

November 19, 1981

Mr. Tom George
Chief Regulation & Procedures Division
Bureau of Alcohol Tobacco & Firearms
Washington, D.C. 20226

Dear Mr. George:

Byrd Vineyards, a bonded winery, wishes to petition for the establishment of a viticultural area within the State of Maryland. The proposed area located in western Frederick County with a small portion in Washington County, Maryland would be known as the Catoctin Viticultural Area.

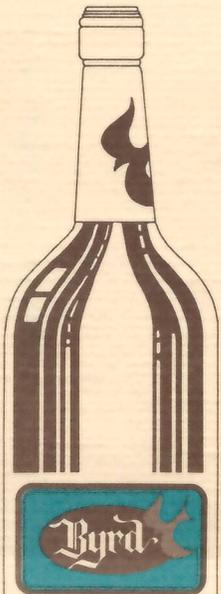
The criteria used to differentiate the Catoctin Viticultural Area from the surrounding areas are climate, geology, topography and soils.

The name Catoctin was given to the area by the Algonquin Indians that use to hunt and roam the mountains and inner valleys. In the Algonquin language the word Catoctin was interpreted to mean "speckled rock" which abounds in the Catoctin Mountain.

The Catoctin, South Mountain and the Blue Ridge are all mountains which belong to the Appalachians and with the inner valleys make up the Maryland Land Resource Area #130 called Blue Ridge, which is the exact area of our petition. (See Maryland Land Resource Area Map). This is the smallest land resource area in Maryland.

The name Catoctin permeates the area. The Catoctin Soil Conservation District lies within MLRA #130. The Catoctin Mountain makes the eastern boundary of MLRA #130. The Catoctin Valley also known as the Middletown Valley extends for over 20 miles. The main drainage arteries is Little Catoctin Creek and also Catoctin Creek and empties into the Potomac River. The Catoctin National Park is within the MLRA #130.

Three major physiographic provinces cross Frederick County in a general north and south direction but tending slightly toward northeast to southwest. The Piedmont Plateau lies in the eastern and south-eastern part of the county. The Limestone Valley and the Triassic Plain are located in the center. The easternmost low ranges of the Appalachian Mountains, with their intermountain valleys, lie in the western (proposed Viticultural Area) part of the county.



Byrd VINEYARDS Church Hill Road, Myersville, Maryland 21773 • (301) 293-1110

Two low ranges of the Appalachian Mountains cross Frederick County. South Mountain runs along the Washington County line. Its highest point within Frederick County is Lambs Knoll, at an elevation of 1,772 feet. Catoctin Mountain runs from the Potomac River northward within the county. Its maximum elevation is 1,917 feet.

The trough like central part of the county is made up of a shallow limestone valley in the southern part and a low Triassic upland plain in the northern part. Elevations in the Frederick Valley are between 300 and 400 feet. In the Triassic plain to the north, elevations rise to about 500 feet.

In the proposed viticultural area the mountains are formed of sedimentary and metamorphosed sedimentary and igneous rocks, but the intermountain valley is composed almost entirely of a green schistose rock, which is a metamorphosed basalt.

According to the U.S. Dept. of Agriculture Soil Survey for Washington County, Maryland, there are three major physiographic divisions in Washington County. In the east (part of the proposed Catoctin Viticultural Area) there is the Blue Ridge (South Mountain) and the associated Elk Ridge, on and close to the county line. Then, there is the broad, shallow Great Valley with its gently rolling floor, extending westward to Fairview Mountain. From the latter mountain westward to the end of the county is known as the Appalachian ridge and valley section. Each of these three great divisions is more or less sharply differentiated from the adjoining ones.

Both the Great Valley on the western border and the Frederick Valley on the eastern border are limestone based soils whereas the proposed Catoctin Viticultural Area consists of soils developed from sandstone, greenstone (metabasalt), mica schist and quartzite. It is also an acid soil. PM 5-5-68

The rainfall across the proposed area is similar being less than the eastern and western portions of the state. The growing frost-free season is generally the same across the area the differences due to elevation. The degree-day heat summation is lower than the Great Valley and the Frederick Valley due to the higher elevations in the proposed Catoctin Viticultural Area. Our studies showed the total to be 2990 day-degrees during the growing season for grapes-similar to Napa Valley, California and in the Winkler Zone II which is considered by U.C. Davis to be one of the two best temperature zones for growing quality varietal wine grapes. The elevation is also one reason why the area abounds in fruit production as the slopes allow for excellent air drainage-an important physical feature for grape or fruit production.

Vinifera
Chardonnay
Cabernet
Sauvignon
Riesling
Blanc

There are 71 acres of wine grapes presently growing in the proposed Catoctin Viticultural Area and approximately 15 acres planned for spring 1982 planting.

Boundaries:

The eastern boundary separating the proposed Catoctin Viticultural Area from the Frederick Valley will be the 500 foot contour line running from the Pa. line to the Potomac River at Point of Rocks, Maryland.

The western boundary will be the 800 foot contour line from the Pa. border south to where it intersects Clevelandville Road at Clevelandville. Continuing along said road to the intersection of Reno Monument Road from this point in a straight line southwesterly to a point at the intersection of Rt. 67 and Millbrook Road. Follow Millbrook Road west to Mount Briar Road then Mount Briar Road north to where the 500 foot contour line intersects Mount Briar Road--then follow the 500 foot contour line north of Red Hill then south to where the 500 foot contour line intersects Porterstown Road. From this point in a straight line southwest to the eastern most corner of the Chesapeake & Ohio Canal National Historical Park--then follow the eastern border of the park to the Potomac River.

The Northern boundary is the Pa. State line.

The Southern boundary is the Potomac River.

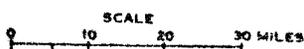
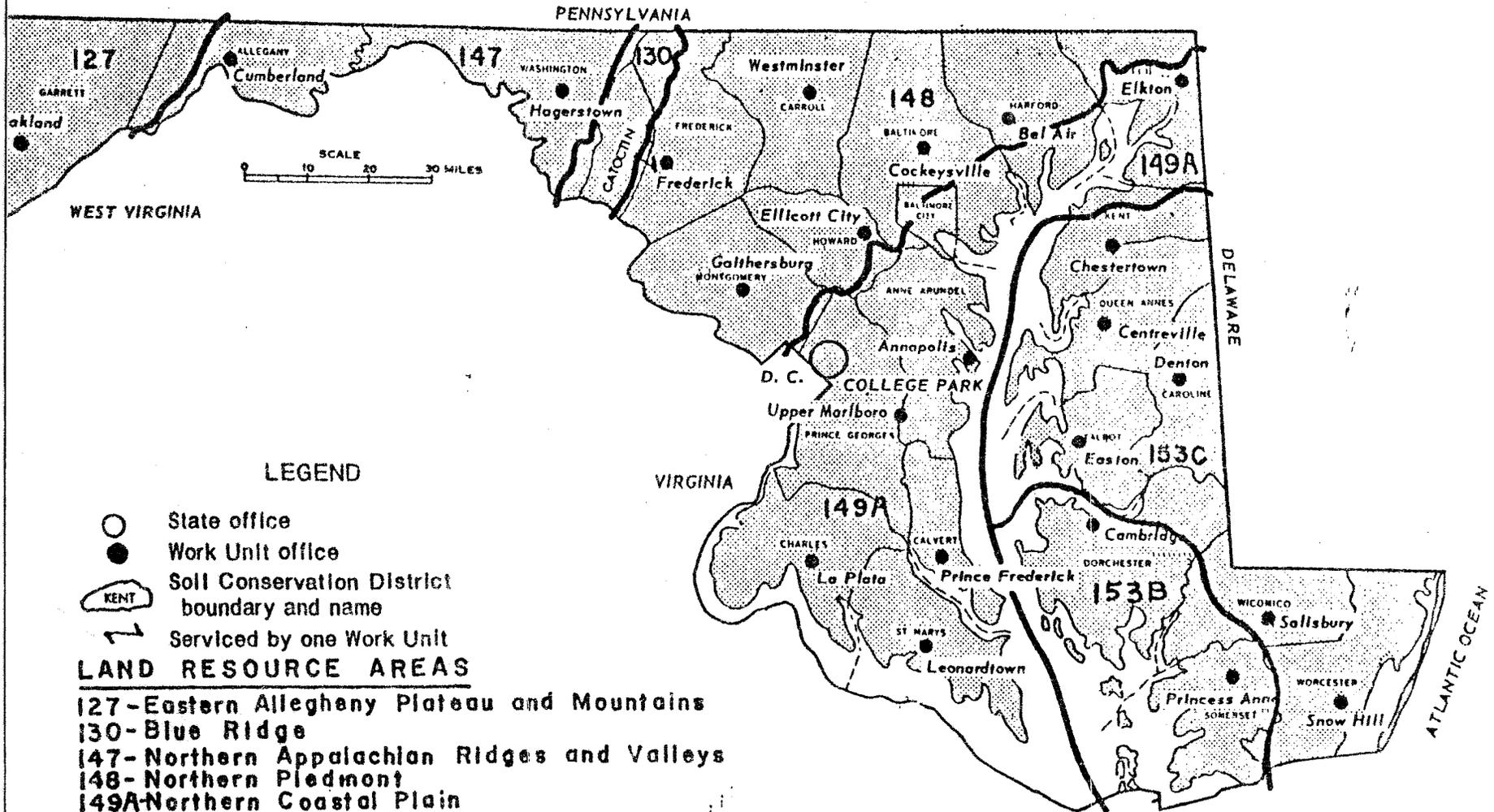
Sincerely,

W. Bret Byrd

W. Bret Byrd
Byrd Vineyards & Winery
Church Hill Road
Myersville, Md. 21773

265 sq. mi
170,000 acres
largest amount
of grapes in the state
280 acres in whole state.
30%

LAND RESOURCE AREA MAP



LEGEND

- State office
- Work Unit office
- ⬢ Soil Conservation District boundary and name
- Serviced by one Work Unit

LAND RESOURCE AREAS

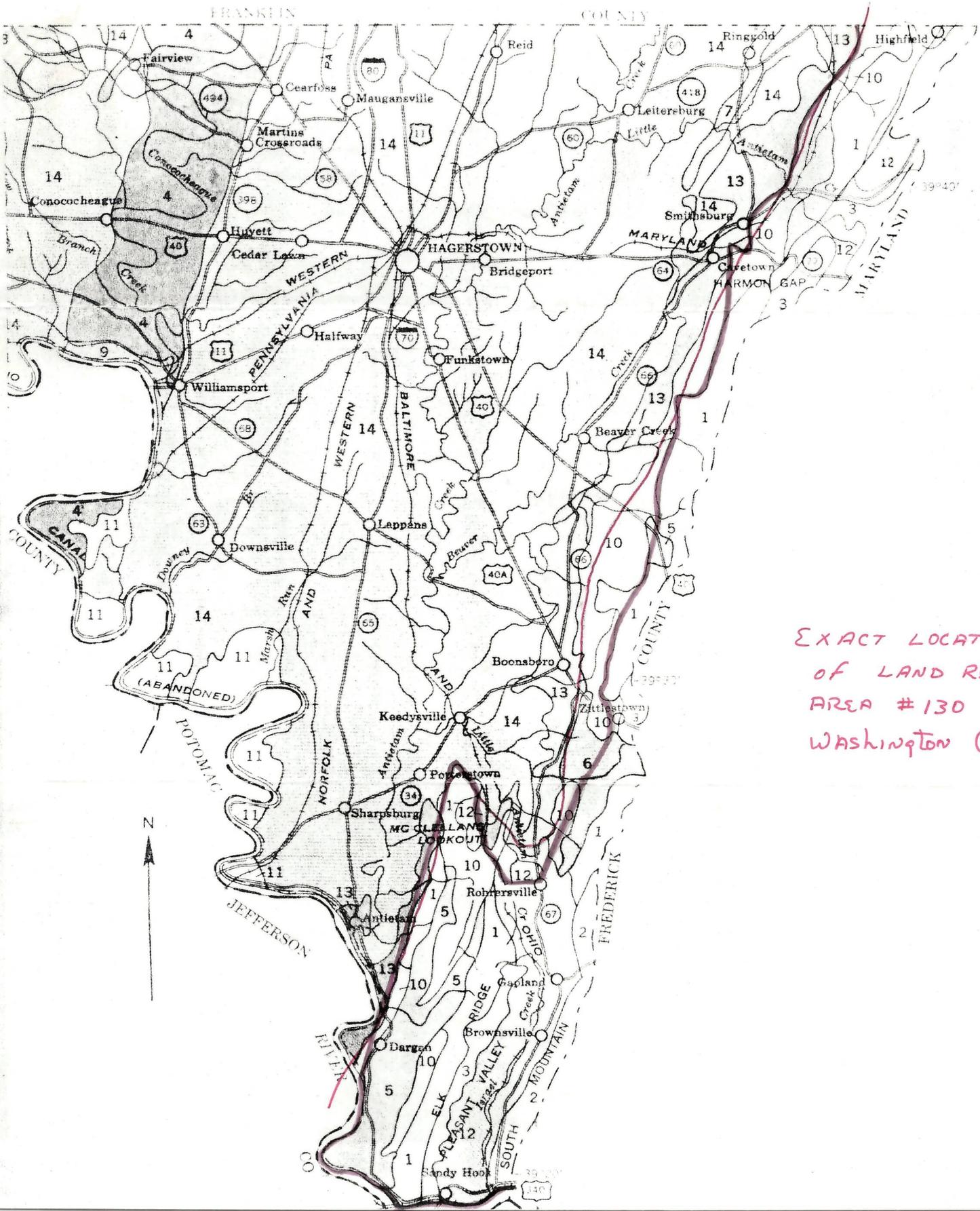
- 127 - Eastern Allegheny Plateau and Mountains
- 130 - Blue Ridge
- 147 - Northern Appalachian Ridges and Valleys
- 148 - Northern Piedmont
- 149A - Northern Coastal Plain
- 153A - Atlantic Coast Flatwoods
- 153B - Tidewater Area
- 153C - Mid-Atlantic Coastal Plain

REV. AU
January 1

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MLRA
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EXACT LOCATION
 OF LAND RESOURCE
 AREA #130 IN
 WASHINGTON CO.

**LAND RESOURCE REGIONS
AND
MAJOR LAND RESOURCE AREAS**

OF THE UNITED STATES

(exclusive of Alaska and Hawaii)

Morris E. Austin
soil scientist
Soil Conservation Service

SOIL CONSERVATION SERVICE
Washington, D.C.

• U.S. DEPARTMENT OF AGRICULTURE
Issued December 1965

AGRICULTURE HANDBOOK 296

INTRODUCTION AND DEFINITIONS

This publication and the accompanying map resulted from efforts of the Soil Conservation Service to assemble and organize currently available information about the land as a resource for farming, ranching, forestry, engineering, recreation, and other uses. The map is an updating, revision, and redesigning of the 1950 map "Problem Areas in Soil Conservation." The information provided in this handbook is current as of the end of 1964. Further revision of both map and report will be required as new information becomes available and as improved methods for organizing and presenting information are devised.

Land resource maps are interpreted primarily from general soil maps (until recently termed soil association maps); at equivalent scales, delineations on land resource maps are the same as delineations on general soil maps except that some delineations on a general soil map are divided into two or more land resource delineations because of significant and mappable differences in climate, water resources, land use, and type of farming. For example, some soil map delineations are divided into two land resource delineations on the basis of marked differences in kind of farming or climatic differences critical to one or more important crops. The principal difference between the two kinds of maps, however, is in the orientation and organization of the information and the nomenclature used to express it.

In the preparation of land resource maps at State and National levels, three land resource categories have evolved.

1. *Land resource units* are geographic areas of land, usually several thousand acres in extent, that are characterized by particular patterns of soil (including slope and erosion), climate, water resources, land use, and type of farming. A unit may occur as one continuous area or as several separate but nearby areas. Land resource units are the basic map units on State land resource maps, which are usually at the scale of 1:1,000,000. They are coextensive with map units of State general soil maps except that some map units of general soil maps are subdivided into two or more land resource units because of significant differences in climate, water resources, land use, and type of farming. They are not described in this handbook or shown on the national map, but they are the basic units from which the major land resource areas have been determined.

2. *Major land resource areas* consist of geographically associated land resource units. Identification of these large areas is most important in State-wide agricultural planning and has value in inter-State, regional, and national planning. At the scale of 1:1,000,000 a map

of a State of ordinary size and complexity shows between 6 and 12 land resource areas.

3. *Land resource regions* consist of geographically associated major land resource areas; their identification is most significant for national planning.

In grouping land resource units into major land resource areas and these, in turn, into land resource regions, the objective is to preserve as much uniformity as possible in relationships significant to agriculture. Uniformity is greatest in land resource units, considerably less in major land resource areas, and very much less in land resource regions. Such losses in uniformity cannot be avoided.

On the map in the pocket of this handbook major land resource areas are designated by numbers. No. 1 is on the west coast and No. 156 on the east coast. The legend identifies each area by number and by a descriptive geographic name. A few major land resource areas consist of two or more parts separated for short distances by other land resource areas. Land resource regions are designated by capital letters, which are identified in the legend by a descriptive name.

Descriptions of the land resource regions and the 156 major land resource areas follow. The descriptions are based on information from many sources, mostly within the Soil Conservation Service. The principal other sources are given in the list of selected references. Most statements about land use are based on recent State soil and water conservation needs reports. The States in which each area occurs are listed, and the approximate area and proportionate extent of each in the United States is listed in table 1 in the appendix.

The dominant physical characteristics of each land resource region and area are described briefly under five headings: **Land Use, Elevation and Topography, Climate, Water, and Soil.** Definitions of the kinds of information included under each heading in this handbook follow.

Land Use also includes statements of principal crops and type of farming. Figures given for the proportion of cropland, pasture, range, forest, and land in industrial and urban uses are for the entire area unless specifically stated otherwise.

For **Elevation** a range in height above sea level for the area as a whole is given, followed by a brief statement of significant exceptions to the general range, which is not absolute but one that best characterizes the area. **Topography** is described in very broad terms and includes features characteristic of most of the area. Significant exceptions are mentioned.

Climate includes only three features. *Average annual precipitation* gives a range of annual averages—

from those in the driest parts of the area to those in the wettest parts. A statement of seasonal distribution of precipitation is included. For both *average annual temperature* and *average freeze-free period*, a range—again characteristic and not absolute—of annual averages in different parts of the area is given.

Water includes statements of surface streamflow and ground water. Special mention is made of sources of irrigation water and, in some areas, of municipal water. Some land resource areas depend on other areas for their water supply; some furnish water to other areas.

Soil information is given by naming the principal great soil groups¹ and soil series² because they connote more information than could be given in very brief soil descriptions. Names of representative soil series are

¹ Great soil groups consist of many soil series whose profiles have many features in common. All soil series in any one great soil group have the same number and kind of major horizons, but the horizons may not be expressed to the same degree in every profile.

² A soil series is a group of soils that have profiles almost alike. The soils have horizons similar in order and in differentiating characteristics in the soil profile except for texture of the surface soil, and they formed in a particular kind of parent material.

given in parentheses after each great soil group. Usually enough descriptive information is given to provide a general notion of the soils to those unfamiliar with the great soil groups and soil series. The appendix includes descriptions of the great soil groups but not descriptions of soil series. Reports of modern soil surveys of counties within a major land resource area contain descriptions of soil series. Other publications, such as bulletins of some State agricultural experiment stations, also contain descriptions of soil series.

Since the material for this publication was prepared, the new comprehensive soil classification system³ has been adopted by the Soil Conservation Service for use in the national cooperative soil survey. Table 2 (in appendix) shows the relation of the great soil groups of the modified 1938 Yearbook classification, which are described in the appendix, to great groups in the comprehensive system. It must be emphasized that no groups in the two systems are exactly equivalent.

³ Soil Classification, a Comprehensive System, 7th Approximation. Soil Survey Staff, Soil Conservation Service, U. S. Dept. Agr. 265 pp. 1960.

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N—EAST AND CENTRAL GENERAL FARMING AND FOREST REGION

236,500 square miles

This borderland region between the North and the South includes the Appalachian mountains, valleys, and dissected plateaus and the Ozarks. The annual precipitation is 40 to 50 inches over much of the region but ranges from 35 inches along the western edge to 60 inches or more on some of the higher mountains in the east. The freeze-free season is 180 to 200 days over a large part of the region but ranges from about 150 days in the north-east to as long as 240 days in some of the valleys in the south.

Sols Bruns Acides from sandstones and acid shales are the more extensive soils on the mountain slopes and dissected plateaus. Red-Yellow Podzolic soils are on limestones and more deeply weathered shales. Reddish-Brown Lateritic soils are conspicuous in some limestone valleys and basins, but their total area is small. Alluvial soils along the many streams are of small total extent, but they are cropped intensively throughout the region.

Small general farms are characteristic of much of the region, but there are large dairy and livestock farms in areas of more favorable soils. Corn, small grains, and hay are the most extensive crops. Tobacco is an important cash crop, especially in the eastern two-thirds of the region. The steeply sloping areas, amounting to nearly one-half of the region, are mainly in forests, which are used for both recreation and timber production. A large part of the Nation's coal is mined in this region.

116—Ozark Highland

Missouri, Arkansas, and Oklahoma
34,400 square miles

Land Use: About three-fifths of the area is in forest or woodland, most of it in farm woodlots but some in large holdings. About one-fifth of the area is cropland. Corn, feed grains, and hay for dairy cattle and other livestock are the principal crops, and orchards, vineyards, and truck crops are important on some of the more friable deep soils. Pastures, mainly of tame grasses and legumes, occupy most of the remaining one-fifth of the area.

Elevation and Topography: 500 to 1,500 feet. These sharply dissected limestone plateaus have narrow rolling ridgetops that break sharply to steep side slopes. Valleys are narrow and have steep gradients, especially in the upper reaches. There are some gently sloping plateau remnants in the west. Local relief is in several tens of feet to a few hundred feet.

Climate: Average annual precipitation—40 to 48 inches; highest in spring and early summer and low in midsummer. Average annual temperature—55° to 60° F. Average freeze-free period—180 to 200 days.

Water: Crops and pasture depend upon the moderate rainfall. Shallow wells or springs supply domestic needs and water for livestock on most farms, but deep wells are required to obtain large supplies. Water from deep wells is of good quality but hard. Small ponds on many individual farms provide some water for livestock, and a few large reservoirs are used for flood control and recreation.

Soil: Red-Yellow Podzolic soils (Baxter, Clarkville, Nixa, and Dickson, the latter two with fragipans) from deeply weathered cherty limestone occupy much of the area. Other members of this group are Talbott and Colbert soils from clayey limestones. Reddish-Brown Lateritic soils (Decatur) from relatively pure

limestones and *Rendzinas* (Gasconade) from shaly limestones or calcareous clays are soils that are locally conspicuous but of small total extent. Small areas of soils like *Brunizems* are in small prairie outliers in the west.

117—Boston Mountains

Arkansas and Oklahoma
6,200 square miles

Land Use: About three-fourths of the area is in forest, mainly in farm woodlots but some in Arkansas in national forests. The remaining one-fourth of the area is about evenly divided between cropland and pasture. Corn, other grains, and hay for livestock feed are the main crops, and peach and apple orchards are important locally. Pastures are mostly of tame grasses and legumes but of native grasses on the prairie outliers in the west.

Elevation and Topography: 500 feet on the lowest valley floors to 2,500 feet on the highest ridge crests. Ridgetops of these deeply dissected sandstone and shale plateaus are narrow and rolling; valleys are narrow and steep sided and have steep gradients. Local relief is in a few hundreds of feet.

Climate: Average annual precipitation—45 to 52 inches; highest in spring and fall and lowest in midsummer. Average annual temperature—55° to 60° F. Average freeze-free period—180 to 205 days.

Water: The moderately high rainfall is adequate for crops and pastures. Shallow wells are the principal source of water for domestic use and livestock in the uplands. Small ponds on individual farms provide some water for livestock, and springs are numerous in the valleys. Deep wells are needed to obtain large supplies of ground water. Large reservoirs on several of the major streams are a source of municipal water and also provide flood control and recreation.

Climate: *Average annual precipitation*—About 54 inches; somewhat unevenly distributed; highest in midwinter, decreasing gradually from spring to autumn except slightly higher in midsummer. *Average annual temperature*—60° to 62° F. *Average freeze-free period*—Mainly 200 to 210 days and 240 days in some valleys.

Water: The plentiful rainfall is adequate for crops and pasture in most years. Droughts are less frequent and of shorter duration than in adjoining valleys. Water for livestock is available from streams, springs, and ponds. Shallow wells yield only small and uncertain amounts of water but deep wells yield large amounts and are dependable. Most streams flow intermittently and are dry in summer and autumn except after storms.

Soil: *Red-Yellow Podzolic soils* (Hartsells and Albertville) are the principal soils on the smooth plateau top. Associated with them are *Sols Bruns Acides* (Crossville). *Lithosols* (Ramsey) occupy steep mountain sides and valley walls.

130—Blue Ridge

North Carolina, Virginia, Georgia, Tennessee, South Carolina, and Maryland
18,900 square miles

Land Use: Two-thirds or more of the area is in forest, much of which is privately owned. About a fifth of the area is in national parks and forests, but the proportion is much higher in Georgia and Tennessee. About one-tenth of the area, mainly on small farms in valleys and coves, is cropland and one-sixth is in pasture. Corn and hay are the most extensive crops; small grains, potatoes, and many kinds of fruits and vegetables are grown also. Tobacco is an important crop in some places. Most of the farms are part-time enterprises, and the occupants earn a large part of their livelihood elsewhere.

Elevation and Topography: 1,000 feet in the lower valleys and foot slopes to more than 6,500 feet in the mountains along the Tennessee-North Carolina boundary, decreasing gradually both north and south from this high point. The rugged mountains have steep slopes and sharp crests, and they are dissected by steep narrow valleys. Local relief is in several hundreds to a few thousands of feet.

Climate: *Average annual precipitation*—Mainly 40 to 50 inches but as much as 80 inches on highest peaks in the south; somewhat unevenly distributed; highest in midsummer and midwinter and least in autumn. *Average annual temperature*—50° to 60° F. *Average freeze-free period*—150 to 220 days, decreasing in length with increasing elevation and from south to north.

Water: Springs and shallow wells provide domestic water, but the ground-water yield from wells is generally small. Water for livestock comes largely from springs and perennial streams though some farm ponds have been built recently. In the southern two-thirds of the area the major rivers have many dams for flood control and electric-power production and are used for recreation.

Soil: On steep mountain slopes *Lithosols* (Talladega, Chandler, and Ramsey) and *Sols Bruns Acides* (Ashe and Ranger) are the principal soils. *Gray-Brown Podzolic soils* (Porters) are in the more deeply weathered material on some of the less sloping mountain sides. Rough stony land and rock outcrops are conspicuous on mountain slopes but their total area is small. In more deeply weathered residuum and in colluvium, especially at lower elevations, *Red-Yellow Podzolic soils* (Hayesville, Balfour, Tusquitee, and Tate) are extensive; associated with them on basic rocks are *Reddish-Brown Lateritic soils* (Rabun and Clifton). *Alluvial soils* (Congaree and Chewacla) are on narrow flood plains of the many stream valleys.

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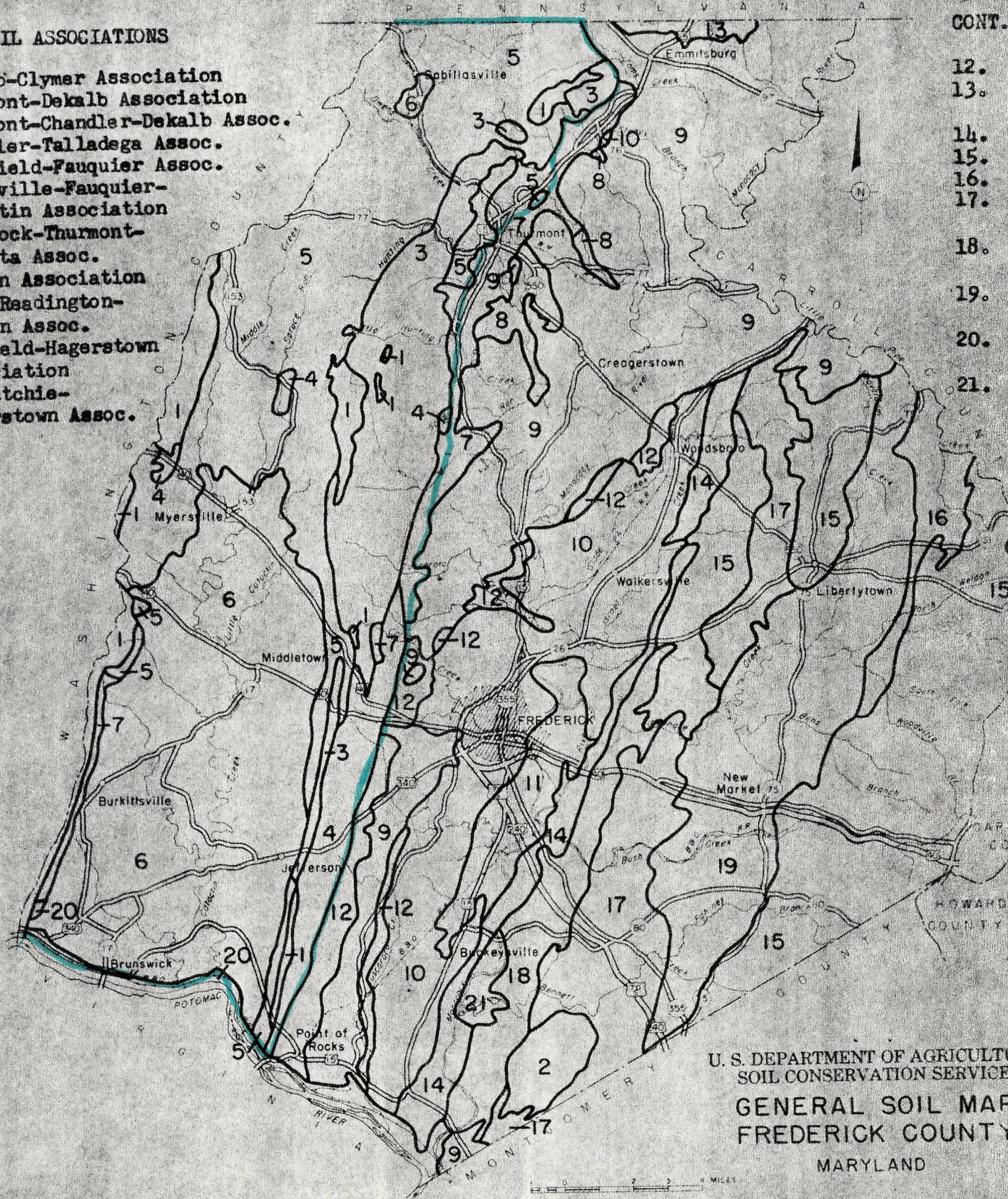
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SOIL ASSOCIATIONS

- 1. Dekalb-Clymer Association
- 2. Edgemont-Dekalb Association
- 3. Edgemont-Chandler-Dekalb Assoc.
- 4. Chandler-Talladega Assoc.
- 5. Highfield-Fauquier Assoc.
- 6. Myersville-Fauquier-Catoctin Association
- 7. Braddock-Thurmont-Augusta Assoc.
- 8. Norton Association
- 9. Penn-Readington-Croton Assoc.
- 10. Duffield-Hagerstown Association
- 11. Sequatchie-Hagerstown Assoc.

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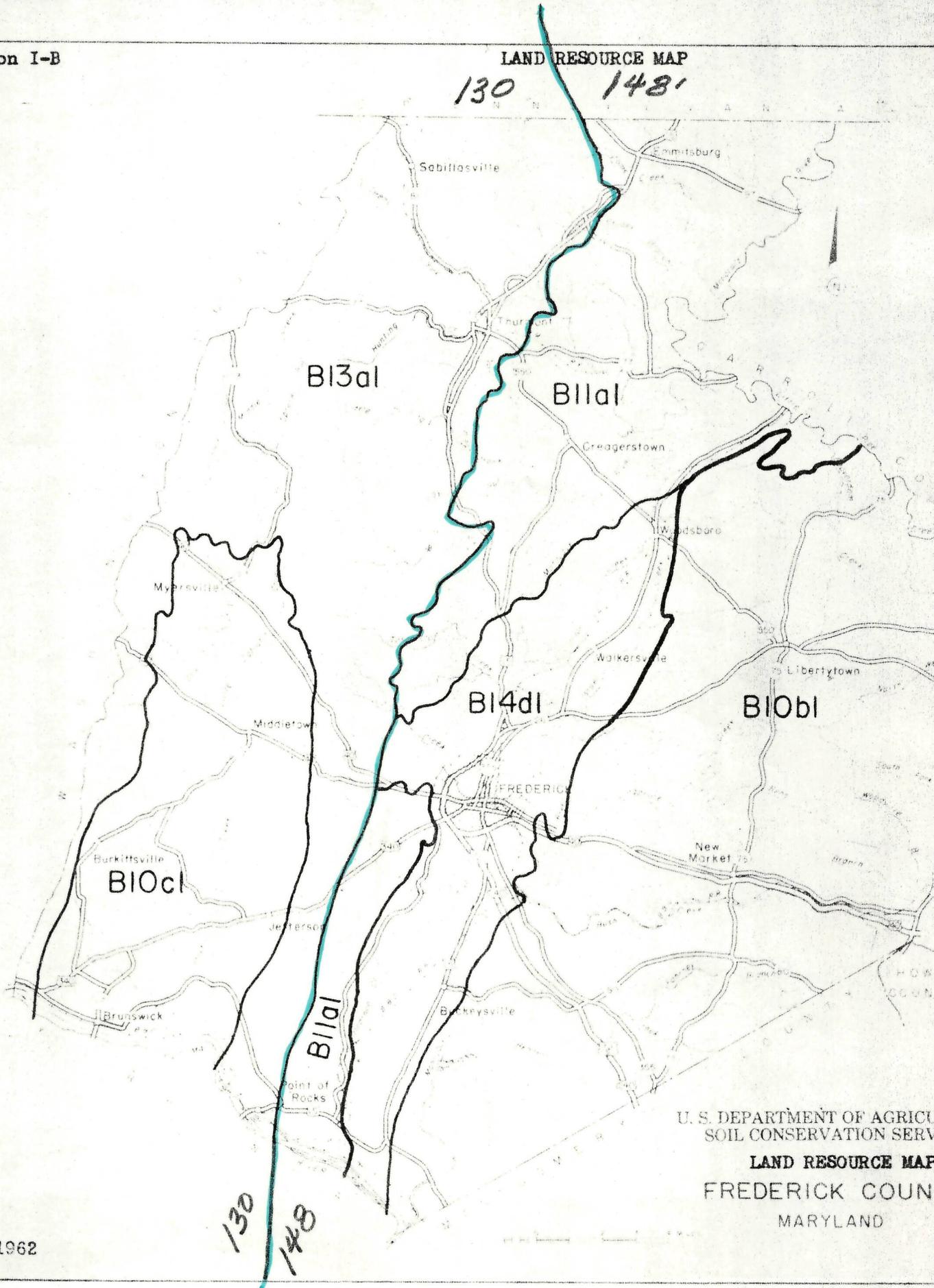


U. S. DEPARTMENT OF AGRICULTURE
 SOIL CONSERVATION SERVICE
 GENERAL SOIL MAP
 FREDERICK COUNTY
 MARYLAND

Section I-B

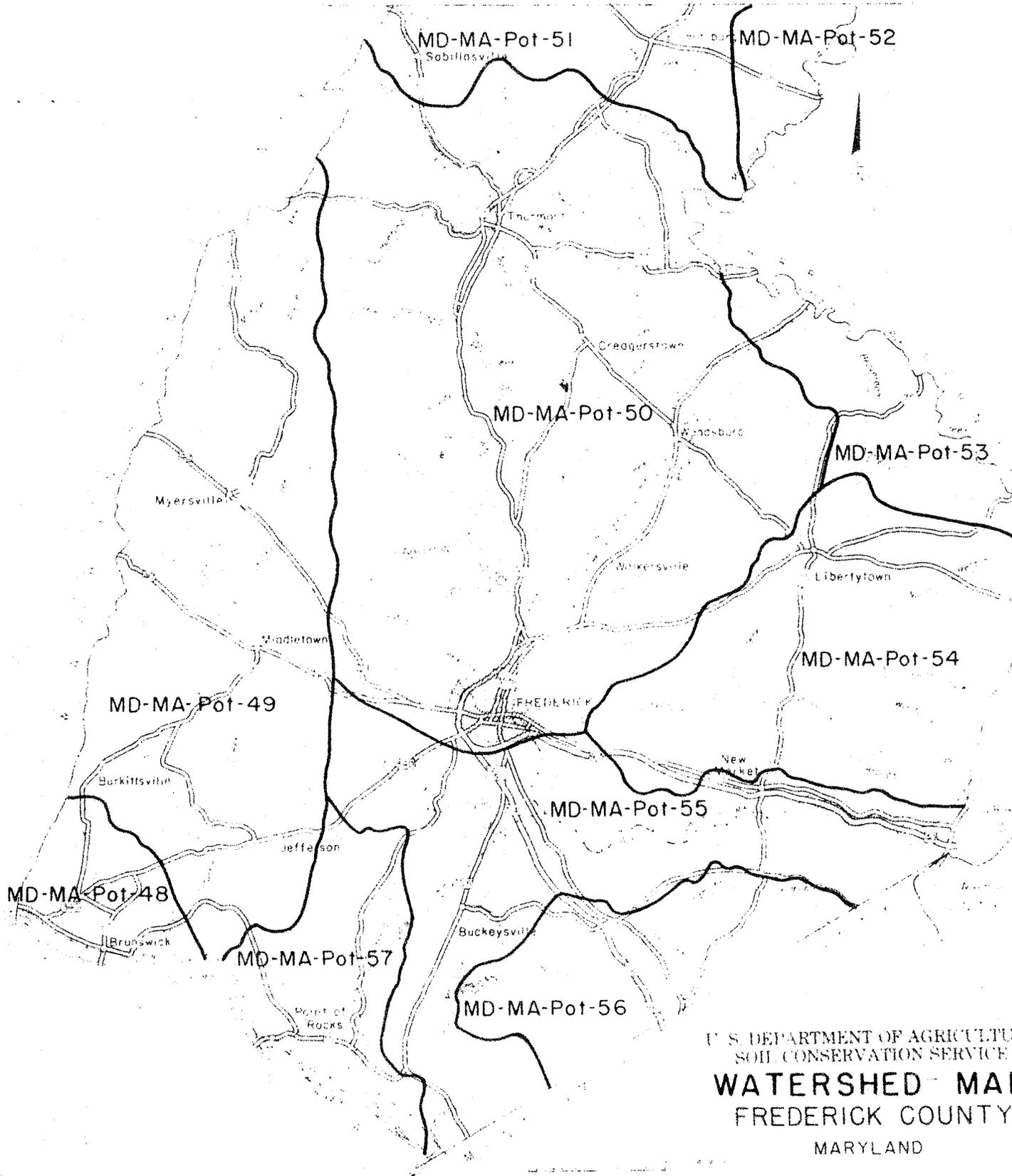
LAND RESOURCE MAP

130 148'

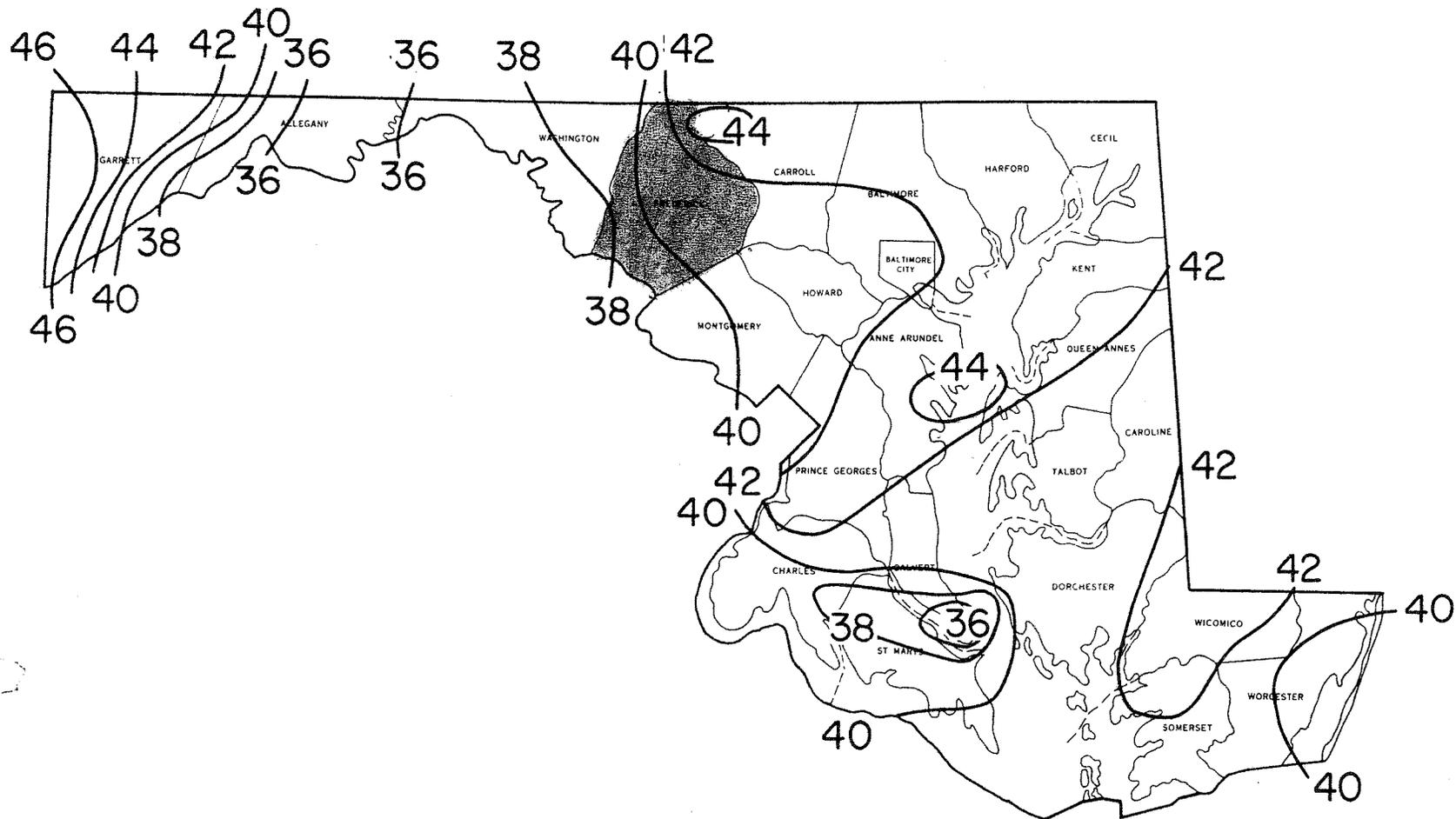


U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE
LAND RESOURCE MAP
FREDERICK COUNTY
MARYLAND

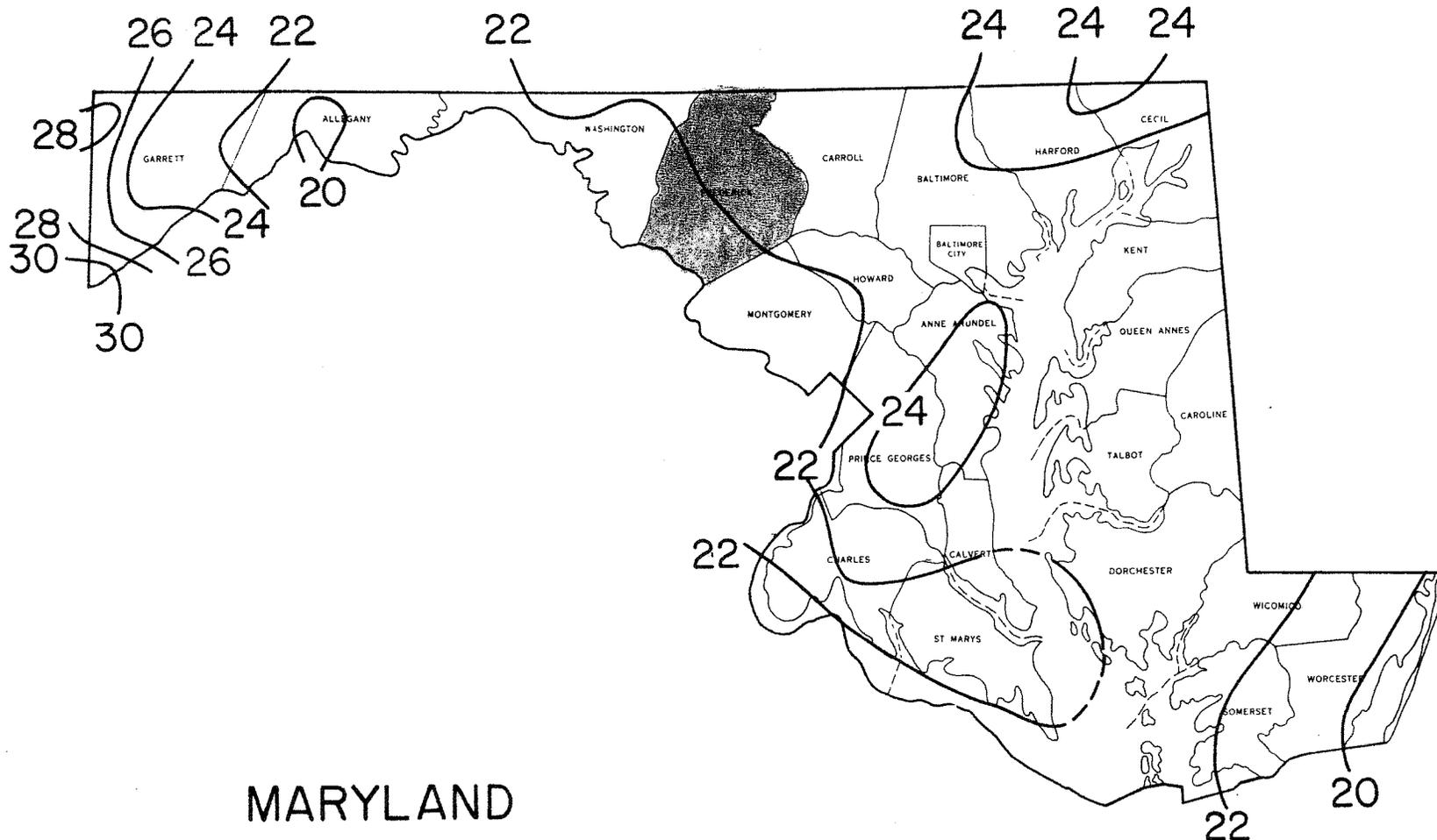
Dec. 1962



U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE
WATERSHED MAP
FREDERICK COUNTY
MARYLAND

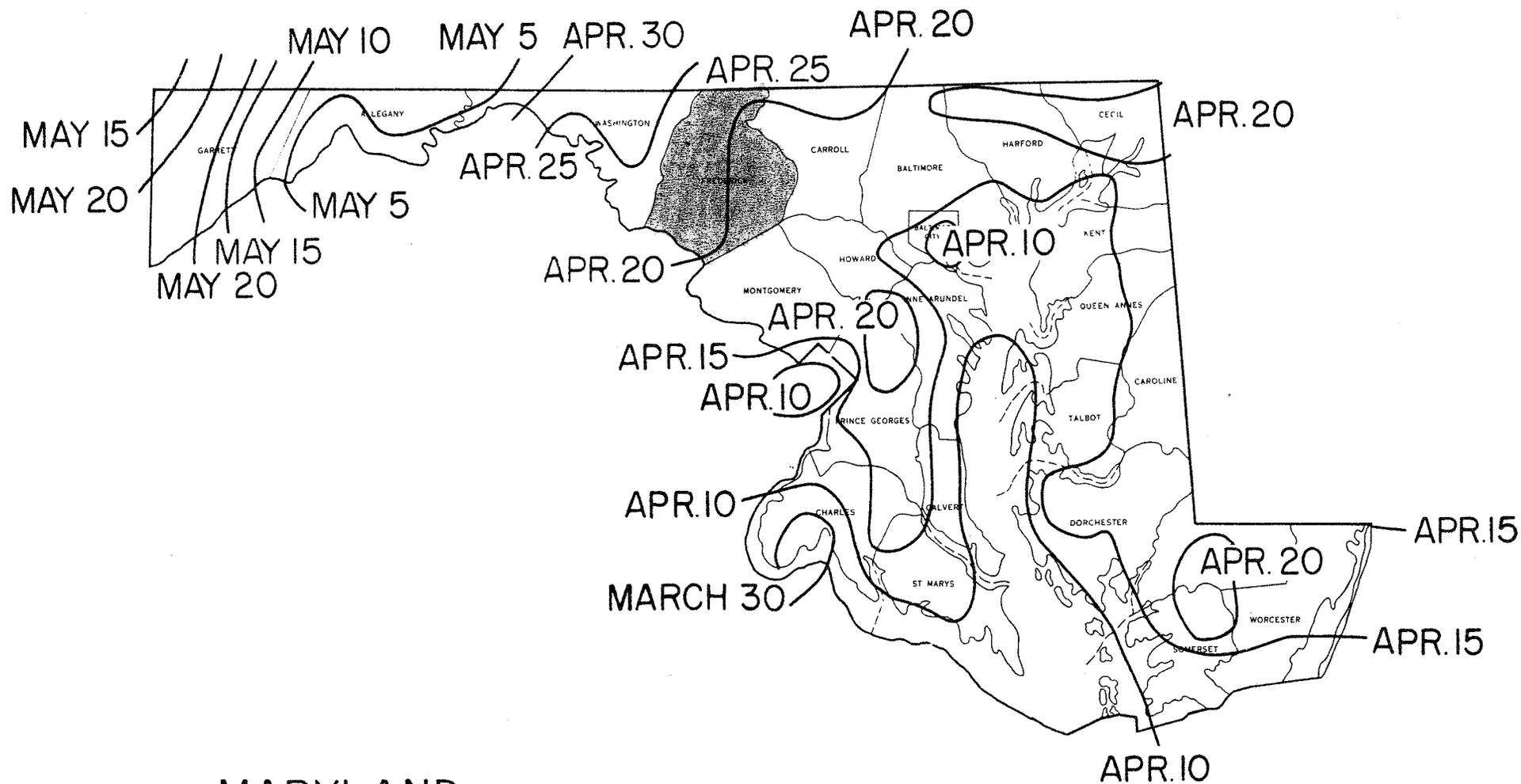


MARYLAND
 AVERAGE ANNUAL
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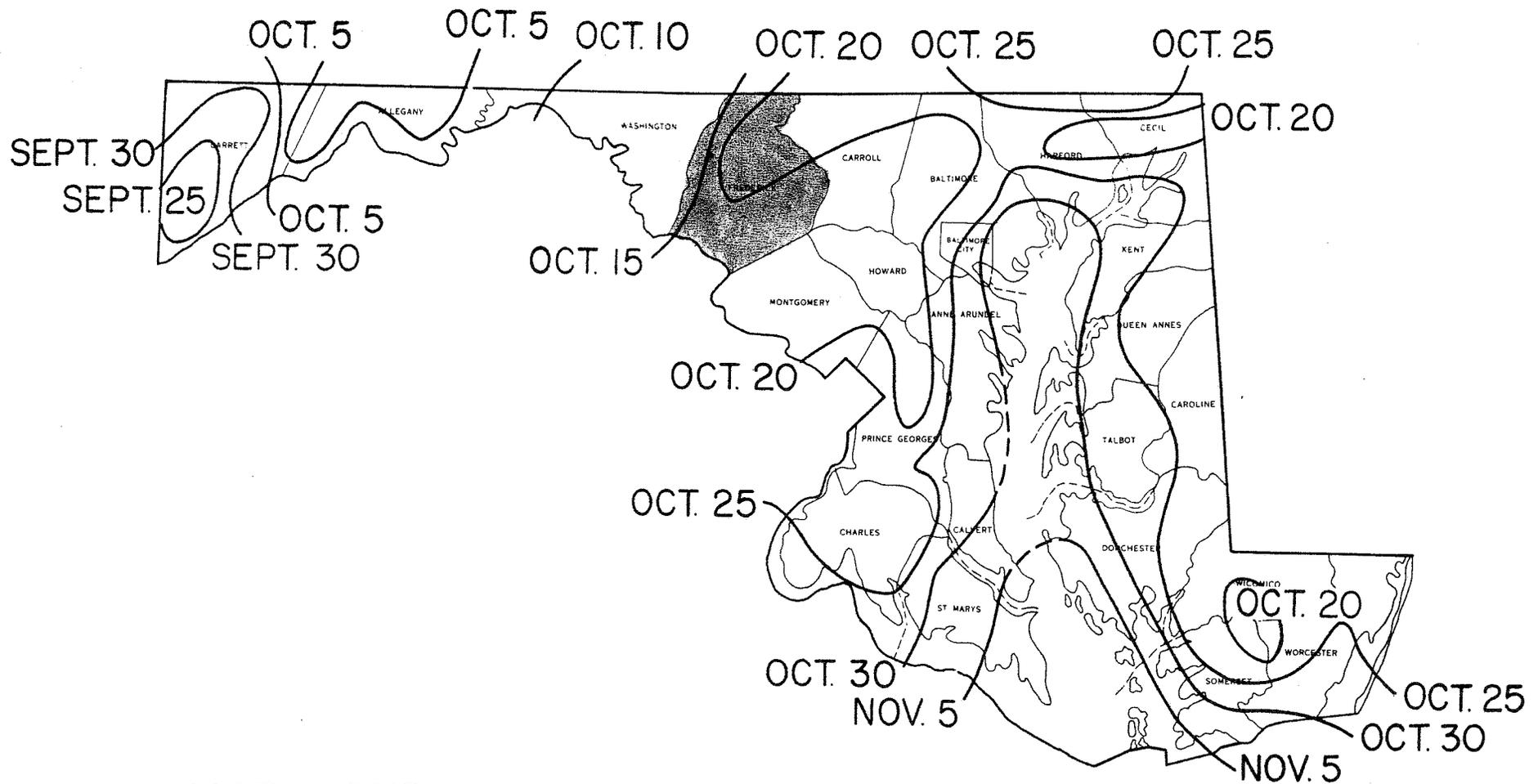
MARYLAND

AVERAGE WARM-SEASON
 PRECIPITATION (INCHES)
 (APRIL TO SEPTEMBER, INCLUSIVE)



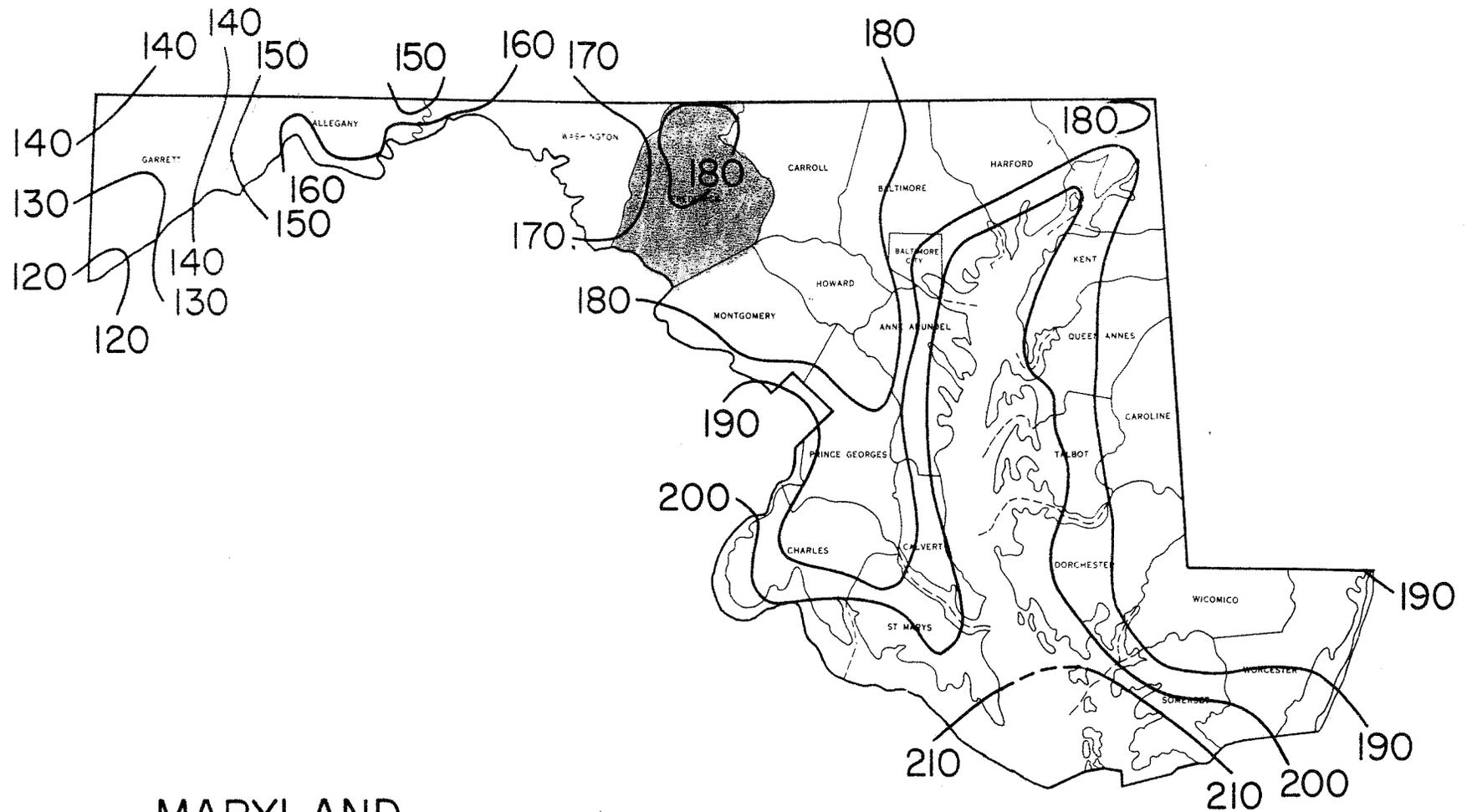
MARYLAND

AVERAGE DATES OF LAST
KILLING FROST IN SPRING



MARYLAND

AVERAGE DATES OF FIRST
KILLING FROST IN FALL



MARYLAND
 AVERAGE NUMBER OF DAYS
 WITHOUT KILLING FROST

February 5, 1982

Mr. J. R. Whitley
Department of the Treasury
Bureau of Alcohol, Tobacco & Firearms
Research and Regulations Branch
Washington, D.C. 20226

Dear Mr. Whitley:

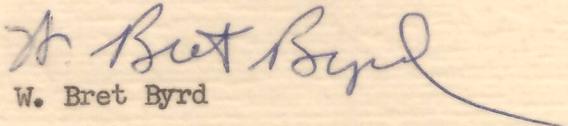
Thank you for your help. In view of our telephone conversation, we wish to use only the word "CATOCTIN" as the designation of our viticultural area and not "Catoctin Viticultural Area" as stated in our original petition.

Below, please find the information you requested.

- (a) There is one bonded winery.
Byrd Vineyards & Winery Bonded Winery BW-MD-23
- (b) We wish the Maryland side of the Potomac River as the southern boundary of the proposed viticultural area.
- (c) If an updated version of the Harper's Ferry quadrangle map can not be found showing the boundary of the "Chesapeake and Ohio Canal National Historic Park" please use some other descriptive information remaining as close to the original boundary as possible.
- (d) A "Buckeystown" quadrangle map indicating boundary will be mailed under a separate cover.
- (e) Point of Rocks will be our designation for the point of beginning for the boundaries of the proposed viticultural area.

Thank you again for your help.

Sincerely,


W. Bret Byrd

