2mgx4
Mean annual precipitation: 46 to 60 inches
Mean annual air temperature: 57 to 61 degrees F
Frost-free period: 190 to 200 days
Farmland classification: Not prime farmland

Map Unit Composition

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

Description of Baxter

Setting

Landform: Hillslopes
Landform position (three-dimensional): Side slope
Parent material: Clayey residuum weathered from cherty limestone

Typical profile

H1 - 0 to 7 inches: gravelly silt loam
H2 - 7 to 20 inches: gravelly silty clay loam
H3 - 20 to 41 inches: gravelly clay
H4 - 41 to 99 inches: very gravelly clay

Properties and qualities

Slope: 20 to 30 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Well drained

Capacity of the most limiting layer to transmit water (Ksat):

Moderately high to high (0.60 to 2.00 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Available water storage in profile: Moderate (about 7.8 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 6e

Hydrologic Soil Group: B

Hydric soil rating: No

BeB—Bewleyville silt loam, 2 to 5 percent slopes

Map Unit Setting

National map unit symbol: 2mgx7

Elevation: 800 to 1,200 feet

Mean annual precipitation: 47 to 55 inches

Mean annual air temperature: 57 to 61 degrees F

Frost-free period: 180 to 205 days

Farmland classification: All areas are prime farmland

Map Unit Composition

Bewleyville and similar soils: 100 percent

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

Description of Bewleyville

Setting

Landform: Interfluves

Landform position (three-dimensional): Crest

Parent material: Loess over clayey or loamy alluvium

Typical profile

H1 - 0 to 8 inches: silt loam

H2 - 8 to 36 inches: silty clay loam

H3 - 36 to 72 inches: clay

Properties and qualities

Slope: 2 to 5 percent

Depth to restrictive feature: More than 80 inches

Natural drainage class: Well drained

Capacity of the most limiting layer to transmit water (Ksat):

Moderately high to high (0.60 to 2.00 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Available water storage in profile: High (about 10.6 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 2e

Hydrologic Soil Group: B

Hydric soil rating: No

BeC2—Bewleyville silt loam, 5 to 12 percent slopes, eroded

Map Unit Setting

National map unit symbol: 2mgx9

Elevation: 800 to 1,200 feet

Mean annual precipitation: 47 to 55 inches

Mean annual air temperature: 57 to 61 degrees F

Frost-free period: 180 to 205 days

Farmland classification: Not prime farmland

Map Unit Composition

Bewleyville and similar soils: 100 percent

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

Description of Bewleyville

Setting

Landform: Hillslopes

Landform position (three-dimensional): Crest

Parent material: Loess over clayey or loamy alluvium

Typical profile

H1 - 0 to 8 inches: silt loam

H2 - 8 to 28 inches: silty clay loam

H3 - 28 to 72 inches: clay

Properties and qualities

Slope: 5 to 12 percent

Depth to restrictive feature: More than 80 inches

Natural drainage class: Well drained

Capacity of the most limiting layer to transmit water (Ksat):

Moderately high to high (0.60 to 2.00 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Available water storage in profile: 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

BeD2—Bewleyville silt loam, 12 to 20 percent slopes, eroded

Map Unit Setting

National map unit symbol: 2mgxb

Elevation: 800 to 1,200 feet
Mean annual precipitation: 47 to 55 inches
Mean annual air temperature: 57 to 61 degrees F
Frost-free period: 180 to 205 days
Farmland classification: Not prime farmland

Map Unit Composition

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

Description of Bewleyville

Setting

Landform: Hillslopes
Landform position (three-dimensional): Side slope
Parent material: Loess over clayey or loamy alluvium

Typical profile

H1 - 0 to 8 inches: silt loam
H2 - 8 to 36 inches: silty clay loam
H3 - 36 to 72 inches: clay

Properties and qualities

Slope: 12 to 20 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat):
Moderately high to high (0.60 to 2.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water storage in profile: High (about 10.6 inches)

Interpretive groups

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

CrC2—Christian silt loam, 5 to 12 percent slopes, eroded

Map Unit Setting

National map unit symbol: 2mgxz
Mean annual precipitation: 46 to 60 inches
Mean annual air temperature: 57 to 61 degrees F
Frost-free period: 190 to 200 days
Farmland classification: Not prime farmland

Map Unit Composition

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

Description of Christian

Setting

Landform: Hillslopes

Landform position (three-dimensional): Side slope

Parent material: Clayey residuum weathered from limestone, sandstone, and shale

Typical profile

H1 - 0 to 7 inches: silt loam

H2 - 7 to 10 inches: silty clay loam

H3 - 10 to 58 inches: clay

Cr - 58 to 68 inches: bedrock

Properties and qualities

Slope: 5 to 12 percent

Depth to restrictive feature: About 58 inches to paralithic bedrock

Natural drainage class: Well drained

Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.01 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Available water storage in profile: Moderate (about 7.8 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 3e

Hydrologic Soil Group: B

Hydric soil rating: No

Dk—Dickson silt loam, 2 to 5 percent slopes

Map Unit Setting

National map unit symbol: 2rgxr

Elevation: 590 to 1,410 feet

Mean annual precipitation: 48 to 58 inches

Mean annual air temperature: 57 to 59 degrees F

Frost-free period: 190 to 230 days

Farmland classification: All areas are prime farmland

Map Unit Composition

Dickson and similar soils: 85 percent

Minor components: 15 percent

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

Description of Dickson

Setting

Landform: Flats

Landform position (two-dimensional): Shoulder

Landform position (three-dimensional): Crest
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Silty loess over clayey residuum weathered from
cherty limestone over clayey residuum weathered from
limestone and/or clayey residuum weathered from siltstone

Typical profile

Ap - 0 to 10 inches: silt loam
E/Bt - 10 to 24 inches: silt loam
Btx - 24 to 42 inches: silt loam
2Bt - 42 to 72 inches: clay
3Cr - 72 to 82 inches: bedrock

Properties and qualities

Slope: 2 to 5 percent
Depth to restrictive feature: 20 to 26 inches to fragipan; 69 to 79
inches to paralithic bedrock
Natural drainage class: Moderately well drained
Runoff class: Low
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: About 12 to 26 inches
Frequency of flooding: None
Frequency of ponding: None
Salinity, maximum in profile: Nonsaline to very slightly saline (0.0
to 2.0 mmhos/cm)
Available water storage in profile: Low (about 5.1 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

Mountview

Percent of map unit: 5 percent
Landform: Flats
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Crest
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: No

Taft

Percent of map unit: 5 percent
Landform: Flats
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Crest
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: No

Sango

Percent of map unit: 5 percent

Landform: Flats

Landform position (two-dimensional): Toeslope

Landform position (three-dimensional): Crest

Down-slope shape: Linear

Across-slope shape: Linear

Hydric soil rating: No

En—Ennis silt loam, local alluvium

Map Unit Setting

National map unit symbol: 2mgyb

Elevation: 310 to 680 feet

Mean annual precipitation: 38 to 50 inches

Mean annual air temperature: 48 to 57 degrees F

Frost-free period: 160 to 205 days

Farmland classification: All areas are prime farmland

Map Unit Composition

Nolin and similar soils: 100 percent

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

Description of Nolin

Setting

Landform: Flood plains

Landform position (three-dimensional): Tread

Parent material: Loamy alluvium derived from interbedded sedimentary rock

Typical profile

H1 - 0 to 8 inches: silt loam

H2 - 8 to 21 inches: silt loam

H3 - 21 to 65 inches: silt loam

Properties and qualities

Slope: 0 to 3 percent

Depth to restrictive feature: More than 80 inches

Natural drainage class: Well drained

Capacity of the most limiting layer to transmit water (Ksat):

Moderately high to high (0.60 to 2.00 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: Rare

Frequency of ponding: None

Available water storage in profile: High (about 11.0 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 1

Hydrologic Soil Group: B

Hydric soil rating: No

Hr—Huntington cherty silt loam

Map Unit Setting

National map unit symbol: 2mgyv

Mean annual precipitation: 46 to 60 inches

Mean annual air temperature: 57 to 61 degrees F

Frost-free period: 190 to 200 days

Farmland classification: All areas are prime farmland

Map Unit Composition

Cannon and similar soils: 100 percent

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

Description of Cannon

Setting

Landform: Flood plains

Landform position (three-dimensional): Tread

Parent material: Loamy alluvium derived from cherty limestone

Typical profile

H1 - 0 to 12 inches: gravelly silt loam

H2 - 12 to 60 inches: gravelly silt loam

Properties and qualities

Slope: 0 to 2 percent

Depth to restrictive feature: More than 80 inches

Natural drainage class: Well drained

Capacity of the most limiting layer to transmit water (Ksat): High
(2.00 to 6.00 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: Occasional

Frequency of ponding: None

Available water storage in profile: Moderate (about 7.9 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 2w

Hydrologic Soil Group: A

Hydric soil rating: No

Ht—Huntington fine sandy loam

Map Unit Setting

National map unit symbol: 2mgyx

Mean annual precipitation: 46 to 60 inches

Mean annual air temperature: 57 to 61 degrees F

Frost-free period: 190 to 200 days

Farmland classification: All areas are prime farmland

Map Unit Composition

Staser and similar soils: 100 percent

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

Description of Staser

Setting

Landform: Flood plains

Landform position (three-dimensional): Tread

Parent material: Loamy alluvium derived from interbedded sedimentary rock

Typical profile

H1 - 0 to 18 inches: fine sandy loam

H2 - 18 to 60 inches: loam

Properties and qualities

Slope: 0 to 2 percent

Depth to restrictive feature: More than 80 inches

Natural drainage class: Well drained

Capacity of the most limiting layer to transmit water (Ksat):

Moderately high to high (0.60 to 2.00 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: Occasional

Frequency of ponding: None

Available water storage in profile: Moderate (about 8.9 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 2w

Hydrologic Soil Group: B

Hydric soil rating: No

Hu—Huntington silt loam

Map Unit Setting

National map unit symbol: 2mgyy

Mean annual precipitation: 46 to 60 inches

Mean annual air temperature: 57 to 61 degrees F

Frost-free period: 190 to 200 days

Farmland classification: All areas are prime farmland

Map Unit Composition

Huntington and similar soils: 100 percent

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

Description of Huntington

Setting

Landform: Flood plains

Landform position (three-dimensional): Tread

Parent material: Loamy alluvium derived from limestone, sandstone, and shale

Typical profile

H1 - 0 to 12 inches: silt loam

H2 - 12 to 64 inches: silt loam

Properties and qualities

Slope: 0 to 2 percent

Depth to restrictive feature: More than 80 inches

Natural drainage class: Well drained

Capacity of the most limiting layer to transmit water (Ksat):

Moderately high to high (0.60 to 2.00 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: Occasional

Frequency of ponding: None

Available water storage in profile: High (about 11.6 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 2w

Hydrologic Soil Group: B

Hydric soil rating: No

Ln—Lindell silt loam, 0 to 2 percent slopes, occasionally flooded

Map Unit Setting

National map unit symbol: 2td2y

Elevation: 500 to 850 feet

Mean annual precipitation: 48 to 58 inches

Mean annual air temperature: 57 to 61 degrees F

Frost-free period: 190 to 230 days

Farmland classification: All areas are prime farmland

Map Unit Composition

Lindell and similar soils: 90 percent

Minor components: 10 percent

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

Description of Lindell

Setting

Landform: Flood plains

Landform position (two-dimensional): Toeslope

Landform position (three-dimensional): Base slope

Down-slope shape: Linear

Across-slope shape: Linear

Parent material: Fine-loamy alluvium derived from limestone and siltstone

Typical profile

Ap - 0 to 7 inches: silt loam
Bw - 7 to 15 inches: silt loam
Bg - 15 to 52 inches: silt loam
Cg - 52 to 79 inches: silty clay loam

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Moderately well 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: About 12 to 16 inches
Frequency of flooding: Occasional
Frequency of ponding: None
Salinity, maximum in profile: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water storage in profile: High (about 11.2 inches)

Interpretive groups

Land capability classification (irrigated): 2w
Land capability classification (nonirrigated): 2w
Hydrologic Soil Group: B/D
Hydric soil rating: No

Minor Components

Norene

Percent of map unit: 4 percent
Landform: Flood plains
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Base slope
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: Yes

Arrington

Percent of map unit: 4 percent
Landform: Flood plains
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Base slope
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: No

Armour

Percent of map unit: 2 percent
Landform: Flood plains
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Base slope
Down-slope shape: Linear
Across-slope shape: Linear

Hydric soil rating: No

McC—Minvale cherty silt loam, 2 to 12 percent slopes

Map Unit Setting

National map unit symbol: 2mgzg

Elevation: 500 to 1,200 feet

Mean annual precipitation: 45 to 55 inches

Mean annual air temperature: 57 to 61 degrees F

Frost-free period: 180 to 205 days

Farmland classification: Not prime farmland

Map Unit Composition

Minvale and similar soils: 100 percent

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

Description of Minvale

Setting

Landform: Hillslopes

Landform position (three-dimensional): Base slope

Parent material: Loamy colluvium derived from cherty limestone

Typical profile

H1 - 0 to 7 inches: gravelly silt loam

H2 - 7 to 30 inches: gravelly silty clay loam

H3 - 30 to 72 inches: gravelly silty clay loam

Properties and qualities

Slope: 2 to 12 percent

Depth to restrictive feature: More than 80 inches

Natural drainage class: Well drained

Capacity of the most limiting layer to transmit water (Ksat):

Moderately high to high (0.60 to 2.00 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Available water storage in profile: Moderate (about 8.7 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 3e

Hydrologic Soil Group: B

Hydric soil rating: No

MeB—Minvale silt loam, 2 to 5 percent slopes

Map Unit Setting

National map unit symbol: 2mgzj

Elevation: 500 to 1,200 feet

Mean annual precipitation: 45 to 55 inches

Mean annual air temperature: 57 to 61 degrees F
Frost-free period: 180 to 205 days
Farmland classification: All areas are prime farmland

Map Unit Composition

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

Description of Minvale

Setting

Landform: Hillslopes
Landform position (three-dimensional): Base slope
Parent material: Loamy colluvium derived from cherty limestone

Typical profile

H1 - 0 to 8 inches: silt loam
H2 - 8 to 33 inches: silty clay loam
H3 - 33 to 72 inches: gravelly silty clay loam

Properties and qualities

Slope: 2 to 5 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat):
Moderately high to high (0.60 to 2.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water storage in profile: High (about 9.0 inches)

Interpretive groups

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

MsB—Mountview silt loam, shallow, 2 to 5 percent slopes

Map Unit Setting

National map unit symbol: 2mgzv
Elevation: 600 to 1,300 feet
Mean annual precipitation: 48 to 58 inches
Mean annual air temperature: 57 to 61 degrees F
Frost-free period: 154 to 226 days
Farmland classification: All areas are prime farmland

Map Unit Composition

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

Description of Mountview

Setting

Landform: Ridges

Landform position (three-dimensional): Crest

Parent material: Loess over clayey residuum weathered from cherty limestone

Typical profile

H1 - 0 to 6 inches: silt loam

H2 - 6 to 20 inches: silty clay loam

H3 - 20 to 66 inches: gravelly clay

Properties and qualities

Slope: 2 to 5 percent

Depth to restrictive feature: More than 80 inches

Natural drainage class: Well drained

Capacity of the most limiting layer to transmit water (Ksat):

Moderately high to high (0.60 to 2.00 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Available water storage in profile: High (about 9.0 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 2e

Hydrologic Soil Group: B

Hydric soil rating: No

MsC2—Mountview silt loam, shallow, 5 to 12 percent slopes, eroded

Map Unit Setting

National map unit symbol: 2mgzx

Elevation: 600 to 1,300 feet

Mean annual precipitation: 48 to 58 inches

Mean annual air temperature: 57 to 61 degrees F

Frost-free period: 154 to 226 days

Farmland classification: Not prime farmland

Map Unit Composition

Mountview and similar soils: 100 percent

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

Description of Mountview

Setting

Landform: Ridges

Landform position (three-dimensional): Side slope

Parent material: Loess over clayey residuum weathered from cherty limestone

Typical profile

H1 - 0 to 6 inches: silt loam

H2 - 6 to 20 inches: silty clay loam

H3 - 20 to 66 inches: gravelly clay

Properties and qualities

Slope: 5 to 12 percent

Depth to restrictive feature: More than 80 inches

Natural drainage class: Well drained

Capacity of the most limiting layer to transmit water (Ksat):

Moderately high to high (0.60 to 2.00 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Available water storage in profile: High (about 9.0 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 3e

Hydrologic Soil Group: B

Hydric soil rating: No

MsD2—Mountview silt loam, shallow, 12 to 20 percent slopes, eroded

Map Unit Setting

National map unit symbol: 2mgzz

Elevation: 600 to 1,300 feet

Mean annual precipitation: 48 to 58 inches

Mean annual air temperature: 57 to 61 degrees F

Frost-free period: 154 to 226 days

Farmland classification: Not prime farmland

Map Unit Composition

Mountview and similar soils: 100 percent

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

Description of Mountview

Setting

Landform: Ridges

Landform position (three-dimensional): Side slope

Parent material: Loess over clayey residuum weathered from cherty limestone

Typical profile

H1 - 0 to 6 inches: silt loam

H2 - 6 to 20 inches: silty clay loam

H3 - 20 to 66 inches: gravelly clay

Properties and qualities

Slope: 12 to 20 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat):
Moderately high to high (0.60 to 2.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water storage in profile: High (about 9.0 inches)

Interpretive groups

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

MvB—Mountview silt loam, 2 to 5 percent slopes

Map Unit Setting

National map unit symbol: 2td2w
Elevation: 520 to 1,410 feet
Mean annual precipitation: 37 to 58 inches
Mean annual air temperature: 57 to 68 degrees F
Frost-free period: 190 to 230 days
Farmland classification: All areas are prime farmland

Map Unit Composition

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

Description of Mountview

Setting

Landform: Ridges
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Crest
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Loess over clayey residuum weathered from cherty limestone

Typical profile

Ap - 0 to 8 inches: silt loam
Bt - 8 to 25 inches: silt loam
B/E - 25 to 33 inches: silt loam
2Bt - 33 to 79 inches: clay

Properties and qualities

Slope: 2 to 5 percent

Depth to restrictive feature: More than 80 inches
Natural drainage class: Moderately well drained
Runoff class: Very low
Capacity of the most limiting layer to transmit water (Ksat):
Moderately high (0.20 to 0.57 in/hr)
Depth to water table: About 20 to 41 inches
Frequency of flooding: None
Frequency of ponding: None
Salinity, maximum in profile: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water storage in profile: High (about 9.8 inches)

Interpretive groups

Land capability classification (irrigated): 2e
Land capability classification (nonirrigated): 2e
Hydrologic Soil Group: C
Hydric soil rating: No

Minor Components

Dickson

Percent of map unit: 8 percent
Landform: Flats
Landform position (two-dimensional): Shoulder
Landform position (three-dimensional): Crest
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: No

Sengtown

Percent of map unit: 7 percent
Landform: Hills
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope
Down-slope shape: Convex
Across-slope shape: Convex
Hydric soil rating: No

MvC—Mountview silt loam, 5 to 12 percent slopes

Map Unit Setting

National map unit symbol: 2td2x
Elevation: 520 to 1,410 feet
Mean annual precipitation: 37 to 58 inches
Mean annual air temperature: 57 to 68 degrees F
Frost-free period: 190 to 230 days
Farmland classification: Not prime farmland

Map Unit Composition

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

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

Description of Mountview

Setting

Landform: Ridges

Landform position (two-dimensional): Backslope

Landform position (three-dimensional): Crest

Down-slope shape: Linear

Across-slope shape: Linear

Parent material: Loess over clayey residuum weathered from cherty limestone

Typical profile

Ap - 0 to 8 inches: silt loam

Bt - 8 to 25 inches: silt loam

B/E - 25 to 33 inches: silt loam

2Bt - 33 to 79 inches: clay

Properties and qualities

Slope: 5 to 12 percent

Depth to restrictive feature: More than 80 inches

Natural drainage class: Moderately well drained

Runoff class: Low

Capacity of the most limiting layer to transmit water (Ksat):
Moderately high (0.20 to 0.57 in/hr)

Depth to water table: About 20 to 41 inches

Frequency of flooding: None

Frequency of ponding: None

Salinity, maximum in profile: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)

Available water storage in profile: High (about 9.8 inches)

Interpretive groups

Land capability classification (irrigated): 3e

Land capability classification (nonirrigated): 3e

Hydrologic Soil Group: C

Hydric soil rating: No

Minor Components

Dickson

Percent of map unit: 8 percent

Landform: Flats

Landform position (two-dimensional): Shoulder

Landform position (three-dimensional): Crest

Down-slope shape: Linear

Across-slope shape: Linear

Hydric soil rating: No

Sengtown

Percent of map unit: 7 percent

Landform: Hills

Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope
Down-slope shape: Convex
Across-slope shape: Convex
Hydric soil rating: No

MvC2—Mountview silt loam, 5 to 12 percent slopes, eroded

Map Unit Setting

National map unit symbol: 2mh08
Elevation: 600 to 1,300 feet
Mean annual precipitation: 48 to 58 inches
Mean annual air temperature: 57 to 61 degrees F
Frost-free period: 154 to 226 days
Farmland classification: Not prime farmland

Map Unit Composition

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

Description of Mountview

Setting

Landform: Ridges
Landform position (three-dimensional): Side slope
Parent material: Loess over clayey residuum weathered from cherty limestone

Typical profile

H1 - 0 to 8 inches: silt loam
H2 - 8 to 24 inches: silty clay loam
H3 - 24 to 66 inches: gravelly clay

Properties and qualities

Slope: 5 to 12 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat):
Moderately high to high (0.60 to 2.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water storage in profile: High (about 9.3 inches)

Interpretive groups

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

Rk—Rock land, limestone

Map Unit Setting

National map unit symbol: 2mh0c

Elevation: 460 to 4,000 feet

Mean annual precipitation: 8 to 55 inches

Mean annual air temperature: 45 to 63 degrees F

Frost-free period: 110 to 205 days

Farmland classification: Not prime farmland

Map Unit Composition

Rock outcrop: 70 percent

Talbott and similar soils: 30 percent

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

Description of Rock Outcrop

Typical profile

R - 0 to 10 inches: bedrock

Properties and qualities

Slope: 15 to 45 percent

Depth to restrictive feature: 0 inches to lithic bedrock

Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.01 in/hr)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 8s

Hydric soil rating: No

Description of Talbott

Setting

Landform: Hillslopes

Landform position (three-dimensional): Side slope

Parent material: Clayey residuum weathered from limestone

Typical profile

H1 - 0 to 6 inches: silty clay loam

H2 - 6 to 37 inches: clay

R3 - 37 to 47 inches: bedrock

Properties and qualities

Slope: 15 to 45 percent

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

Natural drainage class: Well drained

Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.06 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Available water storage in profile: Low (about 4.5 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 7e

Hydrologic Soil Group: C

Hydric soil rating: No

SeB—Sequatchie loam, 2 to 5 percent slopes

Map Unit Setting

National map unit symbol: 2mh0g

Elevation: 600 to 1,500 feet

Mean annual precipitation: 47 to 55 inches

Mean annual air temperature: 57 to 61 degrees F

Frost-free period: 180 to 205 days

Farmland classification: All areas are prime farmland

Map Unit Composition

Sequatchie and similar soils: 100 percent

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

Description of Sequatchie

Setting

Landform: Stream terraces

Landform position (three-dimensional): Tread

Parent material: Loamy alluvium derived from interbedded sedimentary rock

Typical profile

H1 - 0 to 11 inches: loam

H2 - 11 to 38 inches: clay loam

H3 - 38 to 72 inches: cobbly loam

Properties and qualities

Slope: 2 to 5 percent

Depth to restrictive feature: More than 80 inches

Natural drainage class: Well drained

Capacity of the most limiting layer to transmit water (Ksat):

Moderately high to high (0.60 to 2.00 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Available water storage in profile: High (about 9.1 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 2e

Hydrologic Soil Group: B

Hydric soil rating: No

SeD—Sengtown gravelly silt loam, 12 to 20 percent slopes

Map Unit Setting

National map unit symbol: 2qh76

Elevation: 600 to 1,300 feet

Mean annual precipitation: 47 to 58 inches

Mean annual air temperature: 56 to 59 degrees F

Frost-free period: 190 to 230 days

Farmland classification: Not prime farmland

Map Unit Composition

Sengtown and similar soils: 85 percent

Minor components: 15 percent

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

Description of Sengtown

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 cherty limestone

Typical profile

Ap - 0 to 8 inches: gravelly silt loam

E - 8 to 11 inches: gravelly silt loam

Bt - 11 to 79 inches: gravelly clay

Properties and qualities

Slope: 12 to 20 percent

Depth to restrictive feature: More than 80 inches

Natural 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

Salinity, maximum in profile: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)

Available water storage in profile: Moderate (about 7.5 inches)

Interpretive groups

Land capability classification (irrigated): 4e

Land capability classification (nonirrigated): 4e

Hydrologic Soil Group: B

Hydric soil rating: No

Minor Components

Mountview

Percent of map unit: 7 percent

Landform: Hills

Landform position (two-dimensional): Backslope

Landform position (three-dimensional): Side slope

Down-slope shape: Convex

Across-slope shape: Convex

Hydric soil rating: No

Minvale

Percent of map unit: 4 percent

Landform: Hills

Landform position (two-dimensional): Backslope

Landform position (three-dimensional): Side slope

Down-slope shape: Convex

Across-slope shape: Convex

Hydric soil rating: No

Waynesboro

Percent of map unit: 4 percent

Landform: Hills

Landform position (two-dimensional): Backslope

Landform position (three-dimensional): Side slope

Down-slope shape: Convex

Across-slope shape: Convex

Hydric soil rating: No

W—Water

Map Unit Composition

Water: 100 percent

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

Data Source Information

Soil Survey Area: Putnam County and Parts of White County, Tennessee

Survey Area Data: Version 10, Sep 16, 2019