

	<i>Page</i>
Introduction	2-1
Factors affecting surface runoff	2-2
General	2-2
Rainfall.....	2-2
Hydrologic soil groups	2-2
Cover type	2-3
Treatment	2-3
Hydrologic conditions	2-3
Topography	2-3
Runoff	2-4
Runoff curve numbers	2-4
Rainfall.....	2-4
Estimating runoff.....	2-4
Time of concentration	2-5
General	2-5
Estimating time of concentration	2-5
Average watershed slope	2-5
Flow length	2-5
Peak discharge	2-6
General	2-6
I _a /P ratio	2-6
Estimating peak discharge	2-6
Limitations	2-7
Example 2-1	2-8
Example 2-2	2-9

Exhibits

	<i>Page</i>
2-I Unit peak discharge (q_U) for SCS Type I rainfall distribution	2-11
2-IA Unit peak discharge (q_U) for SCS Type IA rainfall distribution	2-12
2-II Unit peak discharge (q_U) for SCS Type II rainfall distribution	2-13
2-III Unit peak discharge (q_U) for SCS Type III rainfall distribution	2-14

Figures

	<i>Page</i>		<i>Page</i>		
2-1	Approximate geographic boundaries for SCS rainfall distributions.	2-15	2-16	Precipitation values for Hawaii—10-year 24-hour rainfall (inches).	2-30
2-2	Precipitation values for the Eastern United States—2-year 24-hour rainfall (inches).	2-16	2-17	Precipitation values for Hawaii—25-year 24-hour rainfall (inches).	2-31
2-3	Precipitation values for the Eastern United States—5-year 24-hour rainfall (inches).	2-17	2-18	Precipitation values for Hawaii—50-year 24-hour rainfall (inches).	2-32
2-4	Precipitation values for the Eastern United States—10-year 24-hour rainfall (inches).	2-18	2-19	Precipitation values for Hawaii—100-year 24-hour rainfall (inches).	2-33
2-5	Precipitation values for the Eastern United States—25-year 24-hour rainfall (inches).	2-19	2-20	Precipitation values for Puerto Rico and the U.S. Virgin Islands—2-year 24-hour rainfall (inches).	2-31
2-6	Precipitation values for the Eastern United States—50-year 24-hour rainfall (inches).	2-20	2-21	Precipitation values for Puerto Rico and the U.S. Virgin Islands—5-year 24-hour rainfall (inches).	2-35
2-7	Precipitation values for the Eastern United States—100-year 24-hour rainfall (inches).	2-21	2-22	Precipitation values for Puerto Rico and the U.S. Virgin Islands—10-year 24-hour rainfall (inches).	2-36
2-8	Precipitation values for Alaska—2-year 24-hour rainfall (inches).	2-22	2-23	Precipitation values for Puerto Rico and the U.S. Virgin Islands—25-year 24-hour rainfall (inches).	2-37
2-9	Precipitation values for Alaska—5-year 24-hour rainfall (inches).	2-23	2-24	Precipitation values for Puerto Rico and the U.S. Virgin Islands—50-year 24-hour rainfall (inches).	2-38
2-10	Precipitation values for Alaska—10-year 24-hour rainfall (inches).	2-24	2-25	Precipitation values for Puerto Rico and the U.S. Virgin Islands—100-year 24-hour rainfall (inches).	2-39
2-11	Precipitation values for Alaska—25-year 24-hour rainfall (inches).	2-25	2-26	Solution for runoff equation.	2-40
2-12	Precipitation values for Alaska—50-year 24-hour rainfall (inches).	2-26	2-27	T_c nomograph.	2-41
2-13	Precipitation values for Alaska—100-year 24-hour rainfall (inches).	2-27			
2-14	Precipitation values for Hawaii—2-year 24-hour rainfall (inches).	2-28			
2-15	Precipitation values for Hawaii—5-year 24-hour rainfall (inches).	2-29			

Tables

	<i>Page</i>
2-1 Hydrologic soil groups for United States soils . .	2-42
2-2 Runoff depth for selected CN's and rainfall amounts	2-84
2-3a Runoff curve numbers for cultivated agricultural lands	2-85
2-3b Runoff curve numbers for other agricultural lands	2-86
2-3c Runoff curve numbers for arid and semiarid rangelands	2-87
2-3d Runoff curve numbers for urban areas	2-88
2-4 I_a values for runoff curve numbers	2-89

Worksheets

1 Runoff curve number	2-90
2 Time of concentration and peak discharge	2-91

1. Introduction

Surface runoff is the volume of excess water that runs off a drainage area. Peak discharge is the peak rate of runoff from a drainage area for a given rainfall.

This chapter presents procedures for estimating runoff and peak discharge from small rural watersheds for use in designing soil and water conservation measures. These procedures for determining peak discharge are applicable to drainage areas that range in size from 1 to 2,000 acres in the United States, Puerto Rico, and the Virgin Islands. There is an MS-DOS microcomputer program that duplicates the manual computation procedures of the chapter.

Tables, figures, exhibits, and worksheets are included for a quick and reliable way to estimate peak discharge and runoff for a range of rainfall amounts, soil types, land use, and cover conditions. The data for the peak discharge exhibits were computed using procedures from the Soil Conservation Service (SCS) National Engineering Handbook Section 4 (NEH-4). NEH-4 or Technical Release 55 (TR-55), "Urban Hydrology for Small Watersheds," should be used to estimate peak discharge for conditions beyond the limits of this chapter and for special situations and areas where procedures of this chapter may be considered too general to provide good estimates.

2. Factors affecting surface runoff

General

Rainfall is the primary source of water that runs off the surface of small rural watersheds. The main factors affecting the volume of rainfall that runs off are the kind of soil and the type of vegetation in the watershed. Factors that affect the rate at which water runs off are the watershed topography and shape along with conservation practices on a watershed.

Rainfall

The peak discharge from a small rural watershed is usually caused by intense rainfall. The intensity of rainfall affects the peak discharge more than it does the volume of runoff. The melting of accumulated snow in the mountains and northern plains may result in a greater volume of runoff, but usually at a lesser rate than runoff caused by rainfall. The melting of a winter's snow accumulation over a large area may cause major flooding along rivers. Intense rainfall that produces high peak discharges in small watersheds usually does not extend over a large area. Therefore, the same intense rainfall that causes flooding in a small tributary is not likely to cause major flooding in a main stream that drains 10 to 20 square miles. This chapter considers only rainfall-generated runoff and not runoff generated from snowmelt.

However, to avoid the use of a different set of rainfall intensities for each drainage area, a set of synthetic rainfall distributions having "nested" rainfall intensities was developed. This set maximizes the rainfall intensities by including selected short-duration intensities with those needed for longer duration.

For the size of the watershed for which SCS typically provides assistance, a storm duration of 24 hours was chosen for the synthetic distributions. The 24-hour storm, while longer than that needed to determine peak discharges, is suitable for determining runoff volumes. Thus, a single storm duration and associated synthetic rainfall distribution can be used to estimate peak discharges for a wide range of watershed areas.

The intensity of rainfall varies considerably during the storm period. Four 24-hour storm distributions, Type I, Type IA, Type II, and Type III, were developed by SCS from U.S. National Weather Service data as typical design storms. They are associated with climatic regions. Type IA maximum intensities are less than Type I; Type I intensities are less than Type III; and Type III intensities are less than Type II intensities.

Type IA and I storm distributions are typical of maritime climates in the western United States where winters are wet and summers are dry. The Type IA storm distribution is characteristic of the coastal side of the Cascade and

Sierra Nevada Mountains in Oregon, Washington, and northern California. The Type I is the characteristic storm distribution for the coastal side of the Sierra Nevada Mountains in southern California and for Hawaii and Alaska. Type III represents Gulf of Mexico and Atlantic coastal areas where tropical storms bring large 24-hour rainfalls. The Type II storm distribution is typical of the more intense storms that occur over the remainder of the United States, Puerto Rico, and the Virgin Islands. Figure 2-1 is a map showing the approximate geographic boundaries for the four rainfall distributions. If a watershed is near a boundary, contact the State Conservation Engineer for a better definition of actual location.

In the intermountain and northern tier of States, the annual peak discharge may occur in some years from rainfall falling on snow or from rapid snowmelt on frozen or saturated soils. In this case, special procedures in NEH-4 are to be used.

Hydrologic soil groups

Soils have been classified into four hydrologic soil groups as shown in table 2-1. The four groups are defined by SCS soil scientists as follows:

Group A soils have low runoff potential and high infiltration rates even when thoroughly wetted. They consist chiefly of sands and gravels that are deep, well drained to excessively drained, and have a high rate of water transmission (greater than 0.30 in/hr).

Group B soils have moderate infiltration rates when thoroughly wetted and consist chiefly of soils that are moderately deep to deep, moderately well drained to well drained, and have moderately fine to moderately coarse textures. These soils have a moderate rate of water transmission (0.15 to 0.30 in/hr).

Group C soils have low infiltration rates when thoroughly wetted and consist chiefly of soils having a layer that impedes downward movement of water and soils of moderately fine to fine texture. These soils have a slow rate of water transmission (0.05 to 0.15 in/hr).

Group D soils have high runoff potential. They have very low infiltration rates when thoroughly wetted and consist chiefly of clay soils with a high swelling potential, soils with a permanent high water table, soils with a claypan or clay layer at or near the surface, and shallow soils over nearly impervious material. These soils have a very low rate of water transmission (0 to 0.05 in/hr).

Cover type

Cover type affects runoff in several ways. The foliage and its litter maintain the soil's infiltration potential by preventing the impact of the raindrops from sealing the soil surface. Some of the raindrops are retained on the surface of the foliage, increasing their chance of being evaporated back into the atmosphere. Some of the intercepted moisture takes so long to drain from the plant down to the soil that it is withheld from the initial period of runoff. Ground cover also allows soil moisture from previous rains to transpire, leaving a greater void in the soil to be filled. Vegetation, including its ground litter, forms numerous barriers along the path of the water flowing over the surface of the land. This increased surface roughness causes water to flow more slowly, lengthening the time of concentration and reducing the peak discharge.

Treatment

Treatment or conservation practices reduce erosion and thereby maintain an open structure at the soil surface. This reduces the runoff, but the effect diminishes rapidly with increases in storm magnitude.

Contouring and terracing reduce erosion and decrease the amount of runoff by forming small reservoirs. Closed-end level terraces act as storage reservoirs without spillways. Land areas in which level terraces have been constructed may be excluded from the drainage area above downstream measures if the terrace system has enough capacity to store the depth of runoff commensurate with the frequency of the runoff event. Gradient terraces increase the distance water must travel and thereby increase the time of concentration.

Hydrologic conditions

In most cases, the hydrologic condition of the site affects the volume of runoff more than any other single factor. The hydrologic condition considers the effects of cover type and treatment on infiltration and runoff and is generally estimated from density of plant cover and residue on the ground surface. Good hydrologic condition indicates that the site usually has a lower runoff potential. Crop residue tilled into the soil and the residual root system from grasses that have been in crop rotations produce a good hydrologic condition.

A grassland cover is good if the vegetation covers 75 percent or more of the ground surface and is lightly grazed. A cover is poor if vegetation covers less than 50 percent of the ground surface or is heavily grazed. Grass cover is evaluated on the basal area of the plant, whereas trees and shrubs are evaluated on the basis of canopy cover.

For arid and semiarid rangelands, poor conditions exist if ground cover (grass, litter, and brush canopy) is less than 30 percent. Fair conditions exist when the ground cover is between 30 and 70 percent, and good conditions exist when ground cover is greater than 70 percent.

Topography

The slopes in a watershed have a major effect on the peak discharge at downstream points. Slopes have little effect on how much of the rainfall will run off. As watershed slope increases, velocity increases, time of concentration decreases, and peak discharge increases. An average small watershed is fan shaped. As the watershed becomes elongated or more rectangular, the flow length increases and the peak discharge decreases.

Potholes may trap a small amount of rain, thus reducing the amount of expected runoff. If potholes and marshland areas make up one-third or less of the total watershed and do not intercept the drainage from the remaining two-thirds, they will not contribute much to the peak discharge. These areas may be excluded from the drainage area for estimating peak discharge. If potholes constitute more than one-third of the total drainage or if they intercept the drainage, the procedures in NEH-4 should be used to estimate the peak discharge.

3. Runoff

Runoff curve numbers

The SCS runoff equation is:

$$Q = \frac{(P - I_a)^2}{(P - I_a) + S} \quad (\text{Eq. 2-1})$$

Where Q = runoff in inches,
 P = rainfall in inches,
 I_a = initial abstraction in inches, and
 S = potential maximum retention after runoff begins in inches.

Initial abstraction (I_a) includes all losses before runoff begins. It includes water retained in surface depressions, water intercepted by vegetation, and water lost to evaporation and infiltration. I_a is highly variable but is generally correlated with soil and cover parameters. Through studies of many small agricultural watersheds, I_a was found to be approximated by:

$$I_a = 0.2S \quad (\text{Eq. 2-2})$$

Removing I_a as an independent parameter allows use of a combination of S and P to produce unique runoff volumes. Substituting equation 2-2 into equation 2-1 gives:

$$Q = \frac{(P - 0.2S)^2}{P + 0.8S} \quad (\text{Eq. 2-3})$$

The potential maximum retention can range from zero on a smooth, impervious surface to infinity in deep gravel. For greater convenience, the "S-values" were converted to runoff curve numbers (CN's) by the following transformation:

$$CN = \frac{1000}{10 + S} \quad (\text{Eq. 2-4})$$

According to equation 2-4, the CN is 100 when S is zero and approaches zero as S approaches infinity. Runoff curve numbers can be any value from zero to 100, but for practical applications are limited to a range of 40 to 98.

The runoff curve numbers in table 2-3 were developed by examining rainfall runoff data from small agricultural watersheds. The runoff curve number for a given soil-cover type is not a constant but varies from storm to storm. The index of runoff potential for a given storm is the antecedent runoff condition (ARC). ARC is an attempt to account for the variation in CN at a site from storm to storm. The runoff curve numbers in table 2-3 are for an average ARC and are used for design.

A representative curve number for a watershed can be estimated by area weighting using worksheet 1 as shown in example 2-1.

Rainfall

The 24-hour rainfall depths for a desired location and frequency can be obtained from the appropriate map in figures 2-2 through 2-25. The rainfall values for each of the 11 western conterminous States can be obtained from the U.S. National Weather Service, NOAA Atlas 2.

Estimating runoff

The runoff from a watershed may be expressed as the average depth of water that would cover the entire watershed. The depth is usually expressed in inches. The volume of runoff is computed by converting depth over the drainage area to volume and is usually expressed in acre-feet. When CN and rainfall (P) have been determined for the watershed, determine runoff (Q) by using figure 2-26 or table 2-2.

4. Time of concentration

General

Time of concentration (T_C) is the time it takes for runoff to travel from the hydraulically most distant point of the watershed to the outlet. T_C influences the peak discharge. For the same size watershed, the shorter the T_C , the larger the peak discharge. This means that peak discharge has an inverse relationship with T_C .

Estimating time of concentration

T_C can be estimated for small rural watersheds using the following empirical relationship:

$$T_C = \frac{\ell^{0.8} \left[\left(\frac{1000}{CN} \right) - 9 \right]^{0.7}}{1140 Y^{0.5}} \quad (\text{Eq. 2-5})$$

Where T_C = time of concentration in hours,
 ℓ = flow length in feet,
 CN = runoff curve number, and
 Y = average watershed slope in percent.

Figure 2-27 is a nomograph for solving equation 2-5. T_C is determined using watershed parameters ℓ , CN, and Y. Worksheet 2 can be used to compute T_C . Example 2-2 demonstrates this procedure. For watersheds where hydraulic conditions are such that velocities of water flow need to be estimated (urban areas, etc.), then T_C should be estimated using TR-55 methods.

Average watershed slope

The average watershed slope (Y) is the slope of the land and not the watercourse. It can be determined from soil survey data or topographic maps. Hillside slopes can be measured with a hand level, Locke level, or clinometer in the direction of overland flow. Average watershed slope is an average of individual land slope measurements.

The average watershed slope can be determined using the following relationship:

$$Y = \frac{100CI}{A} \quad (\text{Eq. 2-6})$$

where Y = average watershed slope in percent,
 C = total contour length in feet,
 I = contour interval in feet, and
 A = drainage area in square feet.

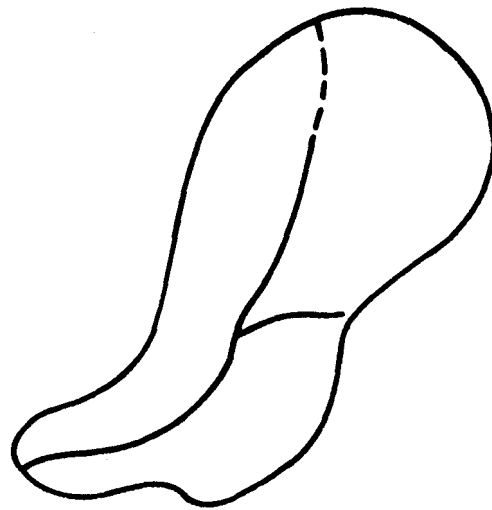
Flow length

Flow length (ℓ) is the longest flow path in the watershed from the watershed divide to the outlet. It is the total path water travels overland and in small channels on the way to the outlet. The flow length can be determined using a map

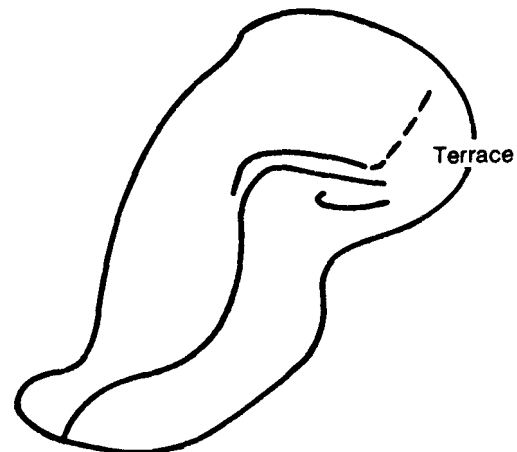
wheel or it can be marked along the edge of a paper and converted to feet.

Some typical examples of determining the flow length are shown below.

Natural Watershed. In this case, water flows from the watershed divide to a small channel, down the small channel to the main stream, and from there to the watershed outlet.



Watershed with Terraces. In this case, water flows from the divide to the terrace, along the terrace to the outlet or main stream, and then along the main stream to the outlet.



5. Peak discharge

General

Using runoff, I_a/P , time of concentration, and drainage area, the peak discharge can be estimated using exhibits 2-IA, 2-I, 2-II, and 2-III.

I_a/P Ratio

The watershed CN is used to determine the initial abstraction (I_a) from table 2-4. I_a/P ratio is a parameter that indicates how much of the total rainfall is needed to satisfy the initial abstraction. The larger the I_a/P ratio, the lower the unit peak discharge (q_u) for a given T_c . This indicates that if initial abstraction is a high portion of rainfall, the peak discharge will be lower. Thus, the I_a/P ratio is greater for smaller storms.

If the computed I_a/P ratio is outside the range shown (0.1 to 0.50) in exhibits 2-I through 2-III, then the limiting values should be used; i.e., use 0.1 if less than 0.1 and use 0.5 if greater than 0.5. If the ratio falls between the limiting values, use linear interpolation.

Estimating peak discharge

The unit peak discharge (q_u) is obtained from exhibits 2-I, 2-IA, 2-II, or 2-III, depending on the rainfall type. Figure 2-1 shows the approximate geographic boundaries for the four rainfall distributions. T_c and I_a/P values are needed to obtain a value for q_u from the exhibit. The peak discharge (q_p) is computed as the product of the unit peak discharge (q_u), the drainage area (A), and the runoff (Q).

$$q_p = q_u \times A \times Q \quad (\text{Eq. 2-7})$$

Worksheet 2 can be used to determine q_p as shown in example 2-2.

6. Limitations

The watershed drainage area must be greater than 1.0 acre and less than 2,000 acres. If the drainage area is outside these limits, another procedure such as TR-55 or TR-20, Project Formulation-Hydrology, should be used to estimate peak discharge.

- The watershed should have only one main stream. If more than one exists, the branches must have nearly equal T_C 's.
- The watershed must be hydrologically similar; i.e., able to be represented by a weighted CN. Land use, soils, and cover are distributed uniformly throughout the watershed. The land use must be primarily rural. If urban conditions are present and not uniformly distributed throughout the watershed, or if they represent more than 10 percent of the watershed, then TR-55 or other procedures must be used.
- If the computed T_C is less than 0.1 hour, use 0.1 hour. If the computed T_C is greater than 10 hours, peak discharge should be estimated by using the NEH-4 procedures, which are automated in the TR-20 computer program.
- When the flow length is less than 200 feet or greater than 26,000 feet, use another procedure to estimate T_C . TR-55 provides an alternative procedure for estimating T_C and peak discharge.
- Runoff and peak discharge from snowmelt or rain on frozen ground cannot be estimated using these procedures. NEH-4 provides a procedure for estimating peak discharge in these situations.
- If potholes constitute more than one-third of the total drainage area or if they intercept the drainage, the procedures in NEH-4 should be used.
- When the average watershed slope is less than 0.5 percent, a different unit hydrograph shape can be used. Contact the State Conservation Engineer for necessary information.
- When the weighted CN is less than 40 or more than 98, use another procedure to estimate peak discharge.
- When the average watershed slope is greater than 64 percent or less than 0.5 percent, use another procedure to estimate T_C . An alternative procedure is shown in TR-55 for estimating T_C and peak discharge.

Accuracy of peak discharge estimated by this method will be reduced if I_a/P ratio used is outside the range given in exhibits 2-I, 2-II, 2-IA, and 2-III. The limiting I_a/P ratios are to be used; i.e., if I_a/P in the exhibit 2-II is less than 0.1, use 0.1; and if I_a/P is greater than 0.5, use 0.5.

7. Example 2-1—Estimating Weighted CN

Given a 90-acre watershed in the Type II storm distribution area, determine the weighted curve number for the drainage area above a proposed waterway. The available soils map shows that the major soils are Dover, Berks, and Easton in field #2 of A.B. Smith's farm in Adams

County, MD. By soil, the cover description breaks down as 25 acres of pasture in good condition on Dover, 55 acres of row crop in straight rows in good condition on Berks, and 10 acres of woods in poor condition on Easton. Use worksheet 1 to develop the weighted curve number for the watershed.

Example 2.1 — Worksheet 1: Runoff curve number (CN)

Client AB SMITH (FIELD #2) By DEW Date 6/6/87
 County ADAMS State MD Checked KO Date 6/6/87
 Practice WATERWAY

Soil name and hydrologic group (table 2-1)	Cover description (cover type, treatment, and hydrologic condition)	CN (table 2-3)	Area (acres or %)	Product of CN x area
DOVER B	PASTURE IN GOOD CONDITION	61	25	1525
BERKS C	STRAIGHT ROW CROPS, GOOD	85	55	4675
EASTON D	WOODS, POOR	83	10	830
Totals =			90	7030

CN (weighted) = $\frac{7030}{90} = 78.1$;

Use CN = 78

8. Example 2-2—Estimating Peak Discharge

Given a 90-acre watershed in the Type II storm distribution area, determine the peak discharges for the 2-, 5-, and 10-year events. The available soils map shows Dover, Berks, and Easton soils in the drainage area above the proposed waterway in field #2 of A.B. Smith's farm in Adams County, MD. The cover by soil types and weighted CN is shown in example 2-1. The average watershed slope is 1 percent, and the flow length is 3,400 feet. The 2-year, 24-hour precipitation is 3.4 inches; the 5-year, 24-hour precipitation is 4.5 inches; and the 10-year, 24-hour precipitation is 5.5 inches. Use worksheet 2 to develop the desired peak discharge estimates.

Example 2.2 — Worksheet 2: Time of concentration and peak discharge

Client AB SMITH (FIELD #2) By DEW Date 6/6/87
 County ADAMS State MD Checked TAS Date 6/7/87
 Practice WATERWAY

Estimating time of concentration

1. Data:

Rainfall distribution type = II (I, IA, II, III)
 Drainage area A = 90 ac
 Runoff curve number CN = 78 (Worksheet 1)
 Watershed slope Y = 1 %
 Flow length l = 3400 ft

2. T_c using l , Y, CN and figure 2-27 = _____ hrs

or using equation 2-5

$$T_c = \frac{l^{0.8} \left[\frac{1000}{CN} - 9 \right]^{0.7}}{1140 Y^{0.5}} = \frac{(3400)^{0.8} (3.82)^{0.7}}{1140 (1)^{0.5}} = \underline{1.5} \text{ hrs}$$

Estimating peak discharge

1. Frequency yr
2. Rainfall, P (24-hour) in
3. Initial abstraction, I_a in
(Use CN with table 2-4)
4. Compute I_a/P ratios
5. Unit peak discharge q_u cfs/ac/in
(Use T_c and I_a/P with exhibit 2-11)
6. Runoff, Q in
(Use P and CN with figure 2-26 or table 2-2)
7. Peak discharge, q_p cfs
(Where $q_p = q_u AQ$)

Storm #1	Storm #2	Storm #3
<u>2</u>	<u>5</u>	<u>10</u>
<u>3.4</u>	<u>4.5</u>	<u>5.5</u>
<u>.564</u>	<u>.564</u>	<u>.564</u>
<u>.17</u>	<u>.13</u>	<u>.10</u>
<u>.40</u>	<u>.42</u>	<u>.43</u>
<u>1.42</u>	<u>2.3</u>	<u>3.1</u>
<u>51</u>	<u>87</u>	<u>120</u>

Exhibit 2-1 — Unit peak discharge (q_u) for SCS Type I rainfall distribution

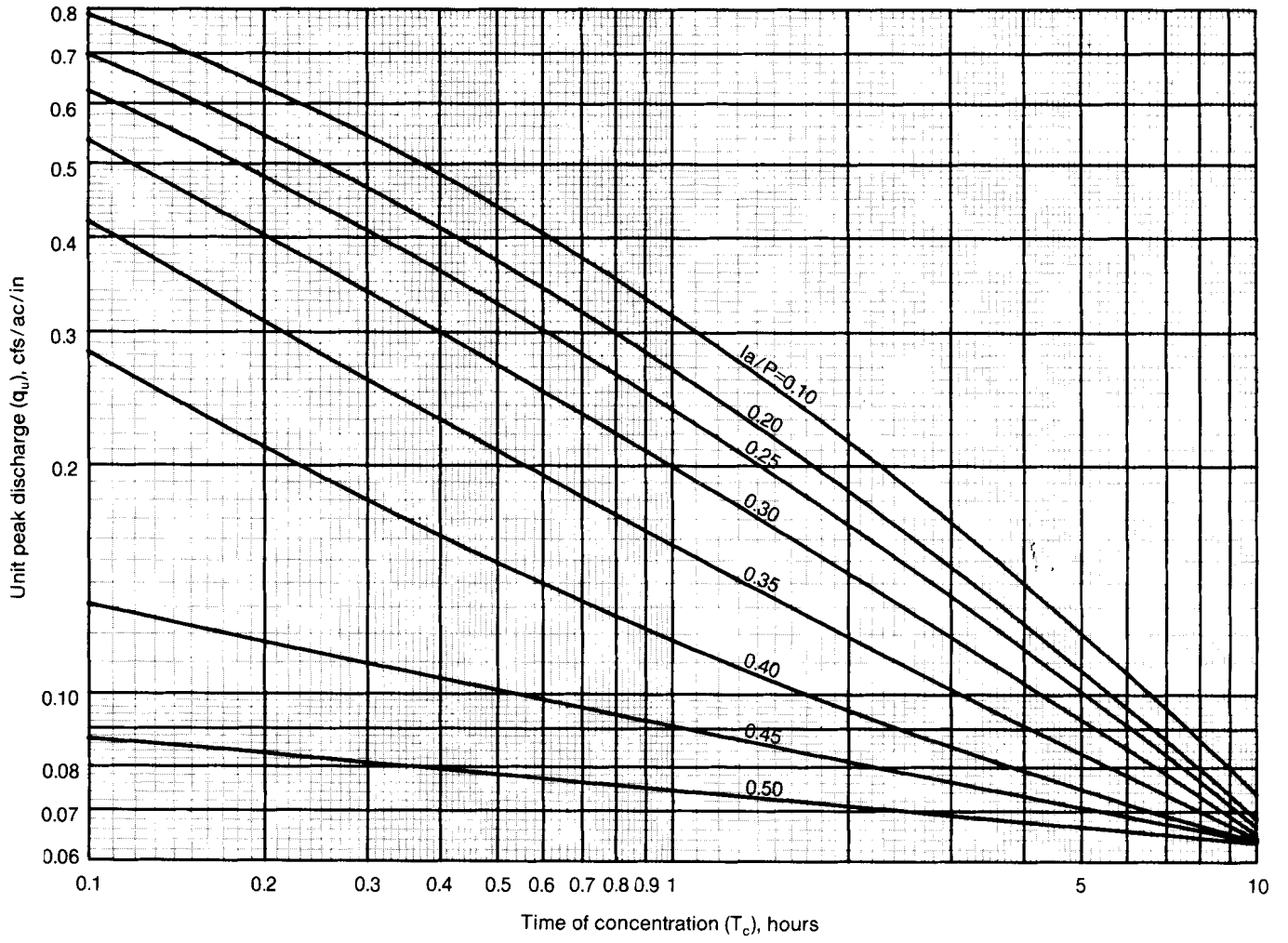


Exhibit 2-1A —Unit peak discharge (q_u) for SCS Type IA rainfall distribution

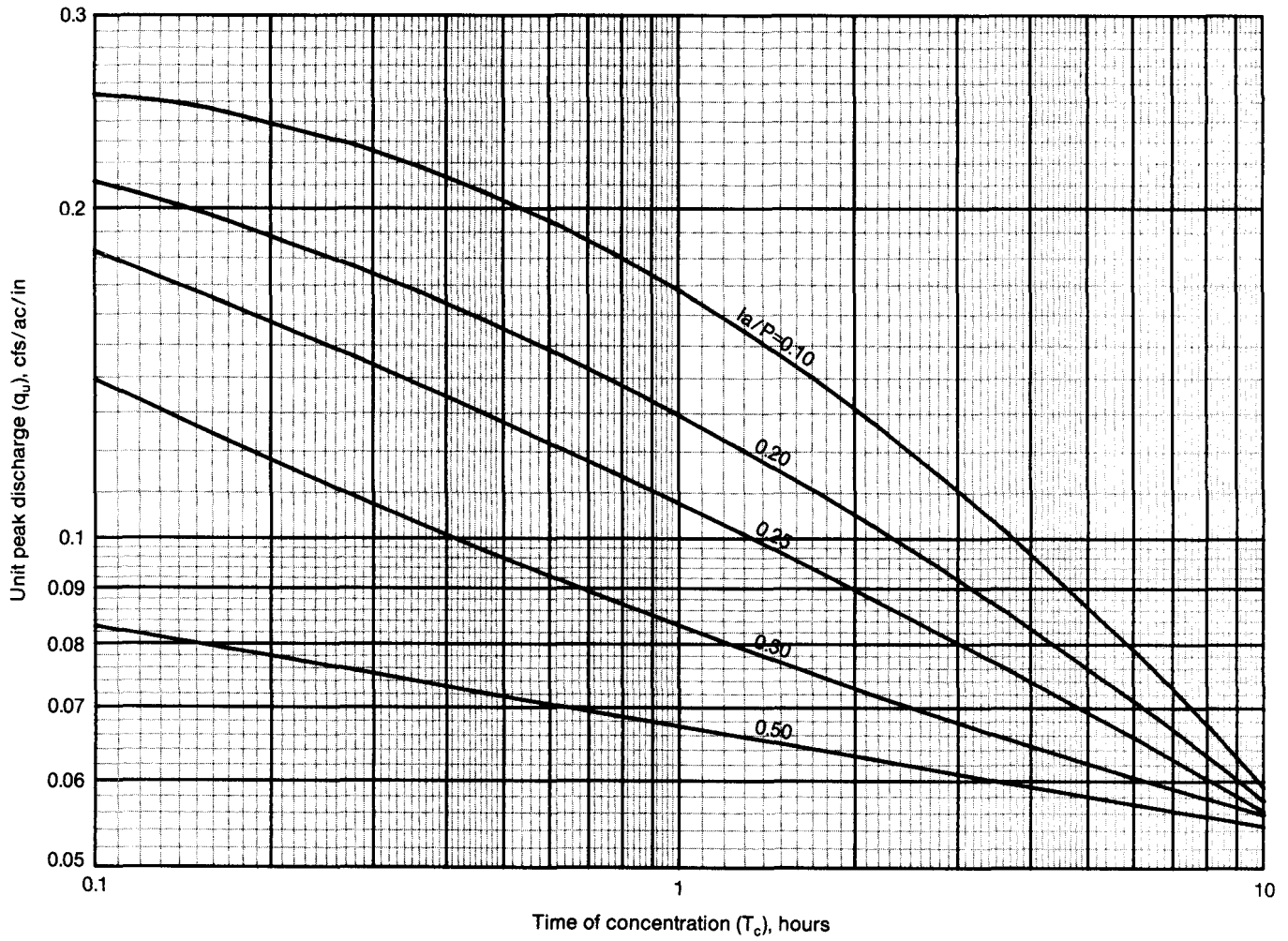


Exhibit 2-II — Unit peak discharge (q_u) for SCS Type II rainfall distribution

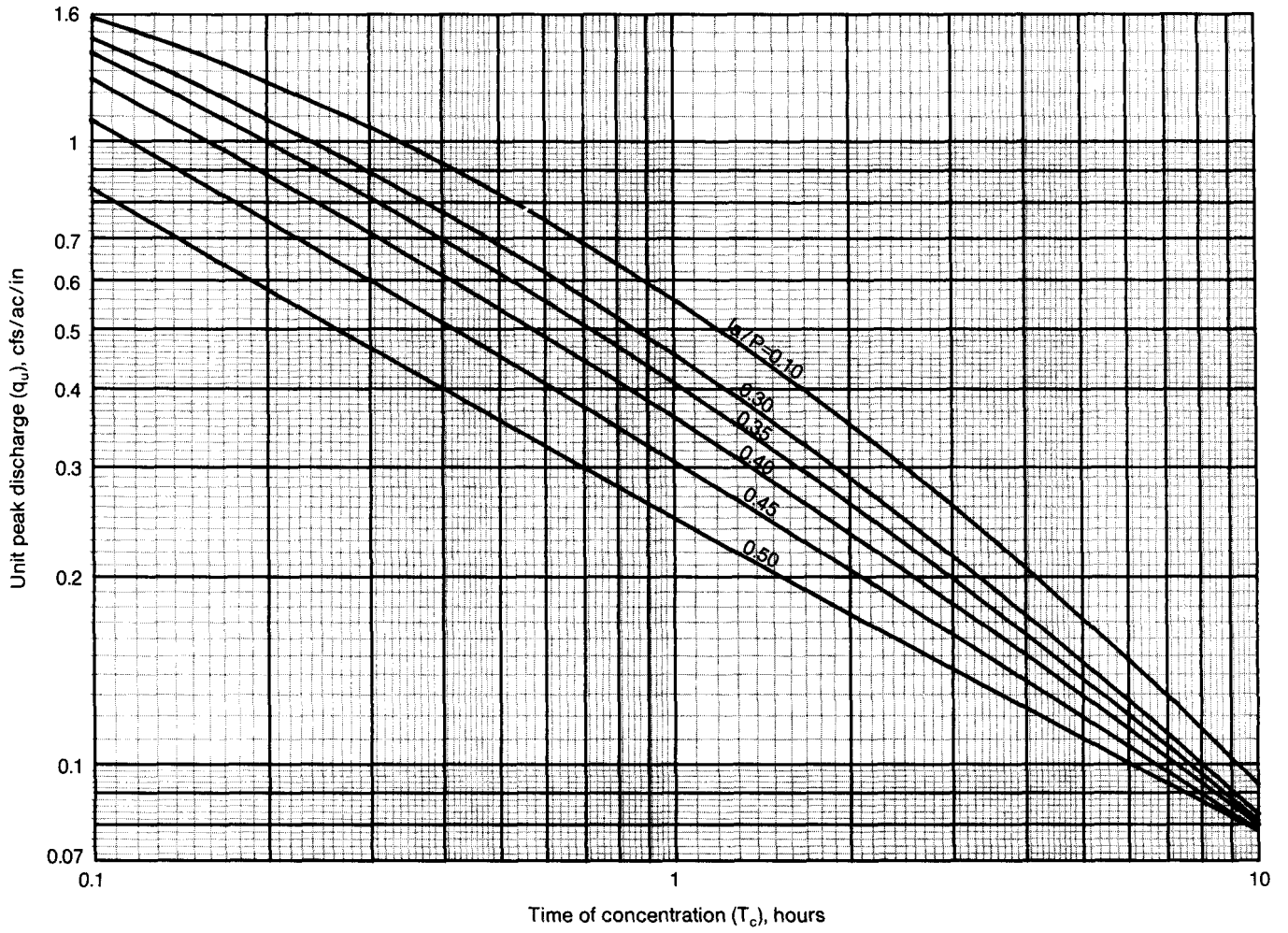


Exhibit 2-III — Unit peak discharge (q_u) for SCS Type III rainfall distribution

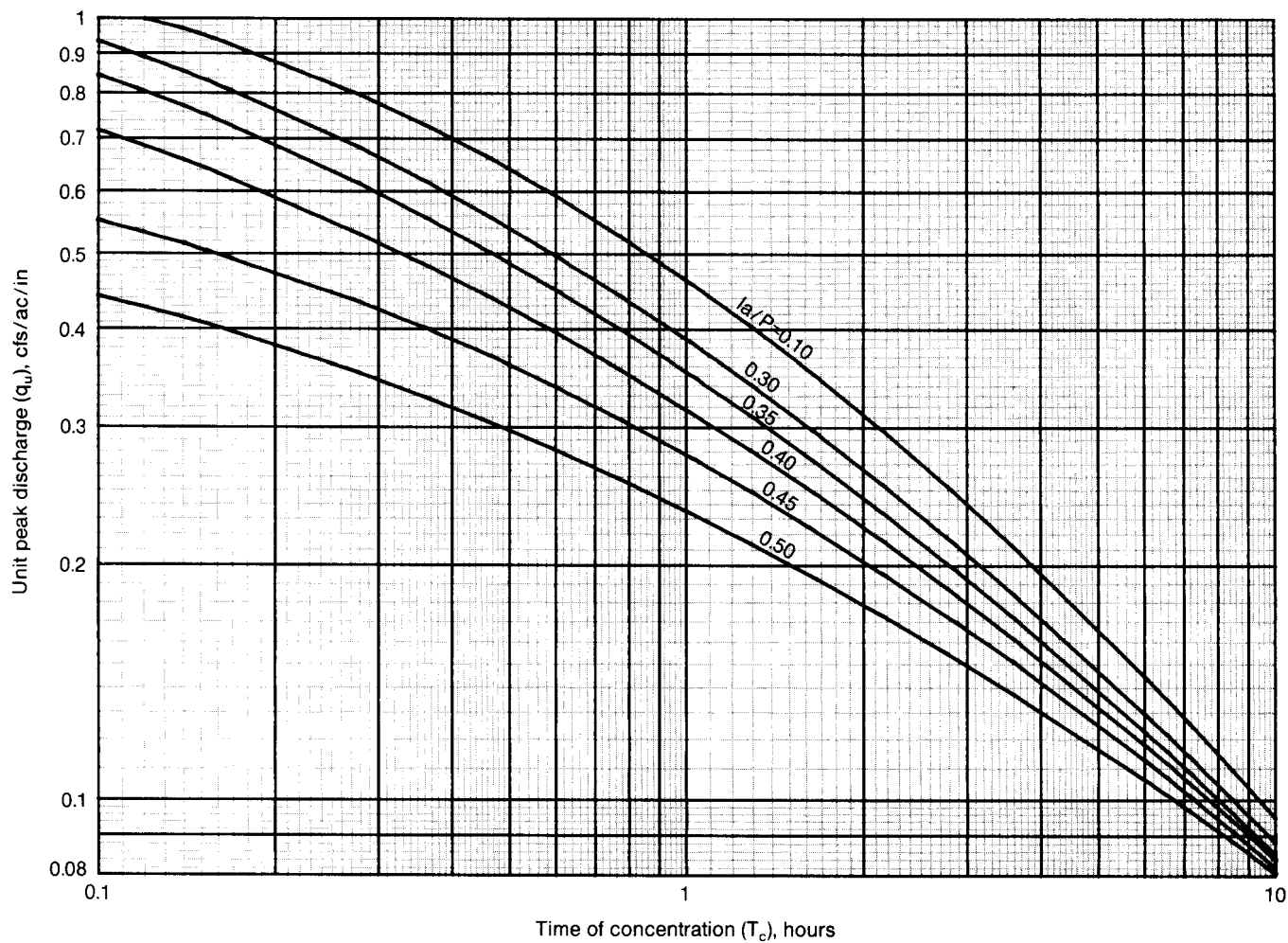


Figure 2-1 — Approximate geographic boundaries for SCS rainfall distributions

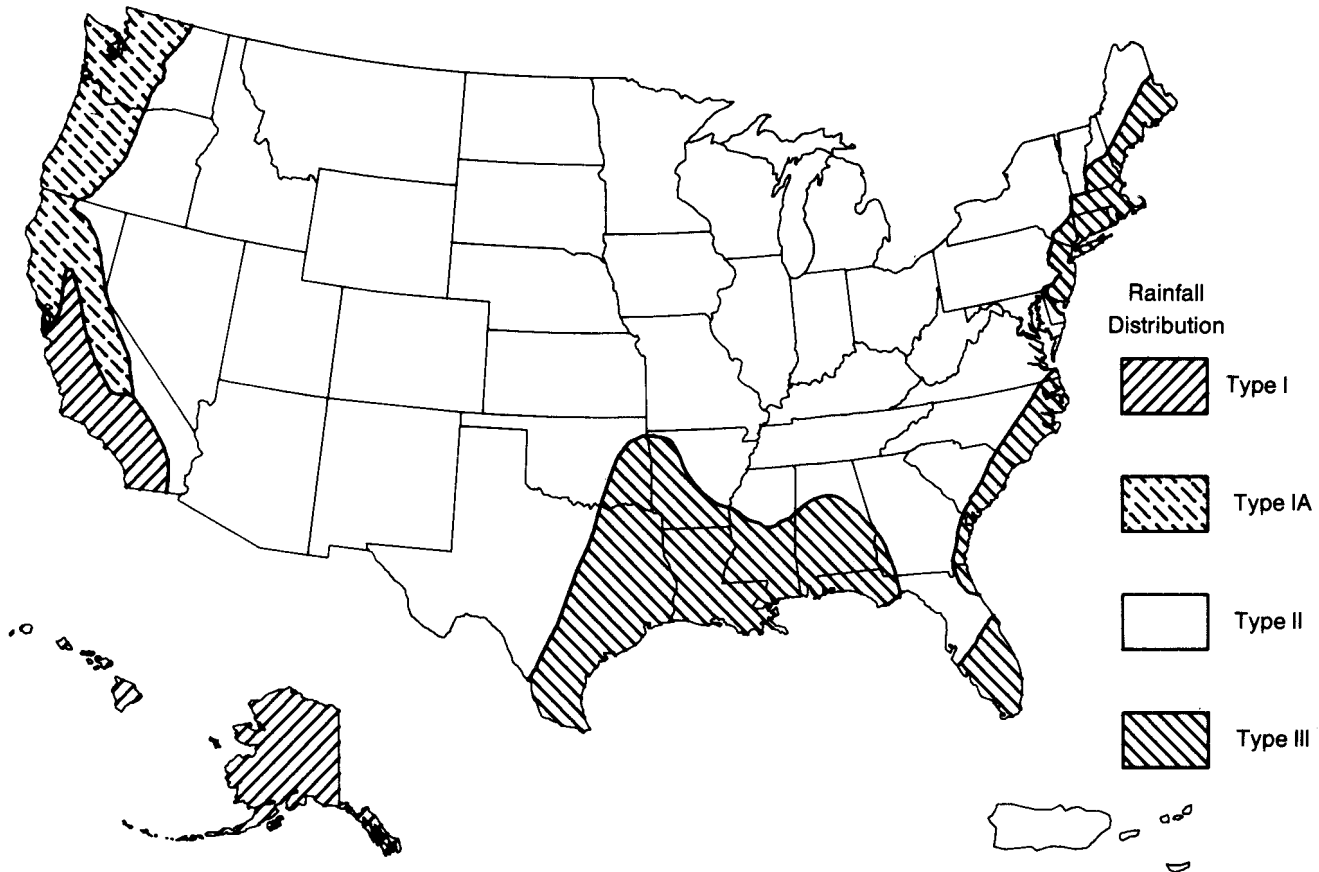
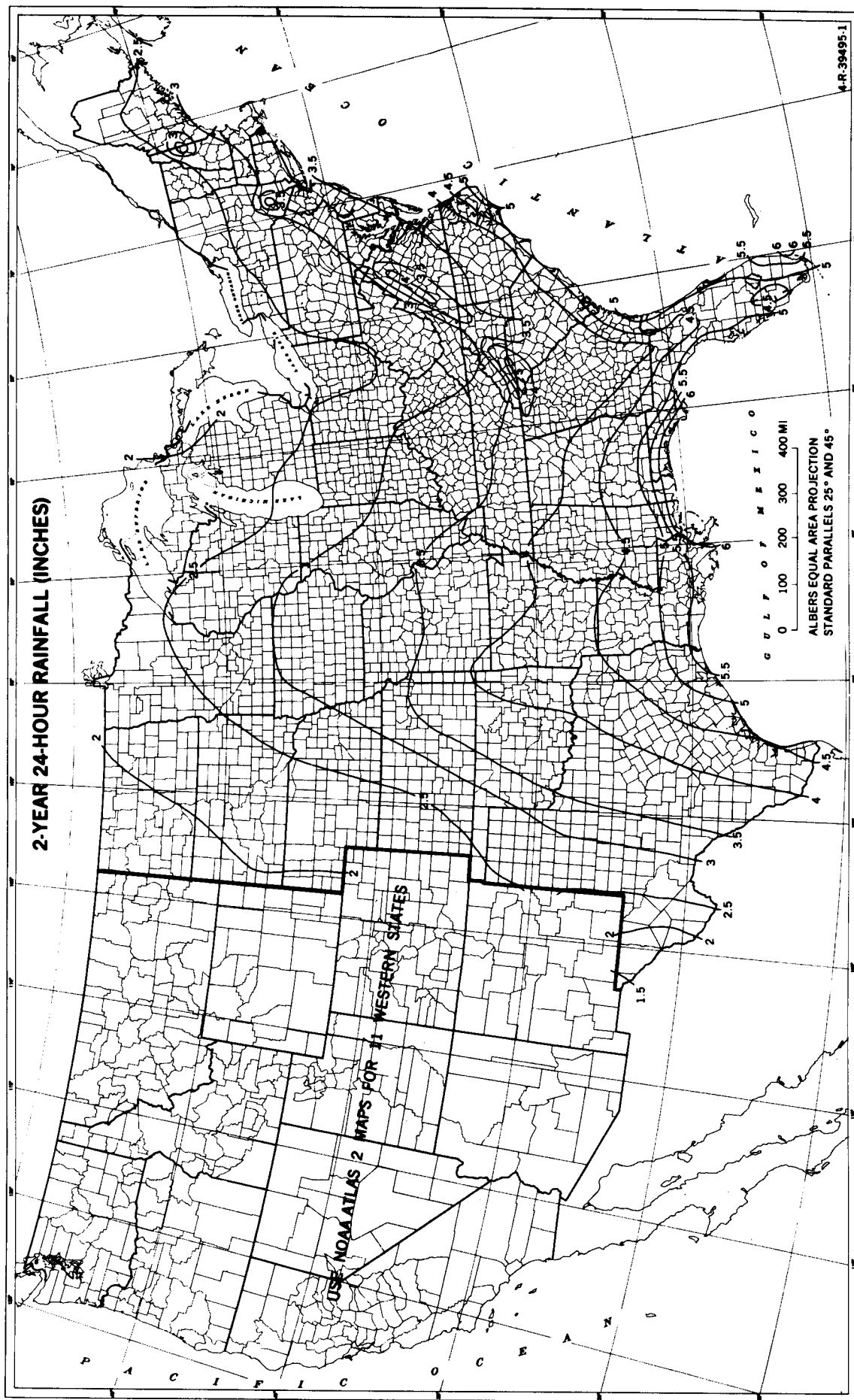
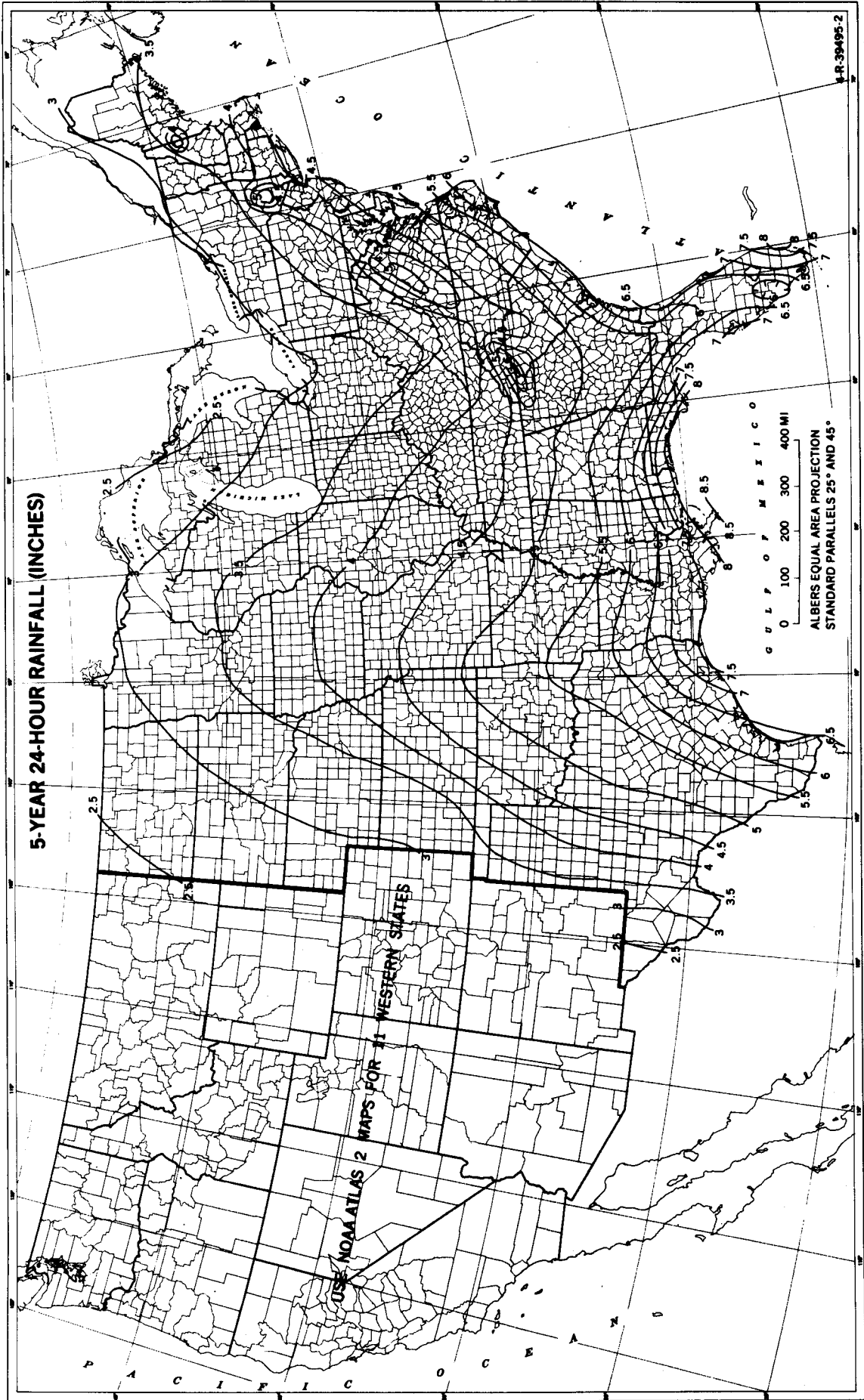


Figure 2-2 — Precipitation values for the Eastern United States—2-year 24-hour rainfall (inches)



Prepared by U.S. Weather Bureau

Figure 2-3 —Precipitation values for the Eastern United States—5-year 24-hour rainfall (inches)



Prepared by U.S. Weather Bureau

Figure 2-4 —Precipitation values for the Eastern United States—10-year 24-hour rainfall (inches)

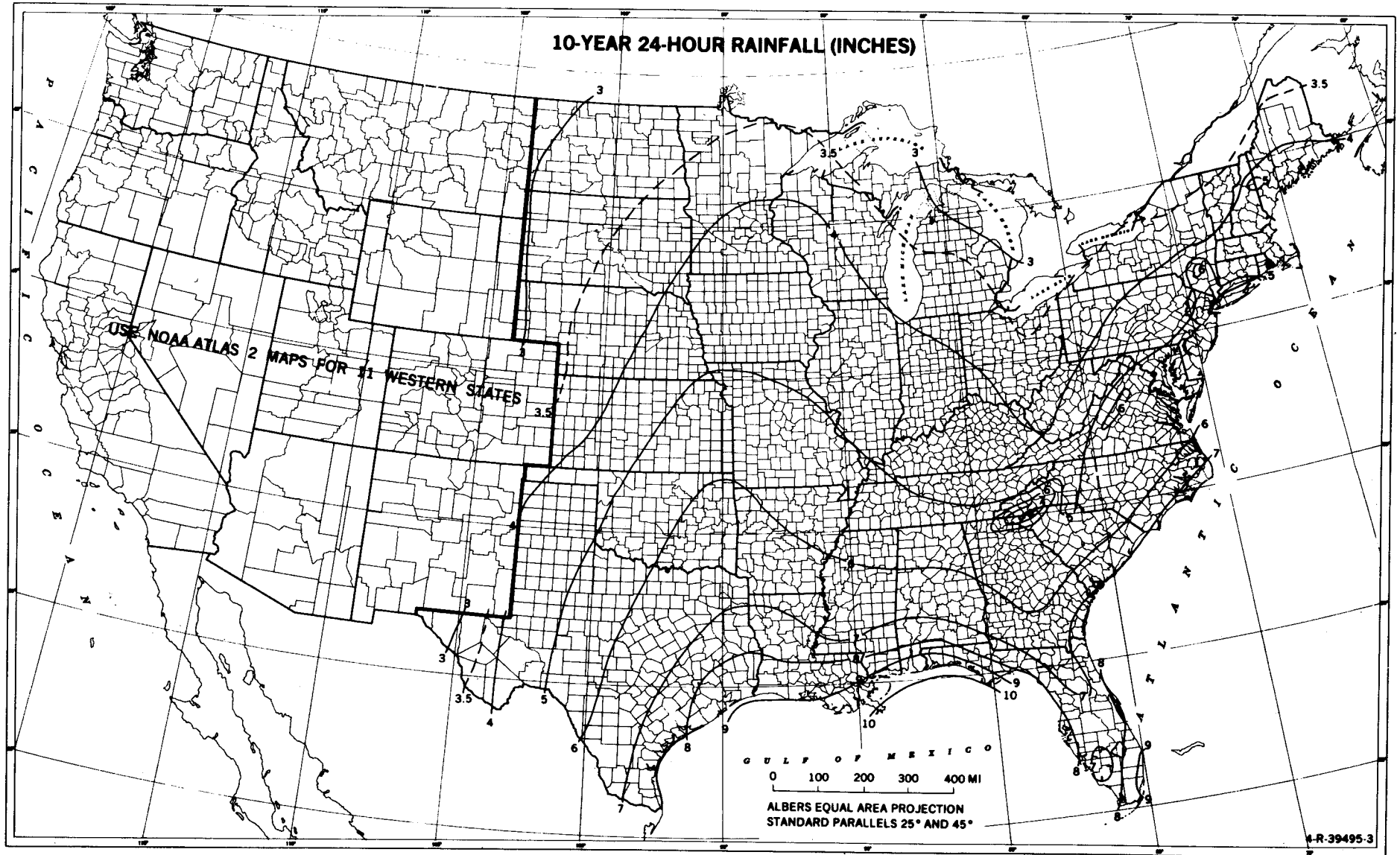
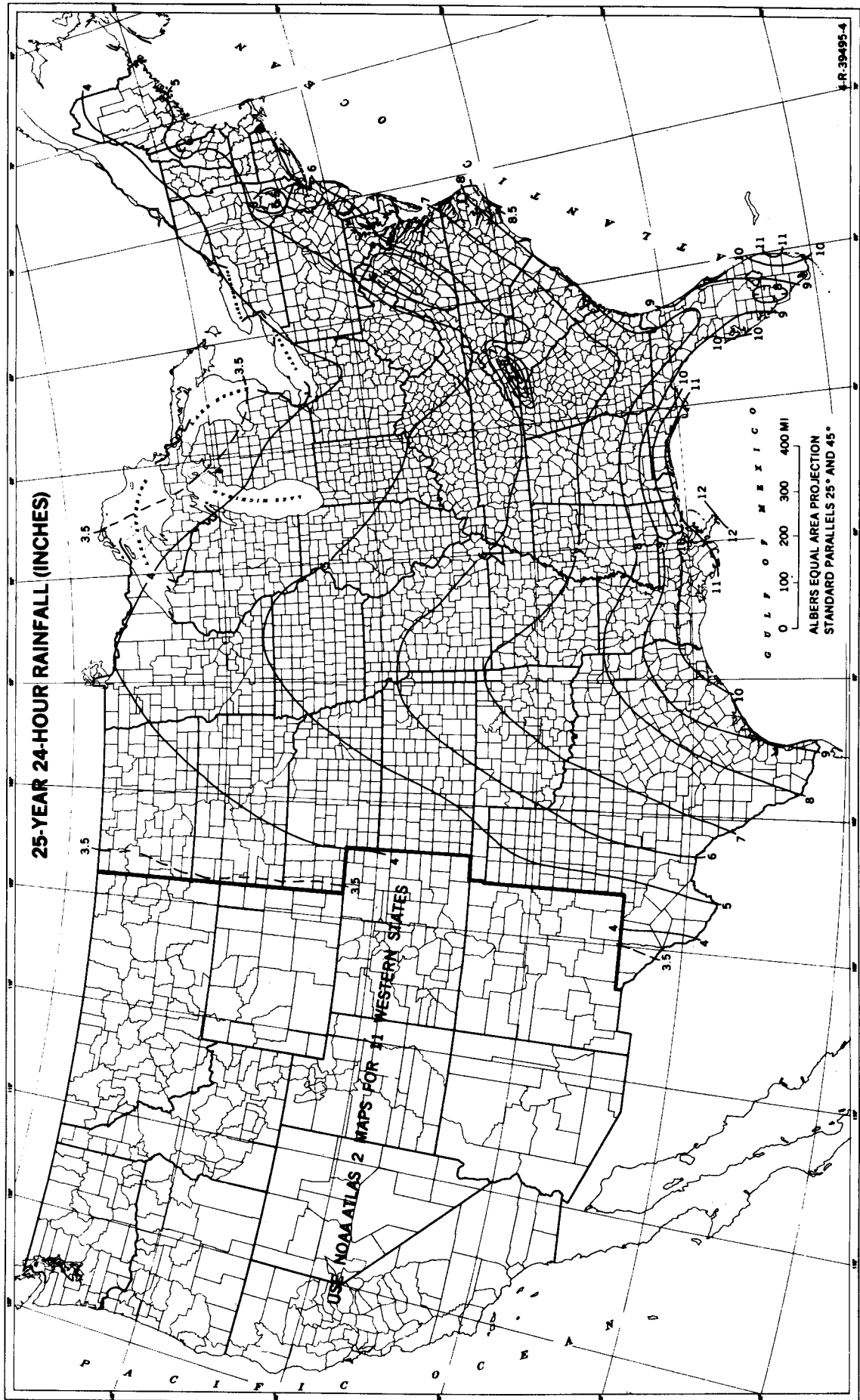
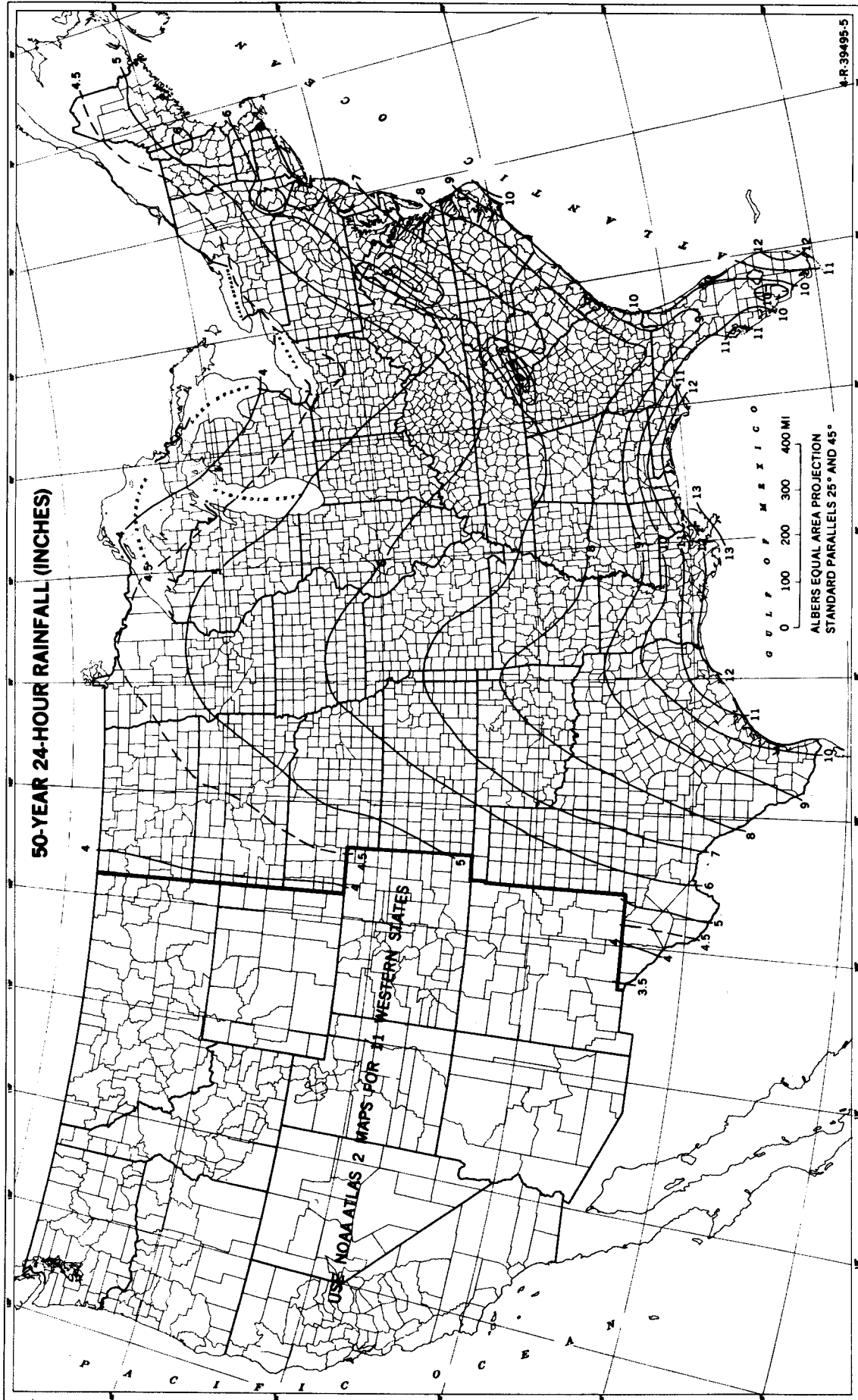


Figure 2-5 — Precipitation values for the Eastern United States—25-year 24-hour rainfall (inches)



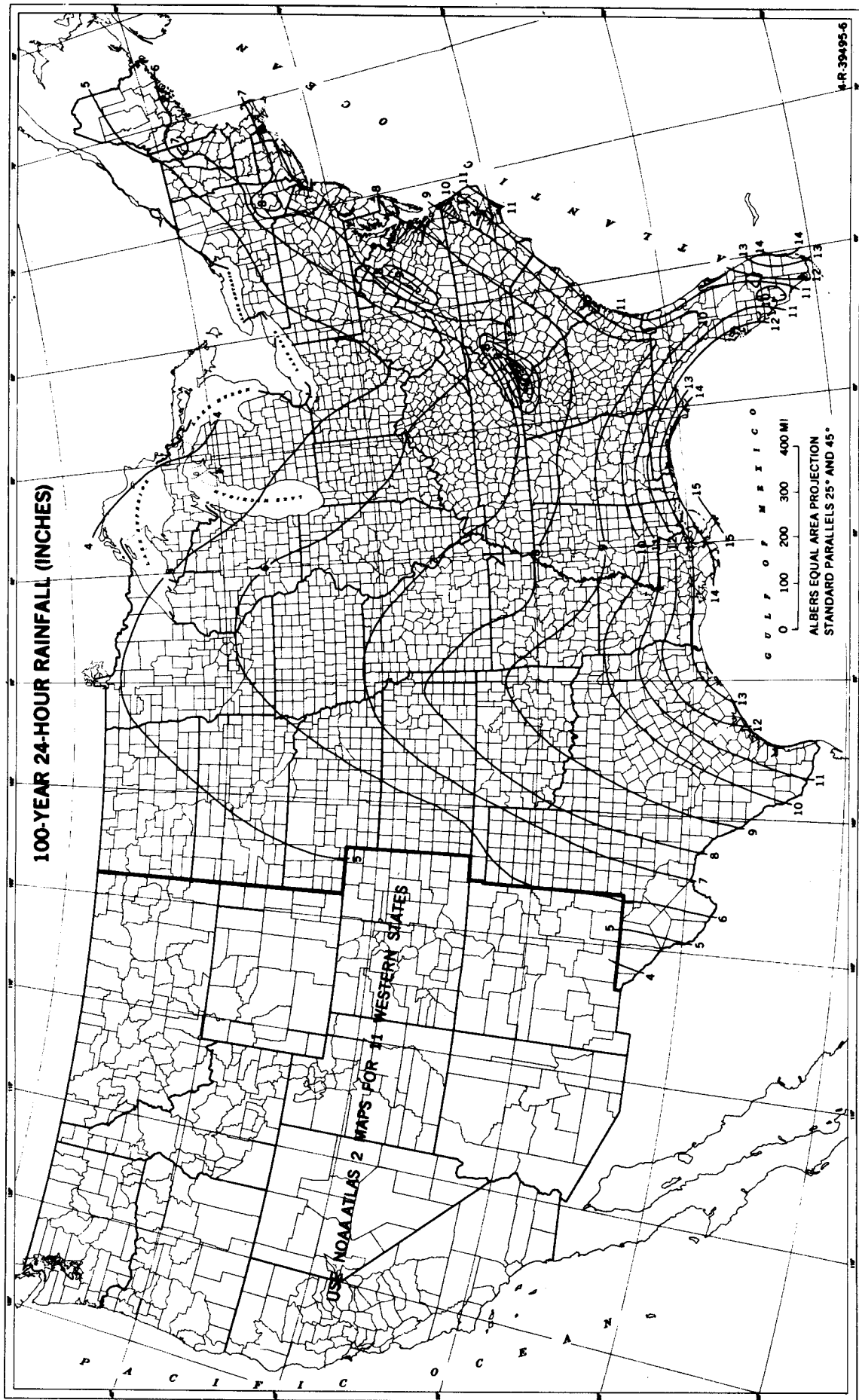
Prepared by U.S. Weather Bureau

Figure 2-6 —Precipitation values for the Eastern United States—50-year 24-hour rainfall (inches)



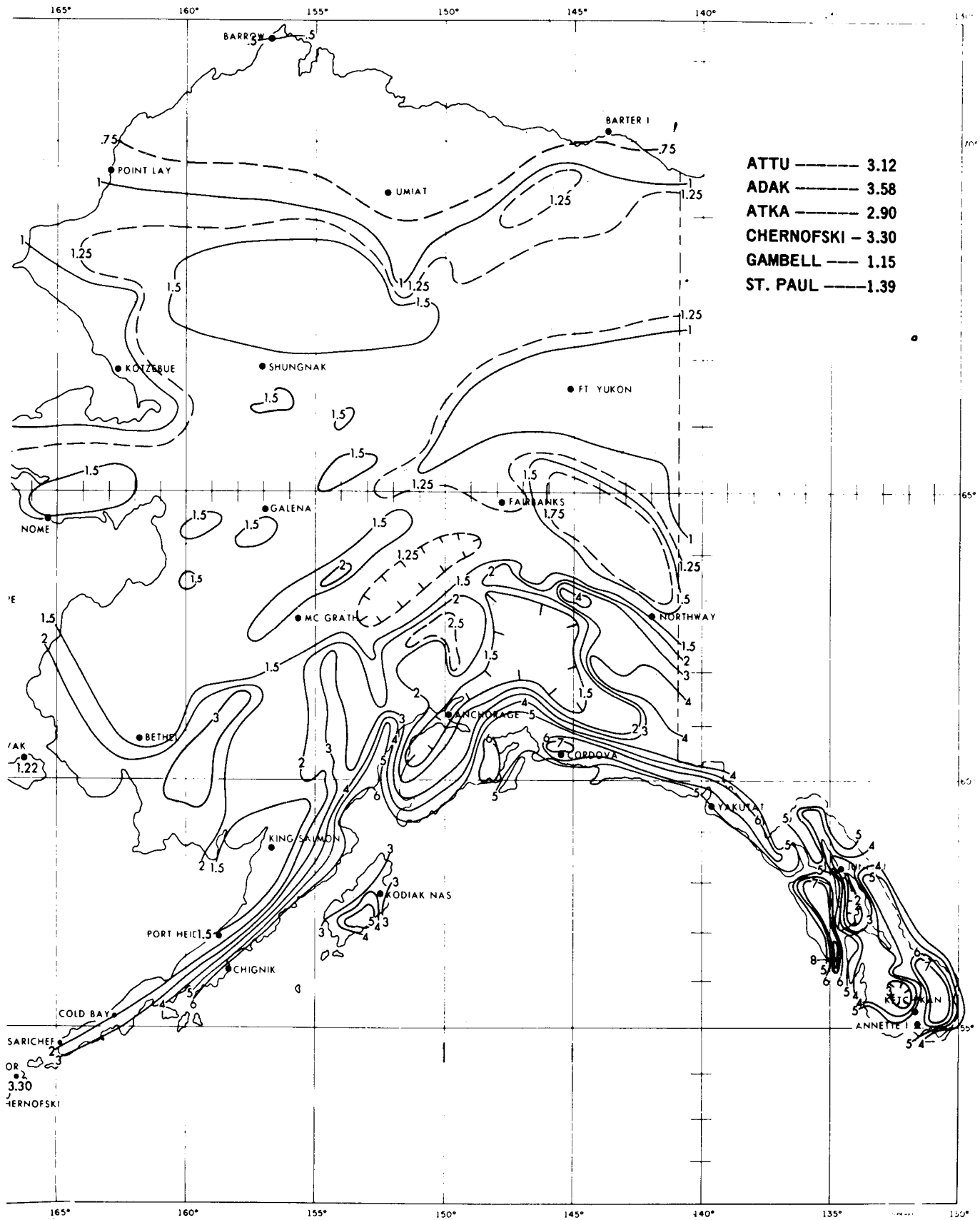
Prepared by U.S. Weather Bureau

Figure 2-7 — Precipitation values for the Eastern United States—100-year 24-hour rainfall (inches)



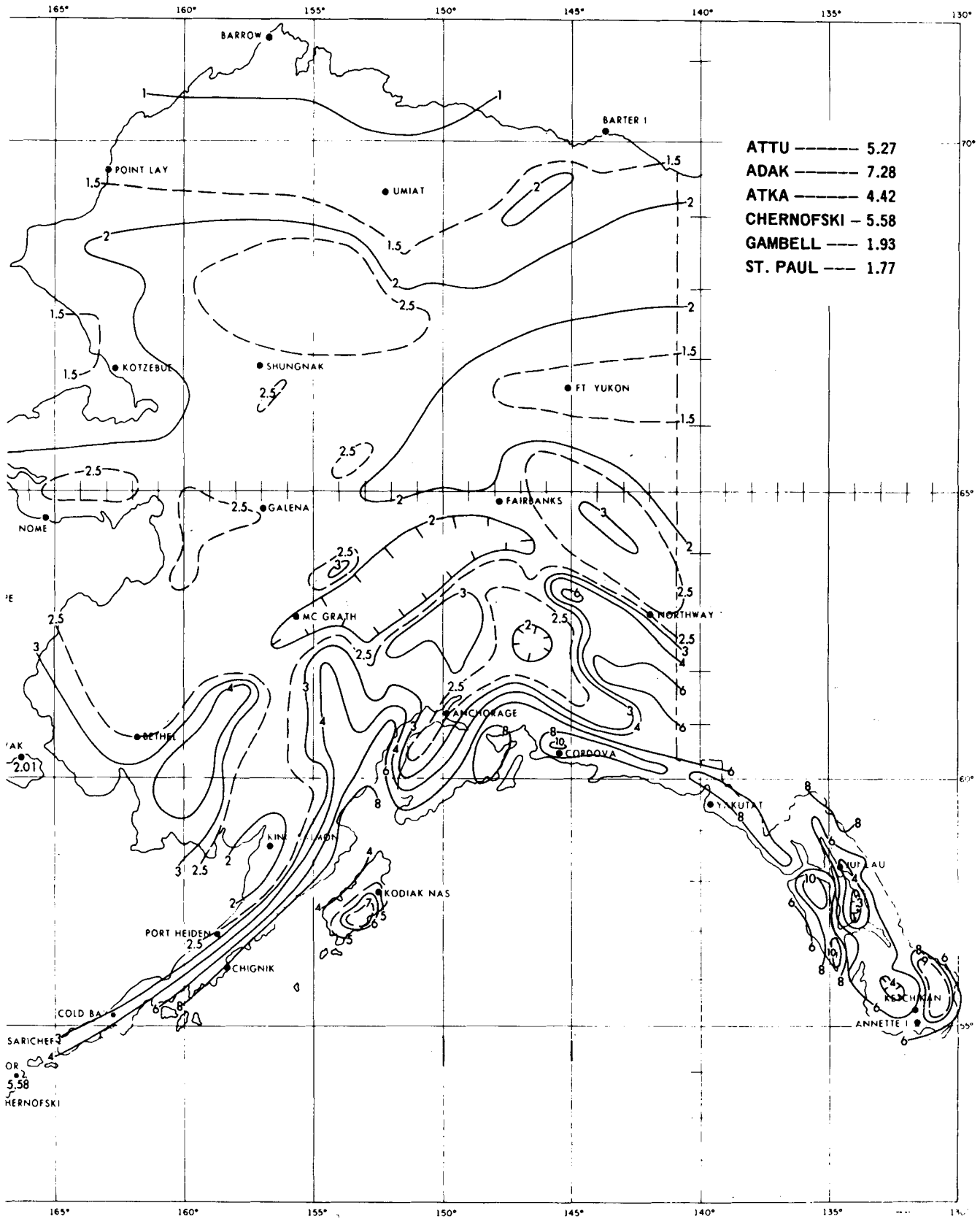
Prepared by U.S. Weather Bureau

Figure 2-8 — Precipitation values for Alaska—2-year 24-hour rainfall (inches)



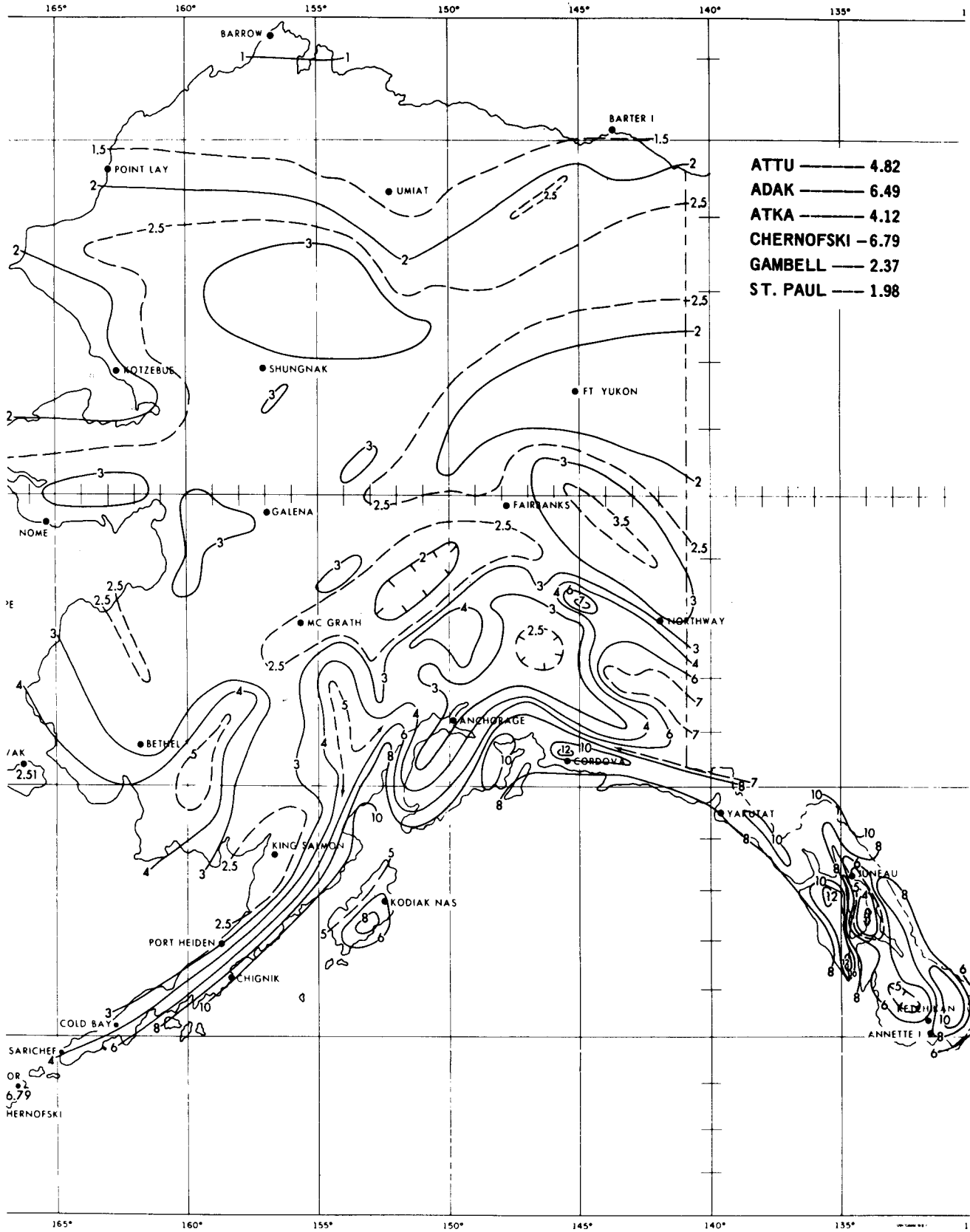
Prepared by U.S. Weather Bureau

Figure 2-10 —Precipitation values for Alaska—10-year 24-hour rainfall (inches)



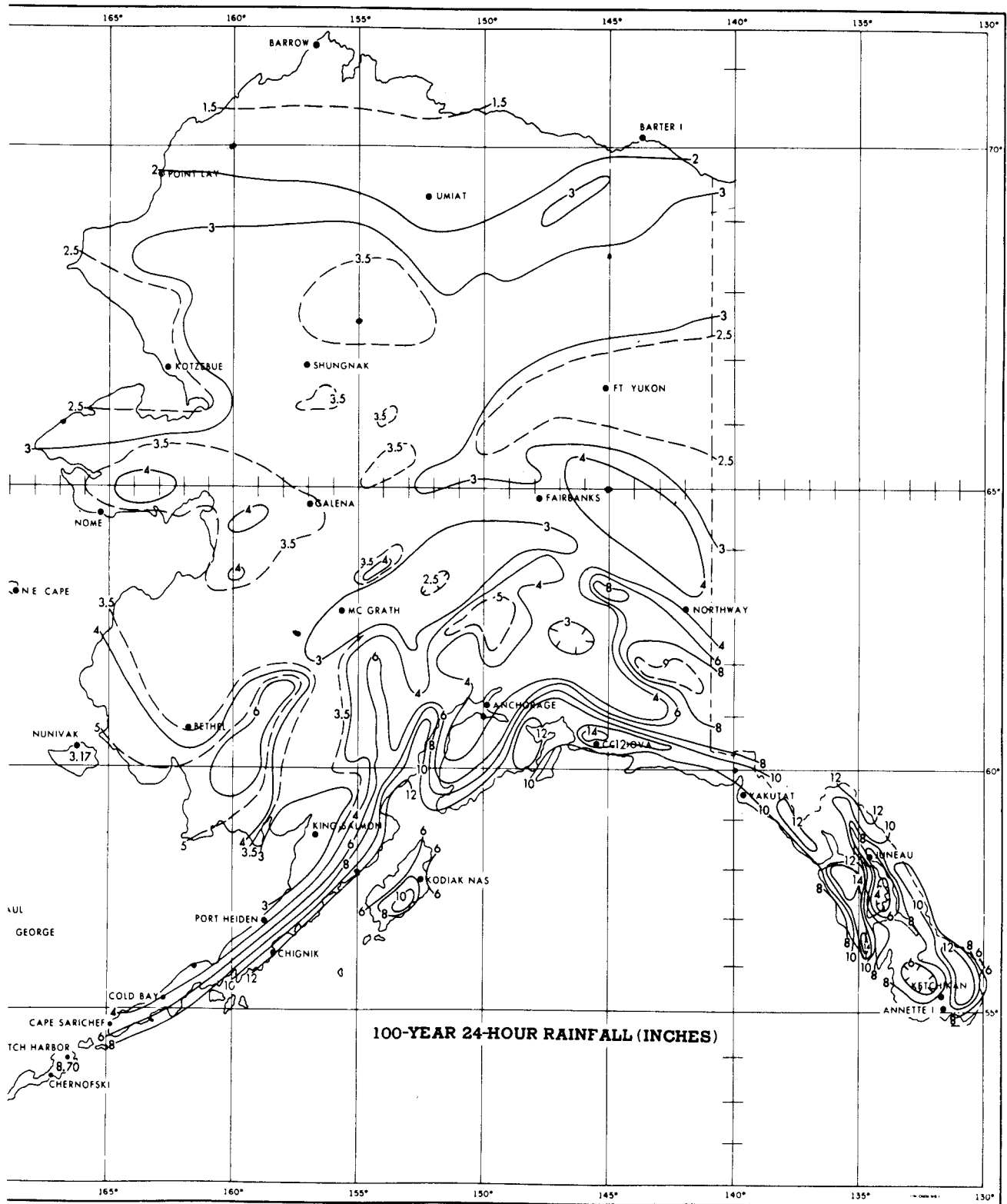
Prepared by U.S. Weather Bureau

Figure 2-11—Precipitation values for Alaska—25-year 24-hour rainfall (inches)



Prepared by U.S. Weather Bureau

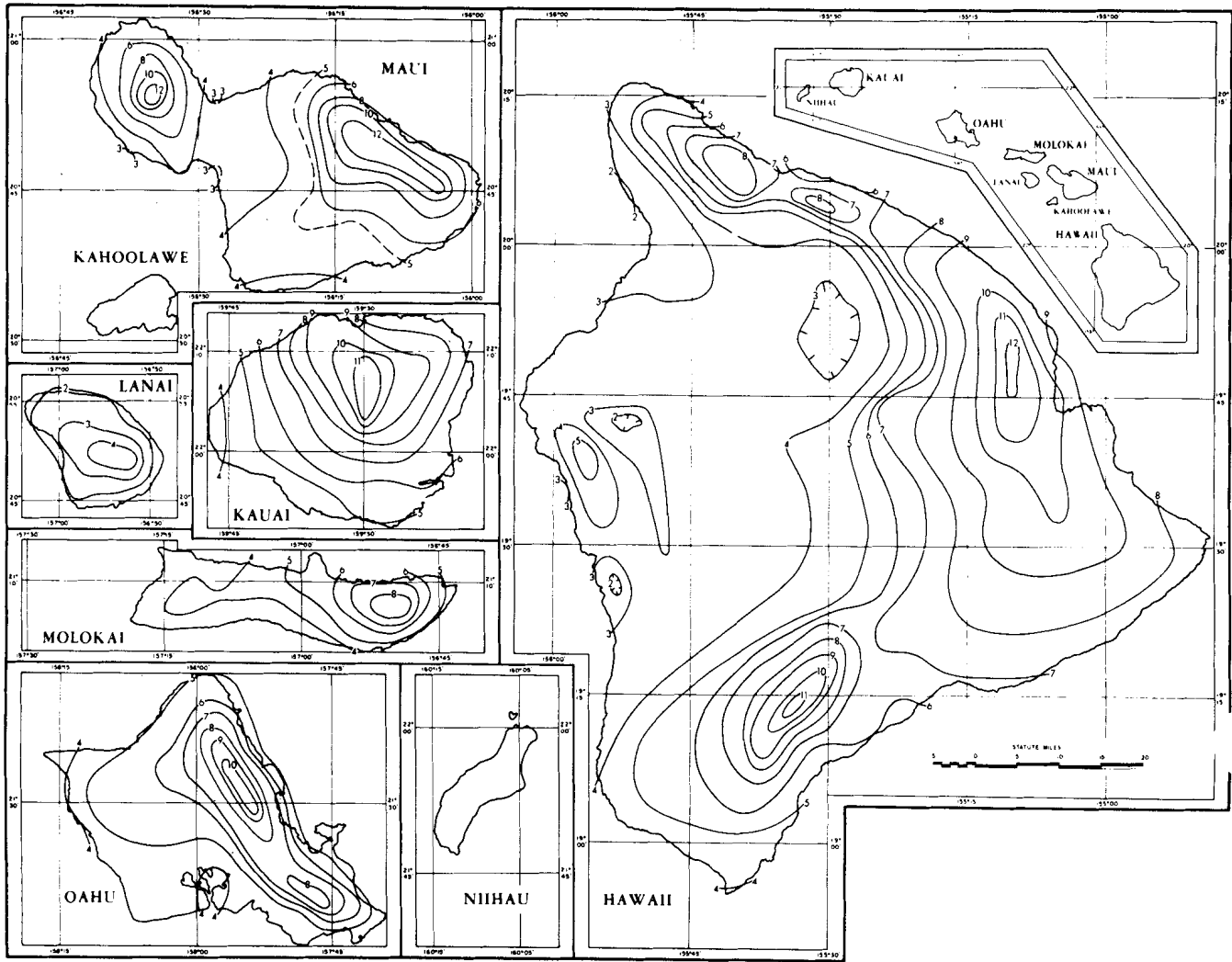
Figure 2-13 — Precipitation values for Alaska—100-year 24-hour rainfall (inches)



100-YEAR 24-HOUR RAINFALL (INCHES)

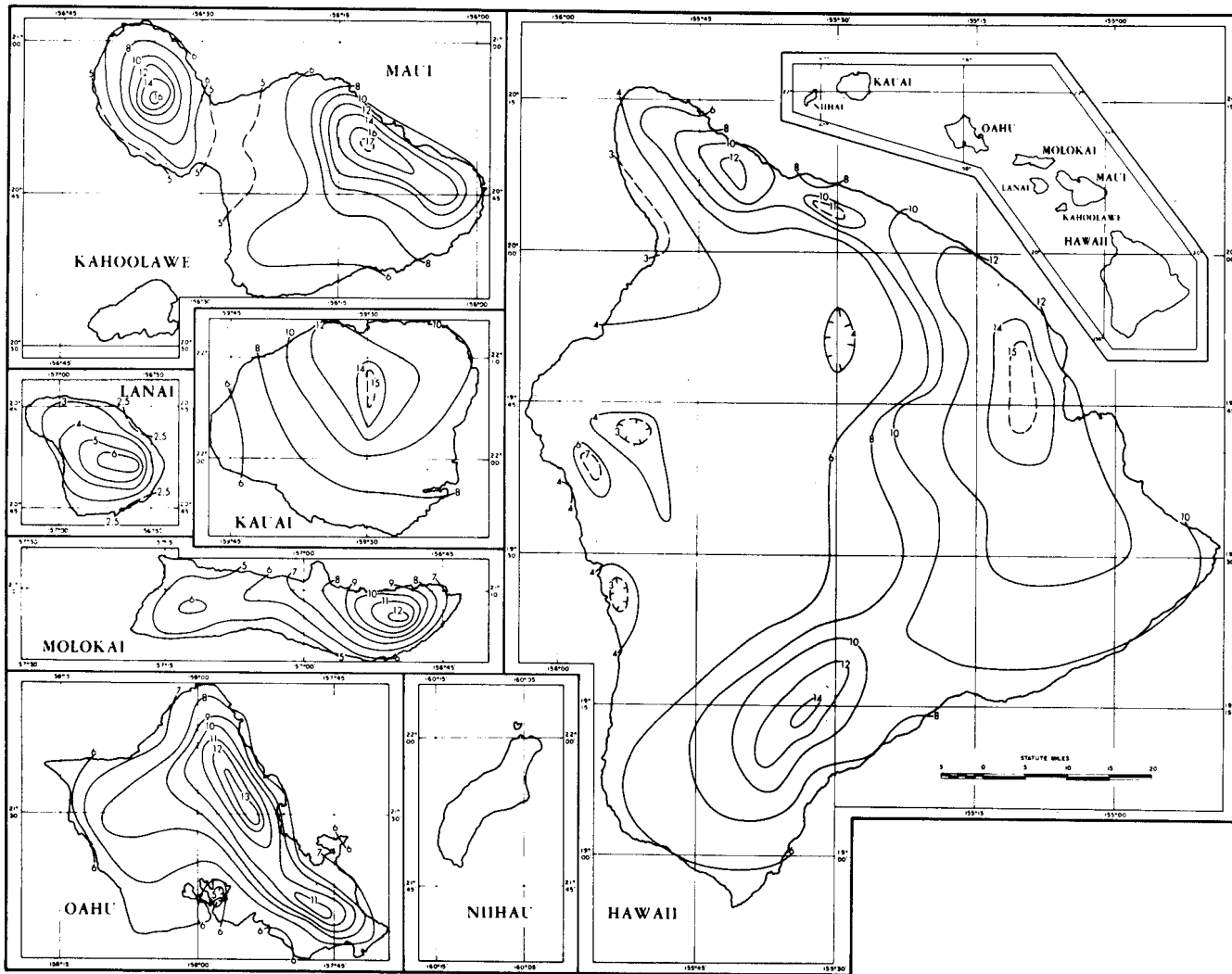
Prepared by U.S. Weather Bureau

Figure 2-14 —Precipitation values for Hawaii—2-year 24-hour rainfall (inches)



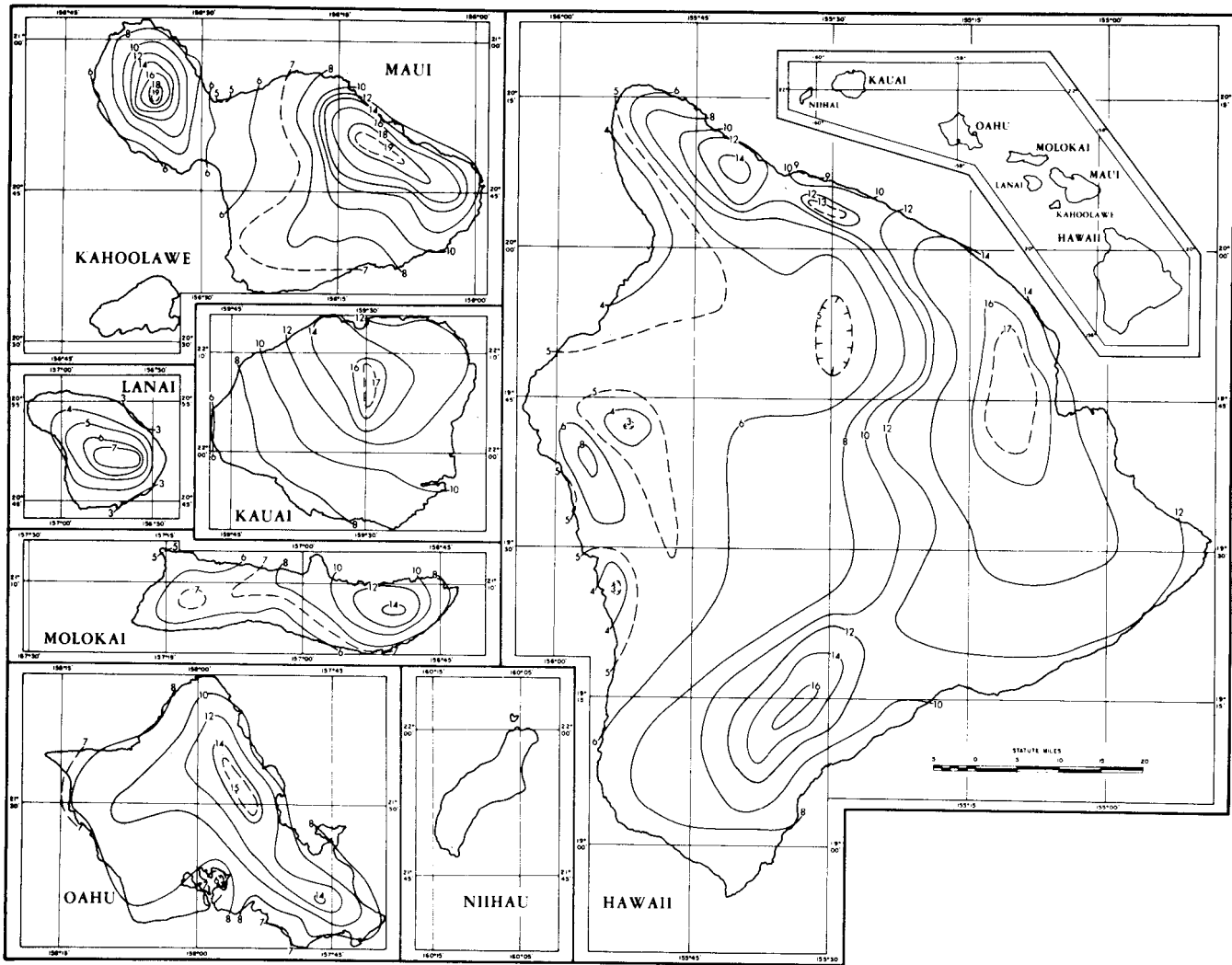
Prepared by U.S. Weather Bureau

Figure 2-15 —Precipitation values for Hawaii—5-year 24-hour rainfall (inches)



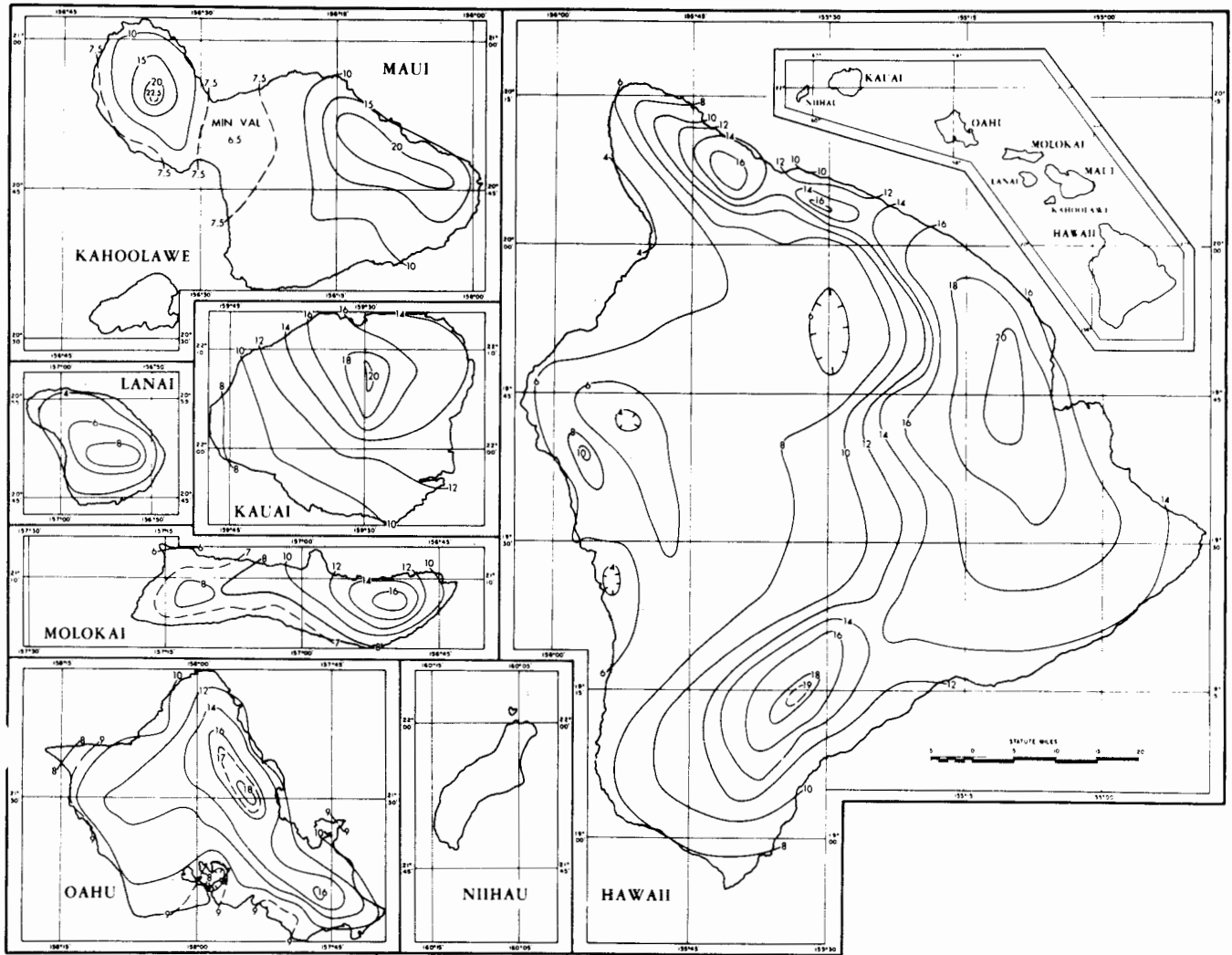
Prepared by U.S. Weather Bureau

Figure 2-16 — Precipitation values for Hawaii—10-year 24-hour rainfall (inches)



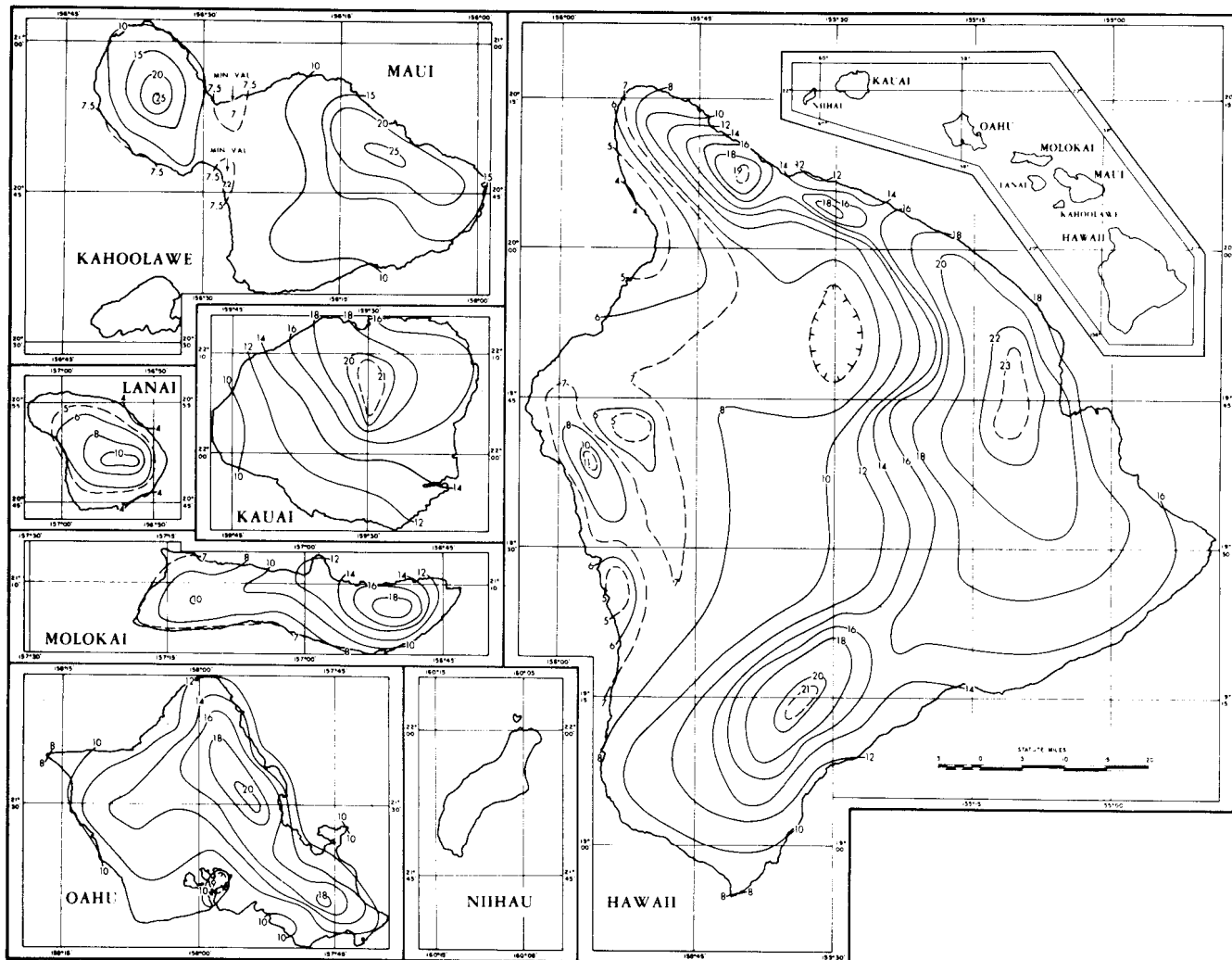
Prepared by U.S. Weather Bureau

Figure 2-17 —Precipitation values for Hawaii—25-year 24-hour rainfall (inches)



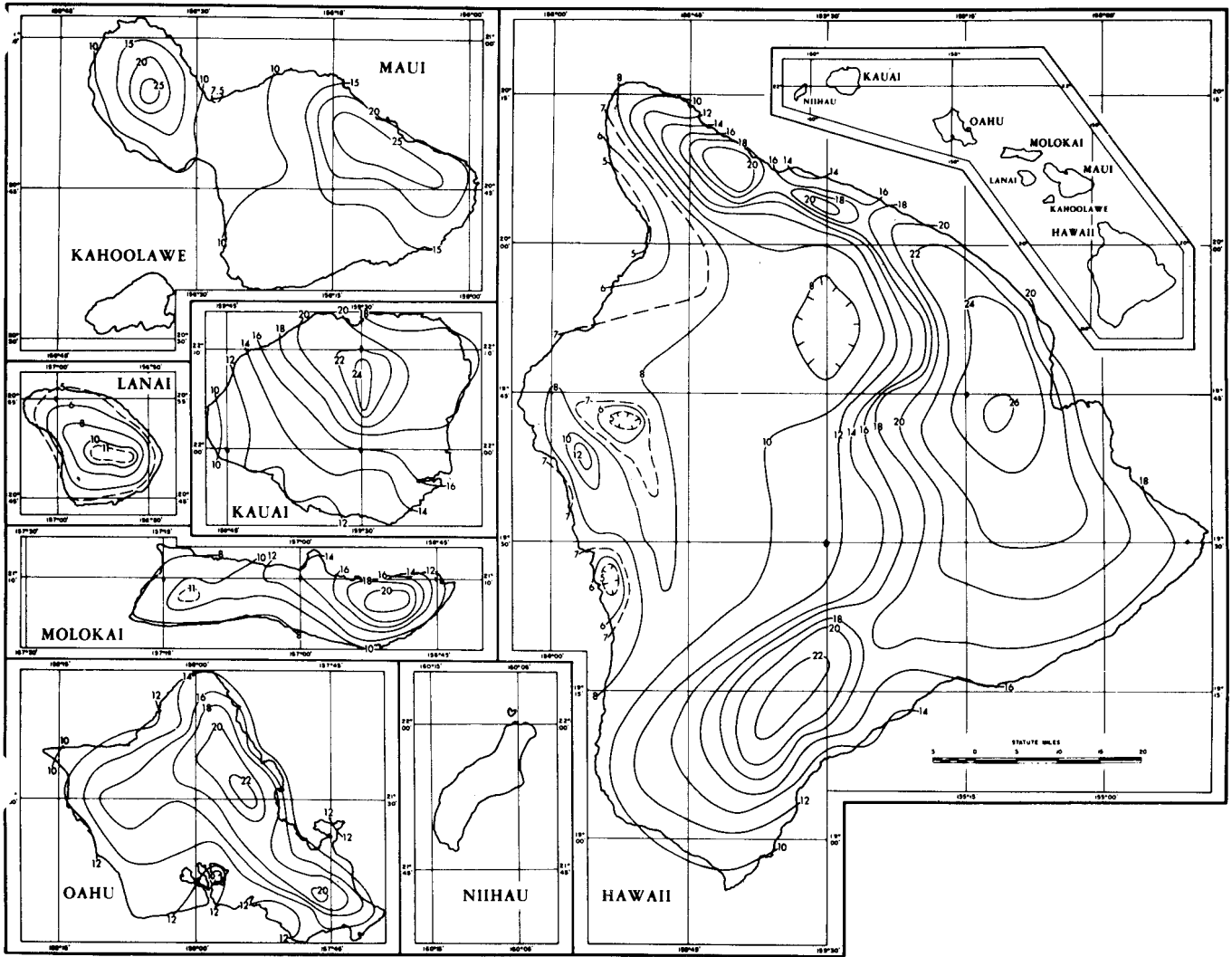
Prepared by U.S. Weather Bureau

Figure 2-18 — Precipitation values for Hawaii—50-year 24-hour rainfall (Inches)



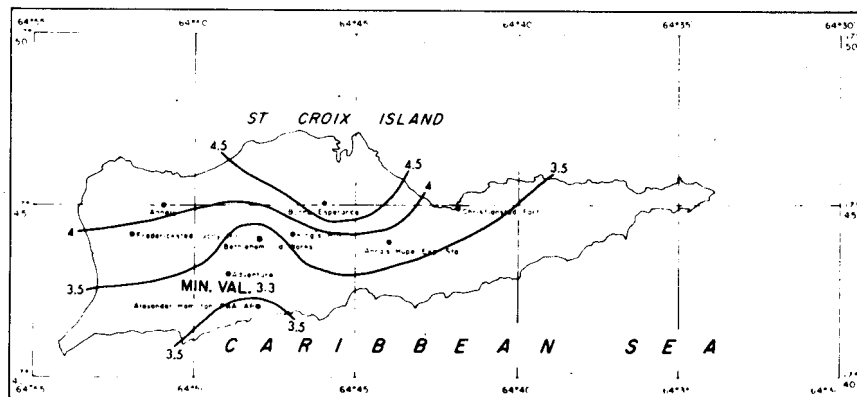
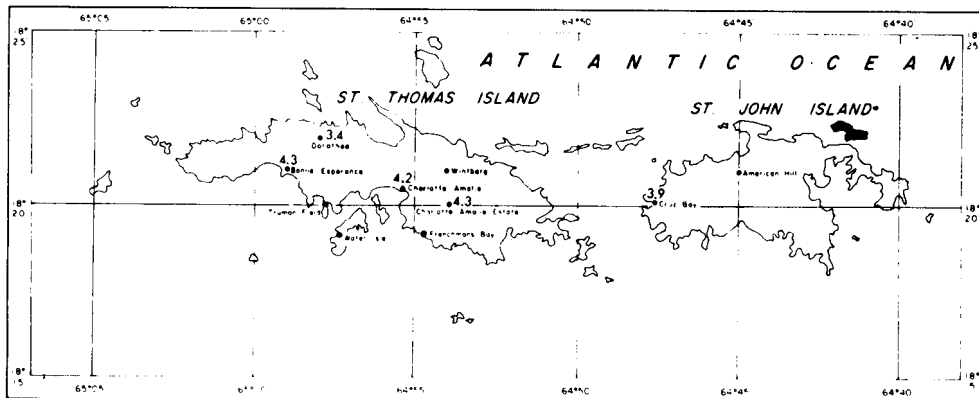
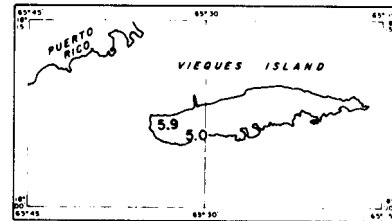
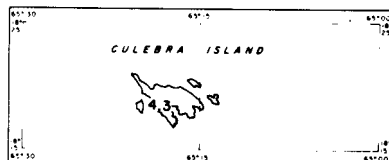
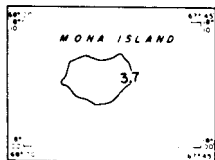
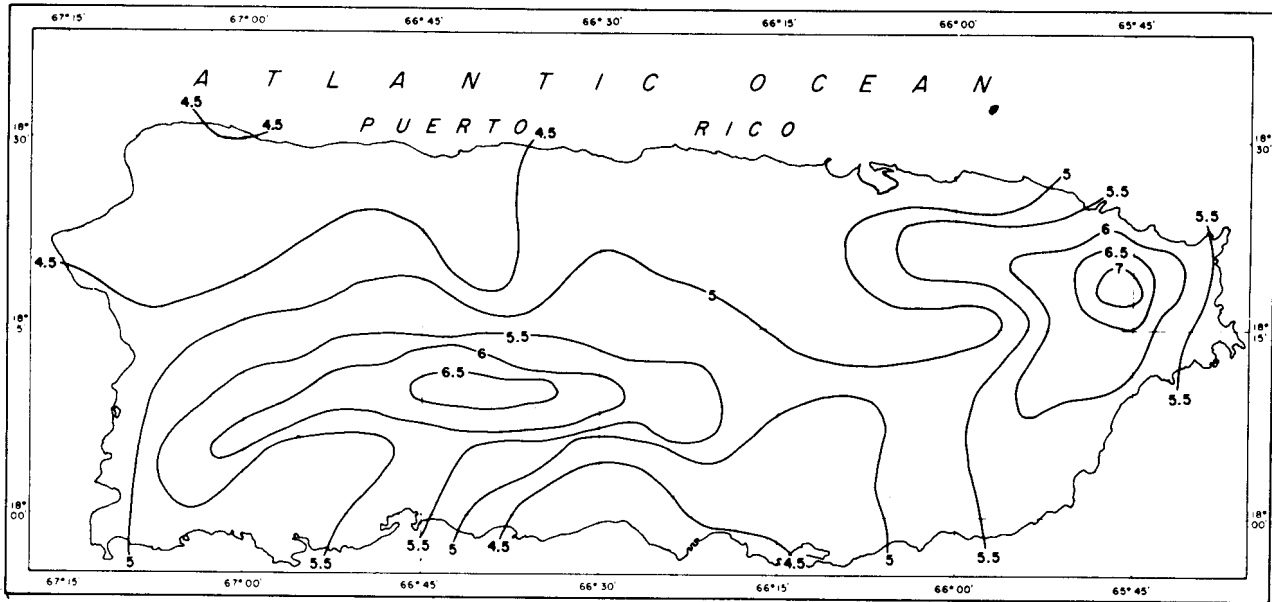
Prepared by U.S. Weather Bureau

Figure 2-19 — Precipitation values for Hawaii—100-year 24-hour rainfall (inches)



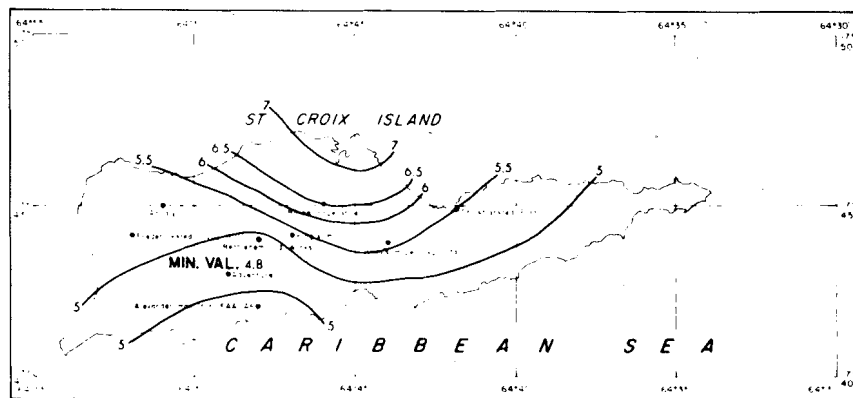
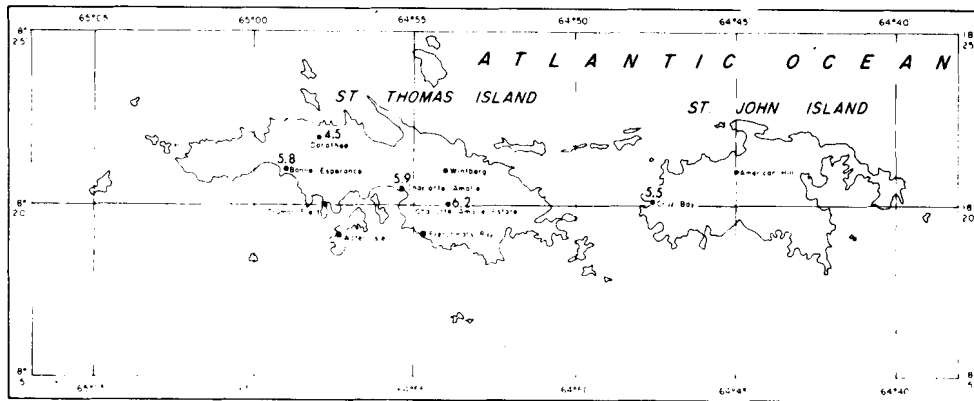
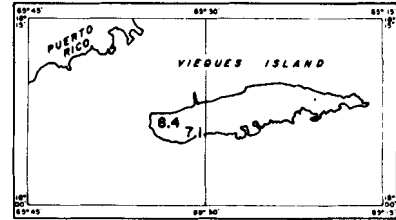
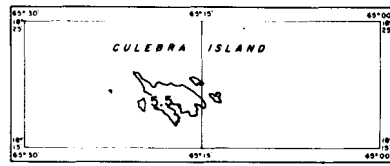
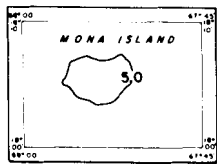
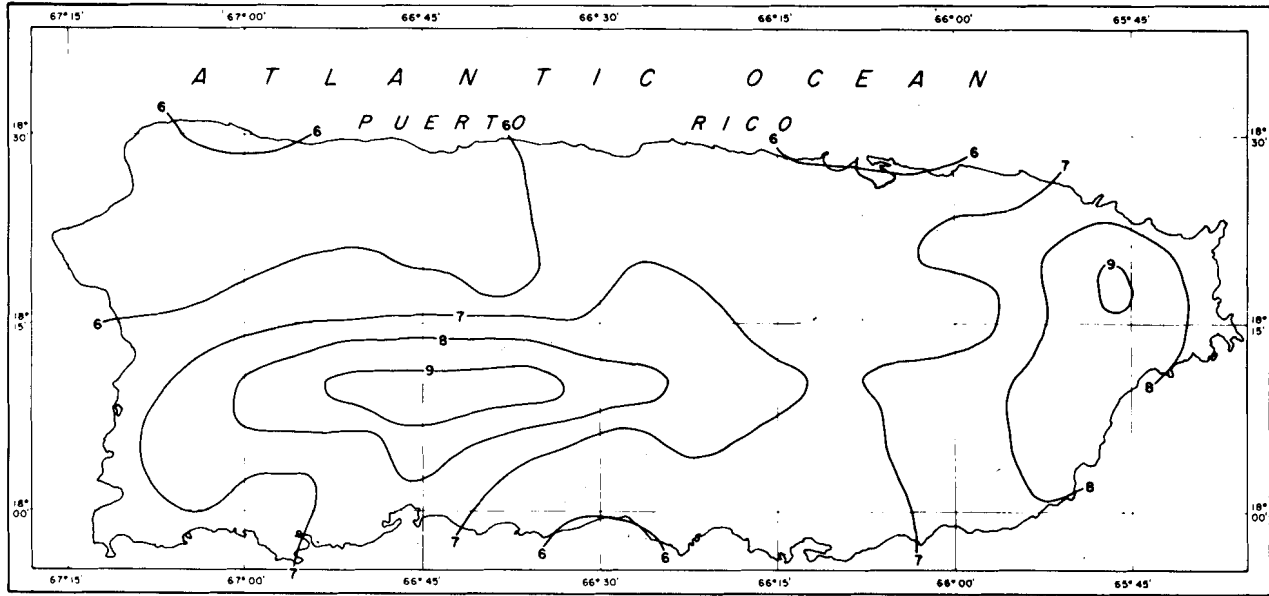
Prepared by U.S. Weather Bureau

Figure 2-20—Precipitation values for Puerto Rico and the U.S. Virgin Islands—2-year 24-hour rainfall (Inches)



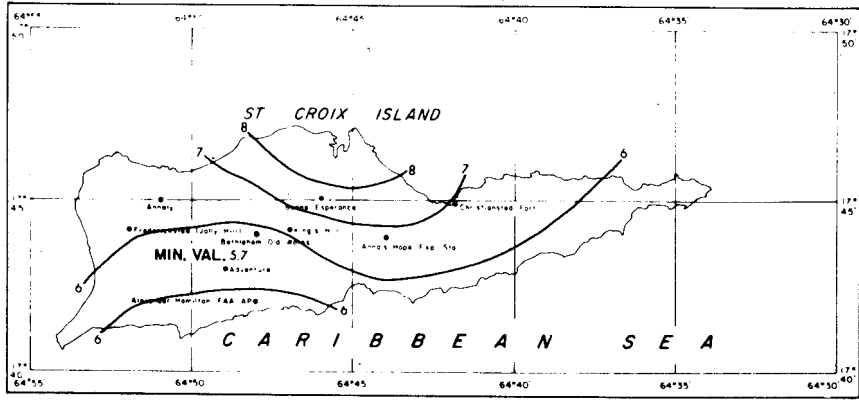
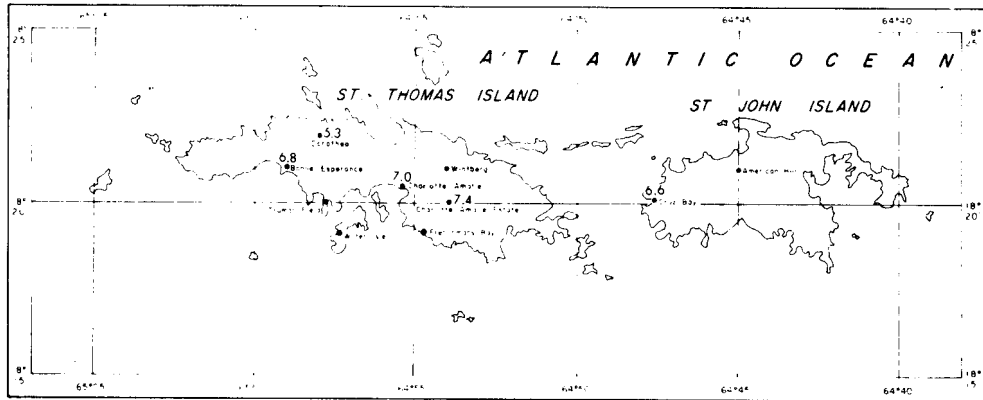
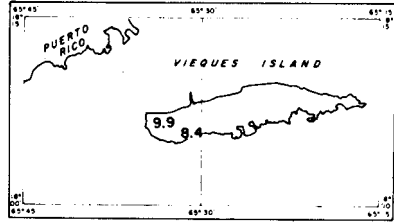
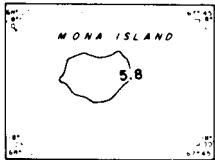
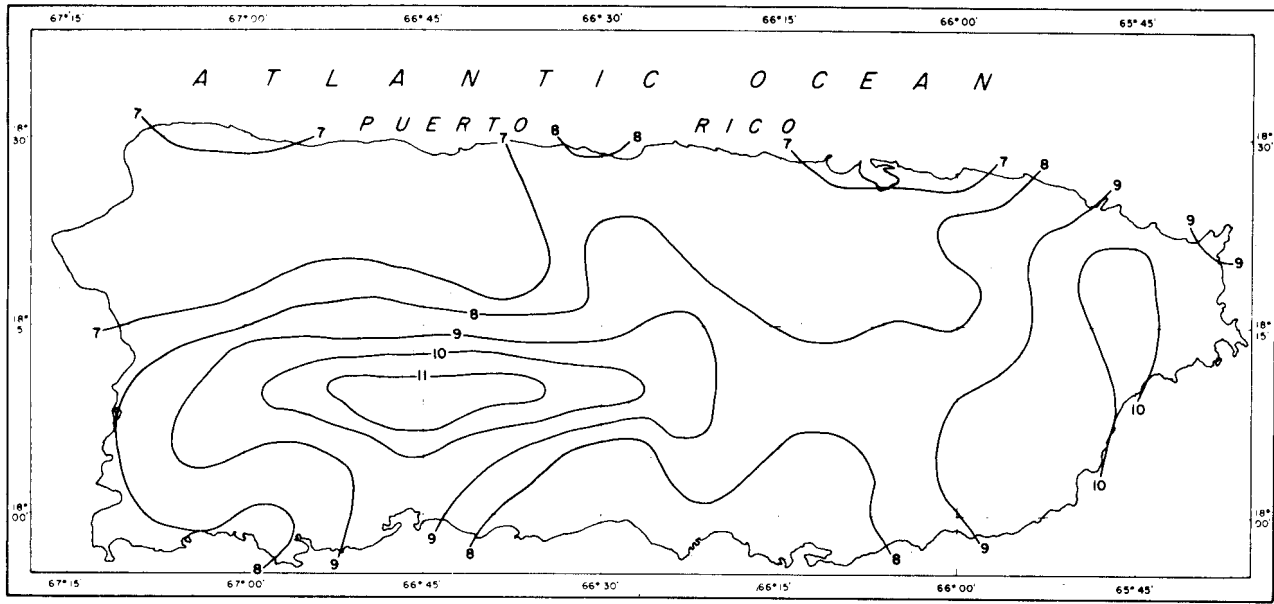
Prepared by U.S. Weather Bureau

Figure 2-21—Precipitation values for Puerto Rico and the U.S. Virgin Islands—5-year 24-hour rainfall (inches)



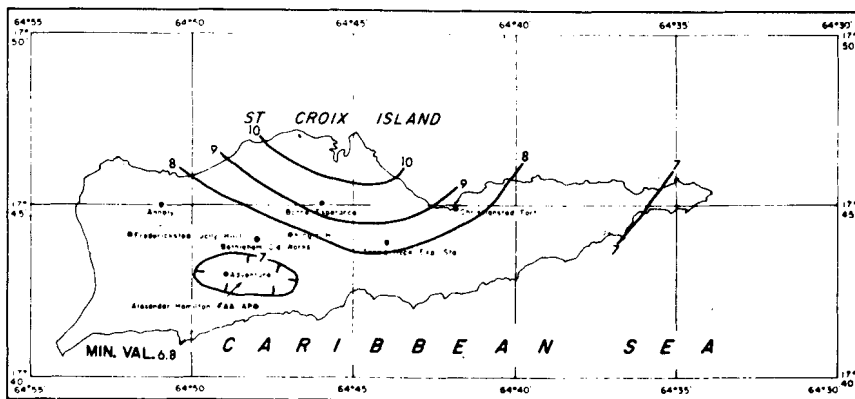
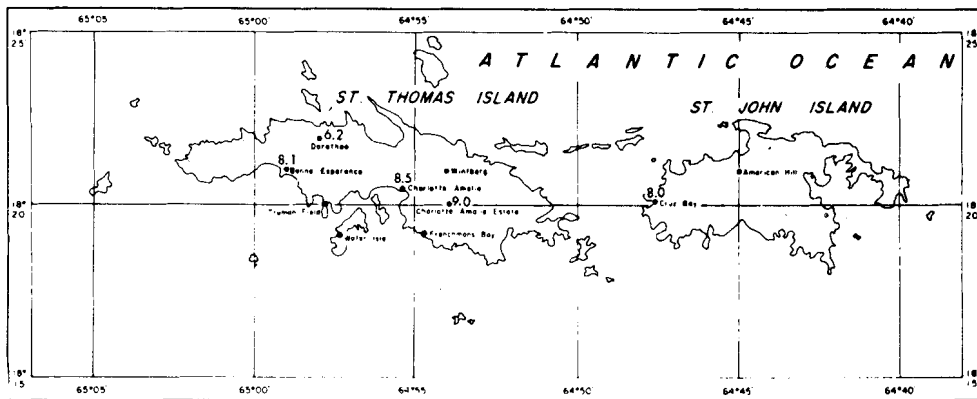
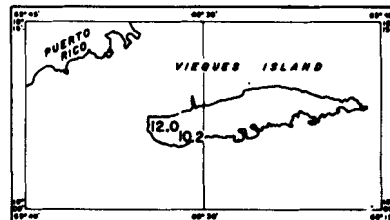
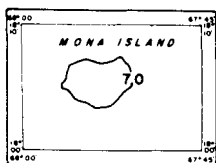
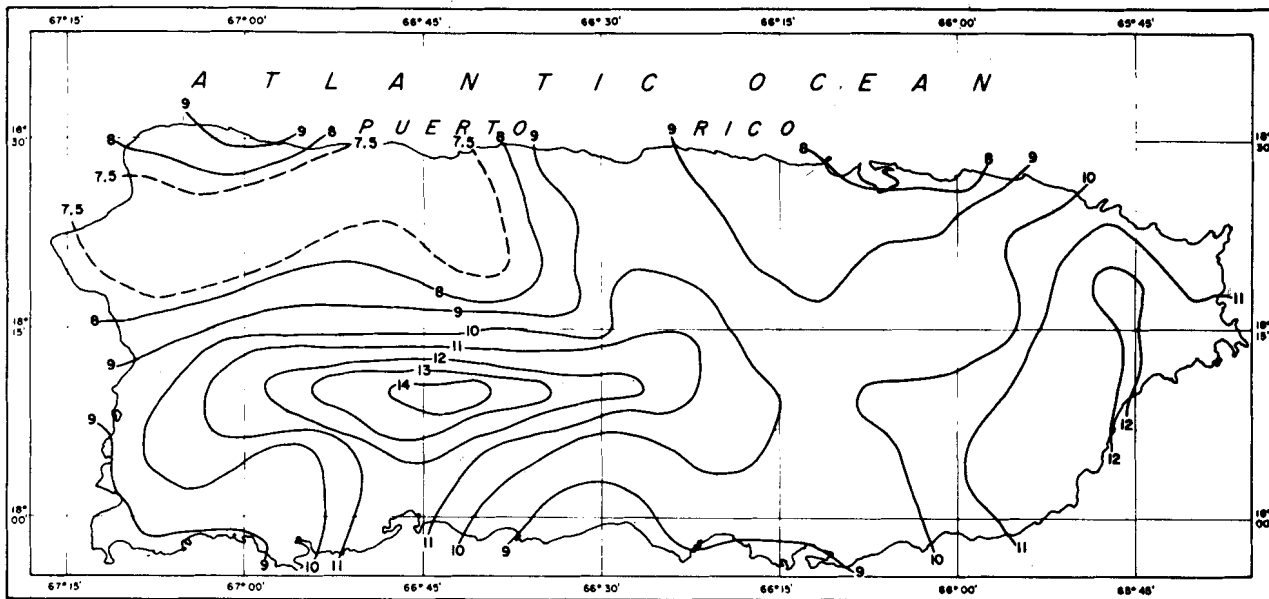
Prepared by U.S. Weather Bureau

Figure 2-22 — Precipitation values for Puerto Rico and the U.S. Virgin Islands—10-year 24-hour rainfall (inches)



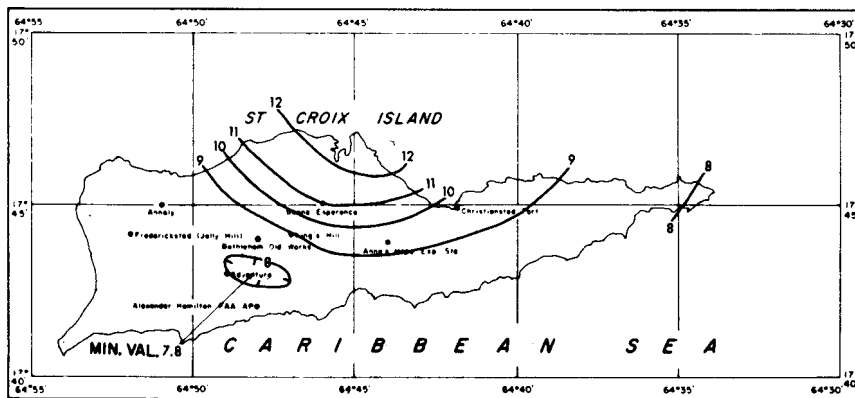
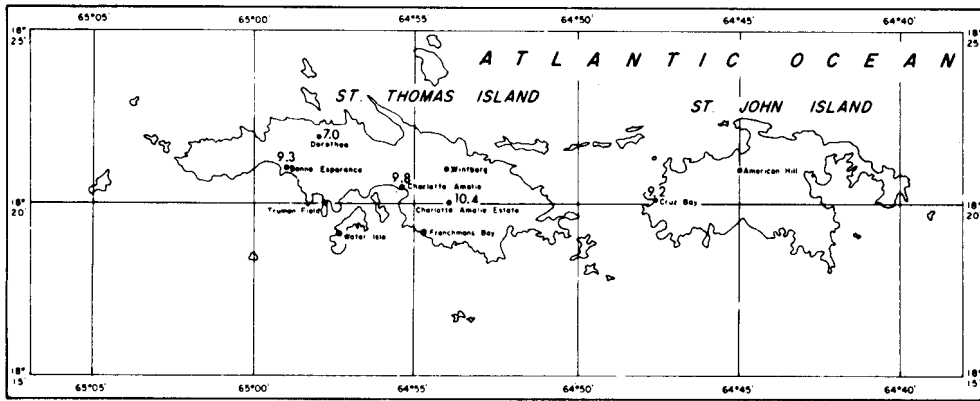
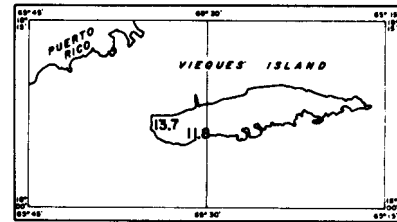
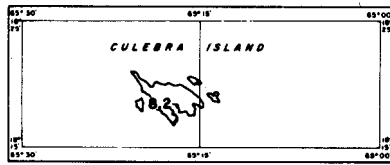
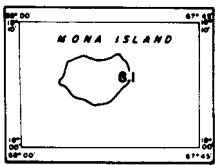
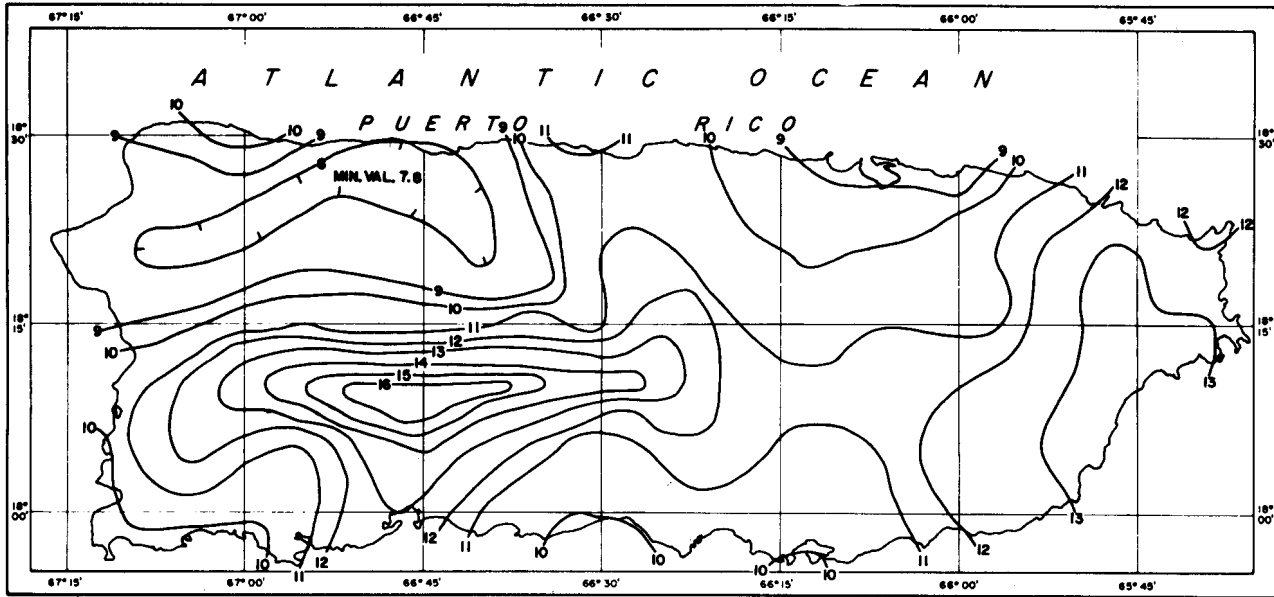
Prepared by U.S. Weather Bureau

Figure 2-23 —Precipitation values for Puerto Rico and the U.S. Virgin Islands—25-year 24-hour rainfall (inches)



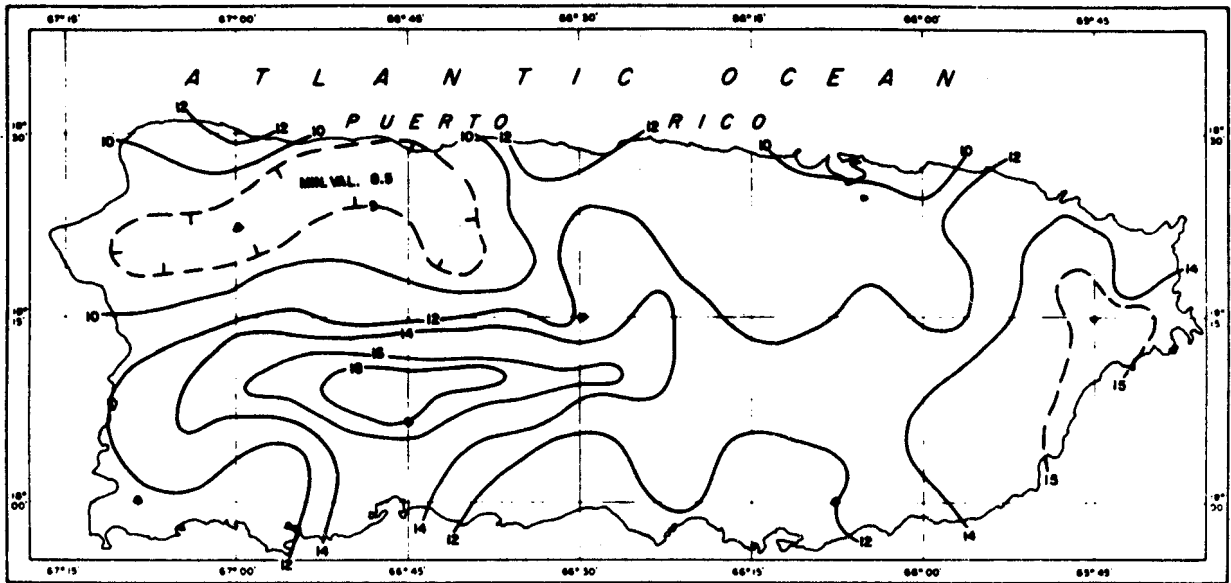
Prepared by U.S. Weather Bureau

Figure 2-24 —Precipitation values for Puerto Rico and the U.S. Virgin Islands—50-year 24-hour rainfall (Inches)

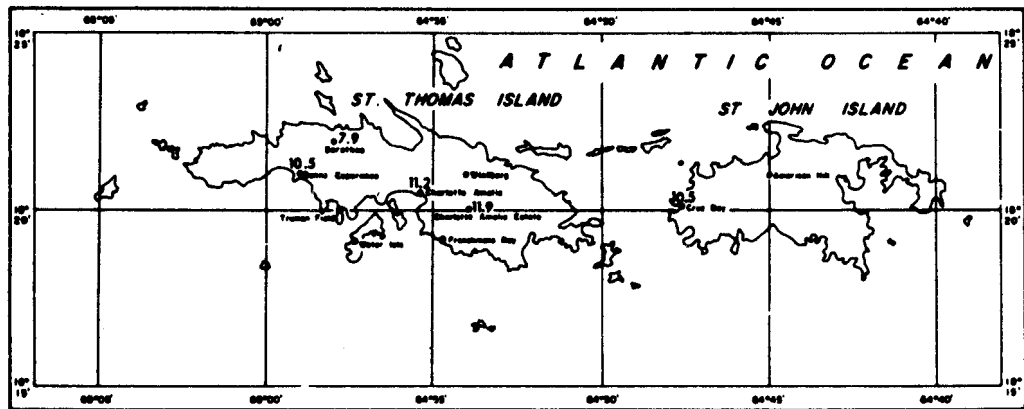
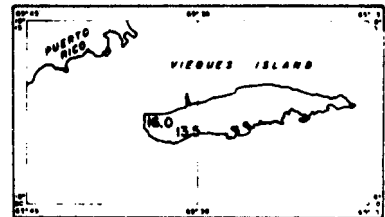
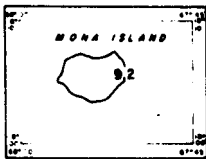


Prepared by U.S. Weather Bureau

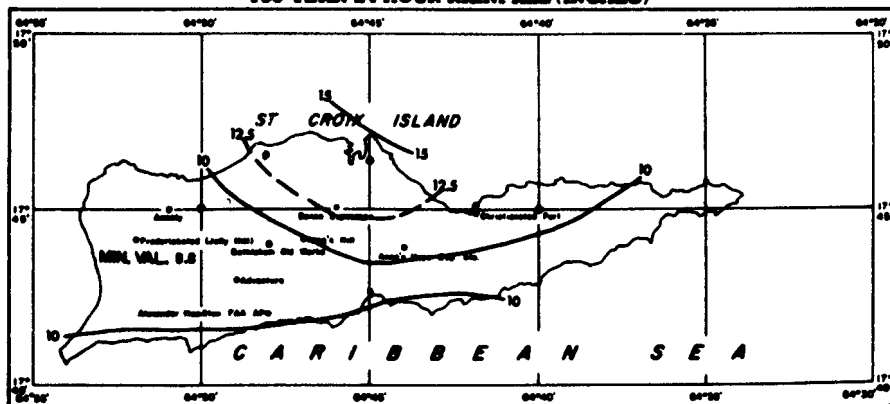
Figure 2-25—Precipitation values for Puerto Rico and the U.S. Virgin Islands—100-year 24-hour rainfall (inches)



100-YEAR 24-HOUR RAINFALL (INCHES)



100-YEAR 24-HOUR RAINFALL (INCHES)



Prepared by U.S. Weather Bureau

Figure 2-26—Solution for runoff equation

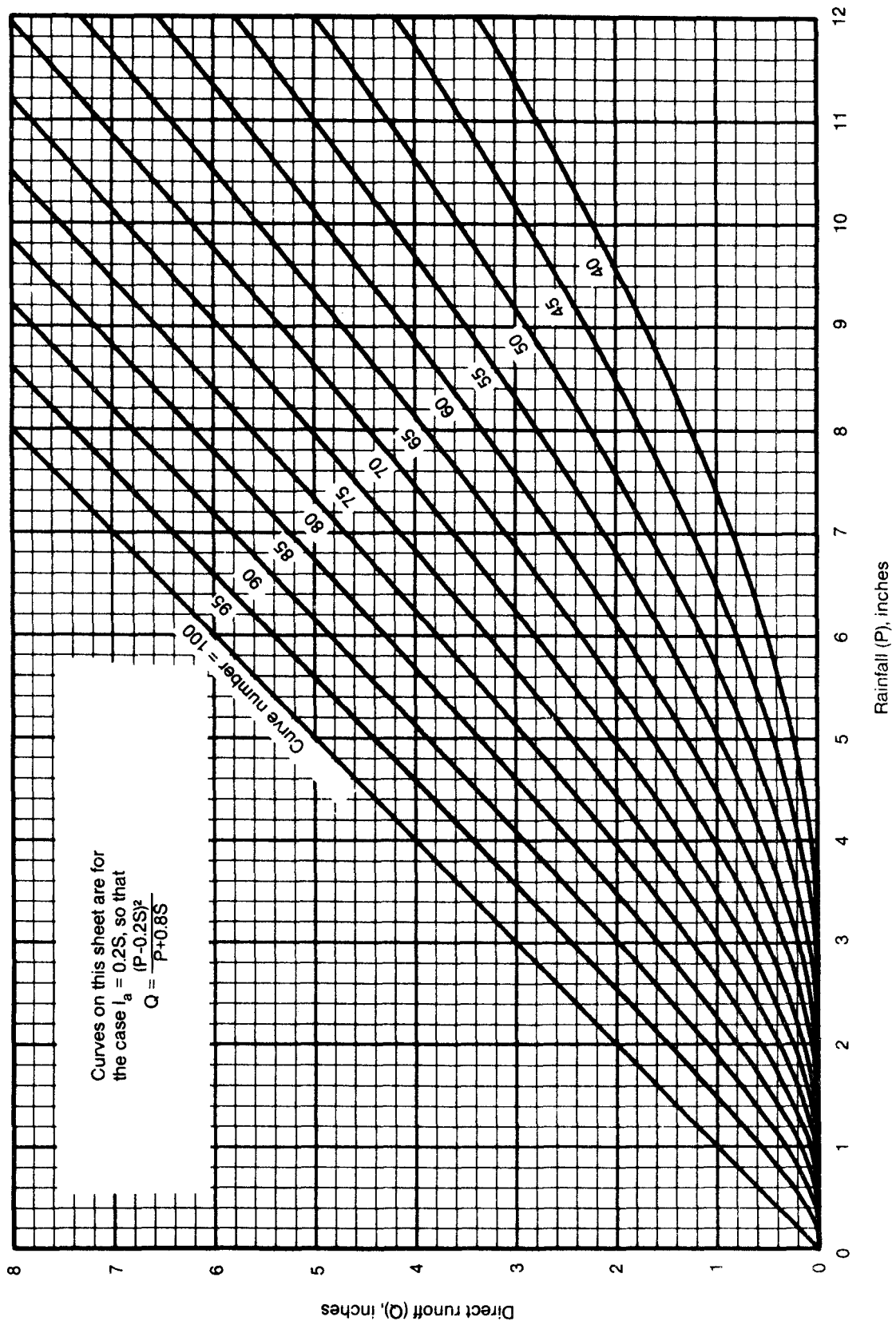


Figure 2-27.—Time of concentration (T_c) nomograph

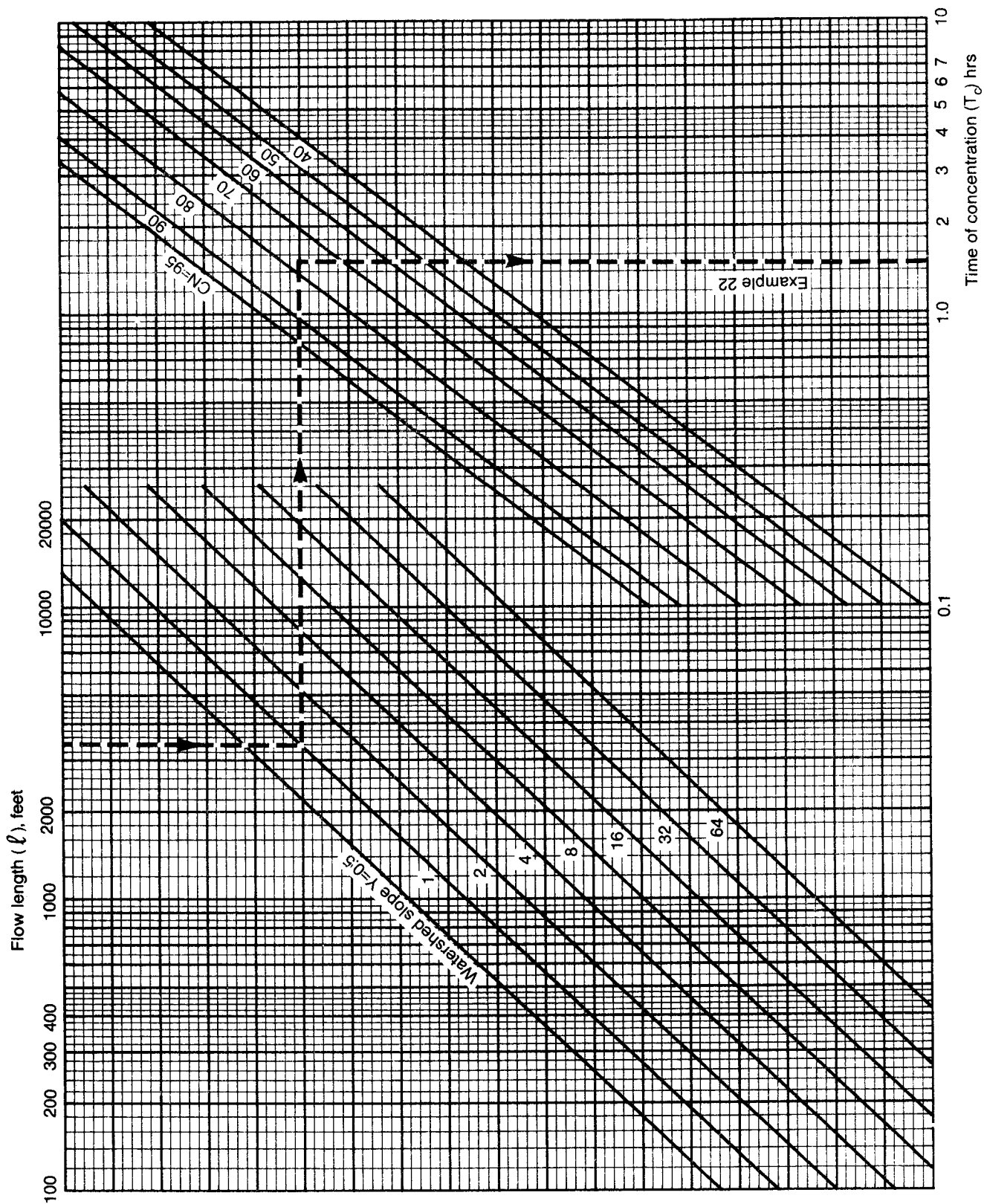


Table 2-1.—Hydrologic soil groups for U.S. soils

AABAB	D	ADAVEN	C	AMREN	Q	ALDING	D	ALSEA	B
AABERG	D	ADDICKS	D	AMRNKLIN	C	ALDINO	C	ALSPAUGH	C
AARON	C	ADDIELOU	E	AMRS	B	ALEDO	C	ALSTAD	C
AASTAD	B	ADE	B	AHTANUM	D	ALEGROS	C	ALSTONY	B
AAZDAHL	B	ADEK	B	AHTANUM, DRAINED	C	ALEKNAGIK	C	ALSUP	C
ABAC	D	ADEL	B	AMWANNEE	B	ALEMEDA	C	ALTMONT	D
ABAJO	C	ADEL, WET	D	AIPONITO	C	ALEX	B	ALTAPEAK	B
ABALOBADIAN	B	ADELAIDE	D	AIDO	D	ALEXANDER	C	ALTAR	B
ABARCA	B	ADELANTO	B	AIKEN	B	ALEXANDRIA	C	ALTAVISTA	C
ABBAYE	B	ADELINO	B	AIKMAN	D	ALFIR	B	ALTDORF	D
ABBIE	B	ADELING	C	AIKMAN, STONY	C	ALFLACK	C	ALTHOUSE	B
ABBOTT	D	SALINE-ALKALI		AILFY	E	ALFORD	B	ALTICREST	B
ABBOTTSTOWN	C	ADELPHIA	B/C	AIYELIIN	Q	ALGANSEE	E	ALTITA	C
ABCAL	D	A DEN	C	AINAKEA	B	ALGARROBO	A	ALTMAR	B
ABEGG	D	A DENA	C	AINSLEY	B	ALGERITA	B	ALTO	C
ABELA	B	ADGER	D	AINSWORTH	E	ALGIERS	C/D	ALYOGA	C
ABELL	B	ADIEUX	B	AIRMCNT	C	ALGOA	C	ALTON	A
ABERDEEN	C	ADILIS	B	AIRPORT	D	ALGOMA	B/D	ALTOONA	C
ABERDNE	B	ADIN	D	AITS	E	ALHAMBRA	B	ALTUDA	D
ABERSITO	C	ADIOS	D	AJC	C	ALHARK	B	ALTURAS	C
ABERT	R	ADJUNTAS	C	AJOLITO	D	ALICE	B	ALTUS	B
ABES	D	ADKINS	B	AKAD	C	ALICEL	B	ALTVAN	B
ABGESE	B	ADKINS, ALKALI	C	AKAKA	A	ALICIA	B	ALUF	A
ABILENE	C	ADKINS, WET	C	AKAN	B/D	ALIDA	B	ALUM	B
ABIQUA	B	ADLER	C	AKASKA	B	ALIKCHI	B	ALUSA	D
ABIQUA, FLOODED	C	ADMAN	D	AKELA	D	ALINE	A	ALVARADO	E
ARITA	C	ADDBE	C	AKERCAN	C	ALKIPIDGE	C	ALVIN	B
ABO	C	ADOLPH	B/D	AKERUF	E	ALKO	D	ALVIRA	C
ABOR	D	ADOS	C	AKINA	C	ALLAGASH	B	ALVISO	D
ABORIGINE	D	ADRIAN	A/D	AKLEF	D	ALLAMORE	D	ALVODEST	D
ABOTEN	D	ADVOKAY	C	ALADDIN	E	ALLANTON	B/D	ALVOP	D
ABRA	B	AECET	C	ALADSHI	F	ALLANTON,	D	ALVOP, DRAINED	C
ABRAHAM	S	AENEAS	B	ALAE	A	DEPRESSIONAL		ALVOR, PROTECTED	C
ABRAZC	D	AFFEY	C	ALAELOA	E	ALLARD	B	ALWILDA	B
ABRAZO, GRAVELLY	C	AFLAY	B	ALAGA	A	ALLDOWN	B	ALYAN	C
ABREU	B	AFTADEN	D	ALAKAI	C	ALLEGHENY	B	ALZADA	D
ABRIGO	B	AFTON	C/D	ALAMA	B	ALLEMANDS	D	ALZOLA	C
ABSAPDKEE	C	AGA	B	ALAMADITAS	C	ALLEN	B	AMADOR	D
ABSCOTA	A	AGAI PAH	D	ALAMPANCE	E	ALLENDALE	B	AMAGON	D
ABSMER	D	AGAN	D	ALAPBIOUE	B	ALLENDOORF	B	AMALIA	B
ABSTED	C	AGAR	B	ALAMC	C	ALLENS PARK	B	AMALU	D
ABSTED, FLOODED	D	AGASSIZ	D	ALAMOGORDO	P	ALLENS PARK, STONY	C	AMANA	B
ABSTON	C	AGATE	C	ALAMOSA	D	ALLENINE	D	AMANDA	C
ACACIO	B	AGATHA	E	ALAPOSA, DRAINED	F	ALLENWOOD	B	AMARILLO	B
ACADPMY	C	AGAWAM	P	ALAMUCHEE	P	ALLEY	D	AMASA	B
ACADIA	D	AGENCY	C	ALAMUGS	P	ALLHANDS	B	AMASA, MODERATELY	C
ACANA	D	AGER	D	ALAPAMA	D	ALLIANCE	D	WET, SANDY	C
ACANOD	C	AGFAYAN	D	ALAPAJ	D	ALLIGATOR	B	SUPSTRATUM	
ACASCO	D	AGNAL	D	ALAZAN	E	ALLIS	D	AMBER	B
ACCELERATOR	B	AGNESTON	E	ALBAN	P	ALLISON	P	AMBIA	D
ACEITUNAS	B	AGNESTON, COBBLY	C	ALBANO	D	ALLKER	E	AMBOAT	C
ACEL	C	SUBSTRATUM		ALBANY	C	ALLOR	B	AMBOY	C
ACHIMIN	C	AGNESTON, COBBLY	C	ALBATON	D	ALLOUFZ	B	AMBRANT	B
ACKEF	B	AGNESTON,	C	ALEEE	C	ALMAC	B	AMBRAW	B/C
ACKERMAN	A/D	NONGRAVELLY		ALBEMARLE	B	ALMANOR	E	AMELIA	C
ACKERVILLE	C	AGNEW	C	ALBERTON	B	ALMAVILLE	D	AMENE	D
ACKETT	D	AGNOS	D	ALPEPTVILLE	C	ALMENA	C	AMENIA	B
ACKLEY	B	AGON	C	ALPINAS	B	ALMERIA	C	AMENSON	D
ACKMEN	B	AGORT	C	ALPION	R	ALMIRANTE	B	AMERICANOS	E
ACKMORE	B	AGRA	C	ALFIGHTS	C	ALMIRANTE	C	ALMO	A
ACKWATER	D	AGUA	P	ALFUZ	C	ALMONT	C	AMERICUS	A
ACHE	C	AGUA DULCE	E	ALBURZ, DRAINED	B	ALMOTA	C	AMERY	B
ACD	B	AGUA FRIA	C	ALBUS	B	ALMOTA	C	AMES	C/D
ACOMA	C	AGUA FRIA, HIGH	B	ALCAN	D	ALNITE	D	AMESHA	B
ACORD	C	RAINFALL		ALCESTER	P	ALO	D	AMESMONT	C
ACOVE	C	AGUA FRIA, STONY	D	ALCOA	B	ALCHA	C	AMHERST	D
ACFEDALE	D	AGUADILLA	A	ALCONA	B	ALOMAX	D	AMISTAD	D
ACREE	C	AGUALT	B	ALCOT	A	ALONA	B	AMITY	D
ACRELANE	C	AGUEDA	B	ALCOVA	P	ALONSO	B	AMMON	B
ACTON	B	AGUILARES	E	ALCA	C	ALOVAR	C	AMCDAC	C
ACUFF	P	AGUILITA	B	ALDA, SALINE	B/D	ALPENA	A	AMCLE	A
ACUNA	C	AGUIRRE	D	ALDAX	C	ALPHA	E	AMOP	B
ACY	C	AGUSTIN	B	ALDFN	D	ALPIN	A	AMORUS	D
ADA	C	AMART	C	ALDER	C	ALPON	R	AMOS	C
ADAIR	C	AHL	C	ALDERDALE	C	ALPORA	P	AMOSTOWN	C
ADAMS	A	AHLSTROM	D	ALDERMAND	D	ALRED	B	AMPHION	C
ADAMSON	B	AMHEEK	C	ALDERWOOD	C	ALROS	C	AMSDEN	B
ADAMSVILLE	C	AMOLT	D	ALDI	E	ALS	A	AMSTEDAM	B
ADATON	D	AMPAH	R	ALDINE	D	ALSCO	B	AMTOFT	D

NOTES: TWO HYDROLOGIC SOIL GROUPS SUCH AS B/C INDICATE THE DRAINED/UNDRAINED SITUATION. MODIFIERS SHOWN, F.C., BEDROCK SUBSTRATUM, REFER TO A SPECIFIC SOIL SERIES PHASE FOUND IN SOIL MAP LEGEND.

Table 2-1.—Hydrologic soil groups for U.S. soils (continued)

AMWELL	C	ANSELMO, BEDROCK	A	ARCH	E	ARMYDRAIN	C	ASSUMPTION	B
AMY	D	SUBSTRATUM		ARCHABAL	E	ARNEGARD	B	ASTA	B
ANACAPA	B	ANSGAR	B/D	ARCHBOLD	A	ARNESS	D	ASTATULA	A
ANACOCO	D	ANSPING	B	ARCHER	C	ARNHEIM	D	ASTOR	B/D
ANACONDA	B	ANT FLAT	C	ARCHERDALE	C	ARNO	D	ASTOP, FLOODED	D
ANAHEIM	C	ANTEL	B	ARCHES	D	ARNOLD	A	ASTORIA	B
ANAHUAC	D	ANTELOPE SPRINGS	C	ARCHIN	D	ARNOT	C/D	ATARQUE	D
ANAMITE	D	ANTERO	D	ARCHIN, COOL	C	ARNTZ	C	ATASCO	C
ANAPRA	B	ANTHO	B	ARCHULETA	D	AROL	D	ATASCOSA	O
ANASAZI	C	ANTHOLOP	D	ARCIA	C	AROSA	C	ATATE	B
ANATONE	D	ANTHONY	B	ARCLAY	D	ARP	C	ATCHEE	D
ANAUD	D	ANTIGO	B	ARCO	C	ARRADA	D	ATCO	B
ANAVERDE	B	ANTILON	C	ARCO, DRAINED	E	ARRASTRE	B	ATENCIO	B
ANAWALT	D	ANTIOCH	D	ARCOLA	C	ARREDONDO	A	ATEPIC	D
ANCHO	B	ANTLER	C	ARD	C	ARRIBA	C	ATHELWOLD	B
ANCHO, SALINE	C	ANTOINE	B	ARDENMONT	B	ARRINGTON	B	ATHENA	B
ANCHOR POINT	D	ANTONITO	C	ARCEVOIR	B	ARRICLA	D	ATHERTON	B/D
ANCHORAGE	A	ANTOSA	D	ARDEP	B	ARRITOLA	D	ATHOL	B
ANCLOTE	B/D	ANTROBUS	B	ARDEP, WET	C	ARROLIME	C	ATKINS	D
ANCLOTE, DEPRESSIONAL	D	ANTWERP	C	ARDILLA	C	ARRON	D	ATKINSON	B
ANCLOTE, FREQUENTLY FLOODED	D	ANTY	B	ARDIVEY	B	ARROWHEAD	C	ATLAS	D
ANCO	C	ANUNDE	E	ARDNAS	B	ARROYADA	D	ATLEE	C
ANDERGEORGE	B	ANVIK	B	ARDTDO	B	ARROYO SECO	B	ATLOW	D
ANDERLY	C	ANWAY	B	ARECIBO	A	ARSITE	D	ATMORE	B/D
ANDERS	C	AOWA	B	AREDALE	B	ARTA	C	ATOKA	C
ANDERSON	B	APACHE	D	ARENA	D	ARTESIA	D	ATOMIC	B
ANDOK	B	APAKUIE	A	ARENA, DRAINED	C	ARTESIAN	D	ATRAC	B
ANDOVER	D	APALACHEE	D	ARENALES	A	ARTNOC	B	ATRAVESADA	O
ANDRADA	D	APALO	B	ARENDSVILLE	B	ARTCIS	C	ATRING	E
ANDREESON	C	APAREJO	E	ARENOSA	A	ARUJO	B	ATRYPA	D
ANDREGG	B	APELDORN	D	ARENZVILLE	B	ARUNDEL	C	ATSION	C/D
ANDRES	B	APEX	B	ARGALT	D	APVA	D	ATSION, TIDE	D
ANDREWS	C	APISHAPA	C	ARGENT	D	ARVADA	D	FLOODED	
ANDRUSIA	A	APISON	B	ARGENTA	C	ARVANA	C	ATTELLA	D
ANDRY	D	APMAT	B	ARGONAUT	D	ARVESON	B/D	ATTER.	A
ANDYS	B	APMAY	D	ARGORA	E	ARVILLA	A	ATTERBERRY	B
ANED	D	APOLLO	E	ARGYLE	E	ARVIN	B	ATTEWAN	B
ANELA	B	APOPKA	A	ARIEL	C	ARZO	D	ATTEWAN, WET	D
ANETH	B	APPANOOSE	D	ARIKARA	B	ASA	B	ATTICA	B
ANETH, DRY	A	APPERSON	C	ARIMO	B	ASABEAN	B	ATTOYAC	B
ANGELICA	B/D	APPIAN, WET	C	ARIPEKA	B	ASBILL	D	ATWATER	B
ANGELINA	D	APPIAN, RECLAIMED	C	ARIPINE	C	ASCALON	A	ATWELL	B
ANGELO	C	APPLEBUSH	B	ARISPE	C	ASCAR	C	ATWOOD	D
ANGELUS	B	APPLEDELLIA	C	ARISZE	C	ASCHOFF	E	AU GRES	B
ANGLE	D	APPLEGATE	C	ARIZO	A	ASH SPRINGS	C	AUA	B
ANGLE	A	APPLETON	C	ARKABUTLA	C	ASHART	D	AUBARQUE	D
ANGLEN	C	APPLING	B	ARKANA	C	ASHBON	D	AUBBENAUBBEE	B
ANGOLA	C	APRON	B	ARKAUA	C	ASHCROFT	B	AUBERRY	B
ANGORA	B	APT	B	ARKONA	E	ASHDALE	E	AUBREY	C
ANGOSTURA	B	APTAKISIC	E	ARKPORT	B	ASHDOWN	B	AUBURN	D
ANHALT	D	APTOS	C	ARKSON	B	ASHE	B	AUBURNDALE	B/D
ANIAK	D	AQUILLA	A	ARKTON	C	ASHER	C	AUFCD	D
ANIMAS	C	AQUINAS	C	ARLAND	E	ASHFORD	D	AUGGIE	B
ANINTO	D	ARABRAB	D	ARLE	C	ASHFORK	D	AUGSBURG	B/D
ANITA	D	ARADA	B	ARLINGTON	A	ASHGROVE	D	AUGUSTA	C
ANKENY	B	ARAGON	C	ARLINGTON, THICK	B	ASHHURST	C	AUGUSTINE	B
ANKLAM	D	ARAMBURU	C	ARLO	B	ASHIPPUN	C	AULD	D
ANKONA	D	ARANSAS	D	ARLOVAL	C	ASHKUM	B/D	AURA	B
ANNABELLA	B	ARAPAHOE	B/D	ARMAGH	C	ASHLAR	A	AURELIE	D
ANNANDALE	C	ARAFIEN	C	ARMCO	C	ASHLEY	D	AURELIUS	B/D
ANNAW	B	ARARAT	B	ARMELLS	B	ASHLO	B	AURORA	C
ANNEMAINE	C	ARAT	D	ARMENDARIS	C	ASHMED	E	AUSHMUS	D
ANNIS	C	ARAYAIPA	C	ARMENIA	D	ASHMUN	D	AUSTIN	C
ANNIS, SALINE	B	ARAVE	D	ARMESPA	B	ASHOLLER	D	AUSTINVILLE	B
ANNIS, DRAINED	B	ARAVETON	B	ARMESBURG	B	ASHPORT	B	AUSTWELL	D
ANNISQUAM	C	ARBELA	C	ARMESPA	B	ASHTON	B	AUT	C
ANNISTON	B	ARBIDGE	C	ARMINGTON	D	ASHUE	B	AUTOMBA	B
ANNONA	D	ARBONES	C	ARMISTEAD	C	ASHUELOT	D	AUTRYVILLE	A
ANOCON	C	ARBOR	B	ARMITAGE	C	ASHWOOD	D	AUXVASSE	D
ANOKA	B	ARBuckle	B	ARMO	B	ASKEW	C	AUZQUI	B
ANDNES	C	ARBuckle, WET	C	ARMOCINE	D	ASOLT	D	AVA	C
ANOWELL	D	ARBURUA	C	ARMONA	B	ASOTIN	C	AVALON	B
ANSARI	D	ARBUS	B	ARMOUR	B	ASPARAS	B	AVANT	B
ANSEL	B	ARCATA	B	ARMPUP	C	ASPEN	B	AVAR	D
ANSELMO	B	ARCETTE	B	ARMSTER	B	ASPERMONT	B	AVAWATZ	A
				ARMSTRONG	C	ASPERSON	C	AVENAL	B
				ARMUCHEE	C	ASSATEAGUE	A	AVILLA	B
						ASSININS	B	AVIS	A
						ASSINIBOINE	B	AVOCA	B

NOTES: TWO HYDROLOGIC SOIL GROUPS SUCH AS B/C INDICATE THE DRAINED/UNDRAINED SITUATION. MODIFIERS SHOWN, E.G., BEDROCK SUBSTRATUM, REFER TO A SPECIFIC SOIL SERIES PHASE FOUND IN SOIL MAP LEGEND.

Table 2-1.—Hydrologic soil groups for U.S. soils (continued)

AVON	C	BALDFIELD	C	BARDLEY	C	BATESON	B	BEAVERTON	B
AVONBURG	D	BALDMILL	E	BARELA	C	BATESVILLE	C	BECKER	E
AVONDA	B	BALDMOUNTAIN	B	BARFIELD	D	BATH	C	BECKET	C
AVONDALE	B	BALDOCK	D	BARFUSS	B	BATTERSON	D	BECKLEY	B
AVONVILLE	B	BALDOCK, GRAVELLY	C	BARGE	C	BATTLE CREEK	C	BECKMAN	D
AVTABLE	D	SUBSTRATUM,		BARGER	C	BATTLEMENT	B	BECKS	C
AWBRIG	D	DRAINED		BARIO	B	BATZA	D	BECKTON	D
AXIS	D	BALDOCK, SALINE	C	BARISHMAN	C	BAUDETTE	E	BECKTON, WELL	C
AXTELL	D	BALDOCK, SALINE	C	BARKAMP	E	BAUER	C	BECKTON, DRAINED	C
AYAR	D	BALDOCK, DRAINED	C	BARKELEW	B	BAUMAN	C	BECKVILLE	B
AYCOCK	B	BALDWIN	D	BARKERVILLE	C	BAUNGARD	B	BECKWITH	D
AYDELOTTE	D	BALDY	B	BARKLEY	C	BAUSCHER	E	BECKWORTH	C
AYERSVILLE	B	BALE	B	BARCOF	D	BAUX	B	BCRAFT	B
AYLSMER	A	BALE, WET	D	BARLEYFIELD	E	BAUXSON	B	BECREEK	B
AYNOR	B/D	BALLAHACK	D	BARLING	C	BAXENDALE	B	BEDELL	B
AYON	B	BALLARD	E	BARLOW	B	BAXTER	B	BEDEN	D
AYOUB	C	BALLER	D	BARNABE	C	BAXTERVILLE	B	BEDFORD	C
AYR	B	BALLINGER	D	BARNARD	B	BAYAMON	B	BEDINGTON	B
AYRES	D	BALLTOWN	D	BARNELLCREEK	C	BAYARD	B	BEDKE	B
AYRSHIRE	C	BALLYAR	B	BARNES	B	BAYBORD	D	BEDNER	C
AYSEES	B	BALLY	C	BARNESTON	B	BAYERTON	C	BEDSTEAD	C
AZAAR	C	BALM	D	BARNESTON,	A	BAYFIELD	C	BEDWYR	D
AZELTINE	B	BALMAN	B	NONGRAVELLY		BAYFIELD, WET	D	BEE	B
AZTALAN	C	BALMAN, SALINE,	C	BARNEY	D	BAYHORSE	D	BEEBE	A
AZTEC	B	FLOODED		BARNHARDT	B	BAYLIS	B	BEECHER	B
AZTEC, HIGH	C	BALMLAKE	B	BARNHOT	B	BAYMEADE	D	BEECHGROVE	B
RAINFALL		BALMORHEA	C	BARNSDALL	B	BAYOU	D	BEECHWOOD	C
AZULE	C	BALON	B	BARNSTABLE	B	BAYUDAN	D	BEEK	C
AZWELL	C	BALSORA	B	BARNUM	B	BAYSHORE	D	BEEKMAN	C
BAANISH	B	BALTIC	D	BARODA	D	BAYSHORE,	B	BEELEM	D
BABB	B	BALTIMORE	B	BAROID	A	MODERATELY WET	A	BEELINE	D
BABBINGTON	B	BAMA	B	BAROID, WET	D	BAYSIDE	D	BEEMONT	C
BABELTHUAP	B	BAMAC	A	BARRADA	D	BAYTOWN	B	BEENOM	D
BACA	B	BAMBER	B	BARRE	D	BAYUCOS	D	BEEKOIVE	B
BACA, FLOODED	C	BAMOS	C	BARRETT	D	BAYVI	D	BEEVILLE	B
BACH	B/D	BAMTUSH	B	BARRIER	D	BAYVIEW	D	BEEZEE	B
BACHELOR	E	BANADERU	D	BARRINGTON	E	BAYWOOD	A	BEFAR	D
BACHO	D	BANAT	B	BARRON	B	BAZETTE	C	BEGAY	B
BACHUS	C	BANBURY	D	BARRONETT	E/D	BAZILE	B	BEHANIN	B
BACKBAY	D	BANCAS	C	BARRY	B/D	BEACH	D	BEHEMOTOSH	C
BACKBONE	B	BANCKER	D	BARSHAC	C	BEAD	C	BEHRING	D
BACKLIFF	D	BANCROFT	B	BARSHAAD	D	BEADLE	C	BEIGLE	B
BACOB I	C	BANCY	D	BART	B	BEALAND	B	BEIRMAN	D
BACONA	B	BANDAG	B	BARTINE	C	BEALES	B	BEISIGL	A
BADAXE	B	BANDERA	B	BARTLE	D	BEAM	D	BEJE	D
BADENA	B	BANDID	B	BARTLEY	C	BEAMTON	C	BEJUCOS	B
BADENAUGH	B	BANDON	C	BARTO	D	BEANBLOSSOM	B	BELAIN	B
BADGE	B	BANE	A	BARTOME	D	BEANFLAT	C	BEALATE	C
BADGERTON	B	BANGO	B	BARTON	B	BEANLAKE	B	BELCHER	D
BADIN	C	BANGOR	B	BARTONFLAT	B	BEANO	D	BELDEN	C
BADITO	C	BANGSTON	A	BARVON	B	BEAR BASIN	B	BELDING	B
BADO	D	BANIDA	D	BARX	E	BEAR CREEK	B	BELÉN	D
BADUS	C/D	BANKARD	A	BASCAL	B	BEAR LAKE	D	BELFAST	B
BADWATER	B	BANKHEAD	B	BASCO	C	BEAR PRAIRIE	B	BELFIELD	C
BAGARD	B	BANKS	A	BASCOM	B	BEARDALL	C	BELFORD	B
BAGDAD	B	BANLIC	C	BASCOYV	D	BEARDEN	C	BELGARRA	C
BAGGOTT	D	BANNEL	B	BASEHOR	D	BEARDSLEY	C	BELGRADE	B
BAGLEY	B	BANNER	C	BASH	C	BEARDSSTOWN	C	BELHAVEN	D
BAHEM	B	BANNING	C	BASHAW	D	BEARGULCH	B	BELINDA	D
BAHIA	A	BANNION	C	BASHER	B	BEARMOUTH	B	BEIJICA	B
BAHL	C	BANNOCK	B	BASILE	D	BEARPAW	C	BELK	C
BAILE	D	BANTRY	A/D	BASIN	C	BEARSKIN	D	BELKNAP	D
BAILEGAP	B	BAPOS	D	BASINGER	B/D	BEARSPRING	B	BELLAVISTA	C
BAILEYCREEK	C	BARABOO	E	BASINGER,	D	BEARTRAP	B	BELLE	B
BAILING	C	BARAGA	C	DEPRESSIONAL		BEARVILLE	C	BELLECHESTER	A
BAINVILLE	C	BARANA	B	BASINGER, FLOODED	D	BEARNALLOW	C	BELLEHELEN	D
BAIRD HOLLOW	C	BARATARI	A/D	BASKET	B	BEASLEY	C	BELLENMINE	D
BAIRD HOLLOW,	D	BARBAROSA	D	BASSEL	E	BEASON	C	BELLEVILLE	B/D
EXTREMELY COBBLY		BARBARY	D	BASSETT	E	BEATRICE	D	BELLEVILLE, PONDED	D
BAIRD HOLLOW,	B	BARBERT	D	BASSFIELD	B	BEAUCOUP	B/D	PELLEVUE	B
GRAVELLY		BARBOUR	B	BASTIAN	C	BEAUFORD	D	BELLICUM	B
BAJURA	D	BARBOURVILLE	B	BASTON	C	BEAUGHTON	D	BELLINGHAM	D
BAKEOVEN	D	BARCAVE	B	BASTROP	B	BEAUMONT	D	BELLINGHAM,	C
BAKER	C	BARCE	B	BASTSIL	B	BEAUREGARD	C	DRAINED	
BAKERSVILLE	D	BARCLAY	C	BATA	B	BEAUSITE	C	BELLPASS	D
BALAAM	B	BARCO	E	BATAN	E	BEAUVAIS	B	BELLPINE	C
BALCOM	B	BARCUS	A	BATAVIA	B	BEAVERCREEK	B	BELLWOOD	D
BALD	C	BARO	D	BATEMAN	B	BEAVERDAM	C	BELMEAR	D
BALDER	D	BARDEN	C	BATES	B	BEAVERELL	B	BELMILL	B

NOTES: TWO HYDROLOGIC SOIL GROUPS SUCH AS B/C INDICATE THE DRAINED/UNDRAINED SITUATION. MODIFIERS SHOWN, E.G., BEDROCK SUBSTRATUM, REFER TO A SPECIFIC SOIL SERIES PHASE FOUND IN SOIL MAP LEGEND.

Table 2-1.—Hydrologic soil groups for U.S. soils (continued)

BELMONT	B	BERTRAM	B	BILLINGS	B	BLACKNOLL	C	BLUE LAKE	A
BELMORE	B	BERTRAND	B	MODERATELY SLOW	B	BLACKOAR	B/D	BLUE STAR	B
BELPRE	C	BERVILLE	B/D	PERM		BLACKPIPE	C	BLUEBELL	C
BELSAC	B	BERMOLF	B	BILLYCREEK	C	BLACKPRINCE	B	BLUECHIEF	C
BELTED	D	BERYL	B	BILLYHAW	D	BLACKROCK	B	BLUECREEK	D
BELTON	C	BERZATIC	D	BILTMORE	A	BLACKSAN	B	BLUEDOME	C
BELTRAMI	B	BESEMAN	A/D	BIMMER	D	BLACKSPAR	D	BLUEFLAT	C
BELTSVILLE	C	BESHMER	C	RINCO	D	BLACKSPOT	D	BLUEGROVE	C
BELUGA	D	BESNER	B	BINDLE	B	BLACKSTON	B	BLUEGULCH	B
BELUGA, DRAINED	C	BESSEMER	C	BINFORD	B	BLACKTHORN	B	BLUEHILL	C
SLOPING		BESSIE	D	BINGER	B	BLACKTOP	D	BLUEHON	C
BELVOIR	C	BESTROM	C	BINGHAM	B	BLACKWATER	D	BLUEJOINT	B
BELZAR	C	BETHANY	C	BINGHAMPTON	B	BLACKWELL	D	BLUENOSE	B
BEMIDJI	A	BETHEL	B	BINGHAMVILLE	D	BLADEN	D	BLUEPOINT	A
BEN LOMOND	B	BETHERA	D	BINNA	B	BLAG	D	BLUERIM	C
BEN CLAY	C	BETHESDA	C	BINNSVILLE	D	BLAGO	D	BLUESLIDE	D
BENCLARE	C	BETHLEHEM	B	BINS	B	BLAINE	C	BLUESPRIN	C
BENCO	B	BETIS	A	BINTON	A	BLAIR	C	BLUESTONE	D
BENDER	B	BETONNIE	B	BINTON, RECLAIMED	B	BLAIRTON	C	BLUEWING	A
BENDIRE	C	BETRA	C	BIOLA	B	BLAKABIN	C	BLUFF	D
BENEVOLA	C	BETTERAVIA	C	BIPPUS	B	BLAKE	B	BLUFFDALE	C
BENEWAH	D	BETTS	B	BIRCHBAY	C	BLAKELAND	A	BLUFFTON	C/D
BENFIELD	C	BEULAH	B	BIRCHFIELD	D	BLAKENEY	C	BLUFORD	C
BENGAL	C	BEVENT	A	BIRCHWOOD	C	BLAKEWELL	C	BLUM	C
BENGE	B	BEVERIDGE	D	BIRDOW	B	BLALOCK	D	BLV	B
BENHAM	B	BEVERLY	B	BIRDS	C/D	BLAMER	C	BLYBURG	B
BENIN	D	BEVERLY, GRAVELLY	A	BIRDSALL	D	BLANCA	B	BLYTHER	D
BENITO	D	BEW	C	BIRDSBORO	F	BLANCHARD	A	BOARDMAN	D
BENJAMIN	D	BEWLEYVILLE	B	BIRDSLEY	D	BLANCHE	B	BOARDTREE	C
BENKLIN	C	BEXAR	D	BIRDSVIEW	A	BLANCHESTER	B/D	BOASH	D
BENMAN	C	BEZO	D	BIRKBECK	B	BLANCOT	B	BOAZ	C
BENDALE	B	BEZZANT	B	BIRMINGHAM	B	BLAND	C	BOBBITT	C
BENNINGTON	C	BIBB	C	BIRNEY	B	BLANDING	B	BOBILLO	A
BENRIDGE	B	BIBLESPRINGS	B	BIROME	C	BLANEY	B	BOBNSOB	C
BENSLEY	B	BICE	B	BISBEE	A	BLANKET	C	BOBS	D
BENSON	D	BICKERDYKE	D	BISCARO	D	BLANTON	A	BOBTAIL	C
BENTEEN	C	BICKETT	D	BISCAY	B/D	BLANTON,	B	BOBTOWN	B
BENWY	B	BICKLETON	B	BISGANI,	B	MODERATELY WET		BOCA	B/D
BENZ	D	BICKMORE	C	MODERATELY WET		BLANYON	C	BOCA, DEPRESSIONAL	D
BEOR	D	BICONDOA	D	BISGANI, FLOODED	C	BLAPPERT	D	BOCA, TIDAL	D
BEOSKA	B	BICONDOA, DRAINED	C	BISHOP	D	BLAQUIERE	C	BOCK	B
BEOTIA	B	BIDDEFORD	D	BISMARCK	D	BLASDELL	A	BOCKER	D
BEOWAWE	B	BIDDLEMAN	B	BISOODI	D	BLASE	C	BOCKSTON	B
BEQUINN	B	BIDMAN	C	BISPING	P	BLASINGAME	C	BODE	B
BERCUMB	B	BIDWELL	B	BISSELL	B	BLAYDEN	D	BODECKER	A
BERDA	B	BIEBER	D	BISSONNET	D	BLAZBIRD	D	BODELL	D
BEREA	C	BIEDELL	D	BIT	C	BLAZON	D	BODEN	C
BERENICETON	B	BIEDSAW	C	BITTER	B	BLEAKWOOD	C	BODENBURG	B
BERGHOLZ	C	BIENVILLE	A	BITTER SPRING	B	BLEDSOE	C	BODINE	B
BERGLAND	D	BIG BLUE	D	BITTERROOT	C	BLEIBLERVILLE	D	BODRUMPE	C
BERGQUIST	B	BIG HORN	B	BITTERWATER	B	BLENCOE	D	BODDY	C
BERGSTROM	B	BIG TIMBER	D	BITTON	D	BLEND	D	BOEL	A
BERGSVIK	D	BIGARM	B	BIVANS	B	BLENDON	B	BOEL, OVERWASH	C
BERIND	B	BIGBEE	A	BIXBY	B	BLETHEN	B	BOELUS	A
BERIT	D	BIGBEND	B	BIXLER	C	BLEVINS	B	BOERNE	B
BERKS	C	BIGBROWN	C	BJORK	C	BLEVINTON	B	BOESEL	C
BERKSHIRE	B	BIGELOW	B	BLACHLY	B	BLEVETT	D	BOESEL, PROTECTED	B
BERLAKE	B	BIGETTY	B	BLACK BUTTE	B	BLICHTON	D	BOETTCHER	C
BERLIN	C	BIGFLAT	D	BLACK CANYON	D	BLICKENSTAFF	B	BOGAN	B
BERMESA	C	BIGFOOT	C	BLACK CANYON,	C	BLIMO	B	BOGART	C
BERMUDIAN	B	BIGFORK	C	DRAINED		BLIMSTER	C	BOGGS	C
BERNAL	D	BIGHAMS	B	BLACK RIDGE	D	BLINN	C	BOGGY	C
BERNALDO	B	BIGHILL	B	BLACKA	C	BLISS	C	BOGRAP	B
BERNARD	D	BIGLAKE	A	BLACKBURN	B	BLITZEN	C	BOGUE	D
BERNARDINO	C	BIGMEADOW	C	BLACKDRAW	D	BLOCKHOUSE	D	BOGUS	C
BERNARDSTON	C	BIGNELL	C	CLACKETT	B	BLOMFORD	B/D	BOHANNON	C
BERNHILL	B	BIGRIVER	B	BLACKFOOT	C	BLOOM	D	BOHEMIAN	B
BERNICE	A	BIGSHEEP	B	BLACKFOOT, DRAINED	B	BLOOMFIELD	A	BOHICKET	D
BERNING	C	BIGSPRING	D	BLACKHALL	D	BLOOMING	B	BOHNA	B
BERNOW	B	BIGWIN	C	BLACKHALL, WARM	C	BLOOMSDALE	B	BOHNLY	D
BERRYLAND	B/D	BIGWINDER	D	BLACKHAMMER	D	BLOOD	C	BOHNSACK	B
BERRYMAN	C	BIJORJA	C	BLACKHAWK	D	BLOOR, GRAVELLY	D	BOISTFORT	B
BERSON	B	BIJOU	B	BLACKHOOF	D	SUBSTRATUM		BOJAC	B
BERTAG	C	BILBO	C	BLACKHORSE	C	BLOUNT	C	BOJD	D
BERTELSON	B	BILGER	D	BLACKLED	B	BLOWERS	B	BOLAN	C
BERTHOUD	B	BILLET	B	BLACKLEG	C	BLUCHER	C	BOLAR	B
BERTIE	B	BILLINGS	C	BLACKLOCK	D	BLUE EARTH	B/D	BOLD	B
BERTO	D			BLACKMAN	C	BLUE EARTH,	D	BOLENT	A
BERTOLOTTI	B			BLACKMOUNT	B	SLOPING		BOLES	C

NOTES: TWO HYDROLOGIC SOIL GROUPS SUCH AS B/C INDICATE THE DRAINED/UNDRAINED SITUATION. MODIFIERS SHOWN, E.G., BEDROCK SUBSTRATUM, REFER TO A SPECIFIC SOIL SERIES PHASE FOUND IN SOIL MAP LEGEND.

Table 2-1.—Hydrologic soil groups for U.S. soils (continued)

BOLFAR	C	BORGEAU	B	BRACEVILLE	C	BREW	C	BROKENHORN	D
BOLICKER	B	BORGES	D	BRACKEN	B	EREWER	C	BROLLIAR	D
BOLIO	D	BORTANA	D	BRACKETT	C	BREWLESS	C	BROMER	C
BOLIVAR	B	BORKY	C	BRAD	C	BREWSTER	D	BROMIDE	B
BOLLING	C	BORNSTEDT	C	BRADDOCK	B	BREWTON	C	BROMO	B
BOLSA	C	BORO	D	BRADEN	B	BRIBUTTE	D	BRONAUGH	B
BOLTON	B	BOROBEGY	C	BRADENTON	B/D	BRICKEL	C	BRONCHO	B
BOLTUS	D	BORREGO	D	BRADENTON, FLOODED	D	BRICKMILL	C	BRONCHO, LOAMY	A
BOMAR	C	BORREGUERO	C	BRADER	C	BRICKTON	C	SUBSTRATUM	
BOMBADIL	D	BORSKI	B	BRADSHAW	B	BRICO	C	BRONELL	B
BOMBAY	B	BORTH	C	BRADSON	B	BRIDGE	C	BRONSON	B
BOMOSEEN	C	BORUP	B/D	BRADWAY	D	BRIDGECREEK	C	BRONTE	C
BOM	B	BORVANT	D	BRADY	B	BRIDGEMHAMPTON	B	BROOKE	D
BONAIR	D	BOSANKO	D	BRADYVILLE	C	BRIDGEPORT	B	BROOKFIELD	B
BONANZA	B	BOSCO	B	BRAFFITS	B	BRIDGER	B	BROOKINGS	B
BONAPARTE	A	BOSKET	B	BRAGG	C	BRIDGESON	D	BROOKLYN	C/D
BONCLAIR	B	BOSLER	B	BRAHAM	B	BRIDGESON, DRAINED	C	BROOKMAN	D
BOND	D	BOSD	D	BRAILSFORD	C	BRIDGET	E	BROOKSHIRE	C
BONDFARM	D	BOSQUE	B	BRAINERD	C	BRIDGEWATER	B	BROOKSIDE	C
BONDMAN	D	BOSSBURG	D	BRALLIER	D	BRIEDWELL	B	BROOKSTON	B/D
BONDORANCH	D	BOSSBURG, DRAINED	C	BRAM	C	BPIEF	B	BROOKSTON, STONY	D
BONDUEL	C	BOSTON	C	BRAMARD	E	BRIER	D	BROOKSVILLE	D
BONE	D	BOSTRUM	D	BRAMLETT	C	BRIGGS	A	BROOME	B
BONEEK	B	BOSTWICK	B	BRAMWELL	C	BRIGGSDALE	C	BROPHY	A/D
BONEYARO	C	BOSVILLE	C	BRANCH	B	BRIGGSVILLE	C	BROSE	D
BONFIELD	B	BUSWELL	D	BRANCROFT	C	BRIGHTON	E/D	BROSELEY	B
BONFRI	C	BOSWORTH	D	BRAND	D	BRIGHTWOOD	B	BROSS	B
BONG	A	BOTELLA	B	BRANDENBURG	B	BRILEY	A	BROUGHTON	D
BONHAM	C	BOTHWELL	B	BRANDON	B	BRILL	B	BROWARD	C
BONIFAY	A	BOTHWI	C	BRANDYWINE	C	BRILLIANT	B	BROWER	B
BONILLA	B	BOTON	B	BRANFORD	B	BRIMFIELD	C/D	BROWNBEAR	C
BONITA	D	BOTTINEAU	C	BRANHAM	C	BRIMLEY	E	BROWNDELL	D
BONJEA	D	BOTTLE	B	BRANSCOMB	B	BRIMSTONE	D	BROWNELL	B
BONN	D	BOTTLEROCK	C	BRANTFORD	B	BRINEGAR	E	BROWNFIELD	A
BONNEAU	A	BOULDER	B	BRANTLEY	C	BRINGMEE	B	EROWNLEE	B
BONNELL	C	BOULDER LAKE	D	BRANYON	D	BRINKER	C	BROWNRIGG	D
BONNER	B	BOULDER POINT	E	BRASHEAR	E	BRINKERT	C	BROWNSCOMBE	C
BONNERDALE	B	BOULDERCREEK	B	BRASSFIELD	B	BRINKERTON	D	BROWNSCREEK	B
BONNET	B	BOULDIN	B	BRATTON	B	BRINNUM	D	BROWNSDALE	C
BONNEVILLE	A	BOULFLAT	C	BPAUN	C	BRINNUM, DRAINED	C	BROWNSTO	B
BONNICK	A	BOUNCER	D	BRAYANE	D	BRIONES	B	BROWNSVILLE	C
BONNIE	C/D	BOUNDARY	B	BRAWLEY	D	BRIOS	A	BROWNTON	C/D
BONNIE, PONDED	C	BOURBON	B	BRAXTON	C	BRISBANE	B	PROXON	B
BONNYDOON	D	BOURNE	C	BRAY	D	BRISCO	E	BROYLES	B
BONO	D	BOUSIC	D	BRAYTON	C	BRISCOT	D	BRUBECK	D
BONSALL	D	BOV	D	BRAZILTON	D	BRISCOY, DRAINED	D	BRUCE	B/D
BONTA	B	BOWBAC	C	BRAZITO	A	BRISKY	C	BRUELLA	B
BONTI	C	BOWBELLS	B	BRAZITO, THICK	B	BRISTOW	D	BRUELLA, HARD	C
BONWIER	C	BOWDISH	C	SURFACE	C	BRITTO	D	SUBSTRATUM	
BONWIER, GRADED	D	BOWOLE	B	BRAZITO, THICK	C	BRITTON	D	BRUFFY	B
BONZ	C	BOWDOIN	D	SURFACE,	D	BRITWATER	B	BRUHEL	B
BOOFORD	C	BOWORE	C	SALINE-ALKALI		BROAD	C	BRUIN	B
BOOFUSS	D	BOWEN	C	BRAZON	C	BROAD CANYON	B	BRUMAN	B
BOOKCLIFF	B	BOWERS	C	BRAZORTA	D	BROADALBIN	C	BRUMBAUGH	C
BOOKER	D	BOWES	E	BRECKENRIDGE	B/D	BROADAX	B	BRUNCAN	D
BOOKOUT	C	BOWIE	B	BRECKNOCK	E	BROADBROOK	C	BRUNDAGE	D
BOOKWOOD	B	BCWLAKE	C	BRECKSVILLE	C	BROADHEAD	C	BRUNEEL	D
BOOMER	B	BOWLUS	B	BREECE	B	BROADHURST	D	BRUNELDA	D
BOOMSTICK	D	BOWMAN	C	BREGAR	C	BROADMOOR	C	BRUNO	A
BOOMTOWN	D	BOWMANSVILLE	B/D	BREIEN	E	BROADUS	B	BRUNSWICK	B
BOONE	A	BOWNS	C	BREKO	B	BROADWELL	B	BRUNZELL	B
BOONESBORO	B	BOWSTRING	A/D	BREMER	C	BROBETT	C	BRUSHCREEK	C
BOONEVILLE	B	BOXELDER	C	BREMER, SANDY	E	BROCK	D	BRUSHCREEK	B
BOONTON	C	BOXFORD	C	SUBSTRATUM		BROCKET	C	BRUSSELS	C
BOONVILLE	C	BOXVILLE	C	BRENO	C	BROCKGULCH	C	BRUSSETT	B
BOONVILLE	D	BOXWELL	C	BREMS	A	BROCKLISS	B	BRYAN	A
BOOTH	C	BOY	B	BRENDA	C	BROCKMAN	C	BRYANT	B
BOOTHBAY	C	BOYCE	D	BRENNAM	C	BRCKO	B	BRYARLY	D
BOOTJACK	D	BOYD	D	BRENNAN	B	BROCKPORT	D	BRYCAN	B
BOOTS	A/D	BOYER	B	BRENNER	D	BROCKROAD	C	BRYCE	D
BOQUILLAS	C	BOYETT	B	BRENT	D	BROCKSBURG	B	BRYMAN	B
BORACHO	C	BOYKIN	B	BFENTON	B	BROCKTON	D	BRYSTAL	B
BORAH	C	BOYLE	D	BRENTSVILLE	C	BROCKWAY	C	BUB	C
BORAVALL	D	BOYSAG	D	BRENTWOOD	B	BRCKWELL	B	BUBUS	B
BORDA	D	BOYSEN	D	BRESSA	C	BRODALE	C	BUCAN	C
BORDEAUX	B	BOZE	B	BRESSER	B	BRODY	C	BUCAN, GRAVELLY	D
BORDEN	B	BOZEMAN	B	BREVARD	B	BROE	B	BUCHANAN	C
BORDER	B	BRABAS	D	BREVATOR	C	BROGAN	B	BUCHEL	D
BOREALIS	D	BRACE	C	BREVORT	B/D	BROGDON	B	BUCHENAU	C

NOTES: TWO HYDROLOGIC SOIL GROUPS SUCH AS B/C INDICATE THE DRAINED/UNDRAINED SITUATION. MODIFIERS SHOWN, E.G., BEDROCK SUBSTRATUM, REFER TO A SPECIFIC SOIL SERIES PHASE FOUND IN SOIL MAP LEGEND.

Table 2-1.—Hydrologic soil groups for U.S. soils (continued)

BUCHENAU, THICK SOLUM	B	BURCHELL	C	CARD POJO	C	CALODO	C	CANTEEN	B
BUCKAROD	C	BURDETT	C	CAPOOSE	B	CALOOSA	C	CANTEY	D
BUCKBAY	C	BUREN	C	CABOT	D	CALOUSE	B	CANTINA	C
BUCKCREEK	C	BURGESS	C	CABRILLO	C	CALPAC	B	CANTON	B
BUCKEYE	C	BURGI	B	CABSTON	B	CALPEAK	B	CANTON BEND	C
BUCKHALL	B	BURIBURI	C	CACHE	D	CALPINE	D	CANTRIL	B
BUCKHOUSE	B	BURKE	C	CACIGUE	C	CALROY	B	CANTUA	B
BUCKING	A	BURKETOWN	C	CACTUSFLAT	C	CALUME	C	CANTUCHE	D
BUCKLAKE	C	BURKEVILLE	D	CADDO	D	CALVERTON	B	CANUTIO	B
BUCKLAND	C	BURKHARDT	E	CADEVILLE	D	CALVIN	D	CANWALL	C
BUCKLE	B	BURLEIGH	A/D	CADILLAC	A	CALVISTA	C	CANYON	D
BUCKLEBAR	B	BURLESON	D	CADIZ	F	CALWOODS	D	CAPAC	C
BUCKLEY	D	BURLEWASH	D	CADMUS	B	CALZACORTA	D	CAPAY	D
BUCKLICK, THICK SOLUM	B	BURLINGTON	A	CADOMA	D	CAMAGUEY	D	CAPE	D
BUCKLON	D	BURMAH	D	CAESAR	A	CAMARGO	B	CAPE FEAR	D
BUCKNELL	D	BURNAC	D	CAGEY	C	CAMARILLO	C	CAPEHORN	D
BUCKNEY	B	BURNBOROUGH	B	CAGLE	C	CAMARILLO, DRAINED	B	CAPERS	D
BUCKPEAK	B	BURNEL	C	CAGUABO	D	CAMAS	A	CAPERTON	D
BUCKS	B	BURNETTE	C	CAGWIN	B	CAMAS, STONY	B	CAPHOR	B
BUCKSHOT	B	BURNHAM	D	CAMABA	B	CAMATTA	D	CAPILLO	C
BUCKSKIN	C	BURNSIDE	B	CAMONA	B	CAMARGE	B	CAPISTRANO	B
BUCKTON	B	BURNSVILLE	B	CAID	B	CAMBERN	C	CAPITAN	D
BUDE	C	BURNSWICK	B	CAINHOY	A	CAMBERT	C	CAPJAC	C
BUDIHOL	D	BURNT LAKE	A	CAIRO	D	CAMBETH	C	CAPLEN	D
BUDLEWIS	C	BURNTRIVER	B	CAJALCO	C	CAMBRIA	B	CAPLES	D
BUELL	B	BURR	D	CAJETE	E	CAMBRIDGE	C	CAPLES, DRAINED	C
BUENA VISTA	B	BURRITA	D	CAJON, OVERWASH	A	CAMDEN	B	CAPONA	C
BUFFARAN	D	BURROWSVILLE	C	CAJON, LOAMY	A	CAMEEK	D	CAPOOSE	C
BUFFCREEK	B	BURSLEY	D	SUBSTRATUM		CAMELBACK	B	CAPPS	B
BUFFINGTON	B	BURSON	C	CAJON, SILTY	A	CAMEO	E	CAPSHAW	C
BUFFMEYER	B	BURT	D	SUBSTRATUM	D	CAMEPON	B	CAPTINA	C
SUFFORK	C	BURTON	B	CAJON, ALKALI,	A	CAMILLUS	B	CAPTIVA	B/D
SUFTON	C	BURWELL	C	OVERWASH	C	CAMIND	C	CAPULIN	B
BUMRIG	C	BUSBY	F	CAJON,	E	CAMPANA	B	CARACOLAS	D
BUMICK	C	BUSE	B	SALINE-ALKALI	B	CAMPBELL, MUCK	C	CARADAN	D
BUIST	F	BUSHER	B	CAJON, COOL,	A	SUBSTRATUM		CARALAMPI	B
BUKO	B	BUSHMAN	B	OVERWASH		CAMPBELL, DRAINED	B	CARBENGLE	B
BUKO, WET	C	BUSHNELL	C	CAJON, GRAVELLY	A	CAMPBELLTON	C	CARBO	C
BUKREEK	B	BUSHVALLEY	D	CAJON, COOL	A	CAMPCREEK	C	CARBOL	D
BULAKE	D	HUSKA	B	CAJON, WARM	A	CAMPPIA	B	CARBONA	D
BULKLEY	C	BUSSY	C	CALABAR	D	CAMPO	C	CARBONDALE	A/D
BULL RUN	B	BUSTER	F	CALAPASAS	B	CAMPONE	C	CARCITY	D
BULL RUN, HARDPAN SUBSTRATUM	C	BUSTI	C	CALAPINE	D	CAMPSPASS	B	CARDENAS	D
BULL TRAIL	B	BUSYWILD	B	CALAPITY	D	CAMPUS	B	CARDIFF	B
BULLARDS	B	BUTANO	C	CALANLUS	A	CAMRODEN	C	CARDIGAN	B
BULLCREEK	D	BUTCHE	D	CALAVERAS	B	CANA	C	CARDINGTON	C
BULLFLAT	B	RUTLER	D	CALAWAH	E	CANAAN	C	CARDON	D
BULLFOR	C	RUTLERTOWN	C	CALCO	B/D	CANADIAN	B	CAREFREE	D
BULLION	D	BUTTERFIELD	C	CALCOUSTA	B/D	CANADICE	D	CAREY	B
BULLNEL	C	PUTTERMILK	B	CALCROSS	B	CANALOU	B	CAREY LAKE	B
BULLOCK	D	BUTTERS	B	CALD	C	CANANDAIGUA	D	CARGENT	B
BULLREY	B	BUTTON	D	CALDER	D	CANASERAGA	C	CARGILL	C
BULLUMP	B	BUTTONHOOK	B	CALDERWOOD	D	CANAVERAL	C	CARIBEL	B
BULLVARD	B	BUTTONWILLOW	C	CALDWELL	C	CANBURN	D	CARIBOU	B
BULLWINKLE	D	EUXIN	D	CALDWELL, DRAINED	B	CANDELARIA	B	CARIDCA	B
BULLY	B	EUXTON, SOMEWHAT	D	CALE	B	CANDELERO	C	CARIS	C
BULOW	A	POORLY DRAINED	B	CALEAST	C	CANDERLY	B	CARJO	C
SUNCOMBE	A	BUXTON, STONY	C	CALEP	B	CANDLER	A	CARLIN	D
BUNDO	B	BUXTON, MODERATELY	C	CALEPONIA	B	CANDLESTICK	C	CARLINTON	C
BUNDORF	D	WELL DRAINED	B	CALENDAR	C	CANDOR	A	CARLISLE	A/D
BUNDY	C	BUZZN	A	CALEFA	C	CANE	C	CARLITO	D
BUNDYMAN	C	BYARS	D	CALHI	A	CANEADEA	A	CARLOS	A/D
BUNJUG	C	BYBEE	D	CALHOUN	D	CANEAK	E	CARLOTTA	B
BUNKER	B	BYINGTON	D	CALICO	C	CANELO	D	CARLOW	D
BUNKERHILL	D	BYLER	C	CALICOTT	A	CANEST	D	CARLSBAD	C
BUNKWATER	C	RYLUM	B	CALIFON	C	CANEYVILLE	C	CARLSBERG	A
JUNKY	C	BYNUM	C	CALIMUS	F	CANEZ	B	CARLSON	B
BUNNELL	B	BYRAM	C	CALITA	B	CANFIELD	C	CARLSTROM	C
BUNSELMEIER	B	BYRNIE	D	CALIZA	B	CANISTED	B/D	CARLTON	C
BUNTINGVILLE	C	CABALLO	E	CALKINS	C	CANISTED, STONY	D	CARMACK	B
BUNYAN	B	CASARTON	D	CALLABO	C	CANIWE	B	CARMEL	C
BURBANK	A	CABBA	D	CALLAHAN	D	CANLON	D	CARMI	B
BURCH	B	CABBART	C	CALLAN	C	CANNELL	B	CARMICHAEL	C
BURCHAM	B	CASBART, STONY	D	CALLEGUAS	D	CANNING	B	CARMODY	C
BURCHARD	B	CASBART, WARM	D	CALLINGS	C	CANNON	B	CARNASAW	C
		CABEZON	D	CALLISBURG	D	CANNONVILLE	D	CARNEGIE	C
		CABIN	B	CALLOWAY	C	CANOE	B	CARNERO	C
		CABINET	C	CALMAR	F	CANOVA	B/D	CARNEY	D
		CABLE	B/D	CALNEVA	C	CANTALA	B	CAROLINE	C

NOTES: TWO HYDROLOGIC SOIL GROUPS SUCH AS B/C INDICATE THE DRAINED/UNDRAINED SITUATION. MODIFIERS SHOWN, E.G., BEDROCK SUBSTRATUM, REFER TO A SPECIFIC SOIL SERIES FOUND IN SOIL MAP LEGEND.

Table 2-1.—Hydrologic soil groups for U.S. soils (continued)

CAROLLO	D	CATALPA	C	CENCOVE	B	CHARLOTTE	B/D	CHEWACLA	C
CARON	A/D	CATAMOUNT	D	CENIZA	B	CHARLTON	B	CHEWELAH	C
CARON, MARSHY	D	CATAND	A	CENTENARY	A	CHARNOCK	C	CHEYENNE	B
CARPENTER	B	CATARACT	B	CENTER	C	CHARNOCK,	B	CHIA	D
CARR	B	CATAPINA	D	CENTER CREEK	C	MODERATELY WET		CHIARA	D
CARRACAS	D	CATASKA	C	CENTERBURG	C	CHARO	C	CHICANE	C
CARRANZA	B	CATAULA	B	CENTERFIELD	P	CHASE	C	CHICHANTNA	D
CARRCREEK	B	CATCHELL	C	CENTERVILLE	D	CHASEBURG	B	CHICKAHOMINY	D
CARRIZALES	A	CATELLI	B	CENTISSIMA	B	CHASEVILLE	A	CHICKAMAN	B
CARRIZO	A	CATERL	E	CENTRAL POINT	B	CHASKA	B/D	CHICKASAW	C
CARRDOLLS	D	CATH	C	CENTRALIA	C	CHASTAIN	D	CHICKASHA	B
CARRYBACK	C	CATHARPIN	C	CENTRALPEAK	C	CHATBURN	B	CHICKCREEK	D
CARSITAS	A	CATHAY	C	CERBAT	D	CHATCOLET	B	CHICOLETE	C
CARSITAS, WET	B	CATHCART	B	CERESCO	B	CHATEAU	D	CHICOTE	D
CARSON	D	CATHEDRAL	D	CERINI	D	CHATFIELD	E	CHIEFLAND	B
CARSTAIRS	A	CATHEEN	B	CERINI, ALKALI	B	CHATHAM	C	CHIGLEY	C
CARSTUMP	C	CATHERINE	C	CERLIN	C	CHATSWORTH	C	CHIKAMIN	C
CART	E	CATHLAMET	B	CERRILLOS	E	CHATT	D	CHILAO	C
CARTAGENA	D	CATHRO	A/D	CERRC	C	CHATUGE	D	CHILCOTT	C
CARTECAY	C	CATILLA	E	CESTNIK	C	CHAUMONT	D	CHILCOTT, GRAVELLY	D
CARTER	D	CATLA	D	CETRACK	B	CHAUNCEY	C	CHILCOTT, COOL	D
CARTERET	D	CATLETT	C/D	CHACHA	C	CHAUTAUQUA	C	CHILDS	B
CARTHAGE	B	CATLIN	B	CHACON	E	CHAVIES	B	CHILGREN	C
CARUSO	C	CATHAN	D	CHAD	C	CHAWANAKEE	C	CHILHOWIE	C
CAROTHERSVILLE	B	CATNIP	D	CHAFFEE	D	CHAYSON	C	CHILI	B
CARVER	A	CATOCTIN	C	CHAGFIN	E	CHAZOS	C	CHILICGTAL	B
CARWILE	D	CATDOSA	B	CHAIN	C	CHEADLE	D	CHILKOOT	D
CARYTOWN	D	CATPOINT	A	CHAIRES	E/D	CHEAMA	D	CHILL	D
CARYVILLE	B	CATTREEK	R	CHAIRES,	D	CHEBOYGAN	B	CHILLUM	B
CASA GRANDE	C	CATTREEK,	A	DEPRESSIONAL		CHECHI	D	CHILMARK	C
CASABONNE	B	GRAVELLY		CHAIX	B	CHECKER	C	CHILOQUIN	D
CASAGA	C	SUBSTRATUM		CHALCO	D	CHECKETT	D	CHILPEP	D
CASCADE	C	CATTO	D	CHALFONT	C	CHEDATNA	B	CHILSON	D
CASCAJO	A	CAUDLE	C	CHALKCREEK	P	CHEDEHAP	B	CHILTON	B
CASCAJO, COBBLY	B	CAUSEWA	C	CHALMERS	B/D	CHEDESKI	B	CHIMAYO	D
CASCILLA	B	CAUSEY	B	CHAMA, MODERATELY	B	CHEDESEY	C	CHIME	C
CASCO	B	CAVAL	B	SLOW PERM		CHEEBE	D	CHIMENEA	D
CASE	B	CAVANAUGH	C	CHAMA, MODERATE	E	CHEEKTOWAGA	D	CHIMNEY	A
CASEY	D	CAVE	D	PERMEABILITY		CHEESEMAN	B	CHINAPPOINT	D
CASHEL	C	CAVEGULCH	B	CHAMA, COOL	C	CHEHALEM	C	CHINCAP	B
CASHIERS	B	CAVEHILL	C	CHAMATE	B	CHEHALIS	B	CHINCHALLO	D
CASHION	D	CAVELT	D	CHAMBEAM	D	CHEHULPUM	D	CHINCOTEAGUE	D
CASHMEPE	B	CAVENDISH	B	CHAMBERINO	B	CHELAN	C	CHINEN	D
CASHMONT	B	CAVO	D	CHAMBERLAIN	B	CHELSEA	A	CHINIAK	A
CASITC	D	CAVODE	C	CHAMISE	D	CHEMAWA	B	CHINO	C
CASLO	D	CAVOUR	D	CHAMGKANE	C	CHEN	D	CHING, DRAINED	B
CASLO, MODERATELY	C	CAYA	D	CHAMPAGNE	B	CHENA	A	CHINDOK	B
NET		CAYAGUA	C	CHAMPION	B	CHENANGO	A	CHINYAR	C
CASMOS	D	CAYTON	C	CHANAC	B	CHENAULT	B	CHIPENDALE	D
CASPAR	B	CAYUGA	C	CHANCE	D	CHENEGA	A	CHIPENHILL	D
CASPIANA	B	CAYUSE	B	CHANCELLOR	C	CHENEY	B	CHIPETA	D
CASS	B	CAZADERO	C	CHANDLER	B	CHENNEBY	C	CHIPLEY	C
CASSIA	C	CAZADOR	B	CHANEY	C	CHENDWETH	B	CHIPMAN,	D
CASSIA, MODERATELY	B	CAZOVNIA	E	CHANNAHON	D	CHEGAH	B	SALINE-ALKALI	
WELL DRAINED		CEBOLIA	C	CHANNING	E	CHEQUEST	C	CHIPMAN,	C
CASSIRO	B	CEPOLLETA	C	CHANTA	D	CHERIONI	D	MODERATELY WET	
CASSIRO, STONY	C	CEBONE	C	CHANTIER	B	CHERCKEE	D	CHIPMAN, DRAINED	D
CASSOLARY	C	CEBOYA	C	CHAPANOKE	C	CHEERY	C	CHIPOLA	A
CASTAIC	C	CECIL	B	CHAPERTON	C	CHEERY, CALCAREOUS	B	CHIPPENY	D
CASTALIA	C	CEDA	B	CHAPIN	C	CHEERY, COOL	B	CHIPPEWA	D
CASTANA	B	CEDAR BUTTE	D	CHAPMAN	B	CHEERY SPRING	C	CHIRENO	D
CASTELL	C	CEDAR MOUNTAIN	D	CHAPOT	B	CHEERYHILL	B	CHIRICAHUA	D
CASTELLEIA	B	CEDARAN	D	CHAPPELL	A	CHERRUM	B	CHIPPCHATTER	B
CASTELLO	B	CEDARBLUFF	C	CHAPPUIS	C	CHESAW	A	CHISCA	D
CASTEPHEN	C	CEDARCREEK	C	CHAQUA	B	CESHIRE	B	CHISMORE	D
CASTILE	B	CEDARFALLS	A	CHAPCC	C	CHESHNINA	C	CHISOLM	A
CASTINO	C	CEDARGAP	B	CHAPCOL	B	CHESNIMNUS	B	CHISPA	B
CASTINO, NONSTONY	D	CEDAPHILL	B	CHARD	B	CHESTATEE	B	CHISTOCHINA	B
CASTLE	D	CEDARPASS	B	CHARDOTON	E	CHESTER	B	CHITINA	C
CASTLEVALE	D	CEDONIA	B	CHARETTE	C	CHESTERTON	D	CHITUM	D
CASTNER	D	CEEK	B	CHARGD	B	CHESTNUT	D	CHITWOOD	D
CASTO	C	CELACY	C	CHARITON	C	CHESTONIA	D	CHIVATO	C
CASTON	B	CELESTE	D	CHARLEBOIS	B	CHESTONIA	D	CHIVATO	C
CASTRC	D	CELETON	D	CHARLEBOIS, WET	C	CHESTONIA	D	CHIVATO	C
CASTROVILLE	B	CELINA	C	CHARLES	C	CHETEK	B	CHO	C
CASUSE	D	CELIO	C	CHARLESTON	C	CHETWYND	B	CHDATES	C
CASVARE	D	CELLAR	D	CHARLEVOIX	B	CHEVAL	C	CHOBEE	B/D
CASWELL	B	CELSOSPRINGS	C	CHARLOS	E	CHEVELON	C	CHOBEE,	D
CATALINA	B	CEMBER	C	CHARLOS, WET	D	CHEVIOT	B	DEPRESSIONAL	

NOTES: TWO HYDROLOGIC SOIL GROUPS SUCH AS B/C INDICATE THE DRAINED/UNDRAINED SITUATION. MODIFIERS SHOWN, E.G., BEDROCK SUBSTRATUM, REFER TO A SPECIFIC SOIL SERIES PHASE FOUND IN SOIL MAP LEGEND.

Table 2-1.—Hydrologic soil groups for U.S. soils (continued)

CHOBEE, LIMESTONE	D	CLALLAM	C	CLIPPER	D	COKEL	B	COLVIN, OVERBLOWN,	C
SUBSTRATUM		CLAM GULCH	D	CLIPPER, DRAINED	C	COKER	D	SALINE	
CHOCOLOCCO	B	CLAMO	C/D	CLODINE	D	COKESBURY	D	COLWOOD	B/D
CHOCK	D	CLAMP	D	CLONTARF	E	COKEVILLE	B	COLY	B
CHOCORUA	D	CLANA	A	CLOQUALLUM	C	COLAND	B/D	COLYER	D
CHOICE	D	CLANALPINE	C	CLOQUATO	B	COLBAR	C	COMAD	A
CHOOP	D	CLANTON	C	CLOQUET	B	COLBERT	D	COMAR	C
CHOPTIE	D	CLAPPER	B	CLOSKEY	C	COLBURN	C	COMBE	B
CHORALMONT	B	CLAREMORE	D	CLOTHO	C/D	COLBY	B	COMBS	B
CHOSKA	B	CLARENCE	D	CLOUD PEAK	C	COLDCREEK	B	COMER	B
CHOTEAU	C	CLARENDON	C	CLOUD RIM	B	COLDENT	C	COMETA	D
CHOWAN	D	CLARESON	C	CLOUDCROFT	D	COLE	C	COMFORT	D
CHRIS	C	CLAREVILLE	C	CLOUDLAND	C	COLEMAN	C	COMFREY	B/D
CHRISMAN	D	CLARINDA	D	CLOUGH	D	COLEMANTOWN	C/D	COMFREY, PONDED	D
CHRISTIAN	C	CLARION	B	CLOVELLY	C	COLESTINE	C	COMITAS	A
CHRISTIANA	C	CLARITA	D	CLOVER SPRINGS	B	COLFAX	C	COMLY	C
CHRISTIANBURG	C	CLARK	B	CLOVERDALE	D	COLHILL	B	COMMERCE	C
CHRISTINE	D	CLARK FORK	A	CLOVERLAND	C	COLIBRO	B	COMMSKI	B
CHRISTOFF	C	CLARKELEN	B	CLOVIS	B	COLINAS	B	COMO	A
CHRISTY	C	CLARKRANGE	B	CLOWERS	B	COLITA	D	COMORABI	D
CHRODER	B	CLARKSBURG	C	CLOWERS, WET	C	COLLAMER	C	COMODORE	D
CHROME	C	CLARKSDALE	C	CLOWFIN	C	COLLARD	E	COMORO	B
CHRYSLER	C	CLARKSVILLE	B	CLUFF	C	COLLAYOMI	B	COMPASS	B
CHUALAR	B	CLARND	B	CLUNIE	C	COLLBRAN	D	COMPTCHE	B
CHUBBS	C	CLATO	E	CLURDE	E	COLLBRAN, COBBLY	C	COMSTOCK	C
CHUCKANUT	B	CLATSOP	D	CLURO	B	COLLEGEDALE	C	COMUS	B
CHUCKAWALLA	B	CLAUNCH	B	CLYDE	B/D	COLLEGIATE	D	CONA	C
CHUCKLES	B	CLAYERACK	C	CLYMER	E	COLLETT		CONABY	B/D
CHUCKRIDGE	D	CLAYICON	C	COACHELLA	B	COLLETT, DRAINED	C	CONALB	B
CHUGCREEK	C	CLAWSON	C	COACHELLA, WET	C	COLLIER	A	CONANT	C
CHUGTER	B	CLAYBURN	B	COAHUILA	B	COLLINGTON	B	CONASAUGA	C
CHUIT	B	CLAYSPRINGS	D	COAL CREEK	D	COLLINS	C	CONATA	D
CHULITNA	B	CLAYTON	B	COALBANK	B	COLLINSTON	B	CONBDY	D
CHUMALL	B	CLE ELUM	C	COALDALE	D	COLLINSVILLE	D	CONCEPCION	D
CHUMMY	D	CLEAR LAKE	D	COALDRAW	D	COLLINWOOD	C	CONCHAS	C
CHUMSTICK	D	CLEAR LAKE,	C	COALMONT	C	COLMA	B	CONCHO	C
CHUPADERA	C	STRATIFIED		COAMO	C	COLMOR	B	CONCONULLY	B
CHURCH	D	SUBSTRATUM		COARSEGOLD	C	COLNEVEE	B	CONCORD	D
CHURCHILL	D	CLEAR LAKE,	C	COATSBURG	D	COLO	B/D	CONDA	D
CHURCHVILLE	D	MODERATELY WET		COBAT	B	COLO, DRAINED	B	CONDIE	B
CHURN	B	CLEARBROOK	D	COBRATUS	C	COLO, NONFLOODED	B	CONDIT	D
CHUSKA	D	CLEARFIELD	C	COBB	B	COLOCKUM	B	CONDCN	C
CHUTE	A	CLEARFORK	D	COBBSFORK	D	COLOMA	A	CONE	A
CHIALES	D	CLEARWATER	D	COBEN	D	COLOMBO	B	CONECUM	D
CIBEQUE	B	CLEAVAGE	D	COBEY	E	COLONA	C	CONEJO	B
CIBO	D	CLEAVER	D	COBLE	D	COLONIE	A	CONEJO, WET	C
CIBOLA	B	CLEAVMOR	D	COBDC	D	COLONVILLE	C	CONEJO, GRAVELLY	C
CID	C	CLEBIT	D	COBRE	C	COLORADO	D	SUBSTRATUM	
CIDRAL	C	CLEGG	B	COBURG	C	COLOROCK	B	CONESTOGA	B
CIENEBA	C	CLEGHORN	C	COCHETOPA	C	COLOROW	B	CONESUS	B
CIENO	D	CLEMAN	B	COCHINA	D	COLOSO	D	CONETOE	A
CIERVO, ALKALI	D	CLEMENTINE	C	COCHITI	C	COLOSSE	A	CONGAREE	B
CIERVO, ALKALI,	D	CLEMENTINE,	B	COCHRAN	C	COLP	C	CONGER	C
WET		DRAINED		COCOA	A	COLRAIN	B	CONGER, COBBLY	D
CIERVO, RECLAIMED	C	CLEMS	B	COCODRIE	C	COLSavage	C	SUBSTRATUM	
CIFIC	C	CLEMVILLE	B	COCOLALLA	D	COLTER	B	CONGLE	B
CIMARRON	C	CLENDENEN	D	COCOLALLA, DRAINED	C	COLTHORP	D	CONI	D
CINCINNATI	C	CLEONE	B	CODLEY	B	COLTON	A	CONIC	C
CINCO	A	CLEORA	E	CODRUS	C	COLTROOP	D	CONLEN	B
CINDERHURST	D	CLERF	C	CODQUIN	D	COLTS NECK	B	CONLEY	C
CINEBAR	B	CLERGERN	B	CODYLAKE	B	COLUMBIA, MUCK	B	CONNEAUT	C
CINNADALE	D	CLERMONT	D	COE	A	SUBSTRATUM		CONNEL	B
CINNAMON	B	CLEVELAND	C	COERGCK	D	COLUMBIA, DRAINED,	B	CONNERTON	B
CINTRONA	D	CLEVERLY	B	COESSE	C/D	CLAY SUBSTRATUM		CONOSTA	C
CIPRIANO	D	CLICK	A	COFF	C	COLUMBIA,	C	CONOTTON	C
CIRAC	B	CLIFFDELL	B	COFFREEN	B	MODERATELY WET		CONOVER	B
CIRCLEBACK	A	CLIFFDOWN	B	COGGON	B	COLUMBIA, DRAINED	B	CONOWINGO	D
CIRCLEBAR	C	CLIFFHOUSE	C	COGNA	B	COLUMBIA, FLOODED	C	CONPEAK	D
CIRCLEVILLE	C	CLIFFORD	C	COGSWELL	C	COLUMBIA, CLAY	C	CONRAD	A/D
CISCO	B	CLIFSAND	B	COHAGEN	D	SUBSTRATUM		CONROE	B
CISNE	D	CLIFTERSON	B	COHASSET	B	COLUMBIA, SLOPING	B	CONSEJO	C
CISPUS	B	CLIFTON	B	COHOCTAH	B/D	COLUMBINE	A	CONSER	D
CITADEL	C	CLIFTY	B	COHOCTAH, SANDY	D	COLUMBUS	C	CONSTABLE	A
CITICO	B	CLIMARA	D	SUBSTRATUM		COLUSA	C	CONSTANCIA	D
CITRONELLE	D	CLIMAX	D	COHOE	B	COLVARD	B	CONSUMO	B
CLACKAMAS	D	CLIME	C	COILS	C	COLVILLE	D	CONTACT	A
CLAIBORNE	B	CLINETOP	D	COIT	D	COLVILLE, DRAINED	C	CONTEE	D
CLAIRE	A	CLINT	C	COKEDALE	D	COLVIN	C/D	CONTIDE	B
CLAIREMONT	B	CLINTON	B	COKEDALE, DRAINED	C	COLVIN, SALINE	C	CONTINE	C

NOTES: TWO HYDROLOGIC SOIL GROUPS SUCH AS B/C INDICATE THE DRAINED/UNDRAINED SITUATION. MODIFIERS SHOWN, E.G., BEDROCK SUBSTRATUM, REFER TO A SPECIFIC SOIL SERIES PHASE FOUND IN SOIL MAP LEGEND.

Table 2-1.—Hydrologic soil groups for U.S. soils (continued)

CONTINENTAL	C	CORRALITOS, SILTY	B	COVERS	B	CREVA	D	CUBCREEK	B
CONTO	B	SUBSTRATUM		COWESTGLEN	B	CREVASSE	A	CUBERANT	B
CONTRA COSTA	C	CORRECO	C	COWETA	C	CREVISCREEK	C	CUCAMUNGO	D
CONTRARY	B	CORRIGAN	D	COWGIL	B	CREWS	D	CUCHILLAS	C
CONVENT	C	CORSON	C	COWHORN	B	CRIDER	B	CUCHO	C
COODERS	B	CORTA	D	COWICHE	B	CRIMS	D	CUDAHY	D
COOK	D	CORTADA	B	COWLAKE	B	CRINKER	C	CUDAHY, DRAINED	C
COOKPORT	C	CORTEZ	D	COWLITZ	A	CRIPPIN	E	CUDDEBACK	C
COOLBRITH	C	CORTINA	B	COWOOD	D	CRISFIELD	B	CUERDA	C
COOLIDGE	B	CORTINA, THIN	A	COWSLY	C	CRISTO	C	CUERO	B
COOLVILLE	C	SURFACE		COWTON	C	CRISTO, LOAMY		CUERYO	C
COOMBS	B	CORUNNA	B/D	COX	D	CRISTOBAL	B	CUESTA	C
COONSKIN	C	CORWIN	B	COXLAKE	B	CRITCHELL	B	CUEVA	D
COOPER	B	CORWITH	B	COXVILLE	D	CRITTENDEN	D	CUEVITAS	D
COOSAM	B	CORY	C	COXWELL	C	CROATAN	B	CUEVOLAND	B
COOTER	C	CORYDON	D	COY	D	CROCKER	A	CULBERTSON	B
COPAKE	B	COSAD	C	COYANOSA	D	CROCKETT	D	CULDESAC	B
COPALIS	C	COSER	D	COYATA	C	CROESUS	C	CULLEN	C
COPANO	D	COSEY	B	COYET	A	CROFTON	B	CULLEOKA	B
COPASTON	D	COSH	C	COYLE	B	CROGHAN	B	CULP	C
COPELAND	B/D	COSHOCOTON	C	COYNE	B	CROKE	B	CULPEPER	C
COPELAND,	D	COSKI	B	COYOTECREEK	E	CROMWELL	A	CULTUS	B
DEPRESSIONAL		COSTILLA	A	COZAD	F	CRONKHITE	C	CULVING	C
COPEMAN	B	COSUMNES	C	COZBERG	B	CRONKS	C	CUMBERLAND	B
COPENHAGEN	D	COTACO	C	COZTUR	D	CROOKED	D	CUMBRES	C
COPITA	B	COTAIL	B	CRAPTREE	C	CROOKED CREEK	D	CUMLEY	C
COPPER RIVER	D	COTANT	D	CRACKERCREEK	B	CROOKED CREEK,	C	CUMMINGS	D
COPPER RIVER,	B	COTATI	C	CRACKLER	E	DRAINED		CUMHISKEY	B
LACUSTRINE		COTEAU	C	CRADDOCK	B	CROOKED CREEK,	C	CUNARD	B
SUBSTRATUM		COTHA	C	CRADLEBAUGH	D	FLOODED		CUNDICK	D
COPPER RIVER, TILL	B	COTITO	B	CRADLEBAUGH,	C	CROOKSTON	B	CUNDIYO	B
SUBSTRATUM		COTO	B	SALINE-ALKALI		CROOM	C	CUNNINGHAM	C
COPPER RIVER,	B	COTOPAXI	A	CRADLEBAUGH,	C	CROPLEY	D	CUPCO	C
SILTY SUBSTRATUM		COTT	B	DRAINED		CROPPER	D	CUPOLA	B
COPPER RIVER,	B	COTTER	B	CRAFT	B	CROQUIB	D	CUPPER	B
GRAVELLY		COTTERAL	B	CRAFTON	C	CROSBY	C	CUPPLES	C
SUBSTRATUM		COTTLE	D	CRAFGEY	D	CROSIER	C	CUPPY	D
COPPERCREEK	B	COTTONEVA	C	CRAGO	E	CROSS	D	CURABITH	A
COPPEREID	D	COTTONTHOMAS	B	CRAGOLA	D	CROSSPLAIN	C	CURANT	B
COPPERTON	B	COTTONWOOD	C	CRAGOSEN	D	CROSSTELL	D	CURDLI	C
COPPOCK	B	COTTRELL	C	CRAIG	E	CROSSVILLE	B	CURECANTI	B
COPSEY	D	COTULLA	D	CRAIGMILE	B/D	CROSSWELL	A	CURHOLLOW	D
COQUAT	D	COUCH	D	CRAIGSVILLE	B	CROT	D	CUROB	D
COQUILLE	D	COUGARBAY	D	CRAMER	D	CROTON	D	CURRAN	C
CORA	D	COUGHANOUR	C	CRAMONT	C	CROUCH	B	CURRIER	A
CORAL	C	COULEEDAM	D	CRANE	B	CROW	C	CURRITUCK	D
CORALLAKE	B	COULSTONE	B	CRANECREEK	C	CROW CREEK	B	CURTIN	D
CORBETT	B	COULTERG	B	CRANFILL	B	CROW HILL	C	CURTIS CREEK	D
CORBILT	B	COULTEVILLE	D	CRANNLER	B	CROWCAMP	D	CURTIS SIDING	A
CORBIN	B	COUNCELOR	B	CRANSTON	B	CROWFLATS	B	CURTISTOWN	B
CORCEGA	C	COUNCIL	B	CRARY	C	CROWFOOT	E	CUSHENBURY	B
CORDELL	D	COUNTRYMAN	C	CRASH	B	CROWHEART	C	CUSHING	B
CORDES	B	COUNTS	D	CRATEP LAKE	B	CROWLEY	D	CUSHMAN	C
CORDESTON	B	COUPEE	B	CRATERMO	C	CROWNEST	D	CUSHOOL	C
CORDOVA	C/D	COUPEVILLE	C	CRAVEN	C	CROWSHAW	B	CUSICK	D
CORDY	B	COURT	B	CRAWFOPD	D	CROWTHER	D	CUSTCO	B
CORIFF	B/D	COURTHOUSE	D	CRAWLEYVILLE	B	CROYDON	B	CUSTER	D
CORINTH	C	COURTLAND	B	CREAL	C	CROZIER	C	CUSTER, DRAINED	C
CORKSTONE	D	COURTNEY	D	CREASEY	C/D	CRUCES	D	CUTAWAY	B
CORLENA	A	COURTROCK	B	CREDO	B	CRUCKTON	B	CUTHAND	B
CORLETT	A	COURVILLE	B	CREED	C	CRUICKSHANK	C	CUTHBERT	C
CORLEY	B/D	COUSE	C	CREEDMODR	C	CRUISER	B	CUTHBERT, GRADED	D
CORMANT	A/D	COUSHATTA	B	CREEL	C	CRUMARINE	B	CUTOFF	C
CORNELIA	A	COUTIS	B	CREEMON	B	CRUME	B	CUTSHIN	B
CORNELIUS	C	COVE	D	CREFORK	C	CRUMP	D	CUTZ	D
CORNHILL	B	COVELAND	D	CREIGHTON	B	CRUMP, DRAINED	C	CUYAMA	B
CORNICK	D	COVELAND, DRAINED	C	CRELDON	C	CRUNKER	B	CUYON	A
CORNING	C	COVELLD	C	CREN	B	CRUNKVAR	A	CYAN	B
CORNISH	C	COVERT	A	CREDLE	D	CRUST	D	CYCLONE	B/D
CORNUTT	C	COVEYTOWN	C	CRESAL	B	CRUTCH	C	CYLINDER	B
CORNVILLE	B	COVILLE	B	CRESSBARD	C	CRUTCHER	C	CYMRIC	D
COROLLA	D	COVING	C	CRESCO	C	CRUZE	C	CYNTHIANA	D
CORONA	B	COVINGTON	D	CRESKIN	B	CRYLUMA	C	CYNTHIANA	D
CDRONACA	B	COWAN	B	CRESPIN	C	CRYSTAL LAKE	B	CYPHER	D
COROZAL	C	COWARTS	C	CREST	C	CRYSTAL SPRINGS	D	CYRIL	B
COROZO	A	COWCO	B	CRESTLINE	B	CRYSTALBUTTE	E	CZAR	B
CORPENING	D	COWDEN	D	CRESTMAN	D	CRYSTALCREEK	B	DABNEY	A
CORRAL	C	COWDREY	C	CRESTVALE	C	CUATE	C	DABOB	C
CORRALITOS	A	COWEEMAN	D	CRETE	C	CUBA	E	DACKER	C

NOTES: TWO HYDROLOGIC SOIL GROUPS SUCH AS B/C INDICATE THE DRAINED/UNDRAINED SITUATION. MODIFIERS SHOWN, E.G., BEDROCK SUBSTRATUM, REFER TO A SPECIFIC SOIL SERIES PHASE FOUND IN SOIL MAP LEGEND.

Table 2-1.—Hydrologic soil groups for U.S. soils (continued)

DACONO	B	DARLAND	B	DECKERVILLE,	C	DELLO, CLAY	B	DESCHELL	B
DACONO, COBBLY	C	DARLEY	C	DRAINED	C	SUBSTRATUM	B	DESCHUTES	C
SUBSTRATUM		DARLING	B	DECLD	B	DELLROSE	B	DESCOT	B
DACORE	B	DARMSTADT	D	DECOLNEY	B	DELLS	C	DESEED	C
DACOSTA	D	DARNELL	C	DECORDOVA	B	DELLWOOD	A	DESERET	C
DADE	A	DARNEN	B	DECGRAM	C	DELMA	C	DESHA	D
DADINA	D	DAROW	C	DECROSS	B	DELMITA	C	DESHLER	C
DAGAN	B	DARR	B	DECY	E	DELMONT	B	DESKAMP	C
DAGFLAT	C	DARRET	C	DEDAS	D	DELNORTE	C	DESMET	B
DAGLUM	D	DARROCH	B	DEDMOUNT	C	DELDORO	D	DESOLATION	B
DAGOR	B	DARROCH, BEDROCK	C	DEDRICK	D	DELOSS	B/D	DESPAIN	B
DAGUAD	C	SUBSTRATUM		DEE	C	DELP	A	DESTAZO	B
DAGUEY	C	DARROUZETT	C	DEECREE	B	DELPHI	B	DESTER	C
DAHAR	C	DARSIL	C	DEEFAN	C	DELPHILL	C	DETER	C
DAHLOQUIST	B	DARST	C	DEEMER	B	DELPIEDRA	D	DETOUR	B
DAICK	D	DART	A	DEEPCUT	D	DELPLAIN	D	DETRA	B
DAIGLE	C	DARTMOUTH	B	DEEPEK	C	DELPOINT	C	DETROIT	C
DAILEY	A	DARVEY	B	DEEPWATER	B	DELRAY	B/D	DEUNAH	D
DAILEY, LOAMY	B	DARWIN	D	DEER CREEK	D	DELRAY,	D	DEV	A
SUBSTRATUM		DASHER	D	DEER PARK	A	DEPRESSIONAL	A	DEVADA	D
DA,NT	B	DASSEL	B/D	DEERFIELD	B	DELRIDGE	B	DEVEN	D
DAKENT	B	DAST	B	DEERFORD	B	DELSON	D	DEVILS	D
DAKOTA	B	DATELAND	B	DEEPHORN	B	DELTAJO	C	DEVILSCREEK	C
DALBO	B	DATEMAN	C	DFERLODGE	C	DELTON	A	DEVILSGAIT	D
DALBY	D	DATIL	E	DEERTON	E	DELWIN	A	DEVILSGAIT,	B
DALCAN	C	DATINO	D	DEERTRAIL	C	DELYNDIA	A	DRAINED,	
DALCO	D	DATINO, STONY	B	DEEPWOOD	B/D	DEMAP	D	OCCASIONALLY	
DALE	B	DATNYLER	C	DEETZ	A	DEMAST	B	DEVILSGAIT,	B
DALECREEK	C	DAULTON	C	DEFENPAUSH	D	DEMENT	B	DRAINED	
DALEVILLE	D	DAVEY	B	DEFIANCE	B	DEMING	B	DEVINE	C
DALHART	B	DAVEY, WARM	A	DEFLEP	B	DEMKY	D	DEVISADERD	D
DALIAN	B	DAVIDELL	B	DEFGRD	A/D	DEMNER	B	DEVOE	C
DALIG	B	DAVIDSON	B	DEGARMO	D	DEMOGUL	B	DEVOIGNES	D
DALKENA	C	DAVIS	B	DEGNER	B	DEMONA	C	DEVOIGNES, DRAINED	C
DALLAM	B	DAVISON	R	DEGOLA	B	DEMONTREVILLE	B	DEVOIGNES,	C
DALLARDSVILLE	C	DAVONE	B	DEGRAND	B	DEMOPOLIS	C	PROTECTED	
DALLESPORT	B	DAWES	C	DEGREY	D	DEMOPOLIS, COBBLY	D	DEVOL	B
DALTON	C	DAWWOOD	B/D	DEHANA	E	DEMOS	D	DEVORE	B
DALUPE	B	DAWSON	A/D	DEHART	E	DEMOX	B	DEVUY	C
DALZELL	C	DAWTONIA	E	DEHAVEN	B	DEMPSEY	B	DEVRIES	C
DAMASCUS	B/D	DAXTY	C	DEHILL	B	DEMPSTER	B	DEWAP	D
DAMERON	B	DAY	D	DEHLINGER	B	DENAUD	B/D	DEWEY	B
DAMEWOOD	C	DAYBELL	A	DEJARNET	B	DENAY	B	DEWEYVILLE	D
DAMLUIS	C	DAYSCHOOL	B	DEKALP	C	DENBAR	C	DEWMINE	D
DAMON	D	DAYTON	D	DEKODD	B	DENBY	C	DEWVILLE	B
DANA	B	DAYTONA	B	DEKOVEN	D	DENCO	D	DEXTER	B
DANAHER	C	DAYVILLE	C	DEL REY	C	DENHAWKEN	D	DIA	C
DANAVORE	B	DAZE	D	DELA	E	DENISON	C	DIA, WET, SALINE	D
DANCY	B/D	DE MASTERS	B	DELAMETER	A	DENMAN	C	DIA, WET	D
DANDAN	C	DEACON	B	DELANCO	C	DENMARK	D	DIABLO	D
DANDREA	C	DEADFALL	C	DELAND	A	DENNIS	C	DIAGULCH	B
DANDRIDGE	D	DEADHORSE	C	DELANEY	A	DENNOT	B	DIAMANTE	B
DANFORTH	B	DEADMAN	B	DELANO	E	DENNY	D	DIAMOND	D
DANGBERG	D	DEADWOOD	D	DELASSUS	C	DENROCK	D	DIAMOND SPRINGS	C
DANIA	B/D	DEADYON	B	DELCOVE	D	DENTON	D	DIAMONDVILLE	C
DANJER	D	DEAMA	D	DELDOCTA	D	DENURE	B	DIANEV	C
DANKO	D	DEAN	B	DELECO	D	DENVER	C	DIANDOLA	D
DANLEY	C	DEANDALE	D	DELENA	D	DEPALY	D	DIASPAR	B
DANN	C	DEARBORN	P	DELECN	C	DEPCOR	B	DIATEE	B
DANNEMORA	D	DEARYTON	C	DELEPLAIN	D	DEPOE	D	DIATZ	C
DANSKIN	B	DEATMAN	C	DELETTE	C	DEPORT	C	DIBBLE	C
DANT	D	DEAYER	C	DELFINA	B	DEPPY	D	DIBOLL	D
DANVERS	C	DEBA8	C	DELFIT	B/D	DEPUTY	C	DICK	A
DANVILLE	C	DEBENGER	C	DELGADO	D	DERA	B	DICKERSON	D
DAPHNEDEALE	C	DEBEQUE	E	DELHI	A	DERALLO	B	DICKEY	B
DAPDIN	C	DERONE	D	DELICIAS	B	DERB	C	DICKINSON, MAP<25	B
DARBONNE	B	DEBORAH	D	DELKS	C/D	DERBY	A	DICKINSON, TILL	A
DARBY	C	DEBS	E	DELL	C	DERECHO	B	SUBSTRATUM	
DARCO	A	DEBUTE	C	DELLEKER	B	DERINDA	C	DICKINSON, MAAT>50	B
DARDANELLE	B	DECAN	C	DELLO, OVERWASH	C	DERLY	D	DICKINSON, MAAT<50	B
DARDEN	A	DECANTEL	D	DELLO, SALINE	C	DERDUX	C	DICKMAN	A
DARDODD	B	DECATHON	C	DELLO, GRAVELLY	D	DERR	C	DICKSON	C
DARE	D	DECATUR	B	SUBSTRATUM, WET		DERRICK	B	DIDDY	D
DARFUR	B/D	DECCA	B	DELLO,	A	DES MOINES, DRY	B	DIEHLSTADT	C
DARGOL	D	DECCA, NONGRAVELLY	C	SALINE-ALKALI		DES MOINES, COBBLY	C	DIERSSEN	D
DARIEN	C	DECHEL	D	DELLO, MODERATELY	C	DESAN	A	DIETRICH	C
DARKBULL	B	DECKER	C	WET		DESART	C	DIGBY	B
DARKCANYON	C	DECKERVILLE	D	DELLO, DRAINED	A	DESATCYA	C	DIGGER	C
DARL	C					DESCALABRADO	D	DIGHTON	B

NOTES: TWO HYDROLOGIC SOIL GROUPS SUCH AS B/C INDICATE THE DRAINED/UNDRAINED SITUATION. MODIFIERS SHOWN, E.G., BEDROCK SUBSTRATUM, REFER TO A SPECIFIC SOIL SERIES PHASE FOUND IN SOIL MAP LEGEND.

Table 2-1.—Hydrologic soil groups for U.S. soils (continued)

DIGIORGIO	B	DOLAND	B	DOUGAN	C	DUCHESNE	B	DURFEE	C
DILANSON	D	DOLBEE	C	DOUGCITY	B	DUCKHILL	D	DURHAM	B
DILL	B	DOLBEE, SANDY	B	DOUGCLIFF	D	DUCKREE	B	DURKEE	C
DILLARD	C	SUBSTRATUM		DOUGH	D	DUCKSTON	A/D	DURDC	B
DILLEY	B	DOLEKEI	B	DOUGHERTY	A	DUCO	D	DURRSTEIN	D
DILLWYN	A	DOLEN	B	DOUGHTY	B	DUDA	A	DURST	C
DILMAN	C	DOLES	C	DOUGLAS	R	UDGEN	D	DUSLER	C
DILTON	D	DOLLAR	C	DOUGVILLE	E	DUDLEY	D	DUSTON	A
DILTS	D	DOLLARD	C	DOUHIDE	D	DUEL	A	DUTCHESS	B
DIMAL	C	DOLLARHIDE	D	DOURO	B	DUELM	A	DUTEK	A
DIMEBOX	D	DOLLYCLARK	C	DOVER	E	DUETTE	A	DUTTON	C
DIMICK	D	DOLMAN	C	DOVRAY	C/D	DUFF	B	DUVAL	B
DIMO	B	DOLPH	C	DOV	B	DUFFAU	B	DUXBURY	A
DIMYAW	C	DOLUS	C	DCWAGIAC	B	DUFFER	C	DUZEL	C
DINA	C	DOMES	B	DOWDE	B	DUFFERN	A	DWIGHT	D
DINCO	B	DOMELL	B	DOWELLTON	D	DUFFIELD	B	DWRSHAK	B
DINES	B	DOMENGINE	C	DOWNATA	D	DUFFSON	B	DWYER	A
DINEYO	B	DOMERIE	B	DOWNER	E	DUFFYMONY	C	DYE	D
DINGLE	C	DOMEZ	B	DOWNEY	B	DUFORT	B	DYKE	B
DINGLISHNA	D	DOMINGUEZ	C	DOWNEVILLE	D	DUFUR	B	DYLAN	D
DINGMAN	C	DOMINIC	B	DOWNS	E	DUGGINS	C	DYRENG	D
DINKELMAN	B	DOMINO	C	DOYCE	B	DUGOUT	D	EACHUS	B
DINKELS	B	DOMINSON	A	DOYCE, LOAMY	C	DUGWAY	C	EACHUSTON	D
DINNEN	B	DOMO	B	SUBSTRATUM		DUKES	A	EAD	C
DINSDALE	B	DONA ANA	B	DOYCE, MODERATELY	C	DULAC	C	EAGAR	C
DINUBA	C	DONAHUE	C	WET		DULCE	D	EAGLE CONE	B
DINWOODY	B	DONALD	C	DOYCE, SANDY	C	DULEYLAKE	C	EAGLEPASS	D
DINZER	B	DONALDSON	B	SUBSTRATUM		DULLES	D	EAGLEROCK	E
DIOBSUD	C	DONAVAN	B	DOYLESTOWN	D	DULUTH	B	EAGLEVILLE	D
DIOXICE	B	DONERAIL	C	DOYNE	D	DUMAS	B	EAGLEWING	B
DIPMAN	D	DONEY	C	DRA	C	DUMFRIES	B	EAKIN	B
DIPSEA	B	DONICA	A	DRAGE	B	DUMMERSTON	B	EALY	B
DIQUE	B	DONICA, LOAMY	B	DRAGOON	C	CUMONT	B	EAPA	B
DIREGO	D	SURFACE		DRAGSTON	C	DUN GLEN	B	EARCREE	B
DISABEL	C	DONIPHAN	B	DRAKE	B	DUNBAR	D	EARLE	D
DISAUEL	B	DONKEHILL	D	DRAKNAB	A	DUNBARTON	D	EARLMONT	D
DISCO	B	DONLONTON	C	DRALL	E	DUNBRIDGE	B	EARLMONT, DRAINED	C
DISHNER	D	DONNA	D	DRANYON	B	DUNC	C	EARP	B
DISHPAN	C	DONNAN	C	DRAPER	C	DUNCAN	D	EARMAN	D
DISTELL	C	DONNARDO	B	DRAK	B	DUNCANNON	B	EASBY	D
DISTERHEFF	C	DONNEL	B	DRAK, WET	C	DUNCKLEY	B	EASLEY	C
DISTON	C	DONNELLY	A	DREDGE	B	DUNCOM	D	EASPUR	B
DISWOOD	D	DONNER	C	DRESDEN	B	DUNDAS	B/D	EAST FORK	C
DITCHCAMP	C	DONNING	D	DRESSLER	C	DUNDAY	A	EAST LAKE	A
DITHOD	C	DONNYBROOK	D	DREWING	D	DUNDEE	C	EASTABLE	B
DITNEY	C	DOODLELINK	B	DREWS	B	DUNELLEN	B	EASTCAN	B
DIVERS	B	DOOLEY	C	DREXEL	B	DUNFORD	C	EASTCHOP	A
DIVIDE	B	DOOLIN	D	DRIFTWOOD	C/D	DUNGENESS	B	EASTGATE	B
DIVOT	C	DOONE	B	DRIGGS	B	DUNKIRK	B	EASTLAND	B
DIX	A	DOOR	B	DRISCOLL	C	DUNLAP	C	EASTON	D
DIXALETA	D	DOOWAK	A	DRIT	B	DUNLATOP	B	EASTPORT	A
DIXBORD	B	DORA	B/D	DRIVER	C	DUNMORE	B	EASTWELL	D
DIXIE	C	DRAN	C	DROEM	C	DUNN	A	EASTWOOD	D
DIXMONT	C	DORB	C	DROYAL	C	DUNNING	D	EATON	D
DIXON	B	DORCHESTER	B	DRUM	C	DUNNLAKE	D	EAGALLIE	B/D
DIXONVILLE	C	DORERTON	B	DRUMMER	B/D	DUNNVILLE	E	EAGALLIE,	D
DIYOU	C	DORMOND	C	DRUMMOND	C	DUNOIR	B	DEPRESSIONAL	
DOAK	B	DORNA	B	DRURY	B	DUNPHY	C	EAPLEINE	B
DOAKUM	B	DOROSHIN	D	DRY CREEK	C	DUNPHY, DRAINED	B	EBA	C
DOBBINS	C	DOROTHEA	C	DRY LAKE	C	DUNPHY, HARDPAN	B	EBAL	B
DOBBS	C	DOROVAN	D	DRYADINE	C	SUBSTRATUM		EBBERT	C/D
DOBEL	D	DORPER	D	DRYBURG	B	DUNSMUIR	B	EBBS	B
DOBENT	C	DORRANCE	A	DRYDEN	B	DUNSMUIR,	C	EBIC	C
DOBROW	D	DORS	B	DRYN	C	NONGRAVELLY	C	EBODA	B
DOBY	D	DORSET	B	DRYVALLEY	C	DUNTON	C	EBODA, STONY	C
DOCAS	B	DOSAMIGOS	D	DU PAGE	B	DUNUL	A	EBON	C
DOCDEE	D	DOSPALOS	D	DUANE	E	DUPEE	C	EBRO	D
DOCENA	C	DOSS	C	DUART	C	DUPLIN	C	ECCLES	B
DOCKERY	C	DOSSMAN	B	DUBAKELLA	B	DUPD	C	ECHARD	D
DOCPAR	B	DOTEN	D	DUBAKELLA,	D	DUPONT	C	ECHAW	A
DOCT	C	DOTHAN	B	GRAYELLY	B	DUPREE	D	ECEHMOOR	C
DODDES	B	DOTLAKE	D	DUBAKELLA, COBBLY	C	DURADOS	A	ECKEPT	D
DODGE	B	DOTSERD	B	DUBAY	B	DURALDE	C	ECKLEY	B
DODGEVILLE	B	DOTTA	B	DUBBS	B	DURAND	B	ECKMAN	B
DODSON	C	DOTY	B	DUBBS, FLOODED	C	DURANGO	B	ECKRANT	D
DOEL	C	DOUCETTE	B	DUBINA	B	DURANT	D	ECKVOLL	B
DOGER	A	DOUDLE	B	DUBLON	B	DURAZO	A	ECLIPSE	B
DOGIECREEK	B	DOUDS	B	DUBOIS	C	DURBIN	D	ECOLA	C
DOGUE	C	DOUGAL	D	DUBUQUE	B	DURELLE	B	ECON	B

NOTES: TWO HYDROLOGIC SOIL GROUPS SUCH AS B/C INDICATE THE DRAINED/UNDRAINED SITUATION. MODIFIERS SHOWN, E.G., BEDROCK SUBSTRATUM, REFER TO A SPECIFIC SOIL SERIES PHASE FOUND IN SOIL MAP LEGEND.

Table 2-1.—Hydrologic soil groups for U.S. soils (continued)

ECONFINA	A	ELBOWLAKE	B	ELRICK	B	ENDCHVILLE.	C	ESTER	D
ECTOR	D	ELBURN	B	ELRIN	F	DRAINED	F	ESTER, THAMED	C
EDALGO	C	ELBUTTE	D	ELROSE	D	ENLA	B	ESTERO	D
EDDINGS	B	ELCD	F	ELS	F	ENDN	A	ESTES	D
EDDS	B	ELD	B	ELSAH	B	ENDREE	E	ESTESLAKE	C
EDDY	C	ELDEAN	P	ELSIE	P	ENOS	E	ESTHERVILLE	B
EDEN	C	ELDER	B	ELSINBORO	B	ENOSBURG	B	ESTO	B
EDENBOWER	D	ELDER HOLLOW	D	ELSMERE	D	ENSENADA	A	ESTRELLA	B
EDENTON	C	ELDERON	B	ELSTON	B	ENSIEN	B	ETACH	C
EDFRO	D	ELDERON, STONY	A	ELTREE	A	ENSLEY	B	ETCHEN	C
EDGAR	B	ELDGIN	B	ELTSAC	B	ENSTROM	D	ETELKA	C
EDGE	D	ELDON	B	ELVE	B	ENTENTE	B	ETHAN	B
EDGEHILL	C	ELDORADO	P	ELVEDERE	P	ENTERO	C	ETHANIA	B
EDGELEY	C	ELDRIDGE	C	ELVERA	C	ENTERPRISE	B/D	ETHELMAN	B
EDGEMONT	B	ELECTRA	C	ELVIPA	C	ENTIAI	B/D	ETHETE	B
EDGEWATER	C	ELEROY	B	ELWELL	B	ENTMOOT	C	ETHETE, SALINE	C
EDGEWICK	C	ELEVA	P	ELWHA	P	ENVILLE	C	ETHRIDGE	C
EDGINGTON	C/D	ELFCREEK	C	ELWOOD	C	ENVOL	C	ETIL	A
EDINA	D	ELFRIDA	B	ELY	B	ENZIAN	P	ETOE	B
EDINBURG	C	ELGEE	A	ELYSIAN	A	EOJ	E	ETOILE	D
EDISTO	C	ELHINA	C	ELZINGA	C	EOLA	P	ETOWAH	B
EDLIN	B	ELIJAH	C	EMBAL	B	EPHRAIM	B	ETOWN	B
EDLOE	B	ELINDIO	C	EMBARGO	C	EPHRATA	C	ETSEL	D
EDMINSTER	D	ELIOAO	C	EMBDEN	B	EPIKOM	B	ETTA	B
EDMONDS	D	ELIZA	D	EMBERTON	D	EPLEY	C	ETTER	B
EDMORE	D	ELK	B	EMBLEM	B	EPOKE	B	ETTERSBURG	B
EDMUND	D	ELK HOLLOW	D	EMBRV	B	EPDT	E	ETTRICK	B/D
EDMUNDSTON	R	ELK MOUNTAIN	B	EMBUDD	B	EPOUFETTE	F	EUBANKS	B
EDNA	D	ELKA	C	EMDENT	C	EPPING	D	EUCLID	C
EDNEYTOWN	B	ELKADER	B	EMDENT, BEDROCK	B	EPSIE	C	EUDORA	B
EDNEYVILLE	B	ELKCREEK	C	SUBSTRATUM.	C	EPVIP	D	EUER	B
EDDM	C	ELKHART	B	DRAINED	B	EQUIS	D	EUFULA	A
EDROY	D	ELKHILLS	B	EMDENT, DRAINED	B	ERA	C	EUHARLEE	C
EDSON	C	ELKHORN	E	EMERALD	E	ERAKATAK	E	EULONIA	C
EDWARDS	B/D	ELKINS	D	EMERALDA	D	ERAM	D	EUNOLA	C
EEL	B	ELKINSVILLE	P	EMERSON	P	ERAMOSH	P	EUREKA	D
EELCOVE	D	ELKMOUND	D	EMIGRANT	D	ERBER	C	EUSBIO	C
EELPOINT	D	ELKNER	B	EMIGRATION	B	ERCAN	D	EUSTIS	A
EEP	C	ELKOL	D	EMILY	D	ERD	B	EUTAN	D
EFFIE	C	ELKRIDGE	C	EMLIN	B	ERICSON	C	EVADALE	D
EFFINGTON	D	ELKSEL	C	EMMA	C	ERIE	C	EVANGELINE	C
EGAM	C	ELKTON	A	EMMERT	C/D	ERIN	B	EVANS	B
EGAN	B	ELLABELLE	D	EMMET	D	ERNEM	E	EVANSHAM	D
EGAS	D	ELLEDEGE	C	EMMONS	C	ERNEST	B	EVANSTON	B
EGBERT	D	ELLEN	F	EMORY	F	ERNO	B	EVANSVILLE	B/D
EGBERT, STRATIFIED	C	ELLETT	D	EMCT	D	ERRAMGUSPE	E	EVANT	D
SUBSTRATUM		ELLIBER	B	EMPEDRADO	A	EPVIDE	B	EVARD	B
EGBERT, MODERATELY	C	ELLICOTT	A	EMPEYVILLE	A	ESCAJOSA	C	EVARO	B
WET		ELLINGTON	B	EMPIRE	B	ESCALANTE	B	EVART	D
EGBERT, DRAINED	C	ELLINOR	C	EMFORIA	C	ESCAMBIA	C	EVENDALE	C
EGBERT, SANDY	C	ELLIOTT	C	EMRICK	B	ESCANABA	B	EVERETT	A
SUBSTRATUM		ELLIOTTSVILLE	B	EMRO	C	ESCANO	C	EVERETT, HARD	B
EGBERT, SLOPING	C	ELLIS	D	ENBAP	D	ESCARLO	B	SUBSTRATUM	
EGELAND	B	ELLISFORDE	B	ENBAR, WET	B	ESCONDIDO	D	EVERGLADES	B/D
EGINBENCH	C	ELLISVILLE	B	ENCAMPMENT	B	ESHAMY	F	EVERLY	B
EGLIN	A	ELLDAM	D	ENCHANTED	D	ESLENDO	F	EVERMAN	C
EGYPT	D	ELLOREE	D	ENCHERRG	D	ESMEPALDA	B	EVERSON	D
EICKS	C	ELLSWORTH	C	ENCINA	C	ESMOND	B	EVERWHITE	C
EIGHTLAF	D	ELLUM	C	ENCAV	C	ESPARTO	P	EVEBORD	A
EIGHTMILE	D	ELLZEY	B/D	ENDERS	B/D	EPELIE	C	EVRIDGE	B
EILERTSEN	B	ELM LAKE	A/C	ENDERSBY	A/C	ESPIL	D	EWA	B
EITZEN	B	ELMDALE	B	ENCICOTT	B	ESPINAL	C	EWA, BEDROCK	C
EKAH	C	ELMENDORF	D	ENDLICH	D	ESPINOSA	B	SUBSTRATUM	
EKALAKA	B	ELMINA	C	FNDSAW	C	ESPINT	C	EWALL	A
EKIM	C	ELMIRA	A	ENERGY	A	ESPLIN	B	EXCELSIOR	B
EKRUB	D	ELMONT	P	ENET	B	ESPY	C	EXCHEQUER	D
FL DARA	B	ELMORE	B	ENFIELD	B	ESQUATZEL	B	EXCLOSE	B
EL PECO	C	ELMPIDGE	C	ENGELHARD	C	ESRO	B/D	EXEL	C
EL RANCHO	B	ELMVILLE	B	ENGETT	B	ESRO, MODERATELY	A	EXETER	C
EL SOLYO	C	ELMWOOD	C	ENGLA	C	WET	B	EXETER, THICK	B
ELAM	A	ELNIDO	C	ENGLEWOOD	C	ESS	C	SOLUM	B
ELAM, HARDPAN	B	ELNORA	B	ENKO	B	ESSAL	C	EXETTE	B
SUBSTRATUM		ELOCHOMAN	B	ENKO, OVERBLOWN	B	ESSEN	B	EXIRA	B
ELANDCO	B	ELOCIN	D	ENLDE	D	ESSEX	D	EXLINE	D
ELBA	C	ELOIKA	B	ENNING	B	ESSEXVILLE	D	EXRAY	D
ELBAVILLE	B	ELOMA	B	ENNIS	C	ESTACADO	B	EXUM	C
ELBERT	D	ELPAM	D	ENOCH	D	ESTACION	C	EYAK	C
ELBETH	B	ELPEDRO	B	ENDCHVILLE	B	ESTATE	D	EYERROW	C
ELBON	B	ELRED	B/D			ESTELLINE	B	EYLAU	C

NOTES: TWO HYDROLOGIC SOIL GROUPS SUCH AS B/C INDICATE THE DRAINED/UNDRAINED SITUATION. MODIFIERS SHOWN, E.G., BEDROCK SUBSTRATUM, REFER TO A SPECIFIC SOIL SERIES PHASE FOUND IN SOIL MAP LEGEND.

Table 2-1.—Hydrologic soil groups for U.S. soils (continued)

EYOTA	A	FARRAGUT	C	FETTIC	D	FLATRON	D	FORKWOOD	B
EYRE	D	FARRAR	B	FETZER	C	FLATTOP	D	FORMADER	C
EZBIN	B	FARRELL	B	FEZ	C	FLAXTON	B	FORMAN	B
FABIUS	B	FARRENBURG	B	FIANDER	D	FLEAK	D	FORMDALE	B
FACEVILLE	B	FARROT	C	FIANDER, DRAINED	C	FLEER	A/D	FORNEY	D
FACEY	B	FARSON	B	FIAT	C	FLEISCHMANN	D	FORNOR	B
FACTORY	C	FARSON, WET	C	FIDALGO	C	FLEMING	C	FORREST	C
FACTORY, MOIST	B	FARVA	C	FIDDLER	C	FLEMINGTON	D	FORSEER	C
FADDIN	D	FARVANT	D	FIDDLETOWN	B	FLETCHER	B	FORSEY	B
FAODLL	B	FASHING	D	FIDDYMENT	D	FLEWSIE	B	FORSGREEN	C
FAGAN	C	FASKIN	B	FIELD	C	FLEX	D	FORSYTH	A
FAGASA	C	FATHOM	A	FIELDCREEK	B	FLO	A	FORT COLLINS	B
FAMEY	B	FATIMA	B	FIELDING	B	FLOER	D	FORT MEADE	A
FAIM	C	FATTIG	C	FIELDON	C	FLOKE	D	FORT MOTT	A
FAIM, MOIST	B	FAUNCE	A	FIFER	D	FLOM	B/D	FORT ROCK	C
FAIRBANKS	B	FAUNSDALE	D	FIFIELD	C	FLOMATON	A	FORTANK	C
FAIRBURN	D	FAUQUIER	C	FIILION	D	FLOMOT	B	FORTESCUE	C/D
FAIRCHILD	C	FAUSSE	D	FILIRAN	D	FLOODWOOD	B	FORTUNA	D
FAIRDALE	B	FAYRET	C	FILLMORE	D	FLORAHOME	A	FORTWINGATE	C
FAIRFAX	B	FAMIN	B	FINCASLE	C	FLORALA	C	FORTYFOUR	C
FAIRFIELD	B	FAX	C	FINCH	C	FLORENCE	C	FORVIC	C
FAIRHAVEN	B	FAXON	B/D	FINCHFORD	A	FLORESVILLE	C	FORWARD	B
FAIRLIE	D	FAYETTE	B	FINDOUT	D	FLORIDANA	B/D	FOSS	B
FAIRLO	B	FAYETTEVILLE	B	FINGAL	C	FLORIDANA,	D	FOSSILON	D
FAIRMOUNT	D	FAYWOOD	C	FINGEROCK	D	DEPRESSIONAL	D	FOSSUM	A/D
FAIRPLAY	B	FE	D	FINLAND	C	FLORIDANA, FLOODED	D	FOSTER	C
FAIRPOINT	C	FEARS	B	FINLEY	B	FLORIN	C	FOSTORIA	B
FAIRPORT	C	FEATHERLEGS	B	FINLEYPPOINT	B	FLORISSANT	C	FOUNTAIN	D
FAIRWAY	C	FEATHERSTONE	D	FINNERTY	D	FLORITA	B	FOUR STAR	C
FAIRYDELL	C	FEDJI	A	FIND	B	FLOTAG	B	FOUR STAR, DRAINED	B
FAIRYLAWN	D	FEDORA	B/D	FINOL	C	FLOWELL	C	FOURCHE	B
FAJARDO	C	FEDSCREEK	B	FIONE	B	FLOWEREE	B	FOURLOG	D
FALAYA	D	FELAN	B	FIFADA	C	FLOYD	B	FOURME	B
FALBA	D	FELCHER	B	FIREBALL	B	FLUETSCH	B	FOURMILE	B
FALCON	D	FELDA	B/D	FIREBOX	B	FLUGLE	B	FOX	B
FALFA	C	FELDA,	D	FIRESTEEL	B	FLUKER	C	FOXCREEK	D
FALFURRIAS	A	DEPRESSIONAL	D	FIPSTONE	C	FLUVANNA	C	FOXCREEK, DRAINED	C
FALK	C	FELICITY	A	FIRIMAGE	B	FLYBOW	D	FOXHOME	B
FALKIRK	B	FELIPE	D	FIRD	D	FLYGARE	B	FOXMOUNT	C
FALKNER	C	FELIZ	B	FIROKE	B	FLYNN	B	FOXOL	D
FALLBROOK	B	FELKER	B	FIRSTVIEW	B	FLYNNCOVE	C	FOXTON	C
FALLCREEK	C	FELLOWSHIP	D	FIRTH	C	FOAD	C	FOXWORTH	A
FALLERT	B	FELOR	B	FIRTH, DRAINED	B	FOARD	D	FRADDLE	D
FALLON	C	FELT	B	FISHERMAN	D	FOEHLIN	B	FRAILEY	B
FALLON, NONFLOODED	B	FELTA	C	FISHERS	B	FOIDEL	B	FRAILTON	D
FALLSAM	D	FELTHAM	B	FISHFIN	D	FLA	B	FRAM	B
FALLSINGTON	B/D	FELTNER	D	FISHHOOK	C	FOLDAHL	B	FRANCIS	A
FALOMA	D	FELTON	B	FISHLAKE	D	FOLEY	D	FRANCISCAN	C
FALSEN	A	FELTONIA	B	FISHPOT	C	FOLLET	D	FRANCISQUITO	C
FALULA	D	FENCE	B	FISHROCK	D	FOMSENG	C	FRANCITAS	D
FANAL	C	FENDALL	C	FISHTRAP	D	FONDA	D	FRANSEN	B
FANCHER	C	FENELON	C	FISK	P	FONDIS	C	FRANKFORT	C
FANDANGLE	C	FENN	D	FITCHVILLE	C	FONNER	B	FRANKIRK	C
FANDOW	D	FENSTER	B	FITZGERALD	B	FONS	B	FRANKLIN	B
FANG	B	FENWICK	C	FITZHUGH	E	FONTANA	B	FRANKSTOWN	B
FANNIN	B	FENWOOD	B	FIVEBLOCK	C	FONTREEN	B	FRANKTOWN	D
FANNO	C	FERA	C	FIVEMILE	B	FOPIANO	D	FRANKVILLE	B
FANSHAW	B	FERDELFFORD	C	FIVEMILE, SALINE	C	FORADA	B/D	FRATERNIDAD	D
FANTZ	C	FERDINAND	C	FIVEOH	B	FORAKER	D	FRAVAL	C
FANU	B	FEREBEE	D	FIVEPINE	D	FORBAR	D	FRAVAL, GRAVELLY	B
FAPS	C	FERGUS	B	FIVES	B	FORBES	C	FRAZER	C
FARAWAY	D	FERN CLIFF	B	FIVESPRINGS	C	FORBESVILLE	C	FRAZERTON	B
FARB	D	FERNANDO	B	FLACO	C	FORBING	D	FRED	C
FARBER	B	FERNCREEK	D	FLAGG	B	FORD	D	FREDENSBOG	C
FARGO	D	FERNDALE	B	FLAGLER	B	FORDICE	B	FREDERICK	C
FARISITA	D	FERNEY	D	FLAGSTAFF	D	FORDNEY	A	FREDON	C
FARLAND	B	FERNHAVEN	B	FLAK	C	FORDNEY, WET	C	FREDONIA	C
FARLOW	B	FERNLEY	C	FLAMBEAU	B	FORDTRAN	C	FREDONYER	C
FARLOW, HIGH	C	FERNOW	B	FLAMING	A	FORDUM	D	FREE	B/D
RAINFALL	C	FERNPPOINT	B	FLANAGAN	B	FORDVILLE	B	FREEBURG	C
FARMELL	B	FERNWOOD	B	FLANDREAU	B	FORELAND	D	FREECE	D
FARMINGTON	C	FERRELO	B	FLANE	C	FORELLE	B	FREEDOM	C
FARMSWORTH	D	FERRIS	D	FLANLY	B	FORESMAN	B	FREEDOM, SALINE	B
FARMTON	D	FERRDBURRO	D	FLASHER	D	FORESTBURG	A	FREEHOLD	B
FARNHAM	B	FERRON	D	FLAT HORN	D	FORESTDALE	D	FREELAND	C
FARNHAMTON	C	FERTALINE	D	FLATHEAD	B	FORESTER	C	FREEMAN	C
FARNUF	B	FERTEG	C	FLATIRONS	C	FORESTON	C	FREEMANVILLE	B
FARNUF, WET	C	FESTINA	B	FLATNOSE	B	FORGAY	B	FREON	B
FARNUM	B	FETT	D	FLATONIA	D	FORK	C	FREER	C

NOTES: TWO HYDROLOGIC SOIL GROUPS SUCH AS B/C INDICATE THE DRAINED/UNDRAINED SITUATION. MODIFIERS SHOWN, E.G., BEDROCK SUBSTRATUM, REFER TO A SPECIFIC SOIL SERIES PHASE FOUND IN SOIL MAP LEGEND.

Table 2-1.—Hydrologic soil groups for U.S. soils (continued)

FREEST	C	FULSHEAR	C	GAPCOT	D	GED	D	GILISPIE	D
FREESTONE	C	FULSTONE	C	GAPD	D	GEE	C	GILLAND	C
FREETOWN	D	FULTON	D	GAPD, DRAINED	C	GEEBURG	C	GILLENDER	D
FREEWATER	B	FULTS	D	GAPPMAYER	B	GEEMORE	C	GILLIAM	C
FREEZENER	P	FULWIDER	D	GARA	C	GEER	B	GILLIGAN	B
FREEZEDUT	B	FUNTER	D	GARFER	D	GEERTSEN	B	GILLS	C
FRELSBURG	D	FUQUAY	B	GARFO	B	GEFO	A	GILLSBURG	C
FREMONT	C	FURNISS	D	GARBUTT	B	GEISEL	B	GILMAN	B
FREN	B	FURSHUR	D	GARCENO	C	GEKE	C	GILMORE	C
FRENCH	C	FURY	D	GARCES	D	GELKIE	B	GILPAR	B
FRENCHCREEK	B	FURY, DRAINED	C	GARCIA	C	GEM	C	GILPIN	C
FRENCHJOHN	C	FUSULINA	D	GARCITAS	C	GEM, STONY	D	GILROY	C
FRENCHMAN	B	FUSUVAR	D	GARCON	C	GEMID	C	GILSTON	B
FRENCHTOWN	D	GAASTRA	C	GARDELLA	D	GEMSON	B	GILT EDGE	D
FRESHWATER	D	GABALDON	B	GARDENA	B	GENAV	D	GIMLETT	B
FRESNO	D	GABBS	C	GARDINER	A	GENEGRAF	B	GINAT	D
SALINE-ALKALI		GABBVALLY	D	GARDNER'S FORK	B	GENESEEE	B	GINEX	D
FRESNO, THICK	C	GABEL	C	GARDNERVILLE	C	GENEVA	B	GINGER	D
SOLUM		GABICA	D	GARDONE	A	GENOA	D	GINI	B
FREWA	B	GABINO	D	GAREY	B	GENOLA	B	GINLAND	D
FREZNIK	D	GACEY	D	GARFAN	B	GENTILLY	D	GINNIS	D
FRIANA	D	GACHADO	D	GARFIELD	C	GENTRY	D	GINSER	C
FRIANT	D	GACIBA	D	GARHILL	D	GEOCONDA	C	GIRARD	D
FRIDLO	C	GADDES	C	GARIPER	C	GEOCHROCK	B	GIRARDOT	D
FRIEDLANDER	C	GADDY	A	GARITA	E	GEORGE CREEK	B	GIRD	B
FRIEDMAN	C	GADSDEN	C	GARLAND	B	GEORGETOWN	D	GIST	D
FRIENDS	C	GADSDEN, WET	C	GARLET	E	GEORGEVILLE	B	GITAKUP	C
FRIENDSHIP	A	SUBSTRATUM	B	GARLOCK	C	GEORGIA	C	GITAM	D
FRIES	D	GADWELL	C	GARKON	B	GEPPFORD	D	GIVIN	C
FRIESLAND	B	GAGEBY	B	GARMORE	B	GEPP	B	GLACIER CREEK	A
FRIJOCLES	B	GAGETOWN	B	GARNEL	D	GEPPERT	D	GLADDEN	B
FRINDLE	C	GAGIL	B	GARNER	D	GERALD	D	GLADEL	D
FRINES	C	GAHEE	H	GARNES	B	GERRER	D	GLADEVILLE	D
FRIO	B	GAIR	D	GARO	D	GEPDRUM	D	GLADEWATER	D
FRIONA	C	GAILA	B	GARR	D	GERING	D	GLADSTONE	B
FRIJTON	C	GAINES	C	GARRETSON	P	GERLACH	P	GLADWIN	A
FRIPP	A	GAINESBORO	C	GARRETT	B	GERLANE	B	GLASGOW	C
FRISCO	B	GAINESVILLE	A	GARRISON	E	GERLE	B	GLASSNER	D
FRISITE	B	GALATA	D	CARPOCHALES	D	GERMANTOWN	B	GLEAN	B
FRIITZ	B	GALBRETH	D	GARSID	C	GERMANY	B	GLEASON	B
FRIZZELL	C	GALCHUTT	C	GARTON	C	GERMER	C	GLEBE	C
FROBERG	D	GALE	B	GARVESON	E	GERONI	C	GLEN	B
FRODD	D	GALEN	P	GARVIN	D	GERRARD	B	GLENBAP	B
FROHMAN	C	GALEPPI	B	GARWIN	B/D	GERRARD, DRAINED	E	GLENBAR, WET	C
FROLIC	S	GALESTINA	C	GARZA	B	GERST	D	GLENBERG	B
FROLIC*	C	GALESTOWN	A	GARZONA	D	GESSIE	B	GLENBLAIR	C
ELEVATION<3000		GALEY	B	GAS CREEK	D	GESSNER	R/D	GLENBROOK	D
FROLIC, FLOODED	C	GALILEE	C	GASCONADE	D	GESTRIN	B	GLENCARB	E
FRONDORF	B	GALISTEO	C	GASIL	B	GETAWAY	C	GLENCARB, WET	C
FRONTENAC	S	GALISTEO*	D	GASQUET	B	GETCHELL	C	SALINE	
FRONTIER	C	SALINE-ALKALI		GASSAWAY	D	GETRAIL	D	GLENCOE	B/D
FRONTON	D	GALLAND	C	GASSVILLE	C	GETTYS	C	GLENCOE, PONDED	D
FROST	D	GALLATIN	C	GASTON	C	GETZVILLE	D	GLENDALE	B
FROZARD	C	GALLEGOS	B	GAT	P	GETZER	C	GLENDALE, WET	C
FRUITA	B	GALLEN	B	GATES	P	GEYSEN	C	GLENDALE, RARELY	C
FRUITFIELD	A	GALLIA	E	GATESON	C	GIBBLER	C	FLOODED	
FRUITHURST	C	GALLIME	B	CATEVIEW	B	GIBBON	B	GLENDESON	B
FRUITLAND	S	GALLION	B	GATEWAY	C	GIBBONSCREEK	C	GLENLIVE	B
FRUITLAND*	C	GALLMAN	B	GATEWOOD	C	GIBBS	D	GLENDRRA	A/D
MODERATELY WET		GALLUP	B	GATLIN	B	GIBNEY	C	GLENEDEN	D
FRUITLAND, WET	C	GALDO	C/D	GATOR	D	GIBSONVILLE	D	GLENELG	B
FRYE	C	GALT	P	GATTON	P	GIBWELL	C	GLENFORD	C
FRYEBURG	B	GALVA	P	GAULDY	B	GIEDON	C	GLENHALL	B
FT. DRUM	C	GALVESTON	A	GAULEY	C	GIELON	C	GLENHAM	B
FT. GREEN	D	GALVEZ	C	GAVEL	C	GIFFORD	D	GLENHMAN	B
FUBAR	C	GALVIN	D	GAVILAN	C	GIGGEP	C	GLENMORA	C
FURBLE	D	GALWAY	B	GAVINS	D	GILA	B	GLENNALLEN	C
FUEGO	C	GAMBLER	B	GAVIOTA	D	GILBERT	D	GLENOMA	B
FUEGOSTA	D	GAMBOA	B	GAY	B/D	GILBOA	B	GLENPOOL	A
FUERA	C	GAMGEE	C	GAYLESVILLE	D	GILBY	B	GLENRIO	D
FUGAWEE	B	GANADO	D	GAYLORD	C	GILCHRIST	A	GLENROSE	B
FUGHES	C	GANCE	C	GAYNCR	C	GILCO	B	GLENROSS	D
FULCHER	C	GANDO	D	GAYVILLE	D	GILCREST	B	GLENSTED	D
FULDA	C/D	GANIS	D	GAZELLE	D	GILEAD	C	GLENTON	B
FULLAM	C	GANNETT	D	GAZOS	C	GILES	B	GLENTON, WET	C
FULLER	D	GANSNER	C	GAZWELL	C	GILFORD	B/D	GLENTOSH	A
FULLERTON	B	GANSNER, PONDED	D	GEARHART	A	GILFORD*	D	GLENVIEW	B
FULMER	D	GANY	B	GEARY	B	STRATIFIED		GLENVILLE	C
FULMER, DRAINED	C	GAPBUTTE	B	GEBSON	B	SUBSTRATUM		GLENYON	B

NOTES: TWO HYDROLOGIC SOIL GROUPS SUCH AS B/C INDICATE THE DRAINED/UNDRAINED SITUATION. MODIFIERS SHOWN, E.G., BEDROCK SUBSTRATUM, REFER TO A SPECIFIC SOIL SERIES PHASE FOUND IN SOIL MAP LEGEND.

Table 2-1.—Hydrologic soil groups for U.S. soils (continued)

GLOHM	C	GOOSEFLATS	D	GRANGEVILLE.	E	GRELLTON	B	GUAYABOTA	D
GLORIA	D	GOOSMUS	B	DRAINED	E	GRENADA	C	GUAYAMA	D
GLOUCESTER	A	GORDO	B	GRANGEVILLE.	E	GRENADIER	B	GURE	C
GLOVER	C/D	GORE	D	OCCASIONALLY		GRENVILLE	E	GUBEN	E
GLYNDON	B	GOREEN	D	FLOODED		GRESHAM	C	GUCKEEN	C
GLYNN	C	GORGAS	D	GRANILE	P	GRETIVID	B	GUDGEL	C
GLYWOOD	C	GORGONIO	A	GRANMOUNT	C	GREWINGK	C	GUDGREY	B
GLYPHS	B	GORHAM	B/D	GRAND	D	GREYBACK	B	GUELPH	B
GOBAR	B	GORIN	C	GRANSHAW	F	GREYBO	B	GUEMES	B
GOBERNADOR	D	GORING	C	GRANT	B	GREYBULL	C	GUENOC	C
GOBINE	B	GORMAN	C	GRANTFORK	D	GREYEAGLE	D	GUENTHER	B
GOBLE	C	GORSKEL	D	GRANTHAM	D	GREYS	B	GUERNSEY	C
GOBLIN	D	GORST	D	GRANTSBURG	C	GRIBBLE	D	GUERO	C
GOCHEA	B	GORUS	B	GRANTSDALE	B	GRIDELL	D	GUERRERO	A
GODDARD	B	GORZELL	B	GRANVILLE	B	GRIDGE	D	GUEST	D
GODDE	D	GOSA	B	GRANYON	B	GRIDLEY	C	GUFFEY	C
GODDING	C	GOSHEN	B	GRANZAN	B	GRIETA	B	GUFFIN	D
GODECKE	D	GOSHUTE	D	GRAPEVINE	B	GRIEVES	F	GUGUAK	D
GODFREY	D	GOSINTA	C	GRAPIT	E	GRIFFITH	D	GUILDER	C
GODWIN	D	GOSLIN	B	GRASHUL	C	GRIFFY	E	GUISER	B
GOEMMER	C	GOSNEY	D	GRASMERE	E	GRIFTON	D	GULER	E
GOESLING	B	GOSPER	B	GRASSNA	E	GRIGSBY	B	GULF	B/D
GOESSEL	D	GOSPORT	C	GRASSVAL	D	GRIGSTON	F	GULKANA	B
GOFFPEAK	B	GOSS	B	GRASSVALLEY	D	GRIMM	A	GULNARE	D
GOGBIC	B	GOSUMI	D	GRASSY BUTTE	A	GRIMM, STONY	B	GUMBLE	D
GOL	D	GOTEBO	B	GRASSY CONE	A	GRIMSLEY	B	GUMBOOT	D
GOL	C	GOTHAM	A	GRAT	D	GRIMSTAD	E	GUMBOOT, DRAINED	C
GOL, NONSTONY	C	GOTHARD	C	GRATTAN	A	GRIMSTONE	B	GUNBARREL, SALINE	D
GOL, GRAVELLY	C	GOTHENBURG	D	GRAUFELS	C	GRINA	D	GUNBARREL, DRAINED A	A
GOLCONDA	C	GOTHIC	C	GRAVDEN	D	GRINDALL	D	GUND	C
GOLD CREEK	D	GOTHO	C	GRAVELTON	E/C	GRINDBROOK	C	GUNDY	C
GOLDBERG	D	GOTHO, MODERATELY	B	GRAVIER	B	GRINDSTONE	C	GUNLOCK	C
GOLDENDALE	B	WET	B	GRAYBERT	E	GRINK	C	GUNN	B
GOLDFINCH	D	GOTHO, COOL	B	GRAYCALM	A	GRINROD	C	GUNNEL	D
GOLDHEAD	B/D	GOULDING	D	GRAYFORD	B	GRISDALE	B	GUNSIGHT	B
GOLDHILL	D	GOULDSBORO	D	GRAYLAND	D	GRISWOLD	B	GUNSONE	D
GOLDHILL, LOAMY	C	GOURDIN	C	GRAYLAND, DRAINED	C	GRITNEY	C	GUNSTOCK	C
SUBSTRATUM		GOURLEY	C	GRAYLING	A	GRIVER	C	GUNTER	B
GOLDLAKE	B	GOVE	B	GRAYLOCK	A	GRIVER, WET	D	GUP	C
GOLDMAN	C	GOWEN	B	GRAYLOCK, STONY	B	GRIVER, DRAINED	B	GURDANE	C
GOLDMIRE	C	GOWKER	C	GRAYPOINT	C	GRIZZLY	B	GURDON	C
GOLDRIDGE	B	GOWTON	B	GRAYPOINT, WET	C	GROBUTTE	B	GURLEY	C
GOLDRUN	A	GOZEM	D	GRAYROCK	C	GROGAN	B	GURNEY	B
GOLDSBORO	B	GRABE	B	GRAYS	B	GROOM	C	GUSTIN	D
GOLDSTON	C	GRABLE	B	GRAYSILL	C	GROSECLOSE	C	GUSTSPRING	B
GOLDSTREAM	D	GRACEMONT	C	GRAZER	C	GROSS	C	GUTHRIE	D
GOLDSTREAM, THAWED	B	GRACEMORE	C	GREAT BEND	E	GROSSWELL	C	GUY	B
GOLDOUST	C	GRACEVILLE	B	GREDDGE	D	GROTON	A	GUYAN	C
GOLDVALE	B	GRADCO	C	GREEN BLUFF	E	GROTTE	B	GUYANDOTTE	B
GOLDVALE, NONSTONY	C	GRADON	C	GREEN CANYON	B	GROTTO	A	GUYTON	D
GOLDVEIN	C	GRADY	D	GREEN RIVER	C	GROUSECREEK	B	GWENA	D
GOLDYKE	D	GRAFEN	B	GREEN RIVER,	P	GROUSEVILLE	C	GWIN	D
GOLETA	B	GRAFF	D	STRONGLY SALINE		GROVE	A	GWIN, GRAVELLY	C
GOLIAD	C	GRAHAM	D	GREEN RIVER,	P	GROVECITY	B	GWINLY	D
GOLLAMER	D	GRAIL	C	FLOODED		GROVENA	B	GWINNETT	B
GOLSUM	C	GRAINOLA	D	GREENBRAE	C	GROVER	B	GYMER	C
GOLTRY	A	GRALEY	D	GREENBRIAR	B	GROVETON	B	GYNELLE	A
GOLVA	B	GRALIC	B	GREENCREEK	B	GROWDEN	C	GYPNEVEE	B
GOMERY	B	GRAN	C	GREENDALE	E	GROWLER	B	GYSTRUM	C
GOMEZ	B	GRANATH	B	GREENE	P	GROWTON	B	HAAR	D
GONYICK	B	GRANBY	A/D	GREENFIELD	B	GRUBBS	D	HAARVAR	D
GONZAGA	C	GRANDE RONDE	D	GREENFIELD,	C	GRUBSTAKE	B	HACCKE	C
GOJCH	D	GRANDFIELD	B	HARDPAN		GRUENE	D	HACK	B
GOODING	D	GRANDMORE	B	SUBSTRATUM		GRULLA	D	HACKBERRY	B
GOODINGTON	D	GRANDPON	B	GREENHALGH	B	GRUMMIT	D	HACKERS	B
GOODLAND	B	GRANDVIEW	C	GREENHORN	D	GRUNDY	C	HACKROY	D
GOODLOW	B	GRANDVIEW, DRAINED	B	GREENLEAF	E	GRUVER	C	HACKWOOD	B
GODDMAN	B	GRANER	B	GREENLEE	B	GRYGLA	B/D	HADAR	B
GOODNIGHT	A	GRANGE	C	GREENMAN	C	GSCHWEND	B	HADENCREEK	C
GOODPASTER	D	GRANGEMONT	C	GREENOUGH	E	GUADALUPE	B	HADES	B
GOODPICH	B	GRANGEVILLE.	B	GREENSON	C	GUAJE	D	HADLEY	B
GOODSPRINGS	D	DRAINED, SLOPING		GREENTON	C	GUAM	D	HADSELVILLE	D
GOODWILL	B	GRANGEVILLE,	C	GREENVILLE	B	GUAMANI	B	HAFLINGER	A
GOODWIN	B	SALINE-ALKALI,		GREENVINE	D	GUANABANO	C	HAGEN	B
GOOLAWAY	C	WET		GREENWATER	A	GUANAJIBO	C	HAGENBARTH	B
GOOSE CREEK	B	GRANGEVILLE.	B	GREENWAY	E	GUANICA	D	HAGER	D
GOOSE CREEK, WET	C	SALINE-ALKALI		GREENWOOD	A/D	GUARD	C	HAGERMAN	C
GOOSE LAKE	D	GRANGEVILLE,	B	GREHALEM	E	GUARDLAKE	A	HAGERSTOWN	C
GOOSEBURY	B	MODERATELY WET		GRELL	D	GUAYABO	A	HAGGA	D

NOTES: TWO HYDROLOGIC SOIL GROUPS SUCH AS B/C INDICATE THE DRAINED/UNDRAINED SITUATION. MODIFIERS SHOWN, E.G., BEDROCK SUBSTRATUM, REFER TO A SPECIFIC SOIL SERIES PHASE FOUND IN SOIL MAP LEGEND.

Table 2-1.—Hydrologic soil groups for U.S. soils (continued)

HAGGA, SALINE-ALKALI	C	HANIPOE, BEDROCK SUBSTRATUM	C	HARSHA	P	HAWI	B	HEIMDAL	B
HAGGERTY	B	HANIS	C	HARSHLOW	C	HAWICK	A	HEINSAN	C
HAGSTADT	C	HANKINS	C	HARSTINE	C	HAWKEYE	A	HEISETON	B
HAGUE	A	HANKS	B	HARSTON	B	HAWKINS	C	HEISETON, STONY	C
HAIG	C/D	HANKSVILLE	D	HART	D	HAWKSBILL	B	HEISETON,	C
HAIGHTS	B	HANKSVILLE, NONFLOODED	C	HART CAMP	D	HAWKSNEST	C/D	SALINE-ALKALI	
HAIKU	B	HANLON	E	HARTER	C	HAWKSPRINGS	B	HEISLER	B
HAILMAN	B	HANLY	A	HARTFORD	A	HAWKSTONE	B	HEIST	B
HAIRE	C	HANNA	B	HARTIG	B	HAWLEY	E	HEITT	C
HAIRE, BEDROCK SUBSTRATUM	D	HANNAHATCHEE	E	HARTILL	A	HAWSLEY	A	HEIZER	D
HAKKER	C	HANNING	E	HARTLAND	B	HAXTUN	B	HELDT	C
HALACAN	D	HANO	C	HARTLESS	B	HAYBOURNE	B	HELEMANO	B
HALAWA	B	HANOVER	C	HARTLETON	E	HAYCRIK	C	HELENA	C
HALBERT	D	HANS	C	HARTNIT	C	HAYDEN	B	HELENDALE	B
HALCOTT	C/D	HANSEL	C	HARTSBURG	P/D	HAYESTON	B	HELLGATE	B
HALDER	C	HANSKA	B/D	HARTSFELLS	B	HAYESVILLE	B	HELLMAN	C
HALE	D	HANSON	B	HARTSHORN	B	HAYESVILLE, STONY	C	HELM	D
HALE, DRAINED	C	HANTHO	B	HARTVILLE	C	HAYFIELD	B	HELMER	C
HALEDON	C	HANTZ	D	HARTWELL	D	HAYFORD	C	HELMER, GRAVELLY	D
HALEIWA	B	HANTZ, DRY	C	HARVARD	E	HAYHOOK	E	SUBSOIL	
HALEY	B	HAP	B	HARVESTER	G	HAYMARKET	D	HELMER, THIN	D
HALF MOON	B	HAPGOOD	B	HARVEY	B	HAYMOND	B	SURFACE	
HALFADAY	A	HAPJACK	D	HARVEY, BEDROCK SUBSTRATUM, DRY	C	HAYMONT	B	HELMER, SEVERELY	D
HALFWAY	D	HAPNEY	C	HARWOOD	C	HAYNESS	B	ERODED	
HALII	B	HAPPLE	C	HASKILL	B	HAYNIE	B	HELMICK	D
HALIIMAILE	B	HAPUR	D	HASKINS	B	HAYPRESS	A	HELTER	B
HALL	B	HARAHAN	D	HASSEE	D	HAYRACK	C	HELVETIA	C
HALL RANCH	C	HARAHILL	C	HASSELL	C	HAYSPUR	D	HELY	C
HALLANDALE	B/D	HARANA	B	HASTINGS	C	HAYSUM	B	HEMBRE	B
HALLANDALE, TIDAL	D	HARBORD	B	HAT	C	HAYTER	B	HEMCROSS	B
HALLCREEK	A	HARCANY	B	HATBORO	D	HAYTI	D	HEMINGFORD	B
HALLECK	C	HARCO	B	HATCH	C	HAYWIRE	C	HEMPSTEAD	B
HALLECK, GRAVELLY SUBSTRATUM	B	HARCOT	B/D	HATCH, GRAVELLY	D	HAYWOOD	B	HENCO	B/D
HALLETTSVILLE	D	HARDEMAN	B	HATCHERY	C	HAZEL	C	HENDERSON	B
HALLISON	C	HARDESTY	B	HATCHEY	B	HAZELAIR	D	HENDON	C
HALLORAN	C	HARDHAT	B	HATCHEY, THICK OVERBLOWN	B	HAZEN	E	HENDRICKS	C
HALSEY	C/D	HARDING	B	HATCHEY, GRAVELLY	C	HAZLEHURST	C	HENDY	B
HALSO	D	HARDISTER	E	HATCHEY, OVERBLOWN	C	HAZLETON	B	HENEFER	C
HAMACER	A	HARDOL	B	HATCHEY, COSBLY	C	HAZTON	D	HENHOIT	B
HAMAKUAPOKO	B	HARDSCRABBLE	D	HATCHIE	B	HEADLEY	B	HENKIN	E
HAMAR	A/D	HARDTRIGGER	E	HATERMUS	C	HEADQUARTERS	B	HENLEY	C
HAMBLEEN	C	HARDY	C	HATERTON	D	HEAKE	D	HENLINE	C
HAMBONE	B	HARGILL	B	HATHAYAY	B	HEALTON	C	HENMEL	C
HAMBRIGHT	D	HARGREAVE	C	HATLEY	C	HEALING	E	HENNEKE	D
HAMBURG	B	HARJO	C	HATLIFF	C	HEARNE	C	HENNEPIN	B
HAMBY	C	HARKERS	C	HATMAKER	C	HEARNE, GRADED	D	HENNESSY	B
HAMDEN	B	HARKEY	B	HATPEAK	C	HEATH	C	HENNEWAY	B
HAMEL	C	HARKNESS	C	HATTIE	C	HEATHCOAT	C	HENNEY	B
HAMERLY	C	HARLAN	B	HATTON	C	HEATLY	A	HENNINGS	B
HAMILTON	B	HARLEM	C	HATTUR	C	HEATON	A	HENNINGSEN	C
HAMLET	B	HARLEM, CHANNELED	D	HATWAI	D	HEBBRONVILLE	B	HENRIETTA	B/D
HAMLIN	B	HARLESTON	C	HATZ	C	HEBER	A	HENRIEVILLE	B
HAMMACK	B	HARLINGEN	D	HAUG	B/D	HEBERT	C	HENRY	D
HAMMONTON	B	HARLOW	D	HAUGAN	D	HEBO	D	HENSHAW	C
HAMPSHIRE	C	HARMEHL	C	HAULINGS	D	HEBRON	B	HENSLEY	D
HAMPSON	C	HARMONY	C	HAUNCHEE	D	HECETA	D	HENSON	B
HAMRE	C/D	HARNEY	B	HAUZ	C	HECHTMAN	D	HEPLER	C
HAMRUB	B	HARPER	E	HAYALA	B	HECKER	B	HEPPSIE	D
HAMTAH	C	HARRERSVILLE	D	HAVANA	B	HECKERSON	D	HERAKLE	D
HANA	A	HARPEETH	B	HAVELock	B/D	HECLA	A	HERBERT	B
HANAGITA	D	HARPOLE	B	HAVEN	E	HECTOR	D	HERBMAN	D
HANAKER	C	HARPS	B/D	HAVERDAD	B	HEDGE	D	HERD	C
HANALEI	C	HAPPSTER	B/D	HAVERDAD, MODERATELY SALINE	C	HEDGES	C	HEREFORD	B
HANAMAULU	B	HARPT	B	HAYERLY	C	HEDDOX	C	HERITO	C
HANCEVILLE	B	HARQUA	C	HAYERMOM	B	HEDRICK	B	HERKIMER	B
HAND	B	HARRAH	E	HAYERMOM	B	HEDSTROM	B	HERLONG	D
HANDPAH	D	HARRIET	D	HAYERMOM	B	HEDVILLE	D	HERM	C
HANDRAN	A	HARRIMAN	C	HAYRE, SALINE	C	HEECHEE	B	HERMANTOWN	C
HANDBORO	D	HARRIMAN, WET	C	HAYRE, MODERATELY	C	HEELY	B	HERMERING	B
HANDY	C	HARRINGTON	C	HAYRE, WET	C	HEESER	B	HERMISTON	B
HANEY	B	HARRIS	D	HAYRELON	B	HEFED	B	HERMON	A
HANFORD	B	HARRISBURG	C	HAYRE, WET	C	HEFLIN	B	HERNANDEZ	B
HANGAARD	D	HARRISON	E	HAYRE, WET	C	HEGLAR	B	HERNDON	B
HANGDO	B	HARRISVILLE	C	HAYRE, WET	C	HEGNE	D	HERO	B
HANGTOWN	B	HARROUN	D	HAYRE, WET	C	HEIDEL	B	HEROD	D
HANIPOE	B	HARSAN	B	HAYRE, WET	C	HEIDEN	D	HERRICK	B
				HAYRE, WET	C	HEIDTMAN	C	HERSH	B
				HAYRE, WET	C	HEIGHTS	B/D	HERSHAL	D
				HAYRE, WET	C	HEIL	D	HERTY	D

NOTES: TWO HYDROLOGIC SOIL GROUPS SUCH AS B/C INDICATE THE DRAINED/UNDRAINED SITUATION. MODIFIERS SHOWN, E.G., BEDROCK SUBSTRATUM, REFER TO A SPECIFIC SOIL SERIES PHASE FOUND IN SOIL MAP LEGEND.

Table 2-1.—Hydrologic soil groups for U.S. soils (continued)

HESCH	B	HILLSBORO	B	HOLDERMAN	C	HOODVIEW	B	HOWELL	C
HESPER	B	HILLSDALE	B	HOLDERNESS	C	HOOGDAL	C	HOWLAND	C
HESPERIA	B	HILLTO	B	HOLDINGFORD	C	HOOKS	B	HOWSON	C
HESPERUS	B	HILLWOOD	B	HOLDREGE	B	HOOKSAN	A	HOYE	B
HESSEL	B/D	HILMAR	D	HOLLILLIPAH	A	HOOKTON	C	HOYLETON	C
HESSELBERG	D	HILMAR, DRAINED	B	HOLLAND	B	HOOLEHUA	B	HOYPUS	A
HESSELTINE	B	HILMOE	C	HOLLANDLAKE	B	HOOLY	C	HOYTVILLE	C/D
HESSING	B	HILD	A	HOLLINGER	E	HOOPAL	D	HUACHUCA	C
HESSLAN	C	HILOLO	D	HOLLIS	C/D	HOOPER	D	HUALAPAI	D
HESSON	C	HILT	B	HOLLISTER	D	HOOPESTON	B	HUB	B
HETERWA	C	HILTON	B	HOLLOMAN	D	HOPLITE	D	HUBBARD	A
HETTINGER	C/D	HINCKLEY	A	HOLLLOMEX	B	HOSAN	B	HUBBARDTON	D
HEUSSER	C	HINDES	C	HOLLOW	C	HOOSEGOW	B	HUBBELL	B
HEUVELTON	C	HINESBURG	C	HOLLOWAY	E	HOSIC	A	HUBERLY	D
HEWITT	D	HINKER	C	HOLLOWTREE	C	HOOSIERVILLE	C	HUBERT	B
HEXT	B	HINKLE	D	HOLLY	B/D	HOOSIMBIM	B	HUBLERSBURG	B
HEYDER	B	HINMAN	C	HOLLY, PUNDED	D	HOOT	D	HUCKLEBERRY	C
HEYDLAUFF	B	HINSDALE	D	HOLLY SPRINGS	D	HOOTEN	D	HUCKLEBERRY, HIGH	B
HEYTDU	B	HIRAMSBURG	C	HOLLYWELL	B	HOPCO	C	RAINFALL	C
HEZEL	B	HIRIDGE	D	HOLLYWOOD	D	HOPDRAW	A	HUDNUT	B
HI VISTA	C	HIRSCHDALE	C	HOLMAN	A	HOPEKA	D	HUDSON	C
HIARC	C	HISEGA	C	HOLMDEL	C	HOPKINS	B	HUECO	C
HIBAR	C	HISKEY	B	HOLMES	B	HOPLAND	B	HUEL	A
HIBBARD	C	HISLE	D	HOLOHAN	B	HOPLEY	B	HUENEME	C
HIBBING	C	HITCHCOCK	B	HOLMUA	B	HOPSONVILLE	C	HUENEME,	B
HIBERNIA	C	HITILLO	A	HOLMOW	B/D	HOQUIAM	B	MODERATELY WET	B
HIBRITEN	B	HITT	B	HOLPAW,	C	HORD	B	HUENEME, DRAINED	B
HICKMAN	B	HIVAL	D	DEPRESSIONAL	C	HOREB	C	HUERFANO	D
HICKORY	C	HIWAN	D	HOLPAW,	D	HOREB, GRAVELLY	B	HUEY	D
HICKS	B	HIWASSEE	B	FREQUENTLY		SUBSTRATUM		HUFFINE	B
HICKSVILLE	B	HIWOOD	A	FLOODED		HORNELL	D	HUFFMAN	B
HICKSVILLE,	C	HIXTON	B	HOLSINE	B	HORNING	B	HUFFTON	B
BEDROCK		HOADLY	C	HOLSTEIN	B	HORNITOS	D	HUGGINS	C
SUBSTRATUM		HOBACKER	B	HOLSTON	B	HORNSBY	C	HUGHES	B
HICOTA	B	HOBAN	E	HOLT	B	HORNSVILLE	C	HUGHESVILLE	C
HIDALGO	B	HOBBS	B	HOLTER	B	HORROCKS	B	HUGO	B
HIDATSA	B	HOBCAW	D	HOLTE	B	HORSECAMP	D	HUGUS	B
HIDEAWAY	D	HOBEL	A	HOLTON	C	HORSERIDGE	B	HUGUSTON	D
HIDEWOOD	B/D	HOBERT	C	HOLTVILLE	C	HORSESHOE	B	HUICHICA	C
HIERRO	B	HOBIT	C	HOLYOKE	C/D	HORSETHIEF	B	HUICHICA, PUNDED	D
HIGGINS	D	HOBOD	D	HOMA	C	HORSLEY	D	HUIKAU	A
HIGGINSVILLE	C	HOBODG	D	HOME CAMP	C	HORST	B	HUKILL	E
HIGH GAP	C	HOBONNY	D	HOMELAKE	C	HORTONVILLE	B	HULETT	B
HIGHAMS	D	HOBSON	C	HOMELAND	C	HOSKIN	C	HULLS	C
HIGHBANK	C	HOBUCKEN	D	HOMER	B	HOSKINNINI	D	HULLT	B
HIGHCAMP	B	HOCAR	D	HOMESTAKE	C	HOSLEY	D	HULUA	D
HIGHFIELD	B	HOCHHEIM	B	HOMESTEAD	B	HOSMER	C	HUM	B
HIGHHORN	B	HOCKINSON	D	HOMEWOOD	C	HOSSICK	B	HUMACAO	B
HIGHMORE	B	HOCKINSON,	C	HOMME	C	HOSTAGE	B	HUMATAS	B
HIGHPOINT	D	MODERATELY WET		HOMME, MODERATELY	B	HOT LAKE	C	HUMBARGER	C
HIGHROCK	D	HOCKINSON, DRAINED	B	WET		HOTAW	C	HUMBIG	C
HIGHTOWER	C	HOCKLEY	C	HOMOSASSA	D	HOTCREEK	D	HUMBIRD	B
HIGHWOOD	C	HOCKLEY, GRADED	D	HONAUNAU	C	HOTEL	C	HUMBOLDT	D
HIHIMANU	B	HODA	C	HONCUT	B	HOTSPRINGS	B	HUMBOLDT,	B
HIBNER	C	HODEDO	C	HONDAL	O	HOUEK	B	MODERATELY WET,	
HIKO PEAK	B	HODENPYL	B	HONDODHO	B	HOUGH	B	SALINE-ALKALI	
HIKO SPRINGS	B	HODGE	A	HONEYEYE	B	HOUGHTON	A/D	HUMBOLDT,	B
HILAIRE	B	HODGINS	B	HONEYDEW	C	HOUGHTON, PUNDED	D	MODERATELY WET,	
HILAND	B	HODGSON	C	HONEYGROVE	B	HOUGHTONVILLE	C	SALINE	
HILDEBRECHT	C	HOEHNE	A	HONEYJONES	B	HOUK	C	HUMBOLDT, DRAINED,	B
HILDRETH	D	HOFFLAND	D	HONEYVILLE	C	HOULA	B	STRONGLY SALINE	
HILEA	D	HOFFMANVILLE	C	HONKER	D	HOUKKA	D	HUMBOLDT, DRAINED,	B
HILES	B	HOFFSTADT	B	HONLAK	C	HOURLASS	B	NONSALINE	
HILGER	B	HOFLY	C	HONLAK, DRAINED	B	HOUSE MOUNTAIN	D	HUMBOLDT,	B
HILGRAVE	B	HOGADERO	B	HONLU	B	HOUSER	D	MODERATELY WET	
HILIGHT	D	HOGANSBURG	B	HONN	B	HOUSEROCK	D	HUMBOLDT, DRAINED	B
HILINE	D	HOGBACK	C	HONOBIA	C	HOUSTAKE	C	HUMDUN	B
HILLBRICK	D	HOGG	C	HONOKIA	A	HOUSTON	D	HUME	C
HILLCO	B	HOGMALAT	D	HONOLUA	D	HOUSTON BLACK	D	HUMESTON	C/D
HILLEMANN	C	HOGRIE	B	HONOMANU	A	HOVDE	D	HUMKER	C
HILLERY	C	HOH	B	HONONEGAM	A	HOVEN	D	HUMMINGTON	C
HILLET	B/D	HOHMANN	C	HONOLULUI	B	HOVENWEEP	C	HUMPHREYS	B
HILLFIELD	B	HOKO	C	HONTAS	B	HOVERT	D	HUMPTULIPS	B
HILLGATE	D	HOLBORN	C	HONTOON	B/D	HOVEY	C	HUMSKEL	C
HILLIARD	B	HOLBROOK	B	HONUAULU	A	HOWARD	A	HUN	B
HILLIARD,	C	HOLCOMB	D	HODD	B	HOWARDSVILLE	A	HUNCHBACK	D
MODERATELY WELL		HOLDAWAY	D	HODDLE	B	HOWCAN	B	HUNDRAW	D
DRAINED		HOLDEN	B	HODDOD	D	HOWCREE	C	HUNEWILL	B
HILLON	C	HOLDER	B	HOODSPORT	C	HOWE	C	HUNGRY	C

NOTES: TWO HYDROLOGIC SOIL GROUPS SUCH AS B/C INDICATE THE DRAINED/UNDRAINED SITUATION. MODIFIERS SHOWN, E.G., BEDROCK SUBSTRATUM, REFER TO A SPECIFIC SOIL SERIES PHASE FOUND IN SOIL MAP LEGEND.

Table 2-1.—Hydrologic soil groups for U.S. soils (continued)

HUNNTON	C	ILDECARE	B	IPISH	C	JACAGUAS	B	JEHEMY	D
HUNTSINGER	B	ILDEFONSO	B	IPSON	B	JACANA	D	JEKLEY	C
HUNTERS	B	ILES	C	IPSWICH	D	JACEE	C	JELLICO	C
HUNTERSVILLE	B	ILIFF	C	IRA	C	JACINTO	B	JEMEZ	C
HUNTIMER	C	ILILI	D	IPAAN	D	JACK CREEK	A	JENA	B
HUNTING	C	ILION	D	IREDELL	C/D	JACKET	C	JENKINS	C
HUNTINGTON	B	ILLABOT	C	IRELAND	C	JACKLAND	D	JENKINSON	D
HUNTMOUNT	B	ILLAHEE	B	IRENE	B	JACKMAN	B	JENKS	B
HUNTPOCK	B	ILLER	B	IRETEBA	B	JACKNIFE	C	JENNESS	B
HUNTSBURG	D	ILLITO	D	IRIGUL	D	JACKPORT	D	JENNINGS	C
HUNTSVILLE	B	ILTON	C	IRIM	C	JACKPOT	C	JENNY	D
HUPP	B	ILWACO	B	IRMULCO	B	JACKS	C	JENDOR	C
HURDS	B	IMA	B	IROCK	C	JACKSON	B	JERAG	D
HURLBUT	C	IMBLER	B	IRON BLOSSOM	C	JACKTONE	D	JERAULD	D
HURLEY	D	IMLAY	D	IRON MOUNTAIN	D	JACOB	D	JERICH0	D
HURRICANE	C	IMMIG	C	IRON RIVER	B	JACOBSEN	D	JEROME	D
HURRY BACK	B	IMMIGRANT	B	IRONCO	B	JACOBY	C	JERRY	C
HURRYBACK	B	IMMOKALEE	B/D	IRONDALE	C	JACOT	B	JERRYSLU	C
HURST	D	IMMOKALEE	D	IRONDYKE	B	JACQUES	C	JERU	B
HURWAL	B	DEPRESSIONAL	D	IRONSPRINGS	B	JACQUITH	C	JERVAL	B
HUSE	D	IMOGENE	D	IRCHTON	C	JACRATZ	D	JESREL	D
HUSKA	D	IMONIL	B	IRQUOIS	B/D	JACWIN	B	JESSE CAMP	B
HUSSA	D	IMPACT	A	IRRAWADDY	C	JADIS	B	JESSIETOWN	B
HUSSA, CLAYEY	C	IMPERIAL	D	IRRIGON	C	JAFI	B	JESSO	C
SUBSTRATUM		INARAJAN	D	IRSON	D	JAGUEYES	B	JESSUP	C
HUSSA, MODERATELY	C	INARAJAN,	C	IRVINE	D	JAL	B	JETCOP	D
WET		STRATIFIED		IRVINGTON		JALMAR	A	JETSTER	D
HUSSA, DRAINED	B	SUBSTRATUM		IRWIN	D	JAMES	D	JETT	B
HUSSELL	B	INAVALE	A	ISAAC	C	JAMES CANYON	C	JEVETS	C
HUSSMAN	D	INCELL	D	ISABELLA	B	JAMES CANYON,	B	JEWETT	B
HUSUM	R	INCHAU	C	ISAN	A/D	DRAINED		JIGGS	B
HUTCHINSON	C	INCHELIUM	B	ISANTI	A/D	JAMESTON	C/D	JIGSAW	C
HUTCHLEY	D	INCY	A	ISEFELL	B	JANISE	C	JILSON	D
HUTSON	B	INDART	C	ISELLA	B	JANISE, OVERBLOWN,	B	JIM	C
HUTT	D	INSEX	A	ISHI PISHI	C	DRAINED		JIMBO	B
HUTTON	D	INDIAHOMA	D	ISHPEMING	A	JANSEN	B	JIMCREEK	C
HUXLEY	C	INDIAN CREEK	D	ISIDOR	D	JANUDE	B	JIMEK	C
HUYSINK	B	INDIANO	C	ISKNAT	C	JANUDE, CLAY	C	JIMENEZ	C
HYALL	C	INDIANOLA	A	ISKNAT, CJOOL	D	SUBSTRATUM		JIMLAKE	B
HYANNIS	B	INDIO	B	ISLAND	B	JARAB	D	JIMMERSON	B
HYAS	B	INOLETON	B	ISLES	D	JARBOE	D	JIMSAGE	C
HYATTVILLE	C	INDUS	D	ISLES, SLJUGH	A/D	JARDIN	D	JIMTOWN	C
HYDABURG	D	INEZ	D	ISLOTS	B	JAREALES	D	JIPPER	B
HYDE	B/D	INFERNAL	D	ISMAV	D	JARITA	C	JIVAS	B
HYDER	D	INGALLS	B	ISMC	C	JARMILLO	B	JOACHEM	D
HYDR0	C	INGENIU	B	ISCLDE	A	JAROLA	C	JOB	C
HYE	B	INGERSOLL	B	ISOM	B	JAROSO	B	JOBOS	C
HYLOC	D	INGRAM	D	ISTER	C	JARRE	B	JOBPEAK	D
HYMAS	D	INKLER	B	ISTOKPOGA	B/D	JARRON	D	JOCAL	B
HYPRAIRIE	B	INKOM	D	ITANO	C	JARVIS	B	JOCITY	C
HYRUM	B	INKOM, DRAINED	C	ITASCA	B	JASCO	D	JOCITY, LOAMY	B
HYSHAM	D	INKOSR	D	ITAT	B	JASON	D	SURFACE	C
HYSHOT	D	INKS	D	ITCA	D	JASPER	B	JOCKO	B
HYTOP	D	INKSTER	B	ITHACA	C	JAUCAS	A	JODERO	B
HYZEN	D	INLOW	C	ITMANN	C	JAUCAS, SALINE	C	JOEL	B
IAD	B	INMACHUK	D	ITME	A	JAURIGA	B	JOEMRE	B
IBERIA	D	INMAN	C	ITSWOOT	B	JAVA	B	JOENEY	D
ICARIA	D	INMO	A	IUKA	C	JAWBONE	D	JOES	B
ICENE	D	INNINGER	C	IVA	C	JAY	C	JOEVAR	B
ICESLEW	D	INDEPENDENCE	B	IVAN	B	JAYAR	C	JOHNS	C
ICHBOD	D	INSAK	D	IVANELL	C	JAYBEE	D	JOHNSBURG	D
ICHTUCKNEE	D	INSIDERT	C	IVANHCE	D	JAYEL	D	JOHNSON	D
ICICLE	B	INSKIP	C	IVER	B	JAYEM	B	JOHNSTON	B
IDA	B	INSULA	D	IVERSEN	C	JAYNES	D	JOHNSTOWN	B
IDABEL	B	INTERIOR	B	IVES	B	JEAGER	C	JOHNSWOOD	B
IDAHOME	B	INTON	P	IVES, WET	D	JEAN	A	JOHNTOM	D
IDAMONT	B	INVERNESS	B	IVIE	A	JEAN LAKE	B	JOICE	D
IDEE	C	INVERSHIEL	C	IVINS	C	JEANERETTE	D	JOINEP	B
IDLEWILD	D	INVILLE	B	IYWILD	C	JEBE	B	JOKODOWSKI	D
IDLEWILD, DRAINED	C	IO	B	IXIAN	C	JEB0	B	JOLAN	C
IDMON	B	IOLEAU	C	IYERS	D	JEDBURG	C	JOLIET	D
IGDELL	C	IONA	B	IZAGORA	C	JEDD	C	JOLLY	C
IGERT	C	IONIA	B	I7AR	D	JEDDITO	C	JONALE	B
IGNACID	C	IOSCO	D	I2EE	C	JEDDITO,	B	JONAS	B
IGO	D	IOSEPA	B	I20	A	SALINE-ALKALI		JONATHAN	B
IGUALDAD	D	IOTLA	B	I2OD	D	JFDDO	C/D	JONCA	C
IHLEN	B	IPAGE	A	I2USER	B	JEFFERS	B/D	JONDA	B
IJAM	D	IPANO	C	JARU	B	JEFFERSON	B	JONES	B
ILACHETOMEL	D	IPAVA	B	JABU, WET	C	JEFFREY	B	JONESVILLE	B

NOTES: TWO HYDROLOGIC SOIL GROUPS SUCH AS B/C INDICATE THE DRAINED/UNDRAINED SITUATION. MODIFIERS SHOWN, E.G., BEDROCK SUBSTRATUM, REFER TO A SPECIFIC SOIL SERIES PHASE FOUND IN SOIL MAP LEGEND.

Table 2-1.—Hydrologic soil groups for U.S. soils (continued)

JONNIC	C	KAHANA	B	KAPLAN	D	KEEI	D	KERMIT	A
JOPLIN	C	KAHANUI	D	KAPOD	B	KEEKEE	B	KERNAN	C
JOPPA	B	KAHLER	B	KAPOWSIN	C	KEEL	C	KERR	B
JORAIBI	B	KAHLOTUS	B	KAPTURE	B	KEELDAR	B	KERRDAM	C
JORDAN	D	KAHOLA	B	KAPUHIKANI	D	KEELE	B	KERRFIELD	D
JORGE	B	KAHUA	D	KARAMIN	A	KEELER	B	KERRICK	B
JORNAHAM	B	KAIDERS	B	KARANKAWA	D	KEELINE	B	KERRYVILLE	C
JORY	C	KAIKLI	D	KARBANA	C	KEENE	C	KERSHAW	A
JORY, STONY	C	KAILUA	A	KARCAL	D	KEENO	C	KERSICK	D
JOSBURG	C	KAIMU	A	KARDE	B	KEESE	D	KERSTON	A/D
JOSEPH	C	KAINALIU	D	KARHEEN	D	KEESEHA	C	KERT	C
JOSEPHINE	B	KAIPOIOI	B	KARLAN	C	KEESIAN	B	KESSLER	C
JOSHUA	C	KAIWIKI	A	KARLIN	A	KEETER	C	KESSON	D
JOSIE	B	KALAE	B	KARLO	D	KEEWATIN	C	KESTERSON	D
JOSLIN	B	KALALOCH	B	KAPLSBURG	B	KEG	B	KESWICK	C
JOSSET	C	KALAMA	C	KARLSRUHE	E	KEGEL	D	KETCHLY	B
JOURDANTON	D	KALAMAZOD	B	KARLSTAD	A	KEGEL, DRAINED	C	KETCHUM	B
JOVEC	D	KALAPA	B	KARLUK	D	KEGONSA	B	KETONA	D
JOY	B	KALAUPAPA	D	KARMA	E	KEHAR	D	KETTENBACH	C
JUAB	B	KALEETAN	B	KARNAK	D	KEHENA	C	KETTLE	B
JUANA DIAZ	B	KALEETAN, TILL	C	KARNES	E	KEHOE	3	KETTLEBELLY	B
JUBILEE	D	SUBSTRATUM		KAROC	B	KEIGLEY	E	KETTLEMAN	C
JUBILEE, DRAINED	B	KALIFONSKY	D	KARPP	D	KEISER	B	KETTLEMAN,	B
JUDA	B	KALIGA	B/D	KARRO	B	KEITH	B	GPAVELLY	
JUDD	C	KALIGA, FLOODED	D	KARS	A	KEITHVILLE	C	KEITNER	D
JUDELL	B	KALTHI	D	KARSHNER	D	KEKAHA	B	KEUTERVILLE	B
JUDICE	D	KALISPELL	B	KARTA	C	KEKAKE	D	KEVANTON	C
JUDITH	B	KALKASKA	A	KARTAR	B	KEKAWAKA	B	KEVIN	C
JUDKINS	C	KALLIO	C	KASEBERG	D	KELK	C	KEWACH	C
JUDSON	B	KALMARVILLE	B/D	KASHWITNA	B	KELLER	C	KEWAUNEE	C
JUDY	C	KALMIA	B	KASKI	E	KELLERBUTTE	B	KEWEENAW	A
JUG	B	KALO	C	KASOTA	C	KELLY	D	KEYA	B
JUGET	D	KALOKO	D	KASSLER	A	KELSEY	B	KEYES	0
JUGHANDLE	B	KALONA	C	KASSON	C	KELSO	C	KEYESPOINT	D
JUGSON	C	KALSIN	D	KATAMA	B	KELTNER	B	KEYNER	D
JULES	B	KALSTED	B	KATEMCY	C	KELTYS	B	KEYPORT	C
JULESBURG	B	KAMACK	B	KATHER	B	KELVIN	C	KEYSTONE	A
JULIN	D	KAMAKOA	B	KATO	B/D	KEMAH	D	KEZAN	D
JUMBO	B	KAMAN	D	KATSEANES	D	KEMAN	B	KEZAR	C
JUMPCREEK	C	KAMAOA	B	KATULA	C	KEMMERER	C	KIAKUS	C
JUMPE	B	KAMAOLE	B	KATY	D	KEMOD	B	KIAN	C
JUMPER	C	KAMATO	C	KATYBLAY	B	KEMP	C	KIAWAH	B/D
JUMPMORE	B	KAMAY	D	KAUDER	D	KEMPSVILLE	E	KIBBIE	B
JUMPOFF	C	KAMELA	C	KAUFMAN	D	KENAI	C	KIBESILLAH	C
JUNALUSKA	B	KAMIE	B	KAUKAUNA	C	KENANSVILLE	A	KICKAPOO	B
JUNCAL	C	KAMPVILLE	C	KAUPD	A	KENDAIA	C	KICKERVILLE	B
JUNCOS	D	KAMRAR	E	KAUPPI	B	KENDALL	B	KIDD	D
JUNCTION	B	KANACKEY	D	KAVE TT	D	KENDALLVILLE	B	KIDDER	B
JUNEAU	B	KANAKA	B	KAYON	B	KENDRICK	A	KIDMAN	B
JUNG	D	KANAPAHA	B/D	KAWAIHAE	C	KENEFICK	B	KIEHL	B
JUNGO	B	KANARANZI	B	KAWAIHAPAI	B	KENESAW	B	KIESEL	C
JUNIPERBUTE	A	KANARRA	D	KAWBANGAM	D	KENMOOR	B	KIETZKE	D
JUNIPERO	B	KANASKAT	B	KAWICH	A	KENN	B	KIEV	B
JUNIUS	C	KANAWHA	B	KAWKAWLIN	C	KENNAN	B	KIKI	C
JUNKETT	C	KANDALY	A	KAYMINE	C	KENNEBEC	B	KIKONI	B
JUNO	A	KANDIK	B	KAYO	B	KENNER	D	KILAGA	C
JUNQUITOS	C	KANDOTA	B	KEAAU	D	KENNEWICK	B	KILARC	D
JUNTURA	D	KANE	B	KEAHUA	B	KENNEY	A	KILAUEA	B
JUPITER	B/D	KANEBREAK	C	KEALAKEKUA	A	KENNEY LAKE	C	KILBURN	B
JURA	D	KANEDHE	B	KEALIA	E	KENO	D	KILCHIS	D
JURVANNAH	C	KANEPUU	B	KEANSBURG	D	KENOMA	D	KILDOR	C
JUSTESEN	C	KANER	A	KEAPL	C	KENOTRAIL	C	KILFOIL	C
JUSTESEN, LOAMY	B	KANG	C	KEARNS	B	KENRAY	A	KILGORE	D
SUBSTRATUM		KANGAS	A	KFARSARGE	F	KENSAL	B	KILKENNY	B
JUSTIN	B	KANID	B	KEATING	C	KENSETT	B	KILLARNEY	C
JUYA	B	KANIKSU	B	KEAUKAHA	D	KENSPUR	B	KILLBUCK	C/D
JUYAN	D	KANIMA	C	KEAWAKAPU	B	KENT	D	KILLDUFF	B
KAALUALU	A	KANKAKEE	B	KEBLEP	B	KENUSKY	D	KILLEY	D
KACHEMAK	B	KANLEE	C	KECH	D	KENYON	B	KILLEY, MODERATELY	C
KACHESS	B	KANONA	D	KECKC	B	KEC	B	WET	
KADE	D	KANOSH	C	KECKSRDAD	C	KEDKUK	B	KILLINGTON	D
KADLETZ	B	KANTISHNA	D	KEDA	B	KEOMAH	C	KILLPACK	C
KADOKA	B	KANUTCHAN	D	KEDDIE	C	KEOTA	B	KILMANAGH	C
KAENA	D	KANZA	D	KEDRON	C	KEOWNS	B/D	KILMER	C
KAFING	B	KAPAA	B	KEE	E	KEPLER	C	KILMERQUE	C
KAGMAN	C	KAPAPALA	B	KEECHELUS	C	KERBER	B	KILN	D
KAGMAN, VERY	B	KAPAPALA, BEDROCK	C	KEECHI	C	KERBY	B	KILOA	A
GRAVELLY		SUBSTRATUM		KEEFA	B	KERHAYDEN	B	KILOHANA	A
KAHALUU	D	KAPIN	C	KEEFERS	C	KERL	B	KILOWAN	C

NOTES: TWO HYDROLOGIC SOIL GROUPS SUCH AS B/C INDICATE THE DRAINED/UNDRAINED SITUATION. MODIFIERS SHOWN, E.G., BEDROCK SUBSTRATUM, REFER TO A SPECIFIC SOIL SERIES PHASE FOUND IN SOIL MAP LEGEND.

Table 2-1.—Hydrologic soil groups for U.S. soils (continued)

KILWINNING	D		KITTITAS	D		KODRA	C		KRESSON	C		LACONNER	C
KIM	S		KITTITAS, DRAINED	C		KOEHLER	C		KREYENHAGEN	B		LACOOCHEE	D
KIM, SALINE	C		KITTREDGE	B		KOELE	B		KRIER	D		LACOSTE	C
KIMAMA	B		KITTSO	C		KOEPKE	B		KRIEST	E		LACOTA	B/D
KIMBALL	D		KIVA	A		KOEPLING	C		KRON	D		LACRESCENT	B
KIMBERLINA	B		KIWANIS	P		KOETHER	D		KRDTO	B		LACROL	D
KIMBERLY	B		KIZHUYAK	P		KOFA	D		KRUBATE	B		LACY	B
KIMBROUGH	D		KJAR	D		KOFA, SALINE	C		KRUEGER	C		LADD	D
KIMMERLING	D		KLABER	D		KOFFGO	B		KRUM	D		LADELLE	B
KIMO	C		KLABER, DRAINED	C		KOGISH	D		KRUSE	E		LADERLY	C
KIMPER	B		KLADNICK	A		KOHALA	B		KUBE	E		LADNER	D
KINA	D		KLADNICK, STONY	B		KCKAN	A		KUBLER	C		LADOGA	B
KINAN	B		KLAMATH	D		KOKEE	D		KUBLI	D		LADRON	B
KINCHELDE	D		KLANELNEECHENA	D		KCKERNOT	C		KUCERA	B		LADUE	B
KINCO	A		KLANELNEECHENA,	C		KOKO	B		KUCK	C		LADYCOMB	D
KINDER	C		LACUSTRINE			KOKCKAHI	D		KUDLAC	D		LADYSMITH	D
KINDIG	B		SUBSTRATUM			KOKOKAHI, STONY	B		KUML	D		LAFFE	D
KINDY	C		KLAPATCHE	C		KOKOMO	B/D		KUKAIAU	A		LAFITTE	D
KINESAVA	R		KLAS	C		KOLAR	D		KUKAIAU, BEDROCK	C		LAG	B
KINGDON	B		KLAWASI	D		KOLBERG	C		SUBSTRATUM	C		LAGITOS	C
KINGFISHER	B		KLAWASI,	B		KOLEKOLE	C		KULA	B		LAGLORIA	B
KINGFORN	D		LACUSTRINE			KOLIN	C		KULLIT	B		LAGNAF	B
KINGILE	C		SUBSTRATUM			KOLLS	D		KULSHAN	C		LAGONDA	C
KINGINGHAM	C		KLAWATTI	C		KOLLUTUK	D		KUMA	R		LAGRANGE	D
KINGMAN	D		KLAWHOP	B		KOLDA	C		KUNATON	D		LAGROSS	A
KINGMONT	B		KLAYENT	C		KOLOB	P		KUNAYOSH	A		LAGUNITA	A
KINGS	D		KLECKNER	C		KOLOB, STONY	C		KUNIA	E		LAGUNITA, WET	C
KINGSBURY	D		KLEINBUSH	C		KCLOKOLO	B		KUNUWEIA	B		LAHAINA	B
KINGSDDOWN	B		KLEJ	B		KOLOWOKI	E		KUNZ	B		LAHONTAN	D
KINGSLAND	A/D		KLICKEK	C		KOMO	P		KUNZLER	B		LAHRITY	C
KINGSLEY	B		KLICKITAT	E		KONA	D		KUPREANOF	B		LAI DIG	C
KINGSPOINT	B		KLICKSON	B		KONAWA	P		KUPREANOF,	C		LAILAW	C
KINGSTON	B		KLINE, COBLY	E		KONEPT	C		MODERATELY WET			LAIL	C
KINGSVILLE	A/D		KLINE, PROTECTED	C		KONEPT, DRAINED	C		KUREB	A		LAIRD	B
KINGTAIN	D		KLINESVILLE	C/D		KONNER	D		KURO	D		LAIRDSVILLE	D
KINKEAD	C		KLINGER	B		KONNER, DRAINED	C		KURTH	C		LAJARA	D
KINKEL	C		KLISKON	C		KNOCTI	C		KURTZ	C		LAJITAS	D
KINKEL, GRAVELLY	B		KLISTAN	S		KNOCTI, STONY	P		KUSHNEAHIN	D		LAKE	A
KINKOPA	D		KLONDIKE	D		KNSIL	B		KUSKOKWIM	D		LAKE, CLAYEY	C
KINMAN	C		KLONE	P		KODLAU	C		KUSLINA	C		SURFACE	D
KINNEAR	B		KLOOCHMAN	C		KOODICH	A		KUTCH	C		LAKE CHARLES	D
KINNEY	B		KLOOTCH	C		KOONTZ	D		KUTLER	C		LAKE CREEK	C
KINROSS	A/D		KLOOTCHIE	E		KOOSPHAREM	P		KUY	A		LAKE JAMEE	B
KINSMAN	C		KLOTEN	D		KOOSKIA	C		KVICHAK	B		LAKEFIELD	B
KINSTON	B/D		KLUG	B		KOTENAI	P		KWEO	A		LAKEHELEN	C
KINTA	D		KLUM	E		KOPIE	D		KYBURZ	B		LAKEHURST	A
KINTON	C		KLUMP	B		KOPPERL	P		KYDACA	D		LAKELAND	A
KINZEL	B		KLUTINA	S		KOPPE	A		KYDESTEA	D		LAKEMONT	D
KIGMATIA	A		KNAPKE	B		KORCHEA	E		KYLE	D		LAKEPORT	B
KIONA	B		KNAPPA	B		KORENT	E		KYLER	C		LAKESHORE	D
KIOTE	B		KNAPPTON	S		KCRNMAN	P		KZIN	D		LAKESIDE	B
KIPER	B		KNEELAND	C		KCROPAGO	C		LA BRIER	D		LAKESCL	B
KIPLING	D		KNEP	C		KOPONIS	E		LA FARGE	E		LAKETON	C
KIPPEN	A		KNICKERBOCKER	A		KORTTY	B		LA FONDA	E		LAKEVIEW	C
KIPSON	D		KNIESLEY	C		KOSC IUSKO	P		LA GRANDE	C		LAKEWIN	B
KIRBY	A		KNIFFIN	C		KOSETH	B		LA HOGUE	B		LAKEWOOD	A
KIRBYVILLE	B		KNIGHT	B/D		KCSKOS	D		LA LANDE	E		LAKI	B
KIRK	D		KNIK	B		KCSSE	B		LA PALMA	C		LAKIN	A
KIRKENDALL	C		KNIKLIK	E		KOSSUTH	B/D		LA POSTA	B		LAKCA	B
KIRKHAM	C		KNIPPA	C		KCSZTA	B		LA PRAIRIE	B		LAKOMA	D
KIRKLAND	D		KNOB HILL	B		KCTO	D		LA ROSE	E		LAKRIDGE	C
KIRKSEY	C		KNOETOP	C		KCTZMAN	B		LABENZO	B		LALAAU	A
KIRKVILLE	C		KNOCO	D		KOURY	C		LABETTE	C		LALINDA	B
KIRLEY	C		KNOKE	E/D		KOVICH	D		LABISH	D		LALLIE	D
KIRTLEY	C		KNOLLE	B		KOYEN	P		LABKEY	B		LALOS	B
KIRVIN	C		KNOSS	C		KOYNIK	D		LABORCITA	P		LAM	D
KIRVIN, GRADED	D		KNOTT	D		KOYUPUK	P		LABDU	D		LAMA	C
KISATCHIE	D		KNOWLES	B		KPACKE	B		LABOUNTY	D		LAMANGA	C
KISHONA	B		KNOX	B		KPABE	E		LABRE	E		LAMAR	B
KISHONA, ALKALI	C		KNULL	B		KPAKON	D		LABSHAFT	D		LAMARSH	C
KISRING	C		KNUTSEN	B		KRAM	D		LABU	D		LAMARTINE	C
KISRING, WET	D		KOBAR	C		KRANSKI	B		LABUCK	B		LAMATH	D
KISSICK	C		KOBEL	B		KRANZBURG	B		LACAMAS	D		LAMAWA	B
KISTIRN	B		KOBEL	D		KRATKA	B/D		LACERDA	D		LAMBERT	B
KITCHELL	B		KOCH	D		KRAUSE	E		LACHAPELLA	D		LAMBETH	B
KITCHEN CREEK	B		KOCH, DRAINED	C		KREAMER	C		LACITA	B		LAMBMAN	D
KITI	D		KODAK	B		KREBS	E		LACKAWANNA	C		LAMBRING	E
KITSAP	C		KODAK, NONFLOODED	C		KPEM	A		LACKS	C		LAMEDEER	B
KITTEPLL	D		KODTAK	B		KREMLIN	A		LACLEDE	B		LAMINGTON	D

NOTES: TWO HYDROLOGIC SOIL GROUPS SUCH AS B/C INDICATE THE DRAINED/UNDRAINED SITUATION. MODIFIERS SHOWN, E.G., BEDROCK SUBSTRATUM, REFER TO A SPECIFIC SOIL SERIES PHASE FOUND IN SOIL MAP LEGEND.

Table 2-1.—Hydrologic soil groups for U.S. soils (continued)

LAMKIN	B	LARIAT	B	LAVINA	D	LEETONIA	C	LEW	B
LAMO	C	LARIM	B	LAVON	C	LEEYAN	C	LEWBEACH	C
LAMOILLE	B	LARIMER	B	LAWAI	B	LEFOR	B	LEWDLAC	D
LAMONDI	B	LARIOSCAMP	D	LAWEN	B	LEGALL	B	LEWIS	D
LAMONI	C	LARKIN	B	LANET	B/D	LEGALTY	D	LEWISBERRY	B
LAMONT	B	LARKSON	C	LAVET	B	LEGGETT	B	LEWISBURG	C
LAMONTA	D	LARMINE	C	SALINE-ALKALI	C	LEGLER	C	LEWISTON	C
LAMOOSE	D	LAROQUE	B	LAWLER	F	LEGORE	F	LEWISVILLE	B
LAMOTTE	B	LAROSE	D	LAWNDALE	E	LEHEW	C	LEWKALB	C
LAMOURE	C	LARRUPIN	B	LAWNWOOD	B/D	LEHIGH	C	LEX	B
LAMPASAS	D	LARRY	D	LAWNWOOD,	D	LEHMANS	D	LEXINGTON	B
LAMPHIER	B	LARRY, DRAINED	C	DEPRESSIONAL	C	LEHR	E	LEXTON	B
LAMPSHIRE	D	LARSON	D	LAWRENCE	C	LEICESTER	C	LEYBA	B
LAMSON	B/D	LARTON	A	LAWRENCEVILLE	C	LEIDL	C	LEYDEN	C
LANARK	B	LARUE	A	LAWSHE	D	LEIGHCAN	B	LIBBINGS	D
LANCASTER	B	LARUSH	B	LAWSON	C	LEILEHUA	B	LIBEG	B
LANCE	B	LARVIE	D	LANTHER	D	LEISY	B	LIBERAL	D
LAND	C	LAS	C	LANTON	C	LELA	D	LIPORY	A
LAND, DRAINED	B	LAS ANIMAS	C	LANYER	B	LELAND	B	LIBRARY	D
LANDAVASO	B	LAS FLORES	D	LAX	C	LEMAH	A	LIBUSE	C
LANDCO	C	LAS LUCAS	E	LAXAL	B	LEMBOS	C	LICHA	B
LANDER	C	LAS POSAS	C	LAXTON	C	LEMCO	C	LICK	C
LANDES	B	LAS VEGAS	D	LAYCOCK	B	LEMERT	D	LICKDALE	D
LANDLOW	C	LASA	A	LAYDINT	C	LEMETA	D	LICKING	B
LANDMAN	B	LASALLE	D	LAYTON	A	LEMING	C	LICKSKILLET	C
LANDESEND	C	LASAUSES	D	LAYVIEW	D	LEMITAR	D	LIDAN	C
LANE	C	LASCO	B	LAZAN	D	LEMM	B	LIDDELL	B/D
LANESBORO	C	LASIL	D	LAZEAR	D	LEMOLO	D	LIDDIEVILLE	B
LANEXA	D	LASKA	B	LE BAR	B	LEMOND	B/D	LIDY	B
LANEY	B	LASSEL	C	LE SUEUR	B	LEMONEX	C	LIEBERMAN	B
LANG	C	LASSEN	D	LEA	C	LEMOORE	C	LIEN	D
LANGFORD	C	LASSITER	E	LEADER	B	LEMPIRA	B	LIESNOI	D
LANGHEI	B	LASTANCE	B	LEADORE	B	LEN	C	LIGGET	B
LANGLADE	B	LATAH	D	LEADPOINT	C	LENA	A/D	LIGHTNING	C
LANGLOIS	D	LATAH, HIGH	C	LEADVALE	C	LENA, FLOODED	C	LIGNUM	D
LANGOLA	B	RAINFALL, DRAINED	C	LEADVILLE	B	LENAPAH	D	LIGON	D
LANGRELL	B	LATAH, DRAINED	C	LEAF	D	LENAWEE	B/D	LIGURTA	B
LANGSPRING	B	LATAHCO	C	LEAFRIVER	A/D	LENAWEE, PONDED	D	LIHEN	A
LANGSTON	B	LATAHCO, WET	D	LEAFU	C	LENBERG	C	LIHUE	B
LANGTRY	D	LATANIER	D	LEAGUEVILLE	B/D	LENNEP	C	LIKES	A
LANIER	A	LATCH	A	LEAKSVILLE	D	LENOIR	D	LILAH	A
LANIGER	B	LATENE	B	LEAL	E	LENZ	B	LILBERT	B
LANIGER, GRAVELLY	C	LATES	C	LEALANDIC	D	LENZ, STONY	C	LILBOURN	B
LANKBUSH	B	LATEX	C	LEANNA	D	LENZ, VERY STONY	C	LILLINGS	B
LANKIN	C	LATHAM	D	LEANTO	D	LENZBURG	D	LILLINGTON	B
LANKTREE	C	LATHER	D	LEAPS	C	LEO	A	LILLYLANDS	C
LANOAK	B	LATHROP	B	LEATHAM	C	LEOLA	B	LILTEN	C
LANONA	B	LATIGO	B	LEATHERMAN	D	LEON	B/D	LILY	B
LANSDALE	B	LATINA	D	LEAVENWORTH	C	LEONARD	D	LIM	C
LANSDOWNE	C	LATIUM	D	LEAVERS	E	LEONARDO	E	LIMA	B
LANSING	9	LATOM	D	LEAVITT	B	LEONARDTOWN	D	LIMBER	B
LANTERN	B	LATONIA	E	LEAVITTVILLE	B	LEONI	B	LIMEKILN	D
LANTIS	B	LATDUCHE	D	LEBAM	E	LEGUIEU	D	LIMERICK	D
LANTON	D	LATOUR	B	LEBANON	C	LERDAL	C	LIMERIDGE	C
LANTON, LOW	C	LATDOURELL	B	LEBEAU	D	LERDO	C	LIMKING	B
PRECIPITATION		LATTAS	D	LEBEC	B	LERDY	B	LIMON	C
LANTONIA	B	LATY	D	LEBO	E	LERROW	C	LIMON, WET	D
LANTRY	B	LAUDERDALE	D	LEERSACK	C	LESHARA	B	LIMONES	B
LANTZ	D	LAUDERHILL	B/D	LECK KILL	B	LESHO	C	LIMPIA	C
LANVER	C	LAUFER	D	LECRAG	D	LESLIE	D	LINCO	B
LANYON	C/D	LAUGENOUR, LOAMY	C	LEDFOUR	B	LESON	D	LINCCLN	A
LAP	D	SUBSTRATUM		LEDGEFORK		LESFATE	A	LINDAAS	C/C
LAPARITA	C	LAUGENOUR, SILTY	B	LEDMOUNT	D	LESTER	B	LINDALE	C
LAPDUN	B	SUBSTRATUM		LEDOW	B	LESWILL	E	LINDELL	C
LAPED	D	LAUGENOUR, DRAINED	B	LEDKU	C	LETA	C	LINDEN	B
LAPEER	B	LAUGHLIN	C	LEEDUB	B	LETCHER	D	LINDER	B
LAPHAM	A	LAUMAIA	B	LEDFWITH	B/D	LETHA	C	LINDLEY	C
LAPINE	A	LAUREL	D	LEE	D	LETHENT	D	LINDRITH	B
LAPLATTA	C	LAURELWOOD	B	LEEBENCH	D	LETNEY	A	LINDSIDE	C
LAPON	D	LAUREN	B	LEEDS	C	LETON	D	LINDSTROM	B
LAPORTE	D	LAURENTZEN	B	LEEFIELD	C	LETORT	B	LINDY	C
LAPOSA	C	LAVACREEK	B	LEFKO	C	LETRI	B/D	LINE	B
LAPWAI	B	LAVALLEE	B	LEFKO, WARM	B	LETTIA	B	LINEVILLE	C
LARAND	B	LAVATE	B	LEELANAU	A	LEVASY	C	LINGANORE	B
LARCHMOUNT	B	LAVEAGA	C	LEEMONT	D	LEVELTON	D	LINHART	A
LARDELL	C	LAVEEN	B	LEEPER	D	LEVELTON, DRAINED	C	LINGER	C
LAREDO	B	LAVENTANA	B	LEERAY	D	LEVERETT	C	LINKER	B
LARES	C	LAVERKIN	C	LEESBURG	B	LEVIATHAN	B	LINKUP	D
LARGO	B	LAVIC	B	LEESVILLE	B	LEVY	D	LINKVILLE	B

NOTES: TWO HYDROLOGIC SOIL GROUPS SUCH AS B/C INDICATE THE DRAINED/UNDRAINED SITUATION. MODIFIERS SHOWN, E.G., BEDROCK SUBSTRATUM, REFER TO A SPECIFIC SOIL SERIES PHASE FOUND IN SOIL MAP LEGEND.

Table 2-1.—Hydrologic soil groups for U.S. soils (continued)

LINLITHGO	B	LODI	B	LOPFZ	D	LOZANO	B	LYLES	B/D
LINNE	C	LODICO	D	LOPWASH	E	LOZIER	D	LYMAN	C/D
LINNET	C	LODD	D	LORACK	E	LUALUALEI	D	LYMANSON	C
LINNEUS	B	LOFFTUS	C	LORADALE	C	LUANA	B	LYME	C
LINO	B	LOFTON	D	LORAIN	C/D	LUAP	C	LYNCH	D
LINOYER	B	LOGAN	D	LOPAN	E	LUBBOCK	B	LYNCHBURG	C
LINROSE	C	LOGDELL	B	LORAY	A	LUBRECHT	C	LYNDEN	E
LINSLAW	D	LOGGERT	B	LORDSTOWN	C	LUCAS	D	LYNN HAVEN	B/D
LINT	E	LOGHOUSE	E	LOREAUVILLE	C	LUCE	C	LYNNBOW	D
LINTON	B	LOGRING	D	LORELLA	D	LUCEDALE	C	LYNNDOYL	A
LINVELDT	B	LOGY	B	LORENA	B	LUCERNE	E	LYNNE	B/D
LINVILLE	B	LOHLER	C	LORENZO	B	LUCERO	B	LYNNVILLE	C
LINWELL	C	LOHMILLER	C	LCPETTO	B	LUCIEN	C	LYNNWOOD	A
LINWOOD	A/D	LOHNES	A	LORING	C	LUCILE, MODERATELY	C	LYNX	B
LIPAN	D	LOHSMAN	D	LORMAN	D	WET	D	LYNXCREEK	B
LIPKE	D	LOIRE	E	LORTA	E	LUCILE, DRAINED	E	LYONMAN	B
LIPPINCOTT	B/D	LOKEN	C	LCS ALAMOS	C	LUCKENBACH	C	LYONS	D
LIPPIITT	C	LOKERN	C	LCS BANOS	C	LUCKIAMUTE	C	LYONSVILLE	B
LIRIOS	B	LOKERN,	D	LCS GATOS	C	LUCKY	C	LYRA	D
LISADE	B	SALINE-ALKALI,		LCS GUINEOS	C	LUCKY STAR	E	LYRE	B
LISAM	D	WET		LCS OSOS	C	LUCKYRICH	E	LYSTAIR	B
LISBON	B	LOKERN,	D	LCS ROBLES	B	LUCY	A	LYTELL	E
LISCO	C	SALINE-ALKALI		LCS TANOS	C	LUD	D	LYVILLE	E
LISCOMB	B	LOKOSSEE	B/D	LCSANTVILLE	C	LUDDEN	D	LYX	B
LISK	B	LOLAK	D	LOSEE	E	LUDINGTON	B	MABANK	D
LISMAS	D	LOLALITA	E	LOSTBASIN	B	LUDLOW	C	MABEL	D
LISMORE	B	LOLEKAA	B	LOSTCREEK	B	LUEDERS	C	MABEN	C
LITCHEFIELD	A	LOLETA	C	LOSTINE	E	LUFKIN	D	MABI	D
LITHGOW	C	LOLITE	D	LOSTPOINT	D	LUGERT	F	MABRAY	D
LITIMBER	B	LOLD	B	LOSTSPRING	B	LUGOFF	B	MACAR	B
LITLE	D	LOLDN	E	LOSTVALLEY	C	LUDON	B	MACAPEENO	D
LITRO	D	LOLOPEAK	A	LOSTWELLS	B	LUKE	C	MACE	B
LITTLE HORN	C	LOMA	C	LOSTWELLS, WET	C	LUKIN	C	MACEDONIA	B
LITTLE POLE	D	LOMAKI	B	LCTHAIR	C	LULA	B	MACFARLANE	B
LITTLE WOOD	B	LOMALTA	D	LCTT	C	LULING	D	MACHETE	C
LITTLEAXE	B	LOMART	F	LCTUS	C	LULUDE	C	MACHIAS	B
LITTLEBEAR	B	LOMAX	B	LCTUSPOINT	C	LUMBEE	B/D	MACHUELO	D
LITTLEJOHN	C	LOMETA	C	LOU	B	LUMBERLY	B	MACK	F
LITTLENAN	C	LOMILL	D	LOUDEPBACK	C	LUMMER	B	MACK, LOAMY	C
LITTLETON	B	LOMIRA	E	LOUDCN	C	LUMMI	D	SUBSTRATUM	
LITTSAN	C	LOMITAS	D	LOUDONVILLE	C	LUMMI, DRAINED	C	MACKEN	D
LITZ	C	LOMONE	D	LOUELLA	B	LUMMUS	C	MACKERRICHER	A
LIV	D	LOMOND	E	LOUGHBORO	C	LUNA	C	MACKKEY	C
LIVFORK	B	LONCAB	B	LOUIE	C	LUNDBR	D	MACKSBURG	B
LIVEMORE	B	LOND	C	LOUIECREEK	E	LUNDS	C	MACMEAL	B
LIVIA	D	LONDONDERRY	C/D	LOUIN	D	LUNDY	D	MACOMB	F
LIVINGSTON	D	LONE	C	LOUISA	B	LUNING	A	MACOMBER	C
LIVONA	B	LCNE ROCK	B	LOUISBURG	B	LUNT	C	MACON	B
LIZE	B	LONEBEAR	D	LOUP	D	LUPE	B	MADALIN	D
LIZZANT	E	LONELY	C	LOUPLOUP	E	LUPINTO	E	MADAWASKA	B
LLANDS	C	LONEPINE	S	LOURDES	C	LUPINTO, SALINE	C	MADDEN	C
LOARC	R	LONERIDGE	C	LOUSCOT	C	LUPPYOMA	B	MADDOCK	A
LOBDELL	B	LONESTAR	E	LOUVIERS	D	LUPPINO	D	MADELIA	B/D
LOBELVILLE	C	LONETREE	A	LOVEJOY	C	LUPTON	A/D	MADELINE	D
LOBEPG	C	LONEWOOD	B	LOVELACE	B	LUPTON, PONDED	D	MADERA	D
LOBERT	B	LONGCREEK	D	LOVELAND	C	LURA	C/D	MADGE	B
LOBITOS	C	LONGFORD	C	LOVELAND,	D	LURAY	C/D	MADILL	B
LOBO	D	LONGJIM	D	ELEVATION>6500		LURNICK	C	MADISON	B
LOBURN	D	LONGLOIS	E	LOVELL	D	LUSETTI	B	MADONNA	C
LOCANE	D	LONGMARE	D	LOVELOCK	D	LUSK	C	MADRAK	C
LOCEY	C	LONGMONT	C	LOVELOCK,	C	LUTA	B	MADRAS	C
LOCHLOOSA	C	LONGRIE	B	SALINE-ALKALI		LUTAK	B	MADRID	B
LOCHSA	B	LONGVAL	B	LOVELOCK, DRAINFD	C	LUTE	D	MADRCNE	C
LOCKE	B	LONGVIEW	C	LOVEWELL	B	LUTH	C	MADUREZ	B
LOCKERBY	C	LONIGAN	P	LOVLINE	C	LUTHER	B	MAES	B
LOCKERBY, COBBLY	D	LONIGAN, COBBLY	C	LOWELL	C	LUTIE	E	MAGALLON	B
LOCKHART	R	SUBSTRATUM		LOWERCREEK	A	LUTON	D	MAGDALENA	D
LOCKPORT	B	LONNON	B	LOWNBES	B	LUTZBLOH	E	MAGGERS	B
LOCKTON	B	LOPNA	B	LOWRY	E	LUVERNE	C	MAGGIN	C
LOCKWOOD	B	LOPNOKE	B	LOWS	E/D	LUXOR	D	MAGHILLS	B
LOCKWOOD, WET	C	LONTI	D	LOWVILLE	B	LUZENA	D	MAGIC	D
LOCO	C	LOOKINGGLASS	C	LOX	C	LYBROOK	D	MAGINNIS	D
LOCODA	D	LOOKOUT	C	LOXLEY	A/D	LYDA	D	MAGNA	D
LOCUST	C	LOOMER	D	LOYAL	B	LYDICK	B	MAGNET	C
LODALLEY	D	LOOMIS	D	LOYALTON	D	LYERLY	D	MAGNOR	C
LODAR	D	LOONY	C	LOYSVILLE	D	LYFOPD	C	MAGNUS	C
LODFE	B	LOPER	C	LOZA	D	LYKENS	C	MAGOTHA	D

NOTES: TWO HYDROLOGIC SOIL GROUPS SUCH AS B/C INDICATE THE DRAINED/UNDRAINED SITUATION. MODIFIERS SHOWN, E.G., BEDROCK SUBSTRATUM, REFER TO A SPECIFIC SOIL SERIES PHASE FOUND IN SOIL MAP LEGEND.

Table 2-1.—Hydrologic soil groups for U.S. soils (continued)

MAGOTSU	D	MANAMA	C	MARGO	B	MARYSTOWN	C	MAY	B
MAGUAYO	C	MANBURN	D	MARIA	E	MASADA	C	MAY DAY	D
MAHALA	D	MANCELONA	A	MARIANA	C	MASARDIS	A	MAYACAMA	C
MAHALASVILLE	B/D	MANCHESTER	A	MARIAS	D	MASARYK	A	MAYBELL	A
MAHAN	C	MANDAN	B	MARIVILLE	D	MASCAMP	D	MAYBERRY	D
MAHANA	B	MANDARIN	C	MARICAO	B	MASCARENAS	C	MAYBESG	D
MAHASKA	B	MANDERFIELD	B	MARICOPA	B	MASCHETAH	B	MAYBID	D
MAHOGAN	C	MANDEVILLE	B	MARIETTA	C	MASCOTTE	B/D	MAYDOL	B
MAHONING	D	MANDY	C	MARILLA	C	MASCOTTE,	D	MAYER	B/D
MAHOOSUC	A	MANET	C	MARIMEL	C	DEPRESSIONAL		MAYES	D
MAHTOMEDI	A	MANFRED	D	MARIMEL, DRAINED	B	MASET	B	MAYFIELD	B
MAHTOWA	C/D	MANGUM	D	MARINA	B	MASHAM	D	MAYFLOWER	C
MAHUKONA	B	MANHATTAN	A	MARINE	C	MASHEL	B	MAYGER	C
MAIA	B	MANHEIM	C	MARION	D	MASHULAVILLE	B/D	MAYHEW	D
MAIDEN	C	MANI	C	MARIPO	B	MASKELL	B	MAYMEAD	B
MAILE	A	MANIKAN	B	MARIPOSA	C	MASON	B	MAYMEN	A
MAINSTAY	D	MANILA	C	MARISCAL	C	MASONFORT	D	MAYNARD LAKE	D
MAITLAND	B	MANISTEE	A	MARISSA	C	MASONTOWN	D	MAYO	B
MAJADA	B	MANITA	C	MARKES	D	MASSACK	C	MAYODAN	B
MAJUBA	C	MANITOWISH	B	MARKESAN	B	MASSACK, DRAINED	B	MAYOWORTH	C
MAKAALAE	B	MANLEY	B	MARKET	D	MASSADONA	D	MAYQUEEN	B
MAKAH	B	MANLIUS	C	MARKET	A/D	MASSANETTA	E	MAYSDDRF	B
MAKALAPA	D	MANN	B/D	MARKHAM	C	MASSANUTTEN	E	MAYSPINGS	B
MAKAPILI	B	MANNING	B	MARKLAKE	D	MASSPACH	B	MAYTAG	D
MAKAWAO	B	MANOGUE	D	MARKLAND	C	MASSENA	C	MAYTOWN	C
MAKAWELI	B	MANOR	B	MARKLEPASS	D	MASSIE	D	MAYVILLE	B
MAKENA	B	MANSELD	B	MARKTON	C	MASTERSON	B	MAYWOOD	B
MAKI	C	MANSFIELD	D	MARLA	D	MATA	C	MAZARN	C
MAKIKI	B	MANSIC	B	MARLAKE	D	MATAGORDA	D	MAZASKA	C/D
MAKLAK	A	MANSKER	B	MARLPORO	B	MATAMOROS	C	MAZDALE	B
MAKOTI	B	MANSONIA	B	MARLEAN	B	MATANUSKA	B	MAZOURKA	C
MAL	C	MANTACHIE	C	MARLETTE	B	MATANZAS	E	MAZUMA	B
MALA	B	MANTECA	C	MARLOW	C	MATAPEAKE	B	MC CORT	B
MALABAR	B/D	MANTEO	C/D	MARLTON	C	MATAWAN	C	MCAFFEE	C
MALABAR,	D	MANTER	B	MARMARTH	B	MATCHER	A	MCALLEN	B
DEPRESSIONAL		MANTON	B	MARMARTH, COOL	C	MATFIELD	C	MCALLISTER	C
MALABAR,	D	MANU	C	MARNA	C/D	MATGO	D	MCALPIN	C
FREQUENTLY		MANVEL	B	MAROSA	B	MATHENY	B	MCBEE	D
FLOODED		MANVEL, SALINE	C	MARDTZ	C	MATHERS	B	MCBETH	C
MALABON	C	MANZANAR	C	MARPA	C	MATHERTON	B	MCBETH, SALINE	C
MALACHY	B	MANZANITA	C	MARPLEEN	C	MATHESON	B	MCBETH, DRAINED	C
MALAGA	B	MANZANITA,	E	MARQUETTE	A	MATHIAS	B	MCBIGGAM	C
MALAGA, STONY	A	GRAVELLY		MARQUEZ	C	MATHIS	C	MCBRIDE	B
MALAMA	A	MANZANO	B	MARR	B	MATHISTON	C	MCAFFERY	A
MALARGO	B	MANZANOLA	C	MARRJOTT	B	MATHON	B	MCCAIN	C
MALAYA	D	MAPLE MOUNTAIN	E	MARROWBONE	C	MATLACHA	C	MCCALEB	B
MALBIS	B	MAPLECREST	B	MARSDEN	R	MATNEFLAT	B	MCCALL	B
MALCOLM	B	MAPLEHILL	C	MARSELLES	B	MATTOY	C	MCCALLY	D
MALDEN	A	MAPLETON	C	MARSELL	B	MATTAMUSKEET	D	MCCAMMON	C
MALEZA	B	MAPLETON, STONY	C/D	MARSHALL	B	MATTAN	D	MCCANN	B
MALHEUR	C	MARACK	C	MARSHAN	B/D	MATTAPEX	C	MCCAREY	C
MALIBU	D	MARAGUEZ	B	MARSHBROOK	D	MATTAPONI	C	MCCARRAN	B
MALIN	C	MARANA	B	MARSHDALE	D	MATUNUCK	D	MCCARTHY	B
MALJAMAR	B	MARATHON	B	MARSHDALE, DRAINED	C	MAU	C	MCCASH	B
MALLORY	C	MARBLE	A	MARSHFIELD	P/D	MAUBILA	C	MCCLAIVE	C
MALM	C	MARBLECREEK	B	MARSING	E	MAUDE	E	MCCLEARY	D
MALMESA	D	MARBLEMOUNT	B	MART	B	MAUDLIN	B	MCCLELLAN	B
MALO	B	MARBLEMOUNT,	C	MARTEL	D	MAUGHAN	C	MCCLOUD	C
MALOTERPE	D	CHANNERY		MARTELLA	C	MAUKEY	C	MCCLURE	C
MALOTT	B	MARCADO	D	MARTIN	C	MAUMEE	A/D	MCCOIN	D
MALOY	B	MARCELINAS	D	MARTIN PENA	D	MAUNABO	D	MCCOLL	D
MALPAIS	B	MARCELLON	C	MARTINECK	D	MAUPIN	C	MCCOLLUM	R
MALSTROM	B	MARSETTA	B	MARTINEZ	D	MAUREPAS	D	MCCONNEL	B
MALVERN	C	MARCIAL	D	MARTINI	B	MAURERTOWN	D	MCCONNEL, FLOODED	A
MAMALA	D	MARCLAY	D	MARTINSBURG	E	MAURICE	B	MCCOOK	B
MAMOU	C	MARCOLA	C	MARTINSDALE	B	MAURY	E	MCCORNICK	C
MANAHAA	C	MARCONI	C	MARTINSON	C	MAUYAIS	C	MCCORD	B
MANAHAWKIN	D	MARCOTT	C	MARTINSVILLE	B	MAYCO	C	MCCORD	B
MANANA	C	MARCOU	B	MARTINTON	C	MAYEPICK	C	MCCREE	B
MANARD	D	MARCUM	C	MARTIS	E	MAVIF	B/D	MCCRORY	D
MANARD, GRAVELLY	C	MARCUS	B/D	MARTISCO	B/D	MAWAE	A	MCCROSKET	B
SUBSTRATUM		MARCUSE	D	MARTY	B	MAYER	B	MCCULLOUGH	B
MANASSA	C	MARCY	D	MARUMSCO	C	MAX	B	MCCULLY	C
MANASSAS	B	MARDIN	C	MARVAN	D	MAXCREEK	B/D	MCCUMBER	B
MANASTASH	C	MARENGO	C/D	MARVELL	B	MAYEY	C	MCCUNE	D
MANATEE	B/D	MARESLA	B	MARVIN	C	MAXFIELD	B/D	MCCURDY	C
MANATEE,	D	MARGATE	B/D	MARVYN	B	MAYTON	B	MCCUTCHEN	D
DEPRESSIONAL		MARGERUM	B	MARY	C	MAXVILLE	B	MCDADE	C
MANATEE, FLOODED	D	MARGIE	C	MARYSLAND	B/D	MAXWELL	D	MCDANIEL	B

NOTES: TWO HYDROLOGIC SOIL GROUPS SUCH AS B/C INDICATE THE DRAINED/UNDRAINED SITUATION. MODIFIERS SHOWN: C.G., BEDROCK SUBSTRATUM, REFER TO A SPECIFIC SOIL SERIES PHASE FOUND IN SOIL MAP LEGEND.

Table 2-1.—Hydrologic soil groups for U.S. soils (continued)

MCDERMOTT	B	MECKLENBURG	C	MERDEN	D	MIKIM, WET	C	MINNEOSA	B
MCDOLE	B	MECOSTA	A	MEREDITH	B	SUBSTRATUM	B	MINNEQUA	C
MCDONALD	C	MEDA	E	MERETA	C	MIKKALO	C	MINNETONKA	D
MCDONALDSVILLE	C/D	MEDANO	D	MERGEL	B	MILACA	C	MINNETONKA, SILTY	C/D
MCDUFF	C	MEDARY	C	MERIDIAN	B	MILAN	B	SUBSTRATUM	D
MCELMO	C	MEDBURN	B	MERINO	C	MILBURY	C	MINNEWAUKAN	A/D
MCELROY	B	MEDCO	D	MEKEL	B	MILBY	C	MINNIECE	D
MCEWEN	B	MEDFORD	B	MEPLIN	D	MILCAN	C	MINNIEPEAK	A
MCFADDEN	B	MEDFRA	D	MERMENTAU	C	MILDRED	C	MINNIEPEAK,	B
MCFAIN	C	MEDICINE	B	MERMILL	B/D	MILES	B	OVERBLOWN,	D
MCFARLAND	B	MEDLEY	B	MEFNA	B	MILFORD	B/D	GRAVELLY	B
MCFEUL	C	MEDLIN	D	MEROS	A	MILHAM	B	MINNIEPEAK,	B
MCGAFFEY	B	MEDOMAK	D	MERRICK	B	MILITARY	B	OVERBLOWN	D
MCGARR	C	MEDORA	E	MERRILL	C	MILL HOLLOW	B	MINNIEVILLE	C
MCGARVEY	C	MEDWAY	E	MERRILLAN	C	MILLADORE	C	MINNIMAUD	C
MCGARY	C	MEEGERNOT	B	MERRIMAC	A	MILLARD	B	MINNITH	C
MCGEHEE	C	MEEGRO	E	MERRITT	C	MILLBORO	D	MINNYE	B
MCGILVERY	D	MEEHAN	B	MERRITT, CLAYEY	B	MILLBROOK	B	MINGA	C
MCGINNIS	C	MEEKS	B	SUBSTRATUM,		MILLBURNE	B	MINOCQUA	B/D
MCGINTY	B	MEE TEETSE	D	DRAINED		MILLER	D	MINTER	D
MCGIRK	C	MEGALOS	D	MERRITT, DRAINED	B	MILLERLAKE	B	MINTO	C
MCGIRK, LOW	D	MELGETT	D	MERSON	C	MILLERLUX	D	MINU	D
PRECIPITATION		MEGONOT	C	MEPTON	E	MILLERTON	D	MINVALE	B
MCGOWAN	B	MEGUIN	B	MERTZ	C	MILLERVILLE	A/D	MINVENO	D
MCGRATH	B	MEHLDRN	C	MERWIN	A/D	MILLETT	B	MINWELLS	C
MCGREW	B	MEIKLE	D	MESA	B	MILLGROVE	B/D	MION	D
MCGUFFEY	D	MEISS	D	MESABA	C	MILLHEIM	C	MIPPON	C
MCGUIRE	B	MEKINOCK	D	MESCAL	C	MILLHI	D	MIRABAL	C
MCHENRY	B	MELAKWA	C	MESCALERO	C	MILLPOPPER	C	MIRACLE	C
MCILWAINE	B	MELAND	C	MESEI	D	MILLRIDGE	A	MIRAGE	C
MCINTOSH	B	MELBOURNE	B	MESPUN	A	MILLICOMA	C	MIRAMAR	B
MCINTYRE	B	MELBY	B	MESSER	C	MILLIGAN	C	MIRAND	D
MCIVEY	C	MELD	C	MET	B	MILLING	D	MIRANDA	D
MCKAMIE	D	MELDER	B	METAMORA	B	MILLINGTON	B/D	MIRES	A
MCKAY	C	MELGA	D	METCALF	D	MILLIS	C	MIRES, STONY	B
MCKEE	D	MELHOMES	D	METEA	B	MILLPAW	C	MIRKWOOD	D
MCKEETH	B	MELITA	A	METH	C	MILLPOT	B	MIRROR	C
MCKELVIE	A	MELLENTHIN	D	METIGOSHE	B	MILLRACE	A	MIRROR LAKE	A
MCKENNA	D	MELLOR	D	METGLIUS	B	MILLROCK	B	MISAD	B
MCKENNA, DRAINED	C	MELLOR, STRATIFIED	C	METRE	D	MILLSAP	D	MISENHEIMER	C
MCKENZIE	D	SUBSTRATUM		MEtz	B	MILLSDALE	B/D	MISHAK	D
MCKINLEY	B	MELLOTT	B	MEFICO	D	MILLSHOLM	D	MISHAK, DRAINED	C
MCKINNEY	C	MELOCHE	D	MEFISPRING	D	MILLSITE	B	MISSION	D
MCKNIGHT	B	MELOLAND	C	MEYSTRE	R	MILLVILLE	R	MISSISQUOI	A
MCLAIN	C	MELROSE	C	MHCODN	D	MILLWOOD	D	MISSLER	B
MCLAURIN	H	MELTON	D	MIAMI	B	MILNER	B	MISSOULA	D
MCLEOD	B	MELVILLE	R	MIAMIAN	C	MILOK	B	MITCH	B
MCLOUGHLIN	B	MELVIN	D	MICANOPY	C	MILPITAS	C	MITCH, RARELY	C
MCMEEEN	C	MEMALDOSE	C	MICCO	B/D	MILREN	C	FLOODED	C
MCMILLE	B	MEMPHIS	B	MICHELSON	B	MILTON	C	MITCHELL	B
MCMULLIN	D	MENAHGA	A	MICHIGAMME	C	MILVAR	C	MITWANGA	C
MCMURDIE	C	MENARD	B	MICKEY	D	MIMBRES	P	MITKOF	D
MCMURRAY	D	MENASHA	D	MICROY	C	MIMOSA	C	MITKOF, MODERATELY	C
MCMURRAY, DRAINED	C	MENBO	C	MIDAS	C	MINA	B	WET	C
MCNARY	D	MENGEBOURE	C	MIDCO	A	MINALDOOSA	B	MITRE	C
MONEAL	P	MENDELTA	D	MIDDLE	C	MINAM	B	MITRING	C
MCONULL	C	MENDELTA,	B	MIDDLEBURY	B	MINAT	B	MITTEN	B
MCONULTY	B	LACUSTRINE	B	MIDDLEMARCH	B	MINATARE	B	MIVIDA	B
MCPAUL	B	SUBSTRATUM		MIDDLETOWN	B	MINCHEY	D	MIZEL	D
MCPHIE	B	MENDENHALL	D	MIDDLEWOOD	D	MINCHUMINA	D	MOAB	B
MCOUARRIE	D	MENDI	B	MIDELIGHT	E	MINCO	B	MOAG	D
MCOQUEEN	C	MENDOCINO	B	MIDESSA	B	MINDEGO	C	MOANO	D
MCRAE	B	MENDON	B	MIDFORK	E	MINDEN	B	MOAPA	C
MCRAVEN	C	MENDOTA	B	MIDLAND	D	MINE	B	MOAULA	A
MCTAGGART	B	MENEFEE	D	MIDMONT	C	MINEOLA	A	MOBATE	D
MCEVEGAS	D	MENFRO	B	MIDNIGHT	D	MINER	D	MOBEETIE	B
MCVICKERS	C	MENLO	D	MIDQ	A	MINERAL	C	MOBERG	B
MEAD	D	MENO	C	MIDRAW	C	MINERAL MOUNTAIN	C	MOBL	B
MEADIN	A	MENOKEN	C	MIDVALE	C	MINERSVILLE	B	MOBRIDGE	B
MEADLAND	C	MENGWINEE	A	MIDWAY	C	MINESINGER	C	MOCA	D
MEADOWBROOK	B/D	MENTO	C	MIERHILL	C	MINETA	C	MOCAREY	D
MEADOWCREEK	C	MENTOR	B	MIERUF	B	MINGO	C	MOCHO	B
MEADOWLAKE	C	MENZEL	B	MIESEN	C	MINGUS	D	MOCKLEP	B
MEADOWVILLE	B	MEQUON	C	MIFFLIN	B	MINIDOKA	C	MOCMONT	B
MEANS	C	MER ROUGE	E	MIGEFN	B	MINKLER	D	MOCILEME	C
MEARES	D	MERCED	D	MIGUEL	D	MINLITH	D	MODA	D
MECAN	B	MERCEDES	D	MIKE	D	MINNEHA	C	MODALE	C
MECHANICSBURG	C	MERCEY	C	MIKESELL	C	MINNEISKA	P	MODFNA	B
MECKESVILLE	C	MERCEY	C	MIKIM	B	MINNEOPA	B	MODESTO	C

NOTES: TWO HYDROLOGIC SOIL GROUPS SUCH AS E/C INDICATE THE DRAINED/UNDRAINED SITUATION. MODIFIERS SHOWN, E.G., BEDROCK SUBSTRATUM, REFER TO A SPECIFIC SOIL SERIES PHASE FOUND IN SOIL MAP LEGEND.

Table 2-1.—Hydrologic soil groups for U.S. soils (continued)

MODJESKA	B	MONTCALM	A	MORTENSON	C	MUIR	B	MYOMA, WET	B
MODKIN	C	MONTE	B	MORTENSON, COBBLY	D	MUIRKIRK	P	MYRA	C
MODOC	C	MONTE CRISTO	D	MORTON	B	MUKILTEO	D	MYRICK	C
MODYON	C	MONTECITO	B	MORVAL	B	MUKILTEO, DRAINED	C	MYRTLE	B
MOE	B	MONTEGRANDE	D	MOSBY	C	MULAT	D	MYSTEN	A
MOEN	C	MONTTELL	D	MOSCA	B	MULDOON	B	MYSTIC	C
MOENKOPIE	D	MONTELLO	C	MOSCOW	C	MULPOW	D	NAALEHU	B
MOEPITZ	B	MONTEOCHA	D	MOSSEL	C	MULETT	D	NAALEHU, BEDPOCK	C
MOFFAT	B	MONTEOLA	D	MOSSES	B	MULGON	B	SUBSTRATUM	
MOGG	D	MONTEROSA	D	MOSSES, BOULDERY	C	MULHALL	B	NABESNA	D
MOGLIA	C	MONTESA	C	MOSHANNON	B	MULHOLLAND	B	NACHES	B
MOGOLLON	B	MONTEVALLO	D	MOSHEIM	D	MULHOP	D	NACHUSA	B
MOGOTE	C	MONTEZ	B	MOSHER	D	MULKEY	C	NACIMIENTO	C
MOHALL	B	MONTGOMERY	D	MOSHERVILLE	C	MULLICA	C	NACLIINA	D
MOHAVE	B	MONTICELLO	B	MOSHUP	C	MULLIG	B	NACOGDOCHES	B
MOHAWK	B	MONTIETH	B	MOSIDA	B	MULLINS	D	NADA	D
MOHOCKEN	C	MONTLID	C	MOSINEE	B	MULLYON	D	NADEAU	B
MOIESE	B	MONTDRENCI	B	MOSLANDER	B	MULSHOE	C	NADINA	D
MOINES	C	MONTNEVA	C	MOSMAN	D	MULSTAY	C	NADRA	D
MOINGONA	B	MONTOSO	B	MOSO	P	MULT	C	NAEGELIN	D
MOJO	C	MONTOUR	D	MOSQUET	D	MULTEY	B	NAFF	B
MOKELUMNE	D	MONTOYA	D	MOSROC	D	MULTNOMAH	B	NAGITSY	C
MOKENA	C	MONTPELLIER	C	MOSBYROCK	B	MULTORPOR	A	NAGLE	B
MOKIAK	B	MONTROSS	C	MOSWELL	D	MUNDAL	C	NAGROM	C
MOKINS	D	MONTVALE	D	MOSTA	E	MUNDELEIN	B	NAHA	C
MOKO	D	MONTVERDE	B/D	MOTEN	C	MUNDEN	B	NAHATCHE	C
MOKULEIA	B	MONTWEL	C	MOTLEY	C	MUNDOS	B	NAHMA	B/D
MOLALLA	B	MONTWEL, ALKALI	B	MOTOQUA	D	MUNDT	C	NAHON	D
MOLAND	B	MONUE	B	MOTT	B	MUNI	D	NAHRUB	D
MOLAS	D	MONVERO	A	MOTTLAND	B	MUNISING	B	NAHUNTA	C
MOLCAL	B	MOODY	B	MOTTO	D	MUNJOR	B	NAIWA	B
MOLENA	A	MOOHOO	B	MOTTSVILLE	A	MUNK	C	NAKAI	B
MOLIDN	D	MOOLACK	A	MOULTON	C	MUNNELL	B	NAKARNA	B
MOLLICY	C	MOONLIGHT	B	MOULTRIE	D	MUNSET	D	NAKINA	B/D
MOLLMAN	B	MOONSHINE	B	MOUND	C	MUNSON	D	NAKNEK	D
MOLLYVILLE	D	MOONSTONE	C	MOUNDHAVEN	A	MUNUSCONG	B/D	NAKOCNA	D
MOLLY	B	MCONVILLE	B	MOUNDPRAIRIE	B/D	MURAD	B	NALAKI	C
MOLOKAI	B	MOOREVILLE	C	MOUNDPRAIRIE,	D	MURANCH	C	NALDO	B
MOLSON	B	MOOSE RIVER	D	POONDED	D	MURDO	B	NALL	D
MOLYNEUX	B	MOOSD	C	MOUNDVILLE	A	MURDOCK	C	NAMBE	B
MOMOLI	B	MOOSELAKE	A/D	MOUNT HOME	B	MUREN	B	NAMELA	C
MONA	B	MOOSHAUNEE	C	MOUNT LUCAS	C	MURNEN	B	NAMEOKI	D
MONACAN	C	MOOSLAUKE	C	MOUNTADAMS	B	MUROC	D	NAMON	B
MONACHE	B	MOPANA	D	MOUNTAINBOY	D	MURPHY	C	NAMUR	D
MONAD	B	MOPANG	B	MOUNTAINBURG	C	MURRIETA	D	NANAMKIN	A
MONADNOCK	B	MOQUAH	B	MOUNTAINEER	C	MURRILL	B	NANCY	B
MONAHANS	B	MORA	C	MOUNTAINVIEW	C	MURTIP	B	NANIAX	D
MONARDA	D	MORADO	C	MOUNTAINVILLE	B	MURVILLE	A/D	NANKIN	C
MONASTERIO	C	MORALES	D	MOUNTMED	D	MUSCATINE	D	NANNY	B
MONAVILLE	B	MORAN	B	MOUNTMED,	C	MUSE	C	NANNYTON	B
MONBUTTE	C	MORANCH	B	MODERATELY WET	B	MUSELLA	B	NANSEMOND	C
MONCHA	B	MORAPDS	C	MOUNTVIEW	C	MUSICK	B	NANSENE	B
MONDAMIN	C	MORD	C	MOUZON	D	MUSINIA	D	NANSESEP	C
MONDEY	C	MOREAU	D	MOVILLE	C	MUSKEGO	A/D	NANSUS	D
MONDOVI	B	MOREHEAD	C	MOWATA	D	MUSKEGO, MARSHY	D	NANTAHALA	B
MONEE	D	MOREHOUSE	D	MOWEBA	B	MUSKEGO, CLAY LOAM	D	NANTUCKET	C
MONGAUP	C	MORELAND	D	MOWER	C	SUBSTRATUM		NANUM	B
MONICO	C	MORENO	C	MOWICH	D	MUSKELLUNGE	D	NAPA	D
MONIDA	C	MORET	D	MOXEY	D	MUSKINGUM	C	NAPIER	B
MONIERCO	D	MOREY	D	MOYERS	C	MUSKOGEE	C	NAPLENE	B
MONITEAU	C/D	MORFITT	B	MOYERSON	D	MUSOFARE	C	NAPOLEON	A/D
MONITOR	C	MORGALA	C	MOYINA	D	MUSQUIZ	C	NAPPANEE	C
MONJEAU	D	MORGANFIELD	B	MT. AIRY	A	MUSSEL	B	NAPTOWNE	B
MONOCLINE	C	MORIARTY	D	MT. CARROLL	B	MUSSELSHELL	B	NARANJITO	C
MONOGRAM	B	MORICAL	C	MT. HOOD	B	MUSSERHILL	C	NARANJO	C
MONONA	B	MORLEY	C	MT. OLIVE	C	MUSSEY	B/D	NARCISSE	C
MONONGAHELA	C	MORLING	D	MT. VERNON	C	MUSTANG	A/D	NARCOOSSEE	C
MONROE	B	MORMON MESA	D	MUCARA	D	MUTNALA	B	NARD	B
MONRDEVILLE	C/D	MOROCDO	B	MUCKALEE	D	MUZZLER	D	NAREL	B
MONSE	B	MORONI	D	MUD SPRINGS	D	MYAKKA	B/D	NARGAR	B
MONSERATE	C	MOROP	C	MUDCO	C	MYAKKA,	D	NARK	C
MONSERATE, THIN	D	MORPH	B/D	MUDLAVIA	B	DEPRESSIONAL		NARLON	D
SURFACE		MORRILL	B	MUDRAY	D	MYAKKA, TIDAL	D	NARNETT	B
MONSDN	C/D	MORRIS	C	MUES	C	MYATT	D	NARDN	B
MONTAGUE	D	MORRISON	B	MUFF	C	MYERS	D	NARRAGANSETT	B
MONTALTO	C	MORRISTOWN	C	MUG	D	MYERSVILLE	B	NARRAGUINNEP	D
MONTARA	D	MORROW	C	MUGGINS	C	MYFORD	D	NARROWS	D
MONTAUK	C	MORSE	D	MUGHOUSE	C	MYLREA	C	NARTA	D
MONTBORNE	C	MORSET	B	MUGHUT	C	MYOMA	A	NARU	C

NOTES: TWO HYDROLOGIC SOIL GROUPS SUCH AS B/C INDICATE THE DRAINED/UNDRAINED SITUATION. MODIFIERS SHOWN, E.G., BEDROCK SUBSTRATUM, REFER TO A SPECIFIC SOIL SERIES PHASE FOUND IN SOIL MAP LEGEND.

Table 2-1.—Hydrologic soil groups for U.S. soils (continued)

NASER	B	NEHALEM, FLOODED	C	NEVALBIN, MUCK	D	NIKAL	B	NOONAN	D
NASH	B	NEHAR	B	SUBSTRATUM	B	NIKEY	B	NOPAH	C
NASHMEAD	B	NEHAR, STONY	C	NEVALBIN, PONDED	D	NIKFUL	D	NOGRA	B
NASHOBA	C	NEIBER	C	NEWALLA	D	NIKISHKA	B	NORAD	B
NASHVILLE	B	NEICE	B	NEWAPNA	C	NIKLASON	B	NORBERT	D
NASHWAUK	C	NEILTON	A	NEWARK	C	NIKOLAI	D	NORBORNE	B
NASKEAG	C	NEISSENBERG	C	NEWARK, PONDED	D	NILAND	C	NORCAN	C
NASON	C	NEKIA	C	NEWARK, PONDED,	D	NILER	D	NORD	B
NASON, GRAVELLY	D	NEKKEN	E	COOL	B	NILRAP	B	NORDBY	B
NASS	D	NEKOMA	B	NEWAUKUM	B	NIMBRO	B	NORDEN	B
NASSAU	C	NELOORE	D	NEWAYCO	E	NIMERICK	C	NORDIC	B
NASSET	R	NELLA	B	NEWBELL	B	NIMMO	D	NORDICOL	B
NATAGA	A	NELLIS	B	NEWBEPG	B	NIMROD	C	NORDNESS	B
NATAL	D	NELMAN	C	NEWBERG, WET	C	NIMS	C	NORFOLK	B
NATANK	C	NELSCOTT	C	NEWBFBN	C	NIMUE	B	NORFORK	D
NATCHEZ	B	NELSF	B	NEWBERRY	C	NINCH	E	NOPGE	B
NATCHITOCHE	D	NELSON	C	NEWBRN	B	NINEKAR	D	NORGO	D
NATHALE	C	NEMADJI	P	NEWCO	D	NINEMILE	D	NORKA	B
NATHROP	C	NEMAH	D	NEWCGMB	A	NINEPIPE	B	NOPKODL	B
NATHROP, NONSTONY	B	NEMAH, DRAINED	C	NEYDALE	F	NINEVEH	B	NORLAND	B
NATHROP, COBBLY	B	NEMICO	D	NEWELL	D	NINIGRET	B	NORMA	D
NATI	C	NEMOTE	A	NEWELLTON	B	NICBELL	C	NORMA, DRAINED	C
NATIONAL	B	NEMOURS	C	NEWFIELDS	B	NIOTA	D	NORMANGEE	D
NATKIM	B	NENANA	E	NEWFLAT	D	NIOTAZE	C	NORMANIA	B
NATOMAS	B	NENNO	C	NEWFORK	D	NIPE	B	NOROB	C
NATROY	D	NEOLA	D	NEWFOUND	C	NIPINTUCK	D	NORREST	C
NATURITA	B	NEOTOMA	B	NEWGLARUS	E	NIPPT	B	NORRIS	D
NAUKATI	D	NEPALTO	A	NEWHAN	A	NIPSUM	C	NORRISTON	A
NAUMBURG	C	NEPESTA	B	NEWHOUSE	B	NIRA	B	NORTE	C
NAUVOO	B	NEPHI	C	NEWIPK	D	NIRAC	C	NCRTFZ	C
NAVACA	D	NEPONSET	C	NEWLANDS	E	NIRE	C	NORTH POWDER	C
NAVAJO	D	NEPPEL	B	NEWLANDS, #ARM	C	NISENE	B	NORTHBCRO	C
NAVAN	D	NEPTUNE	A	NEWLIN	B	NISHNA	C/D	NORTHCASTLE	B
NAVASAN	A	NERESON	B	NEWMAN	C	NISHNA, PONDED	D	NORTHCODE	C/D
NAVIDAD	B	NESPITT	R	NEWNATA	C	NISHON	D	NORTHDALE	C
NAVINA	B	NESDA	E	NEWPASS	C	NISQUALLY	A	NORTHFIELD	D
NAVO	D	NESHAMINY	B	NEWPORT	C	NISULA	P	NORTHMORE	C
NAWNEY	D	NESHOBA	C	NEWRY	B	NITCHLY	B	NORTHTRUP	C
NAWT	D	NESIKA	B	NEWSKAH	B	NITTAW	D	NORTHSTAR	C
NAXING	B	NESIUS	A	NEWSON	A/D	NIU	B	NORTHWATER	B
NAYE	C	NESKAHI	B	NEWSPOCK	B	NIULII	C	NORTHWOOD	B/D
NAYPED	R	NESKOWIN	C	NEWSTEAD	C	NIWANA	B	NORTON	C
NAYRIE	D	NESO	D	NEWTON	A/D	NIWOT	C	NORTONVILLE	C
NAZ	B	NESPELEM	C	NEWTONIA	B	NIX	D	NORWELL	C
NAZATON	B	NESS	D	NEWTOWN	C	NIXA	C	NORWICH	D
NEABSCO	C	NESSEL	B	NEWULM	B	NIXON	B	NORWOOD	B
NEBAGO	C	NESTER	C	NEWVIENNA	B	NIXONTON	B	NOSRAC	B
NEBEKER	C	NESTORIA	C/D	NEWVILLE	D	NIZINA	A	NOTAL	D
NEBGFN	D	NESTUCCA	D	NEYGAT	C	NOARK	B	NOTCHEP	B
NEBISH	B	NET	C	NEZ PERCE	C	NOBE	D	NOTI	B
NEBONA	D	NETARTS	P	NGARDMAU	P	NOBLE	B	NOTINED	D
NECANICUM	B	NETCONG	B	NGAROOK	E	NOBLETON	C	NOTSPIER	D
NECESSITY	C	NETO	B	NGATPANG	C	NOBOCO	B	NOTTAWA	B
NECHE	C	NETOMA	R	NGEDEBUS	A	NOBSCOT	A	NOTTER	B
NECONDA	C	NETRAC	A	NGERSUOL	C	NOBUCK	C	NOTUS	C
NECTAR	C	NETTLES	D	NGERUNGOR	D	NOCKFN	C	NOTUS, DRAINED	B
NEDA	C	NETTLETON	C	NIAGARA	C	NODAWAY	B	NOUQUE	D
NEDERLAND	B	NEUBERT	B	NIAPADA	B	NODEM	B	NOVCAN	D
NEEDLE	D	NEUNS	C	NIAPT	C	NODINE	B	NOVARK	B
NEEDLE PEAK	C	NEURALIA	C	NIPES	C	NOELKE	D	NOVARY	D
NEEDLE PEAK, LOAMY	B	NEURALIA, SANDY	B	NIBLEY	B	NOGAL	C	NOVATO	D
SUBSTRATUM		SUBSTRATUM		NIBSON	C	NOHILI	D	NOVINA	B
NEEDLE PEAK,	B	NEUSKE	B	NICANDP	D	NOKASIPPI	R/D	NOWATA	B
OCCASIONALLY		NEVADANILE	C	NICHOLFLAT	C	NOKAY	C	NOWEN	B/D
FLOODED		NEVADRER	B	NICHOLIA	D	NOKHU	C	NOWOY	B
NEEDLETON	B	NEVAPC	C	NICHOLS	P	NOLAM	B	NOYER	B
NEEDLEYE	C	NEVAT	B	NICHOLSON	C	NOLICHUCKY	B	NOYES	C/D
NEEDMOPE	C	NEVEE	B	NICHOLVILLE	C	NOLIN	B	NOYO	C
NEELEY	B	NEVERSINK	D	NICKEL	B	NOLO	D	NOYSON	C
NEEN	C	NEVILLE	B	NICKIN	B	NOLTEN	C	NUAHS	B
NEEN, WET	D	NEVILLE, WET	C	NICKSVILLE	C	NOMARA	C	NUBY	D
NEEN, DRAINED	B	NEVIN	B	NICODEMUS	B	NOME	D	NUBY, DRAINED	C
NEENAH	C	NEVINE	B	NICODEMUS, FLOODED	C	NOMIE	B	NUBY, PROTECTED	C
NEER	B	NEVKA	C	NICOLAS	A	NONDALTON	B	NUC	C
NEESES	C	NEVOYER	D	NICOLLET	B	NONOPAHU	B	NUCKOLLS	B
NEESOPAH	B	NEVTAH	C	NIDO	C	NONPAREIL	D	NUCLA	B
NEFF	C	NEVU	C	NIELSEN	D	NOOK	C	NUCES	C
NEGLEY	B	NEW CAMBRIA	C	NIGHTHAWK	B	NOOKACHAMPS	D	NUEVA	B
NEHALEM	B	NEVALBIN	B/D	NIHILL	P	NOOKSACK	C	NUFF	C

NOTES: TWO HYDROLOGIC SOIL GROUPS SUCH AS B/C INDICATE THE DRAINED/UNDRAINED SITUATION. MODIFIERS SHOWN, E.G., BEDROCK SUBSTRATUM, REFER TO A SPECIFIC SOIL SERIES PHASE FOUND IN SOIL MAP LEGEND.

Table 2-1.—Hydrologic soil groups for U.S. soils (continued)

NUGENT	A	OCONALUFTEE	B	OLD CAMP	D	OPENLAKE	D	OSAKIS	B
NUKRUM	D	OCONEE	C	OLDENBURG	C	OPEQUON	C	OSBORN	C
NULEY	B	OCONTO	B	OLDHAM	B	OPHIR	C	OSBORN, MODERATELY	D
NULLIGAM	9	OCOSTA	D	OLDS	D	OPIHIKAO	D	WET	
NUMA	B	OCQUEOC	A	OLDSFERRY	A	OPLIN	C	OSCAR	D
NUNDA	C	OCQUEOC,	B	OLDSMAR	B/D	OPPIO	D	OSCURA	C
NUNEMAKER	D	MODERATELY WET		OLDSMAR,	D	OPPIO, STONY	C	OSGOOD	C
NUNICA	C	OCRAIG	D	DEPRESSIONAL	D	OQUAGA	C	OSHA	B
NUNN	C	OCTAGON	B	OLEO	B	OQUIN	C	OSHAWA	D
NUNN, MODERATELY	B	OCTAVIA	B	OLENO	B	ORA	C	OSHKOSH	C
WET		ODAS	D	OLENTANGY	A/D	DRACLE	D	OSHONE	D
NUNNSTON	C	OELL	B	OLEQUA	B	ORAGRAN	D	OSHTENO	B
NUPART	D	OEM	A	OLETE	C	ORAID	C	OSIER	A/D
NUPPER	D	ODENSON	D	OLEX	B	ORAN	B	OSITO	C
NURKEY	B	ODERMOTT	C	OLF	D	ORANGE	D	OSKA	C
NUSS	D	ODERMOTT, STONY	B	OLGA	C	ORANGEBURG	B	OSMUND	B
NUTALL	D	OESSA	D	OLI	C	ORANGEVALE	B	OSO	C
NUTIVOLI	A	ODIN	C	OLIAGA	C	ORCAP	C	OSOBB	D
NUTLEY	C	ODNE	D	OLICAL	B	ORCAS	D	OSOLL	D
NUTRAS	C	ODO	B	OLIN	B	ORCHARD	B	OSORIDGE	D
NUTRIOUSO	B	ODONNELL	C	OLINDA	B	ORCKY	B	OSOTF	D
NUVALDE	B	ODELP	B	OLIPHANT	B	ORD	B	OSSIAN	B/D
NUYOBE	C	OEST	B	OLIVENHAIN	D	ORDNA	D	OSSIPEE	D
NYALA	B	OESTERLE	C	OLIVIER	C	ORDNANCE	C	OST	B
NYE	B	OFFENBACHER	C	OLJETC	C	ORDWAY	A	OSTLER	C
NYJACK	C	OFU	B	OLLEI	D	OREANA	D	OSTRANDER	B
NYMORE	A	OGARTY	C	OLLIERIVAS	C	OREANNA	B	OSWALD	D
NYSERVA	B	OGEECHEE	B/D	OLMITO	D	OREJAS	D	OTANYA	B
NYSSA	C	OGEMAW	C/D	OLMITZ	B	ORELIA	D	OTEEEN	C
NYSSATON	B	OGILVIE	B/D	OLMOS	C	ORELLA	D	OTERO	B
NYSWONGER	D	OGLALA	B	OLMSTED	B/D	ORENDA	B	OTHELLO	C/D
O'BRIEN	B	OGLE	B	OLNES	B	ORENEVA	C	OTISCO	A
O'NEILL	B	OGLESBY	D	OLNEY	B	ORFORD	B	OTISVILLE	A
OAHE	B	OGRAL	B	OLOAVA	B	ORHOOD	D	OTLEY	B
OK GLEN	B	OHACO	C	OLOKUI	C	ORICTO	D	OTOMO	D
OK GROVE	B	OHANA	C	OLOMOUNT	C	ORIDIA	B	OTOOLE	C
OKALLA	B	OHIA	A	OLOMPALI	D	ORIF	A	OTTER	B/D
OKBORO	C	OHOP	C	OLOT	C	ORIGO	B	OTTERHOLT	B
OKDALE	B	OHSCOW	B	OLOTANIA	B	ORINDCO	C	OTTERTSON	A
OKDEN	D	OJDEM	A	OLPE	C	ORIO	B/D	OTTMAR	B
OKES	B	OJATA	D	OLSON	D	ORION	C	OTTOKEE	A
OKHILL	B	OJIBWAY	C	OLTON	C	ORITA	B	OTTOSEN	B
OKHURST	D	OJITO	C	OLUSTEE	C	ORIZABA	B/D	OTTUMWA	D
OKLAND	C	OJITOS	B	OLYIC	B	ORIZABA, DRAINED	B	OTWAY	D
OKLET	C	OKANOGAN	B	OLYMPIC	B	ORLA	B	OTWELL	C
OKLIMETER	C	OKATON	D	OMADI	B	ORLAND	B	OTWIN	C
OKVILLE	A	OKAN	D	OMAK	C	ORLANDO	A	OUACHITA	C
OKWOOD	B	OKAY	B	OMEGA	B	ORLIE	C	OUARD	D
DANAPUKA	B	OKEE	B	OMENA	B	ORMAS	B	OULA	D
OASIS	B	OKEECHOBEE	B/D	OMIO	B	ORMISTON	B	OUPICO	C
OATLANDS	B	OKEELANTA	B/D	OMNI	D	ORMSBY	C	OURAY	B
OATMAN	B	OKEELANTA,	D	OMPO	C	ORNBAUM	R	OUSLEY	C
OATUU	D	DEPRESSIONAL		ONSTOTT	C	ORO FINO	B	OUTERKIRK	C
OBAN	C	OKEELANTA, TIDAL	D	OMULGA	C	ORG GRANDE	D	OUTLET	C
OBANION	C	OKEELANTA, FLOODED	D	ONA	E/D	ORGNEN	D	OUTLOOK	D
OBARD	B	OKEETEE	D	ONAMIA	B	ORONOCO	B	OUTLOOK, DRAINED	C
OBEN	C	OKEMAH	C	ONAUQUI	D	OROSE	C	OVAL	D
OBISPO	D	OKIOTA	D	ONARGA	B	OROVADA	B	OVAN	C
OBRAST	D	OKLARED	B	ONASON	C	ORPARK	C	OVANDO	A
OBRAY	D	OKLARK	B	ONAWA	D	ORPHA	D	OVERGAARD	C
OBSCURITY	B	OKLAWAHA	B/D	ONAWAY	B	ORPHANT	A	OVERLAND	C
OBSERVATION	C	OKO	D	ONAWA	B	ORR	B	OVEPLY	C
OBURN	D	OKO, STONY	C	ONECO	B	ORR, GRAVELLY	C	OVERTON	D
OCALA	C	OKOBOJI	B/D	ONEIL	C	SUBSTRATUM		CVIATT	B
OCAMBEE	C	OKOBOJI, PONDED	D	ONEONTA	B	ORRUB	D	OVID	C
OCANA	B	OKOLONA	D	DNITA	C	ORRVILLE	C	OVINA	B
OCCDDU N	B	O REEK	D	NITE	B	O SA	A	OWANKA	C
OCCUM	B	OKRIST	B	ONKEYO	D	ORSET	B	OWEGO	D
OCEANET	D	OKTAHA	B	ONOTA	B	ORSINO	A	OWEN CREEK	C
OCEANO	A	OKTIBBEHA	D	ONSLOW	B	ORTEGA	A	OWENS	D
OCHAYEDAN	B	OLA	C	ONTARIO	B	ORTELO	B	OWENTOWN	B
OCHLOCKNEE	B	OLAA	A	ONTEORA	C	ORTING	D	OWHI	B
OCHO	D	OLAC	D	ONTKO	D	ORTIZ	C	OWINZA	D
OCHOCO	C	OLANCHA	B	ONTONAGON	D	ORTON	B	OWLCAN	B
OCHOPEE	B/D	OLAND	B	ONYX	B	ORWASH	A	OWOSSO	B
OCIE	C	OLANTA	B	OOKALA	A	ORWET	A/D	OWSEL	B
OCILLA	C	OLASHES	B	OOKEN	A	ORWIG	A	OWYHEE	B
OCKLEY	B	OLATHE	D	OPAL	D	ORWOOD	B	OXBOW	C
OCDEE	B/D	OLBUT	D	OPELIKA	D	OSAGE	D	OXCOREL	D

NOTES: TWO HYDROLOGIC SOIL GROUPS SUCH AS B/C INDICATE THE DRAINED/UNDRAINED SITUATION. MODIFIERS SHOWN, E.G., BEDROCK SUBSTRATUM, REFER TO A SPECIFIC SOIL SERIES PHASE FOUND IN SOIL MAP LEGEND.

Table 2-1.—Hydrologic soil groups for U.S. soils (continued)

OXENDINE	D	PALIX	E	PAPALOTE	C	PATIO	C	PELEE	B
OXERINE	C	PALLS	C	PAPINEAU	C	PATIT CREEK	B	PELELIU	D
OXFORD	D	PALM BEACH	A	PAPDOSE	D	PATNA	B	PELHAM	B/D
OXHEAD	B	PALMA	B	PAPA	B	PATOS	C	PELLIC	D
OXLEY	C	PALMAR	D	PARACHUTE	B	PATOUTVILLE	C	PELION	B/D
OXWALL	D	PALMAREJO	C	PARADISE	C	PATRICIA	B	PELKIE	A
OYHUT	C	PALMER CANYON	B	PARADOX	E	PATRICK	B	PELLA	B/D
OYLEN	C	PALMERDALE	B	PARANAT	C	PATROLE	C	PELLEJAS	B
OZAMIS	D	PALMETTO	B/D	PARANAT, DRAINED.	B	PATTANI	D	PELLICER	D
OZAN	D	PALMETTO,	D	SALINE	D	PATTEE	B	PELONCILLO	D
OZAUKEE	C	DEPRESSIONAL	C	PARASOL	S	PATTENBURG	B	PELTIER	C
OZETTE	C	PALWICH	B	PARCELAS	D	PATTER	B	PENBERTON	B
CZIAS	D	PALMS, OVERWASH	A/D	FARCHIN	D	PATTEPSON	C	PEMBROKE	B
PAAIKI	B	PALMS, MAAT>50	A/D	PARCHIN, COOL	C	PATTON	B/D	PEMENE	B
PAALOA	B	PALMS, MAAT<50	A/D	PAPDALOE	D	PAUL	B	PEMI	C
PAAUHAU	A	PALMS, PONDDED	D	PARDEE	D	PAULDING	D	PENA	B
PABLO	D	PALMS, SANDY	A/D	PARDEEVILLE	E	PAULINA	D	PENAPON	B
PACHAPPA	B	SUBSTRATUM	B	PAREHAT	C	PAULSON	C	PENASCO	D
PACHECO	C	PALMS, GRAVELLY	A/D	PARENT	B/D	PAULVILLE	B	PENCE	B
PACHECO, DRAINED	B	SUBSTRATUM	D	PARIATO	D	PAUNALU	B	PEND OREILLE	B
PACIFICCO	C	PALMYRA	B	PARIETTE	C	PAUNSAUGUNT	D	PENDANT	D
PACK	C	PALO	D	PARISA	C	PAUSANT	B	PENDARVIS	C
PACKARD	B	PALODURO	B	PARISIAN	D	PAUWELA	B	PENDEN	B
PACKER	B	PALOMARIN	E	PARKALLEY	B	PAVAIAI	C	PENDER	C
PACKHAM	B	PALOMAS	B	PARKAY	B	PAVANT	D	PENDERGRASS	D
PACKTRAIL	C	PALOMIND	D	PARKDALE	E	PAVER	B	PENDLETON	C
PACKWOOD	D	PALON	B	PARKF	B	PAVILLION	B	PENDPOY	D
PACO	C	PALOPINTO	D	PARKER	E	PAVO	B	PENELAS	D
PACOLET	B	PALOS VERDES	D	PARKFIELD	C	PAVOHROD	E	PENEY	D
PACTOLA	B	PALOUSE	E	PARKHILL	B/D	PAWCATUCK	D	PENGILLY	B/D
PACTOLUS	A	PALSGROVE	B	PARKINSON	B	PAWHUSKA	D	PENGRA	C
PADDOCK	C/D	PALUXY	B	PARKS	E	PAWLING	E	PENINSULA	B
PADEN	C	PAMISON	B	PARKVIEW	B	PAWNEE	D	PENISTAJA	B
PADILLA	C	PAMLICO	D	PARKVILLE	C	PAXICO	B	PENITENTE	B
PADINA	B	PAMOA	E	PARKWOOD	B/D	PAXTON	C	PENLAW	C
PADRES	B	PAMSDEL	C	PARLEYS	R	PAXVILLE	B/D	PENN	C
PADRONES	B	PAMUNKEY	R	PARLIN	C	PAYETTE	B	PENNEKAMP	A
PADUCAM	B	PANA	E	PARLG	B	PAYMASTER	B	PENNELL	D
PADUS	B	PANAEWA	D	PARMELE	C	PAYNE	C	PENNEY	A
PAFSL	B	PANAK	B	PARMELOW	B	PAYNECREEK	B	PENNICHUCK	B
PAGARI	B	PANAMA	B	PARMENTER	B	PAYSON	D	PENNSUCO	D
PAGEBROOK	D	PANAMINT	B	PARMLFED	C	PEACHAM	D	PENO	C
PAGINA	C	PANASOFFKEE	C/D	PARNELL	C/D	PEACHLAND	D	PENOYER	B
PAGODA	C	PANCHERI	B	PARQUAT	E	PEARL	B	PENROSE	D
PAGOSA	C	PANDO	B	PARR	B	PEARL HARBOR	D	PENSORE	D
PAGUATE	C	PANDDAH	C	PARRAN	D	PEARSOLL	D	PENTHOUSE	D
PAHAKA	B	PANDORA	B/D	PARRISH	D	PEASLEY	D	PENTZ	D
PAHOKEE	B/D	PANDURA	D	PARRITA	D	PEASPEAR	D	PENWELL	A
PAHRANAGAT	C	PANE	R	PARSHALL	B	PEAVINE	C	PENWOOD	A
PAHRANAGAT, VERY POORLY DRAINED	D	PANGBORN	D	PARSIPPANY	C/D	PEAWICK	D	PENZANCE	C
PAHRANGE	C	PANGUITCH	B	PARSONS	D	PEBBLEPOINT	C	PEOGA	C
PAHREAH	C	PANHANDLE	B	PARTLOW	D	PECATONICA	E	PEOH	D
PAHROH	D	PANHILL	B	PARTCV	D	PECKHAM	C	PEOH, DRAINED	C
PAHRUMP	C	PANIN	B	PARTPI	C	PECKISH	D	PEOLA	C
PAHSIMEFOI	B	PANIOGUE	B	PARTRIDGE	A	PECOS	D	PEONE	D
PAIA	B	PANIOGUE, WET	C	PASAGSHAK	C	PECTURE	E	PEONE, DRAINED	C
PAICE	D	PANITCHEN	B	PASCO	D	PEDCAT	D	PEORIA	D
PAILO	B	PANKY	C	PASCO, DRAINED	C	PEDEE	C	PEOTONE	B/D
PAINEVILLE	C	PANMOD	C	PASO SECO	D	PEDERNALES	C	PEPAL	B
PAINT	D	PANOCHE	B	PASQUETTI	D	PEDIGO	C	PEPOON	D
PAISLEY	D	PANOCHE,	C	PASQUETTI,	C	PEDLEFORD	C	PEPPER	D
PAIT	B	SALINE-ALKALI,		MODERATELY WET		PEDOLI	B	PEPTON	D
PAJARA	C	NET		PASQUETTI, DRAINED	C	PEDRICK	B	PEQUAMING	A
PAJARITO	B	PANOLA	D	PASQUOTANK	B/D	PEDRO	C	PEQUEA	B
PAJUELA	B	PANOR	B	PASS CANYON	D	PEEBLES	C	PEQUOP	B
PAKA	B	PANORAMA	R	PASSAR	C	PEEKO	D	PERALTA	C
PAKALA	B	PANOZA	E	PASSCREEK	C	PEEL	C	PERAZZO	B
PAKINI	B	PANSEY	D	PASTERN	D	PEELER	B	PERCETON	B
PALACIOUS	D	PANTANO	D	PASTIK	C	PEERLESS	B	PERCHAS	D
PALAFIX	C	PANTEGO	B/D	PASTORIUS	B	PEETZ	A	PERCILLA	D
PALANUSH	C	PANTERA	B	PASTURA	D	PEEVER	C	PERCIVAL	C
PALAPALAI	B	PANTHER	D	PATAHA	C	PEEVYWELL	C	PERCOUN	C
PALATINE	B	PANTON	D	PATCHIN	D	PEGLEG	C	PERCY	B/D
PALAU	B	PAOLA	A	PATE	C	PEGLER	D	PERDIN	C
PALAZZO	C	PAOLI	F	PATELZICK	D	PEGRAM	B	PERELLA	B/D
PALBODNE	B	PAPAA	D	PATENT	C	PEKAY	C	PERELLA,	B
PALINOR	C	PAPAC	C	PATHEAD	C	PEKIN	C	MODERATELY WET	
PALISADE	B	PAPAGUA	C	PATILLAS	B	PELANHATCHIE	C	PERHAM	B
		PAPAI	A	PATILLO	B	PELAN	B	PERICO	B

NOTES: TWO HYDROLOGIC SOIL GROUPS SUCH AS B/C INDICATE THE DRAINED/UNDRAINED SITUATION. MODIFIERS SHOWN, E.G., BEDROCK SURSTRATUM, REFER TO A SPECIFIC SOIL SERIES PHASE FOUND IN SOIL MAP LEGEND.

Table 2-1.—Hydrologic soil groups for U.S. soils (continued)

PERIDGE	B	PHILO	B	PINELLAS	B/D	PLASKETT	D	POKEGEMA	B
PERILLA	B	PHILOMATH	D	PINELLI	B	PLATA	B	POKEMAN	C
PERINDOS	C	PHING	D	PINETOP	C	PLATEA	C	POKER	C
PERITSA	C	PHIPPS	C	PINETUCKY	B	PLATNER	C	POKERGAP	B
PERKINS	C	PHLISS	D	PINETUCKY, GRADED	C	PLATO	C	POKEY	C
PERKS	A	PHOEBE	B	PINEVAL	B	PLATORO	B	POLACCA	C
PERLA	C	PHONIX	D	PINEVILLE	B	PLATTE	B	POLLALLIE	C
PERLOR	D	PHYS	B	PINEZ	B	PLATTE, WET	D	POLAR	B
PERMA	B	PIANKESHAW	B	PINGREE	D	PLATTE, CHANNELED	D	POLATIS	C
PERN	C	PIASA	D	PINHOOK	D	PLATTVILLE	B/D	PCLAWANA	A/D
PERNITAS	B	PIBLER	D	PINICON	B	PLAYCO	B	POLE	D
PERNOG	D	PICABO	C	PINITOS	F	PLAYER	F	POLECREEK	D
PERNTY	D	PICACHO	C	PINKEL	C	PLAYMOOR	C/D	POLELINE	B
PERQUIMANS	D	PICANTE	D	PINKHAM	A	PLAZA	C	POLEPATCH	A
PERREAU	B	PICAYUNE	B	PINKSTON	B	PLEASANT	C	POLEY	C
PERRIN	B	PICEANCE	C	PINNACLES	C	PLEASANT, PONDED	D	POLEY, COBBLY	D
PERRINE	D	PICKAWAY	C	PINNEBOG	C	PLEASANT GROVE	A/D	POLICH	C
PERRINTON	C	PICKENS	D	PINNOBIE	B	PLEASANT VALE	B	POLKING	D
PERRY	D	PICKETT	C	PINO	C	PLEASANT VIEW	B	POLLARD	C
PERRYSPARK	B	PICKFORD	B	PINOLE	D	PLEASANTON	B	POLLASKY	B
PERRYVILLE	B	PICKNEY	A/D	PINON	D	PLEDGER	D	POLLUX	C
PERSANTI	C	PICKNEY, FLOODED	D	PINONES	D	PLEGOMIR	D	POLLY	B
PERSAYO	D	PICKRELL	D	PINRIDGE	D	PLEINE	D	POLO, MODERATELY	C
PERSHING	C	PICKTON	A	PINSRING	C	PLEIDVILLE	C	SLOW PERM	
PERSIS	B	PICKUP	C	PINTAS	B	PLEITO	C	POLO, MODERATE	B
PERT	D	PICKWICK	B	PINTLAR	B	PLEVNA	D	PERMEABILITY	
PERU	C	PICO	B	PINTO	C	PLINCO	B	POLONIO	B
PERVINA	B	PICOSA	C	PINTURA	A	PLITE	B	POLSON	B
PERWICK	C	PIDCOKE	D	PINTWATER	D	PLOME	E	POLUM	B
PESCADERO	D	PIDINEEN	D	PIOCHE	D	PLOVER	C	POMADE	D
PESCAR	C	PIE CREEK	D	PIOPOLIS	C/D	PLUCK	C	POMAN	C
PESHASTIN	B	PIEGON	B	PIPELINE	D	PLUMAS	B	POMAT	C
PESHEKEE	D	PIERIAN	B	PIPEP	C	PLUMMER	B/D	POMAT, DRY	B
PESMO	C	PIERKING	D	PIFESTONE	B	PLUSH	B	POMELLO	C
PESMORE	C	PIERPONT	C	PIPPIN	A	PLUTOS	B	POMERENE	C
PESO	C	PIERRE	D	PIRD	B	PLYMOUTH	A	POMFRET	A
PESOWYO	C	PIERSONTE	A	PIRODEL	B	POALL	C	POMO	B
PETACA	D	PIERZ	B	PIROUETTE	D	POARCH	B	POMONA	B/D
PETAL	C	PIETOWN	B	PIRUM	B	POBER	C	POMONA,	D
PETAN	D	PIGTAIL	C	PISGAP	C	POCALLA	A	DEPRESSIONAL	
PETEETNEET	D	PIIHONUA	A	PISHKUN	B	POCAN	B	POMPANO	B/D
PETERMAN	D	PIKE	B	PISMO	D	POCASSET	B	POMPANO,	D
PETERMAN, SANDY	C	PIKEVILLE	B	PIT	D	POCATELLO	B	DEPRESSIONAL	
SUBSTRATUM,		PILABO	B	PITCHER	B	POCCATY	D	POMPANO, FLOODED	D
ALKALI		PILCHUCK	C	PITCO	D	POCKER	C	POMPEII	D
PETERS	D	PILCHUCK,	A	PITNEY	C	POCOLA	D	POMPONIO	C
PETERSON	B	PROTECTED		PITTIMAN	C	POCOMOKE, PONDED	B/D	POMPTON	B
PETESCREEK, STONY	B	PILINE	D	PITTSFIELD	E	POCOMOKE, DRAINED	B	POMROY	C
PETESCREEK,	C	PILLIKEN	B	PITTSTOWN	C	POCONO	C	PONCA	B
GRAVELLY		PILLOT	B	PITZER	C	PODEN	F	PONCENA	D
PETRIE	D	PILLSBURY	C	PIUTE	D	PODMOR	A	PONCHA	A
PETPOLIA	C/D	PILOT PEAK	D	PIVOT	D	PODO	D	PONCIANO	C
PETROS	D	PILOT ROCK	C	PIXLEY	D	PODUNK	B	POND	D
PETSPRING	D	PILOTPEAK	D	PIZENE	D	PCDUS	C	POND CREEK	B
PETTICOAT	B	PILTDOWN	B	PLACEDO	B	PDE	C	PONDER	D
PETTIGREW	B/D	PILTZ	C	PLACENTIA	D	POGAL	C	PONIL	D
PETTUS	C	PIMA	B	PLACERITOS,	E	POGANEAB	C	PONINA	D
PETTY	B	PIMER	B	SALINE, DRAINED		POGANEAB, CLAYEY	D	PONOZZO	C
PEVETO	A	FINAL	D	PLACERITOS,	C	SUBSTRATUM		PONTO	B
PEWAMO	C/D	PINALENO	B	SALINE-ALKALI		POGANEAB, SALINE	D	PONTOTOC	B
PEYTON	B	PINAMT	B	PLACERITOS,	B	POGANEAB, HIGH	D	PONZER	D
PFEIFFER	B	PINATA	C	MODERATELY WET		RAINFALL		POOCHAM	B
PHAGE	B	PINAVETES	A	PLACERITOS, WET	C	POGANEAB, STRONGLY	D	POOKU	B
PHALANX	B	PINBIT	B	PLACERITOS,	B	SALINE		POOLER	D
PHANTOM	C	PINCHER	C	CPAINED		POGANEAB,	D	POOLEVILLE	C
PHARO	B	PINCHOT	B	PLACID	B/D	FREQUENTLY		POORCAL	B
PHARR	B	PINCKNEY	C	PLACID,	D	FLOODED		POORMA	B
PHEBA	C	PINCONNING	B/D	DEPRESSIONAL		POGANEAB,	D	POOSE	D
PHEENEY	C	PINE FLAT	B	PLACID, FREQUENTLY	D	SALINE-ALKALI		POOTATUCK	B
PHELAN	D	PINEAL	D	FLOODED		POGUE	B	POPASH	D
PHELPS	B	PINEBUTTE	B	PLACITAS	C	POHAKUPU	B	POPE	B
PHERSON	B	PINECREEK	B	PLACK	D	PCIN	D	POPHERS	C
PHIFERSON	C	PINEDA	B/D	PLAINBO	A	POINDEXTER	F	POPLE	C/D
PHILBON	D	PINEDA,	D	PLAINFIELD	D	POINSETT	B	POPLIMENTO	C
PHILDER	D	DEPRESSIONAL		PLAISTED	C	POINT	C	POPOSHIA	B
PHILIPPA	C	PINEDALE	B	PLANK	D	POINT ISABEL	C	POPOTOSA	B
PHILIPSBURG	B	PINEGURST	B	PLANKINTON	D	POISONCREEK	D	POPPLETON	A
PHILLCHER	B	PINEHURST	B	PLANO	E	POJO	C	POQUETTE	A
PHILLIPS	C	PINEISLE	B	PLANTATION	B/D	POJUAQUE	B	POQUITA	B

NOTES: TWO HYDROLOGIC SOIL GROUPS SUCH AS B/C INDICATE THE DRAINED/UNDRAINED SITUATION. MODIFIERS SHOWN, E.G., BEDROCK SUBSTRATUM, REFER TO A SPECIFIC SOIL SERIES PHASE FOUND IN SOIL MAP LEGEND.

Table 2-1.—Hydrologic soil groups for U.S. soils (continued)

POQUONOCK	C	PREMIER	B	PUNCHBOWL	D	QUINLIVEN	C	RAMROD	C
PORFIRIO	C	PRENTISS	C	PUNG	C	QUINN	B/D	RAMSDELL	D
PORRETT	D	PRESA	B	PUNGO	D	QUINNEY	C	RAMSDELL, DRAINED	C
PORRONE	B	PRESHER	B	PUNDHU	A	QUINTANA	B	RAMSEY	D
PORT	B	PRESTO	B	PUNSAT	C	QUINTO	D	RAMSHORN	B
PORT BYRON	B	PRESTON	A	PUNTA	B/D	QUINTON	C	RANA	D
PORTAGE	D	PREWITT	B	FUNTILLA	B	QUITERIA	B	RANCE	C
PORTAGEVILLE	D	PREY	C	PURCELLA	B	QUITMAN	C	RANCHESECO	D
PORTALES	B	PRICE	B	PURCHES	C	QUIVERA	C	RANDADO	C
PORTALTO	B	PRIDA	C	PURDAM	C	QUONSET	A	RANDALL	D
PORTERFIELD	C	PRIDHAM	D	PURDY	D	QUOPANT	D	RANDCORE	D
PORTERS	B	PRIESTLAKE	B	PURETT	B	QUOSATANA	D	RANDMAN	D
PORTERVILLE	D	PRIETA	D	PURGATORY	D	RABBITEK	C	RANDCLPH	C
PORTHILL	D	PRIM	D	PURNER	D	RABER	C	RANDS	C
PORTIA	C	PRIMEAUX	C	PURRB	D	RABIDEUX	B	RANDBURG	D
PORTINO	C	PRIMEN	D	PURSLEY	B	RABUN	B	RANGEE	D
PORTLAND	D	PRINGHAR	B	PURVES	D	RACE	B	RANGER	C
PORTMOUNT	E	PRINCETON	B	PUSHMATAMA	C	RACINE	B	RANPUFF	D
PORTNEUF	B	PRINEVILLE	C	PUSTOI	B	RACKER	A	RANSLO	D
PORTOLA	B	PRING	B	PUTNAM	D	RACOMBES	E	RANSOM	E
PORTSMOUTH	B/D	PRINGLE	D	PUTNEY	B	RACONN	C/D	RANSTEIN	B
PORUM	D	PRITCHARD	C	PUTT	C	RAD	B	RANTOUL	D
POSANT	D	PRITCHETT	C	PUTTSTER	C	RAD, LACUSTRINE	C	RAPATEE	D
POSEN	B	PROCHASKA	A/D	PUU OO	A	SUBSTRATUM	C	RAPELJE	B
POSEY	B	PROCTOR	B	PUU OPAE	B	PAD, FLOODED	C	RAPH	E
POSEYVILLE	C	PROGRESSO	C	PUU PA	A	RADDLE	B	RAPHO	B
POSITAS	D	PROMISE	D	PUU PA, NONSTONY	E	RADER	D	RAPIDAN	B
POSKIN	C	PROMO	D	PUUKALA	C	FADERSBURG	B	RAPLEE	C
POSO	B	PRONG	C	PUUDNE	C	RADFORD	B	RAPPAHANNOCK	D
POSOS	C	PROPHETSTOWN	B/D	PUYALLUP	C	RADLEY	B	RAPSON	B
POST	D	PROSPECT	B	PYBURN	D	RADNOR	C	RARDEN	C
POTAMUS	B	PROSPER	B	PYLE	B	RAFAEL	D	RARICK	C
POTCHUB	C	PROSSER	C	PYLON	D	RAFTON	D	RARITAN	C
POTEET	C	PROTIVIN	C	PYOTE	A	RAFTRIVER	C	RASBAND	E
POTELL	B	PROUT	C	PYRAMID	D	RAGLAN	B	RASILLE	B
POTH	C	PROUTY	C	PYRMONT	D	PAGNAR	B	RASSER	E
POTLATCH	C	PROVIDENCE	C	PYRMONT, BEDROCK	C	RAGNEL	B	RASSET	E
POTOMAC	A	PROVIG	C	SUBSTRATUM	C	RAGO	C	RASTUS	C
POTOSI	A	PROVO	D	PYWELL	D	RAGPIE	D	RATAKE	D
POTRATZ	C	PROVO BAY	D	QUAFENO	C	RAGSDALE	B/D	RATHBUN	C
POTSDAM	C	PROW	D	QUAKER	C	RAGSDALE, OVERWASH	B	RATHDRUM	B
POTTER	C	PRUDY	B	QUAKERTOWN	C	RAGTOWN	C	RATLAKE	D
POTTINGER	B	PRUE	B	QUAM	B/D	RAHAL	C	RATLEFLAT	B
POTTS	B	PRUITTON	B	QUAMON	A	RAHM	C	RATLIFF	B
POTTSBURG	B/D	PRUNIE	D	QUANAH	B	RAHWORTH	B	RATON	D
POUDRE	D	PRYOR	C	QUANDER	E	RAIL	D	RATSON	C
POUJADE	D	PSUGA	B	QUANTICO	B	RAILCITY	A	RATTLEP	D
POULSBO	D	PTARMIGAN	C	QUARLES	D	RAINBOW	C	RATTO	C
POUNCEY	D	PUAPUA	D	QUARTZBURG	C	RAINEY	C	RATTO, STONY	D
POVERTY	D	PUAULU	A	QUARTZVILLE	B	RAINIER	C	RAUB	C
POVEY	B	PUCHYAN	B	QUARZ	C	RAINO	D	RAUGHT	B
POWDER	B	PUDDLE	E	QUATAMA	C	RAINS	B/D	RAUVILLE	D
POWDERHORN	C	PUERCO	D	QUAY	B	RAINS, FLOODED	D	RAUZI	D
POWDERWASH	C	PUERTA	D	QUAZO	D	RAINSBORO	C	RAVALLI	B
POWEEN	C	PUERTECITO	D	QUEALMAN	C	RAINSVILLE	E	RAVALLI, BEDROCK	B
POWELL	C	PUETT	D	QUEALY	D	RAIRDENT	B	SUBSTRATUM	A
POWER	B	PUFFER	D	QUEBRADA	C	RAISIO	C	RAVEN	A
POWERLINE	C	PUGET	D	QUEENY	D	RAKANE	D	RAVENDALE	D
POWLEY	D	PUGET, PROTECTED	C	QUEETS	B	RAKE	C	RAVENELL	D
POWMENT	C	PUGSLEY	C	QUEMADO	C	RAKIED	C	RAVENNA	C
POWMAKKEE	B	PUHI	B	QUENZER	D	RALEIGH	D	RAVENSWOOD	C
POWATKA	C	PUHIMAU	D	QUERC	C	RALLOD	D	RAVIA	C
POY	D	PUICE	C	QUERENCIA	E	RALLS	B	RAVOLA	B
POYGAN	D	PULA	C	QUETICO	D	RALPH	B	RAWAH	C
POYNOR	B	PULANTAT	C	QUICKSELL	C	RALPHSTON	D	RAWE	C
POZO	C	PULASKI	B	QUICKSILVER	D	RALSEN	B	RAWLES	B
POZO BLANCO	B	PULCAN	C	QUICKVERT	C	RAMADERO	B	RAWLINS	B
PRAG	C	PULEHU	B	QUIDEN	B	RAMBLA	C	RAWSON	B
PRAIRIEVILLE	B	PULEXAS	B	QUIENSABE	C	RAMBOUILLET	B	RAWSONVILLE	C
PRAMISS	C	PULLMAN	D	QUIETUS	C	RAMELLI	D	RAYBURN	D
PRATHER	C	PULPIT	C	QUIGLEY	B	RAMIRES	C	RAYEX	D
PRATLEY	C	PULS	D	QUIHI	C	RAMMEL	C	RAYFORD	C
PRATT	A	PULSIPHER	D	QUILCENE	C	RAMO	C	PAYLAKE	D
PREACHER	B	PULTNEY	C	QUILLAYUTE	B	RAMONA	B	RAYMONDVILLE	D
PREAKNESS	B/D	PUMEL	D	QUILTOUSA	D	RAMONA, HARD	C	RAYNE	B
PREATORSON	B	PUMEL, NONGRAVELLY	C	QUILT	D	SUBSTRATUM	C	RAYNESFORD	B
PREBISH	C/D	PUMPER	B	QUIMA	B	RAMPART	B	RAYNHAM	C
PREBLE	D	PUNA	A	QUINCY	A	RAMPARTER	B	RAYNOLDSON	B
PRELO	B	PUNALUU	D	QUINLAN	C	RAMPS	B	RAYHILL	C

NOTES: TWO HYDROLOGIC SOIL GROUPS SUCH AS B/C INDICATE THE DRAINED/UNDRAINED SITUATION. MODIFIERS SHOWN, E.G., BEDROCK SUBSTRATUM, REFER TO A SPECIFIC SOIL SERIES PHASE FOUND IN SOIL MAP LEGEND.

Table 2-1.—Hydrologic soil groups for U.S. soils (continued)

RAYPOL	C	REDSTONE	A	RENIX	B	RICOT	C	RITIDIAN	D
RAZ	D	REDSUN	D	RENSHAW	B	RICREST	B	RITNER	C
RAZITO	A	REDTHAYNE	B	RENSLOW	B	RIDD	C	RITO	B
RAZOR	C	REDTOM	B	RENSSELAER	B/D	RIDDLES	B/D	RITTER	B
RAZORBA	B	REDVALE	C	RENSSELAER,	C	RIDENBAUGH	D	RITTMAN	C
RAZORT	B	REDVIEW	B	NONSTRATIFIED		RIDGE	B	RITZ	D
RAZSUN	D	REDVIEW, WET	C	SUBSTRATUM		RIDGEBURY	C	PITZ, DRAINED	C
READING	B	REDVINE	C	RENTILL	E	RIDGECREST	C	RITZCAL	B
READINGTON	C	REDWASH	D	RENTON	D	RIDGEDALE	B	RITZVILLE	B
READLYN	B	REE	B	RENTON, DRAINED	C	RIDGELAND	B/D	RIVALIER	B
REAGAN	B	REEBOK	D	RENTSAC	D	RIDGELAWN	D	RIVERDALE	A
REAKOR	B	REED	D	RENTZEL	C	RIDGELAWN, WET	D	RIVERHEAD	B
REAL	D	REED, DRAINED	C	REPARADA	D	RIDGELITE	D	RIVERROAD	B
REALLIS	B	REED, PROTECTED	C	REPP	B	RIDGEPORT	B	RIVERSIDE	A
REAP	D	REEDER	B	REPPART	B	RIDGEVIEW	D	RIVERTON	B
REARDAN	C	REEDER, COOL	C	REPUBLIC	B	RIDGEVILLE	B	RIVERVIEW	B
REAVILLE	C	REEDSBURG	C	RESCUE	E	RIDGEWOOD	C	RIVIERA	C/D
REAVIS	B	REEDSPORT	C	RESNEP	B	RIDIT	C	RIVIERA,	D
REBA	C	REEDY	D	RESORT	D	RIDLEY	C	DEPRESSIONAL	
REBEL	B	REEFRIDGE	D	RESOTA	A	RIDOTT	C	RIVIERA, LIMESTONE	B/D
RECAPTURE	B	REELFOOT	C	RESTING	C	RIEDEL	C	SUBSTRATUM	
RECK	D	REEPO	C	RESTON	D	RIEDTOWN	C	RIVIERA, LIMESTONE	D
RECLUSE	B	REESE	C	RET	D	RIEPE	C	SUBSTRATUM,	
RED BAY	B	REESER	C	RETRIEVER	D	RIESEL	C	DEPRESSIONAL	
RED BLUFF	C	REESVILLE	C	RETROP	C	RIETBROCK	C	RIVRA	D
RED BLUFF,	B	REEVES	B	RETRYDE	C	RIFLE	A/D	RIXIE	C
GRAVELLY		REFLECTION	B	REVA	D	RIGA	D	RIXON	C
RED BUTTE	B	REFUGE	C	REVEL	C	RIGDON	C	RIZ	D
RED HILL	B	REGAL	B/D	REVENTON	B	RIGGINS	D	RIZNO	D
RED HOOK	C	REGAN	B/D	REVERE	B/D	RIGGS	D	RIZOZO	D
RED ROCK	B	REGENT	C	REVIT	C	RIGLEY	B	ROANE	C
RED SPUR	B	REGGAD	A	REWARD	B	RIGOLETTE	C	ROANHIDE	C
REDARROW	D	REGGEAR	D	REXBURG	B	RILEY	B	ROANOKE	D
REDBANK	B	REGGEAR, COOL	C	REXFORD	C	RILLA	B	ROARING	B
REDBELL	B	REGNAPS	C	REXMONT	D	RILLIND	B	ROB ROY	C
REDBIRD	B	REGNIER	D	REXOR	A	RILLITO	B	ROBANA	B
REDBOW	C	REMBURG	C	REYAB	B	RIMER	C	ROBBS	D
REDBY	B	REHFIELD	B	REYES	D	RIMINI	A	ROBCO	C
REDCAMERON	D	REHFIELD	C	REYNOSA	B	RIMROCK	D	ROBFR	C
REDCAN	D	REHM	C	REYWAT	D	RIMTON	C	ROBERTSDALE	C
REDCAP	B	REICISS	B	REZAVE	D	RIN	B	ROBERTSVILLE	D
REDCHIEF	C	REICHEL	B	RHAME	B	RINCON	C	ROBIN	B
REDCLIFF	C	REIFF	B	RHEA	B	RINDA	D	ROBINETTE	B
REDCLOUD	B	REILLY	A	RHINEBECK	D	RINDGE	D	ROBINSONVILLE	B
REDCO	D	REINA	D	RHOADES	D	RINDGE, DRAINED	C	ROBOZO	C
REDCREEK	D	REINACH	B	RHOAME	C	RINEARSON	B	ROBROOST	B
REDDALE	D	REINER	B	RHOAMETT	C	RINEY	B	ROBSON	D
REDDICK	B/D	REKOP	D	RHOAMETT, STONY	C	RING	C	ROBY	C
REDDING	D	RELAN	B	RHONE	B	RINGLE	B	ROCA	D
REDEYE	B	RELAY	B	RIB	B/D	RINGLING	A	ROCHE	D
REDFEATHER	D	RELANCE	C	RIBERA	C	RINGO	D	ROCHELLE	C
REDFIELD	B	RELIZ	D	RIBHILL	B	RINGWOOD	B	ROCHER	B
REDFIELD, WET	C	RELLEY	B	RICCO	D	RINKER	C	ROCHESTER	A
REDFLAME	B	RELSOB	B	RICEBORD	B/D	RIO	D	ROCIO	C
REDHOUSE	B	RELUCTAN	C	RICECROSS	B	RIO ARRIBA	D	ROCK CREEK	D
REDIG	B	REMBERT	D	RICERT	B	RIO DIABLO	C	ROCK RIVER	B
REDINGTON	D	REMEDIOS	C	RICETON	B	RIO GRANDE	B	ROCKABIN	C
REDLAKE	D	REMLAP	C	RICEVILLE	C	RIO LAJAS	A	ROCKAWAY	C
REDLANDS	B	REMLIK	A	RICH	C	RIO PIEDRAS	B	ROCKBRIDGE	B
REDLEVEL	C	REMMIT	B	RICH, WET	D	RIOBLANCHO	C	ROCKCASTLE	D
REDLODGE	D	REMNOY	D	RICHARDSON	B	RIOCONCHO	C	ROCKDALE	A
REDMANSON	B	REMOTE	B	RICHENS	C	RIO LINDA	C	ROCKDALE	B
REDMOND	C	REMSEN	D	RICHEY	C	RION	B	ROCKERS	C
REDMOUNT	B	REMUNDA	C	RICHFIELD	B	RIPEC	D	ROCKFIELD	B
REDNIK	B	REMUS	B	RICHFORD	A	RIPLEY	B	ROCKFORD	B
REDNIK, NONSTONY	C	RENBAC	D	RICHLAND	B	RIPLEY,	C	ROCKHOUSE	A
REDNUN	C	RENCALSON	C	RICHMOND	D	SALINE-ALKALI,		ROCKINCHAIR	C
REDOLA	B	RENCOT	D	RICHSUM	B	WET		ROCKLIN	D
REDONA	B	RENFROW	D	RICHTER	B	RIPON	B	ROCKLY	D
REDONDO	B	RENICK	D	RICHVALE	B	RIPPLE	B	ROCKOA	B
REDPOP	C	RENISH	C	RICHVIEW	C	RIPPOMAM	C	ROCKTON	B
REDPORT	B	RENNER	B	RICHVILLE	C	RIRIE	B	ROCKWELL	B/D
REDRIDGE	B	RENNIE	D	RICHWOOD	B	RISBECK	B	ROCKWOOD	C
REDRIVER	C	RENNIE, DRAINED	C	RICKER	A	RISLEY	D	ROCKY FORD	B
REDROB	C	RENNIE, PROTECTED	C	RICKETTS	C	RISLEY, STONY	C	ROCKYBAR	B
REDSPEAR	D	RENO	D	RICKMAN	C	RISUE	D	RODAD	D
REDSPRINGS	B	RENDHILL	C	RICKMORE	C	RISWOLD	B	RODELL	D
REDSPRINGS, GRADED	D	RENOL	C	RICKREALL	D	RITA	D	RODEO	D
REDSTOE	B	RENOVA	B	RICKS	A	RITCHEY	D	RODESSA	D

NOTES: TWO HYDROLOGIC SOIL GROUPS SUCH AS B/C INDICATE THE DRAINED/UNDRAINED SITUATION. MODIFIERS SHOWN, E.G., BEDROCK SUBSTRATUM, REFER TO A SPECIFIC SOIL SERIES PHASE FOUND IN SOIL MAP LEGEND.

Table 2-1.—Hydrologic soil groups for U.S. soils (continued)

RODDIE	B	ROSENDALE	C	RUBY	B	SARENYO	B	SAMINIEGO	C
RODMAN	A	ROSENWALL	D	RUBYHILL	C	SABINA	C	SAMISH	D
RODRUF	D	ROSEVILLE	B	RUCH	B	SABINE	A	SAMMAMISH	D
ROEBUCK	D	ROSEWOOD	A/D	RUCKER	B	SABLE	B/D	SAMOIST	D
ROELLEN	D	ROSEWOOD, WET	D	RUCKLES	D	SAC	B	SAMOR	D
ROEMER	C	ROSEWORTH	C	RUECLICK	D	SACHEEN	A	SAMPSEL	D
ROETEX	D	ROSHE SPRINGS	D	RUDD	D	SACETT	C	SAMPSON	B
ROFISS	B	ROSHE SPRINGS,	C	RUDDLEY	D	SACO	D	SAMSIL	D
ROGAN	B	DRAINED		RUDEEN	C	SACRAMENTO	D	SAMSULA	B/D
ROGERSON	D	ROSHOLT	B	RUDYARD	C	SACTUS	D	SAN ANDREAS	B
ROGERT	D	ROSINE	B	RUEDLOFF	B	SACUL	B	SAN ANTON	B
ROGRUBE	B	ROSITAS	A	RUELLA	B	SADDLE	C	SAN ANTONIO	C
ROGUE	B	ROSITAS, CLAYEY	C	RUFUS	D	SADLEBACK	C/D	SAN ARCADIO	C
ROHAN	D	SUBSTRATUM		RUGAR	C	SADLEGAP	B	SAN BENITO	B
ROHNERVILLE	B	ROSITAS, LOAMY,	C	RUGG	B	SADLEROCK	D	SAN EMIGDIO	B
ROHONDA	C	WET		RUGLES	F	SADER	D	SAN GERMAN	D
ROHRERSVILLE	D	ROSITAS, WET	C	RUHF	D	SADIE	C	SAN ISABEL	A
ROIC	D	ROSLYN	B	RUIDOSO	B	SADLER	C	SAN JOAQUIN	D
ROJO	C	ROSMAN	B	RUINPOINT	B	SAFFELL	B	SAN JON	C
ROLETTE	C	ROSNEY	B	RUIZ	B	SAG	A	SAN JOSE	B
ROLFE	C	ROSS	B	RUKO	B	SAGANING	D	SAN JUAN	A
ROLIE	D	ROSSBURG	B	RULE	B	SAGASER	B	SAN LUIS	C
ROLISS	B/D	ROSSFIELD	B	RUMBLECREEK	B	SAGE	D	SAN MATED	B
ROLLA	C	ROSSMOOR	B	RUMBO	C	SAGECREEK	B	SAN MIGUEL	D
ROLLINGSTONE	C	ROSSMOYNE	C	RUMFORD	C	SAGEDALE	B	SAN SABA	D
ROLOC	D	ROSWELL	A	RUMLEY	B	SAGEHILL	C	SAN SEBASTIAN	B
ROLOFF	C	ROSY	B	RUMNEY	C	SAGEPOOR	B	SAN SIMEON	D
ROMBERG	B	ROTAMER	E	RUMPAH	B	SAGERS	B	SAN TIMOTEO	C
ROMBO	C	ROTAN	C	RUMPLE	C	SAGERTON	C	SAN YSIDRO	D
ROME	B	ROTHICAN	B	RUMUNG	C	SAGLE	C	SANCHEZ	D
ROMEO	D	ROTHIEMAY	C	RUNE	C	SAGO	D	SANCLEMENTE	D
ROMERO	D	ROTHSAY	B	RUNEERG	C/D	SAGOUSPE	C	SANDALL	C
ROMGAN	C	ROTIKOM	F	RUNGE	B	SAGOUSPE, DRAINED	P	SANDBRANCH	B
ROMIA	B	ROTO	C	RUN	D	SAGUACHE	B	SANDCREEK	D
ROMINE	B	ROTTULSEE	C	RUPLE	C	SAGHALIE	B	SANDERSON	B
ROMINELL	C	ROUBIDEAU	C	RUPLEY	A	SAHUARITA	B	SANDHILL	B
ROMNELL	B/D	ROUEN	C	RUSCO	C	SAID	C	SANDIA	B
ROMSTOCK	B	ROUGHCREEK	D	RUSCO, PONDED	D	SAIDO	P	SANDOSE	A
ROMULUS	D	FOUGHLOCK	B	RUSE	D	SAILBOAT	C	SANDOVAL	D
RONAN	D	ROUGHMOUNT	C	RUSH	E	SAILBOAT, DRAINED	B	SANDRIDGE	A
ROND	C	ROUND BUTTE	D	RUSHMORE	B/D	SAIPAN	B	SANDSPRING	B
RONDEAU	A/D	ROUNDABOUT	C	RUSHTOWN	A	SAL	D	SANDUN	B
RONDELL	B	ROUNDARN	E	RUSHVILLE	D	SALADAR	D	SANDUSKY	D
RONDOWA	B	ROUNDHEAD	B/D	RUSG	B	SALADON	B	SANDVIEW	P
RONNEBY	C	ROUNDOR	C	RUSON	C	SALAL	C	SANDWASH	C
RONSEL	B	ROUNDTOP	C	RUSS	F	SALAMATOF	D	SANDWICK	B
RONSON	B	ROUNDUP	C	RUSSELL	B	SALANDER	B	SANELI	D
ROONEY	D	ROUNDY	C	RUSSIAN	E	SALAS	C	SANFORD	B
ROOSET	C	ROUSSEAU	A	RUSSLER	C	SALCHAKET	B	SANGER	D
ROOSEVELT	C	ROUTON	D	RUSTICO	P	SALCO	B	SANGO	C
ROOT	B/D	ROUTT	C	RUSTIGATE	C	SALEM	B	SANHEDRIN	B
ROOTFL	C	ROYAL	D	RUSTON	P	SALERATUS	C	SANIBEL	B/D
ROPER	B/D	ROWDEN	C	RUSTY	B	SALERNO	B/D	SANILAC	B
ROSALIE	B	ROWDY	E	RUTAB	B	SALGA	C	SANJE	B
ROSAMOND	B	ROWE	D	RUTERSVILLE	C	SALIDA	A	SANLOREN	B
ROSAMOND,	C	ROWEL	D	RUTHERFORD	C	SALINAS	B	SANPETE	B
SALINE-ALKALI,		ROWENA	C	PUTLAND	C	SALISBURY	C	SANPITCH	C
FLOODED		ROWLAND	C	PUTLEE	B/D	SALIX	B	SANPOIL	D
ROSANE	D	ROWLEY	C	RYAN	D	SALKUM	B	SANSARC	D
ROSANKY	C	ROXAL	D	RYAN PARK	B	SALLISAW	B	SANTA	D
ROSARIO	C	ROXANA	B	RYARK	A	SALLYANN	C	SANTA CLARA	C
ROSCOE	D	ROXBURY	B	RYCO	D	SALMO	C/D	SANTA FE	D
ROSCOMMON	A/D	ROXER	B	RYDE	C	SALMON	B	SANTA ISABEL	D
ROSE CREEK	C	ROXTON	D	RYCER	C	SALONIE	D	SANTA LUCIA	C
ROSE CREEK,	B	ROY	B	RYDOLPH	C	SALT CHUCK	A	SANTA MARTA	C
DRAINED		ROYAL	B	RYEGATE	C	SALT LAKE	D	SANTA YNEZ	D
ROSE VALLEY	D	ROYCE	C	RYELL	B	SALTAIR	D	SANTANA	D
ROSEBERRY	D	ROYGORGE	D	RYELL, SALINE	D	SALTER	B	SANTANELA	D
ROSEBLOOM	D	ROYOSA	A	RYEPATCH	C	SALTERY	D	SANTAQVIN	A
ROSEBOROUGH	B	ROYST	C	RYER	C	SALTESE	D	SANTAROSA	R
ROSEBUD	B	ROYSTONE	P	RYKER	B	SALTINE	C	SANTEE	D
ROSEBURG	B	ROZA	C	RYMAN	C	SALTON	D	SANTIAGO	B
ROSEDHU	B/D	ROZELVILLE	B	RYORP	C	SALUDA	C	SANTIAM	C
ROSEGLEN	B	ROZETTA	B	RYPDC	B	SALVISA	C	SANTO	B
ROSEHAVEN	B	ROZLEE	C	RYUS	C	SALZER	D	SANTO TOMAS	B
ROSEHILL	D	RUARK	B/D	SAAR	C	SALZER, PROTECTED	C	SANTONI	D
ROSELAND	B	PUBICON	A	SABANA	C	SAMBA	D	SANWELL	B
ROSELLA	D	RUBIO	C/D	SABANA SECA	C	SAMBRITO	B	SAPEHA	B
ROSELMS	D	RUBSON	B	SABE	B	SAMDAY	D	SAPELO	D

NOTES: TWO HYDROLOGIC SOIL GROUPS SUCH AS B/C INDICATE THE DRAINED/UNDRAINED SITUATION. MODIFIERS SHOWN, E.G., BEDROCK SUBSTRATUM, REFER TO A SPECIFIC SOIL SERIES PHASE FOUND IN SOIL MAP LEGEND.

Table 2-1.—Hydrologic soil groups for U.S. soils (continued)

SAPINERO	B		SAWTOWN	C		SCOTCH	D		SEITZ	C		SHAKER	C
SAPKIN	C		SAWYER	C		SCOTCO	A		SEJITA	D		SHAKESPEARE	C
SAPPHIRE	C		SAXBY	D		SCOTIA	B		SEKIL	B		SHAKOPEE	C
SAPPINGTON	B		SAXON	C		SCOTT	D		SEKIU	D		SHALAKE	C
SARA	D		SAY	B		SCOTT LAKE	B		SELAH	C		SHALAKO	D
SARAGOSA	B		SAYBROOK	B		SCOTTICAS	B		SELBIT	B		SHALBA	D
SARAHSVILLE	D		SAYDAB	C		SCOTTIES	E		SELDEN	C		SHALCAR	D
SARALEGUI	B		SAYERS	A		SCOTTSVILLE	C		SELEVIN	D		SHALCAR, DRAINED	C
SARANAC	C/D		SAYLES	D		SCOUT	F		SELFRIDGE	B		SHALCLEAV	D
SARANAC, GRAVELLY SUBSTRATUM	C		SAYLESVILLE	C		SCRABBLERS	F		SELIA	C		SHALET	D
SARAPH	D		SAYNER	A		SCRANTON	A/D		SELIGMAN	D		SHALONA	B
SARATON	C		SAYPO	C		SCRAVO	B		SELKIRK	C		SHALPER	D
SARAZAN	B		SAZI	C		SCRIBA	C		SELLE	B		SHAM	D
SARZAN	B		SCALA	B		SCRIBNER	C		SELLERS	B/D		SHAMBO	B
SARBEN	B		SCALADE	D		SCRIVER	B		SELMA	B/D		SHAMEL	B
SARCILLO	D		SCALFAR	B		SCROGGIN	C		SELMAC	D		SHAMOCK	C
SARDINIA	C		SCALLEY	B		SCULLIN	C		SELON	B		SHANAHAN	B
SARDIS	C		SCAMMAN	D		SCUPPERNONG	D		SELT	C		SHANDEP	B/D
SARGEANT	D		SCANDARD	C		SEABROOK	C		SELWAY	B		SHANE	D
SARILDA	C		SCANTIC	D		SEAFIELD	B		SEMIAMMOO	D		SHANGHAI	C
SARITA	A		SCAPONIA	B		SEAFORTH	B		SEMIAMMOO, DRAINED	C		SHANGHAI, DRAINED	B
SARKAR	D		SCAR	B		SEAGATE	A/D		SEMINOLE	D		SHANKLER	A
SARNOSA	B		SCARBORO	D		SEAGOVILLE	D		SEMPER	C		SHANO	B
SARONA	B		SCARIBOU	B		SEALY	B		SEN	B		SHANTA	B
SARPY	A		SCARPER	C		SEAMAN	E		SENCHELT	C		SHARATIN	B
SARTELL	A		SCATLAKE	D		SEAMAN, STRONGLY	C		SENECAVILLE	B		SHARESNOUT	C
SARUCHE	D		SCAVE	C		SALINE	C		SENSABAUGH	B		SHARKEY	D
SASABE	C		SCHAFFENAKER	A		SEAMAN, MODERATELY	C		SEQUATCHIE	E		SHARLAND	B
SASALAGUAN	C		SCHALLER	A		WET	A		SEQUIM	A		SHARDN	B
SASCO	B		SCHAMBER	A		SEAQUEST	C		SEQUOIA	C		SHARDNDALE	B
SASKA	B		SCHAMP	C		SEAP	B		SERDEN	A		SHARPS	C
SASPAMCO	B		SCHAPVILLE	C		SEARING	B		SERENE	C		SHARPSBURG	B
SASSAFRAS	B		SCHATTEL	C		SEARLA	B		SEROCO	A		SHARROTT	D
SASSER	B		SCHAUSON	B		SEARLES	C		SERPEN	C		SHARVANA	C
SATAGO	D		SCHAWANA	D		SEARSPORT	D		SERPENTAND	B		SHASER	B
SATANKA	C		SCHENCO	D		SEARSVILLE	D		SERPOD	C		SHASKIT	C
SATANTA	B		SCHERRARD	D		SEASTRAND	D		SERRAND	D		SHASTA	B
SATATTON	D		SCHLEY	B		SEATON	B		SERVILLETA	D		SHASTINA	B
SATELLITE	C		SCHMUTZ	B		SEATTLE	D		SESAME	C		SHATRUC	C
SATILLA	D		SCHNEBLY	D		SEATTLE, DRAINED	D		SESPE	C		SHATTA	C
SATIN	C		SCHNEIDER	B		SEAVERSON	B		SESSIONS	C		SHATTUCK	B
SATSOP	B		SCHNIPPER	C		SEAWILLOW	C		SESSUM	D		SHAUSON	B
SATT	C		SCHNOORSON	C		SEBAGO	D		SET	C		SHAVANO	B
SATTLE	B		SCHNORBUSH	B		SEBASTIAN	B		SETH	C		SHAVASH	C
SATTRE	B		SCHODSON	C		SEBASTOPOL	C		SETTERS	D		SHAVER	C
SATURN	B		SCHOENS	A		SEBEEA	E/D		SETTLEMENT	D		SHAWA	B
SATUS	B		SCHOFIELD	C		SEBREE	C		SETTLEMEYER	C		SHAWANO	A
SAUCEL	D		SCHOMARIE	C		SEBRING	B/D		SETTLEMEYER,	D		SHAWMUT	B
SAUCIER	C		SCHOLLE	B		SEBUD	B		SALINE-ALKALI	B		SHAY	D
SAUDE	B		SCHOODIC	D		SECCA	C		SETTLEMEYER,	D		SHAYLA	D
SAUGATUCK	C		SCHOOLCRAFT	B		SECESH	B		FLOODED	B		SHEAR	C
SAUGUS	9		SCHODLEY	D		SECONDOSET	C		SETTLEMEYER, COOL	D		SHEAVILLE	D
SAUK	B		SCHODLEY, DRAINED	C		SECRET CREEK	C		SETTLEMEYER,	B		SHEBANG	D
SAULICH	D		SCHODLEY,	C		SECURITY	C		CHANNELED	C		SHEBEON	C
SAUM	B		PROTECTED			SED	C		SEVAL	C		SHEDADDO	C
SAUNDERS	D		SCHOOLHOUSE	D		SECALE	D		SEVENMILE	B		SHEDD	C
SAURIN	C		SCHOONER	C		SEDFIELD	D		SEVERN	B		SHEDHORN	D
SAUTER	B		SCHRADER	D		SEDEGWAY	E		SEVIER	D		SHEECAL	B
SAUVIE	D		SCHRAP	D		SEDILLO	B		SEVILLE	D		SHEEGE	D
SAUVIE, MODERATELY WET	C		SCHRIER	B		SEDMAR	D		SEVY	B		SHEEK	B
SAUVIE, PROTECTED	B		SCHROCK	B		SEDRWOODLLEY	C		SEWANEE	C		SHEEP CREEK	C
SAUVOLA	C		SCHROON	B		SEDWELL	C		SEWARD	B		SHEEPCAN	B
SAUZ	B		SCHUELKE	C		SEEDSKADEE	D		SEWELL	C		SHEEPHEAD	C
SAVAGE	C		SCHULINE	B		SEELEZ	A		SEXTON	C/D		SHEEPROCK	A
SAVAGETON	D		SCHUMACHER	B		SEELOVERS	C		SEYMOUR	D		SHEEPSHOT	B
SAVANNAH	C		SCHUSTER	B		SEELYEVILLE	A/D		SEZNA	D		SHEETIRON	C
SAVENAC	C		SCHUYLER	B		SEELYEVILLE,	D		SHAAK	C		SHEFFIELD	D
SAVO	C		SCIO	B		SLOPING	B		SHABLISS	D		SHEFFIT	D
SAVOIA	B		SCIOTOVILLE	C		SEEPRID	B		SHACK	B		SHEFFLEIN	B
SAVONA	C		SCISM	C		SEES	C		SHADELAND	C		SHELBIANA	B
SAVABE	D		SCITICO	C		SEEWEE	B		SHADELEAF	C		SHELBURNE	C
SAWATCH	B/D		SCITUATE	C		SEFFNER	C		SHADOW	B		SHELBY	B
SAWBUCK	B		SCLOME	B		SEGIDAL	D		SHADYGROVE	D		SHELBYVILLE	B
SAWCREEK	C		SCDAP	B		SEGNO	C		SHAFFTON	B		SHELD	B
SAWOUST	B		SCOBEY	C		SEGUIN	B		SHAFTER	D		SHELL	B
SAWMILL	B/D		SCOGGIN	D		SEGURA	D		SHAGEL	D		SHELLABARGER	B
SAWTELL	C		SCOON	D		SEHOM	C		SHAGNASTY	C		SHELLBLUFF	B
SAWTELL	C		SCOOTENEY	B		SEHORN	D		SHAKAMAK	C		SHELLCREEK	C
SAWTELPEAK	D		SCORUP	C		SEIS	C		SHAKAN	C		SHELLDRAKE	A

NOTES: TWO HYDROLOGIC SOIL GROUPS SUCH AS B/C INDICATE THE DRAINED/UNDRAINED SITUATION. MODIFIERS SHOWN, E.G., BEDROCK SUBSTRATUM, REFER TO A SPECIFIC SOIL SERIES PHASE FOUND IN SOIL MAP LEGEND.

Table 2-1.—Hydrologic soil groups for U.S. soils (continued)

SHELLROCK	A	SHOTGUN	C	SIMON	B	SKYHIGH	C	SNOWDANCE,	C
SHELMADINE	D	SHOTWELL	D	SIMONA	D	SKYKOMISH	B	MODERATELY WET	
SHELOCTA	B	SHOUNS	B	SIMONIN	B	SKYLICK	B	SNOWOON	D
SHELTON	C	SHOWALTER	C	SIMONTON	E	SKYLINE	D	SNOWLIN	B
SHENA	D	SHOWALTER, STONY	B	SIMPARK	B	SKYMOR	D	SNOWMORE	C
SHENANDOAH	D	SHOWLOW	C	SIMPATICO	C	SKYROCK	D	SNOWSHOE	B
SHENKS	B/D	SHREE	B	SIMPSON	C	SKYVILLAGE	D	SNOWSLIDE	B
SHENON	B	SHREWDER	B	SIMS	B	SKYWAY	B	SNOWVILLE	D
SHENVAL	B	SHREWSBURY	C/D	SINAI	C	SLAB	D	SNUFFUL	C
SHEP	B	SHRINE	B	SINAMOX	B	SLABTOWN	B	SOAKPAK	B
SHEPAN	C	SHROE	C	SINCLAIR	C	SLACKS	C	SOAPCREEK	C
SHEPPARD	A	SHROUTS	D	SINGATSE	D	SLAGLE	C	SOAPLAKE	D
SHEPSTER	D	SHUBUTA	C	SINGERTON	B	SLAPJACK	B	SOAR	D
SHERANGO	B	SHUE	C	SINGLETREE	C	SLATERY	C	SOBEGA	C
SHERAR	C	SHUKASH	A	SINGSAAS	A	SLAUGHTER	C	SOBOBA	A
SHERBURNE	C	SHUKSAN	C	SINKER	C	SLAUGHTERVILLE	B	SOBOL	C
SHERIDAN	B	SHULE	C	SINKSON	E	SLAVEN	C	SOBRANTE	B
SHERLESS	B	SHULLSBURG	C	SINLOC	C	SLAW	C	SOBSON	C
SHERLOCK	B	SHUMLA	C	SINNICE	E	SLAYTON	D	SOCORRO	C
SHERM	D	SHUMWAY	D	SINNIGAM	D	SLEEPER	C	SODA	B
SHERMORE	B	SHUPERT	C	SINTON	B	SLEETH	C	SODA LAKE	B
SHERY	B/D	SHURLEY	A	SINUK	D	SLICKROCK	B	SODA LAKE, WET	C
SHERRY, STONY	D	SHUSTER	C	SION	B	SLIDECREEK	B	SODABAY	B
SHERRYL	B	SHUTTLE	B	SILOUX	A	SLIDELL	D	SODASPRING	B
SHERWOOD	B	SI	C	SILOUXON	C	SLIGHTS	C	SODERVILLE	A
SHEVLIN	C	SIBELIA	B	SIPPLE	B	SLIGHTING	C	SODHOUSE	D
SHIDLER	D	SIBLEY	E	SIPSEY	B	SLIKOK	D	SODUS	C
SHIELDS	C	SIBLEYVILLE	B	SIPPAK	B	SLIMBUTTE	B	SOELBERG	B
SHIFFER	C	SICKLES	B/D	SIRI	B	SLINGER	B	SOEN	C
SHILLY	C	SICKLESTEETS	B	SIROCO	C	SLIPBACK	B	SOFIA	C
SHILOH	B/D	SIDDOWAY	A	SIRREF	D	SLIPMAN	B	SOFTSCRABBLE	C
SHIMA	C	SIDELL	B	SIRRETTA	C	SLOAN	B/D	SOFTSCRABBLE,	B
SHIMMON	C	SIDLAKE	C	SISK	C	SLOCAYE	D	RARELY FLOODED	
SHINAKU	D	SIDON	C	SISKIYOU	F	SLOCUM	C	SOGI	C
SHINGARA	D	SIEBEN	B	SISSETON	F	SLUICE	C	SOGN	D
SHINDLER	C	SIEBERT	A	SISSON	F	SLUKA	C	SOGO	B
SHINER	C	SIECHE	C	SISTEPS	A	SLY	E	SOGZIE	B
SHINGLE	D	SIELO	D	SITAR	B	SMACKOUT	B	SOHAPPY	B
SHINGLEMILL	D	SIEROCLIFF	C	SITDOWN	A	SMALL	C	SOJUR	D
SHINGLETOWN	C	SIERRA	B	SITES	C	SMALLCONE	D	SOLAK	D
SHINKEE	C	SIERRAVILLE	B	SIWELL	C	SMARTS	B	SOLAND	D
SHINNPEAK	D	SIESTA	D	SIXBEACON	E	SMAG	B	SOLDATNA	B
SHINROCK	C	SIEVERS	C	SIXMILE	C	SMEDLEY	D	SOLDIER	C
SHIOCTON	C	SIFTON	B	SIZER	B	SMELTER	C	SOLDUC	B
SHIOYA	A	SIG	D	SKAGGS	D	SMILEY	B/D	SOLEDAD	B
SHIPLEY	B	SIGNAL	C	SKACIT	D	SMILEYVILLE	D	SOLIER	D
SHIPLEY,	C	SIGURD	B	SKAGWAY	C	SPILO	C	SOLIS	C
SALINE-ALKALI		SIKESTON	B/D	SKAHA	A	SMITHBORO	D	SOLLEKS	C
SHIPPA	D	SILAS	B	SKALAN	C	SMITHDALE	B	SOLLER	D
SHIPROCK	B	SILAS, WET	C	SKAMANIA	B	SMITHNECK	C	SOLO	C
SHIPS	D	SILAS, GRAVELLY	C	SKAMO	C	SMITHNECK, DRAINED	B	SOLOMON	D
SHIPSHE	B	SUBSTRATUM		SKANEE	C	SMITHTON	D	SOLOMA	C
SHIRK	C	SILAWA	B	SKANID	B	SMITHVILLE	B	SOLWAY	B
SHIRLEY	B	SILCOX	B	SKATE	B	SMITHWICK	D	SOMBORDORD	D
SHIRO	C	SILENT	D	SKEDADDLE	D	SMOCREEK	C	SOMBRERO	C
SHIRTAIL	B	SILEP	B	SKEIN	D	SMOKEY	C	SOMERS	B
SHIVELY	B	SILERTON	B	SKELLGCK	B	SMOLAN	C	SOMERVELL	B
SHIVIENY	B	SILHOUETTE	C	SKELON	C	SMYRNA	B/D	SONSEN	C
SHVLUM	B	SILI	C	SKELTON	E	SNAG	B	SONAHNPIL	B
SHOALS	C	SILKIE	D	SKERRY	C	SNANOPIHSH	B	SONDOA	B
SHOAT	D	SILSTID	A	SKIPC	B	SNAKE	C	SONLET	D
SHOBA	D	SILVA	C	SKIDMORE	B	SNAKE HOLLOW	A	SONOCAN	C
SHOPEEG	C	SILVER	C	SKINNER	E	SNAKELUM	B	SONDITA	B
SHOESTRING	B	SILVER CREEK	D	SKIPANON	B	SNAKER	D	SONOMA	C
SHOKEN	D	SILVERADO	B	SKIPOPA	D	SNAPP	C	SONOMA, MODERATELY	B
SHONKIN	D	SILVERBELL	C	SKIYOU	B	SNEAD	D	WET, SALINE	
SHONTIK	C	SILVERBOW	D	SKOKOMISH	D	SNEFFELS	C	SONOMA, SALINE,	B
SHOOFLIN	D	SILVERCHIEF	C	SKOKOVISH, DRAINED	C	SNELL	C	DRAINED	
SHOOFLY	D	SILVERCLIFF	B	SKOLY	B	SNELLING	B	SONOMA, STRATIFIED	D
SHOOK	C	SILVERDALE	A	SKOOKUM	C	SNELLMAN	E	SUBSTRATUM	
SHOOKER	C	SILVERN	A	SKGS	D	SNIDER	C	SONOMA, DRAINED,	B
SHOREEK	C	SILVERTON	C	SKOWHEGAN	B	SNOHOMISH	D	SLIGHTLY SALINE	
SHOREWOOD	C	SILVIES	D	SKULL CREEK	C	SNOMO	C	SONOMA, DRAINED,	B
SHORIM	C	SIMAS	C	SKULLGULCH	C	SNOOK	D	FLOODED	
SHORT CREEK	C	SIMCOE	C	SKULLWAK	D	SNOPDC	E	SONOMA, DRAINED	B
SHORTCUT	C	SIMEON	A	SKUMPAH	D	SNOGUALMIE	C	SONORA	B
SHORTHORN	D	SIMEROI	B	SKUTUM	C	SNOTOWN	B	SONTAG	D
SHORTYORK	C	SIMMONT	C	SKYBERG	C	SNOW	B	SODLAKE	B
SHOSHONE	C	SIMODA	C	SKYHAVEN	C	SNOWDANCE	D	SOONAHBE	B

NOTES: TWO HYDROLOGIC SOIL GROUPS SUCH AS B/C INDICATE THE DRAINED/UNDRAINED SITUATION. MODIFIERS SHOWN, E.G., BEDROCK SUBSTRATUM, REFER TO A SPECIFIC SOIL SERIES PHASE FOUND IN SOIL MAP LEGEND.

Table 2-1.—Hydrologic soil groups for U.S. soils (continued)

SOONAKER	C	SPINEKOP	B	STABLER	B	STRELNA, SILTY	B
SOOSAP	C	SPINEKOP, SALINE	C	STADY	B	SUBSTRATUM	B
SOPER	C	SPINEKOP,	C	STAFFORD	C	STREVELL	B
SOQUEL	B	MODERATELY WET		STAGECDACH	B	STRICKER	B
SORENSEN	B	SPINKS	A	STAHL	C	STRICKLAND	C
SORF	C	SPINLIN	C	STAKE	C	STRINGAM	B
SORRENTO	B	SPINNEY	B	STALEY	B	STRINGTOWN	B
SORTER	D	SPIRES	D	STALLINGS	C	STRINGTOWN, GRADED	C
SORUM	D	SPIRIT	C	STAMBAUGH	B	STROLE	C
SOSA	C	SPIRO	B	STAMFORD	D	STROM	C
SOSTIEN	D	SPIVEY	B	STAMP	D	STROMAL	B
SOTIM	B	SPLAWN	C	STAMPEDE	D	STILL	B
SOUGHE	D	SPLENDORA	C	STAN	B	STRONGHOLD	B
SOULAJULE	C	SPLITEN	D	STANDLEY	C	STRONGHURST	B
SOUTHACE	B	SPLITRO	D	STANDUP	C	STROUPE	C
SOUTHAM	D	SPLITTOP	C	STANEY	D	STROZI	C
SOUTHFORK	D	SPOFFORD	D	STANFIELD	C	STRYCH	B
SOUTHGATE	D	SPOFMORE	C	STANISLAUS	C	STRYKER	C
SOUTHMOUNT	C	SPOKANE	C	STANISLAUS, WET	D	STUBBLEFIELD	C
SOUTHRIDGE	B	SPOKEL	B	STANISLAUS, WET	D	STUBBS	C
SOUTHWICK	C	SPONSSELLER	B	STANROD	B	STUCKY	B
SOWCAN	B	SPOOL	D	STAPALOOPE	B	STUDEBAKER	D
SOWCAN, SOMEWHAT	C	SPOONER	C/D	STAPLES	B/D	STUKEL	D
POORLY DRAINED		SPOTSYLVANIA	C/D	STAPLETON	B	STUMBLE	A
SPAA	D	SPOTTSWOOD	B	STAPP	C	STUMPP	D
SPACE CITY	A	SPRABAT	B	STARBUCK	D	STUMPTOWN	B
SPADE	B	SPRAY	B	STARGO	B	STUNNER	B
SPADRA	B	SPRECKELS	C	STARHOPE	D	STUNTZ	C
SPAGER	D	SPRIGGS	C	STARICHKOF	D	STURGEON	B
SPALDING	D	SPRING	C	STARKEY	C	STURGILL	D
SPAN	D	SPRINGDALE	A	STARLEY	C	STURKIE	B
SPANAWAY	A	SPRINGDALE, STONY	B	STARMAN	D	STUTTART	D
SPANEL	D	SPRINGER	B	STARR	C	STUTZMAN	C
SPANG	B	SPRINGERVILLE	D	STARVEOUT	B	STUTZMAN, WET	D
SPANGENBURG	C	SPRINGFIELD	D	STASER	E	STUTZVILLE	C
SPANGENBURG,	D	SPRINGGULCH	B	STATE	B	STYERS	D
PONDED		SPRINGLAKE	A	STATELINE	D	STYX	B
SPANGLER	C	SPRINGMEYER	B	STATLER	B	SUAK	C
SPARANK	D	SPRINGSTEEN	C	STATZ	B	SUBACO	B
SPARHAM	D	SPRINGWATER	C	STAVELY	B	SUBLETTE	D
SPARKHULE	D	SPROUL	D	STAYTON	B	SUBLIGNA	B
SPARMO	B	SPRUCEDALE	D	STEARNS	D	SUBWELL	B
SPARR	C	SPUD	C	STECOAH	D	SUCARNODCHIEE	B
SPARTA, SILTY CLAY	B	SPUDROCK	C	STECUM	B	SUCCESS	A
LOAM SUBSTRATUM		SPUKWUSH	B	STEEDE	C	SUCCESS	D
SPARTA, LOAMY	A	SPUR	B	STEECHMAN	A	SUCCESS	A
SUBSTRATUM		SPURGER	C	STEEDMAN, STONY	D	SUCHES	B
SPARTA, MAAT>50	A	SPURLOCK	B	STEEKEE	C	SUDBURY	B
SPARTA, MAAT<50	A	SQUALICUM	B	STEELE	C	SUDDUTH	C
SPARTA, BEDROCK	A	SQUALLY	B	STEEENS	C	SUDLEY	B
SUBSTRATUM		SQUAM	B	STEEPCAN	C	SUDWORTH	B
SPASPREY	C	SQUAWCREEK	D	STEESE	D	SUEPERT	C
SPEAKER	C	SQUAWROCK	C	STEEVER	B	SUEY	B
SPEAKS	A	SQUAWTIP	C	STEFF	B	SUFFIELD	C
SPEARFISH	D	SQUIRES	C	STEGALL	C	SUFFOLK	B
SPEARHEAD	B	ST. ALBANS	B	STEIGER	C	SUGAKOOL	B
SPEARMAN	B	ST. ANTHONY	B	STEILACOOM	C	SUGARBDWL	B
SPEARVILLE	C	ST. AUGUSTINE	C	STEINAUER	A	SUGARDEE	B
SPECIE	B	ST. AUGUSTINE,	B	STEINBECK	C	SUGARLOAF	B
SPECK	D	ORGANIC		STEINBURG	B	SUGLO	B
SPECTACLE	C	SUBSTRATUM		STEIWER	C	SUISUN	D
SPECTER	C	ST. CHARLES	B	STELLA	C	SULA	B
SPEELYAI	D	ST. CLAIR	D	STELLAR	C	SULLIVAN	B
SPEER	B	ST. ELMO	A	STEMBER	C	SULLY	B
SPEIGLE	B	ST. GEORGE	B	STEMILT	C	SULDAF	B
SPENARD	D	ST. GEORGE, SALINE	C	STEMLEY	B	SULPHUPA	D
SPENCER	B	ST. GEORGE, WET	D	STEMPLE	C	SULSAVAR	B
SPENLO	B	ST. HELENS	B	STENDAL	C	SULTAN	C
SPENS	A	ST. IGNACE	D	STEPHEN	B	SUMAN	B/D
SPERRY	C/D	ST. JOHNS	B/D	STEPHENVILLE	C	STRAT	D
SPEXARTH	C	ST. JOHNS,	D	STEPROCK	C	STRATFORD	B
SPHINX	D	DEPRESSIONAL		STEPSTONE	B	STRATTON	B
SPICER	B/D	ST. LUCIE	A	STEPTOE	B	STRAW	B
SPICERTON	D	ST. MARTIN	D	STERLING	B	STRAWN	B
SPICEMOOD	C	ST. MARYS	B	STERLINGTON	B	STREATOR	B/D
SPIKE	B	ST. NICHOLAS	D	STERRETT	B	STRELNA	C
SPILLCO	B	ST. ONGE	B	STETSON	D	STRELNA, TILL	C
SPILLVILLE	B	ST. PAUL	B	STETTER	B	LACUSTRINE	C
SPILOCK	D	ST. THOMAS	D	STEUHEN	B	SUBSTRATUM	C
						SUMMIT	C
						SUMMITVILLE	C
						SUMPF	D
						SUMTER	C
						SUMTERVILLE	C

NOTES: TWO HYDROLOGIC SOIL GROUPS SUCH AS B/C INDICATE THE DRAINED/UNDRAINED SITUATION. MODIFIERS SHOWN, E.G., BEDROCK SUBSTRATUM, REFER TO A SPECIFIC SOIL SERIES PHASE FOUND IN SOIL MAP LEGEND.

Table 2-1.—Hydrologic soil groups for U.S. soils (continued)

SUMYA	D	SWANTOWN	D	TACOMA	D	TANQUE	B	TEHAMA	C
SUN	D	SWANVILLE	C	TACONIC	C/D	TANSEM	B	TEHRAN	A
SUNAPEE	B	SWANWICK	D	TACDOOSH	B/D	TANTALUS	B	TEIGEN	C
SUNBURG	B	SWAPPS	C	TADLOCK	C	TANTILE	C/D	TEJA	D
SUNBURST	C	SWARTSWOOD	C	TAFFOM	B	TANWAX	D	TEJABE	D
SUNBURY	B	SWARTZ	D	TAFCYA	C	TANWAX, DRAINED	C	TEJANA	B
SUNCITY	D	SWASEY	D	TAFT	C	TANYARD	C	TEKENINK	B
SUNCOOK	A	SWASTIKA	C	TAFTOWN	B	TAOPI	B	TEKISON	C
SUND	C	SWAUK	D	TAFUNA	A	TAPCO	D	TEKLANIKA	A
SUNDANCE	B	SWAYNE	C	TAGGART	C	TAPIA	B	TEKOA	C
SUNDAY	A	SWEATHAN	C	TAGLAKE	B	TAPICITOES	D	TEKOA, EXTREMELY	B
SUNDELL	B	SWEDE	B	TAHKENITCH	B	TAPPAN	B/D	STONY	B
SUNDOWN	A	SWEEN	C	TAHOMA	E	TARA	B	TELA	B
SUNEY	B	SWEENEY	B	TAHOULA	D	TARBOPO	A	TELCHER	B
SUNFIELD	B	SWEET	C	TAHQUATS	B	TARGHEE	C	TELECAN	B
SUNLIGHT	D	SWEETAPPLE	B	TAINTOR	C/D	TARKINGTON	C	TELEFONO	C
SUNNYHAY	D	SWEETGRASS	B	TAJO	C	TARKIO	D	TELEMON	D
SUNNYSIDE	B	SWEETWATER	D	TAKEUCHI	C	TARKLIN	C	TELEPHONE	D
SUNNYVALE	C	SWEITBERG	C	TAKILMA	B	TARLOC	B	TELESCOPE	A
SUNRAY	B	SWEITING	C	TAKOTNA	B	TARNACH	D	TELFER	A
SUNRISE	C	SWEM	C	TAKPOCHAO	D	TARNAV	B	TELFERNER	D
SUNSET	B	SWENODA	B	TALAG	D	TARPLEY	D	TELL	B
SUNSHINE	C	SWIFT	B	TALAMANTES	B	TARR	A	TELLER	B
SUNSWEEP	C	SWIFT CREEK	B	TALANTE	D	TARRANT	D	TELLICO	B
SUNUP	D	SWIFTON	B	TALAPUS	F	TARRETE	D	TELLMAN	B
SUNY	D	SWIMLEY	C	TALBOTT	C	TARRYALL	C	TELLURA	C
SUOMI	C	SWIMS	B	TALCO	D	TARRYTOWN	C	TELOS	C
SUP	B	SWINGLER	B	TALCOT	B/D	TASAYA	C	TELSTAD	C
SUPAN	B	SWINGLER, WET.	C	TALIHINA	D	TASCOSA	D	TEMAN	B
SUPERIOR	D	STRONGLY SALINE	D	TALKEETNA	E	TASSEL	B	TEMBLOR	D
SUPERSTITION	A	SWINGLER, WET	C	TALLA	C	TASSELMAN	D	TEMESCAL	D
SUPERVISOR	C	SWINK	D	TALLAC	R	TASSO	B	TEMO	D
SUPPLEE	B	SWINOMISH	C	TALLADEGA	C	TATAI	C	TEMPLE	C
SUR	C	SWINT	B	TALLAPOOSA	C	TATE	B	TEMPLETON	B
SURFSIDE	D	SWISBOR	D	TALLEYVILLE	B	TATERHEAP	B	TEMVIK	B
SURGFEM	C	SWISSHELM	E	TALLOWBOX	C	TATIYEE	C	TENABO	D
SURGH	B	SWISSTAG	B	TALLS	E	TATLUM	D	TENAHA	B
SURNUF	B	SWISSVALE	D	TALLULA	B	TATOUCHE	B	TENAS	C
SURPLUS	C	SWITCHRACK	C	TALLY	B	TATTON	D	TENCEE	D
SURPRISE	B	SWITZERLAND	B	TALMAGE	B	TATUM	E	TENDOY	D
SURRENCY	D	SWOPE	C	TALMO	A	TAUNTON	C	TENERIFFE	A
SURRETT	C	SWORMVILLF	C	TALMOON	C	TAVARES	A	TENEX	B
SURVEYORS	B	SWYGERT	C	TALOKA	D	TAWAH	B	TENINO	C
SURVYA	C	SYBLON	D	TALPA	D	TAWAS	A/D	TENMILE	C
SUSANNA	C/D	SYCAMORE,	B	TALOUIN	P/D	TAWCAN	C	TENNO	D
SUSANVILLE	D	MODERATELY WET,		TALUCE	D	TAYLOR	C	TENORIO	B
SUSIE CREEK	C	SALINE		TAMA	E	TAYLOR CREEK	C	TENOT	C
SUSITNA	B	SYCAMORE,	C	TAMAHA	D	TAYLORSFLAT	B	TENPIN	D
SUSQUEHANNA	D	MODERATELY WET,		TAMALCO	D	TAYLORSFLAT.	C	TENRAG	B
SUTA	B	CLAYEY SUBSTRATUM		TAMALPAIS	C	SALINE-ALKALI		TENSAS	D
SUTCLIFF	B	SYCAMORE,	C	TAMANEEN	E	TAYLORSVILLE	C	TENSED	C
SUTHER	C	MODERATELY WET		TAMBA	D	TAZLINA	A	TENSLEEP	B
SUTHERLAND	D	SYCAMORE, DRAINED	B	TAMELY	B	TEAGULF	C	TENSNOIR	B
SUTHERLIN	C	SYCAMORE, FLOODED	C	TAMFLAT	D	TEAKEAN	B	TENVORRD	D
SUTKIN	B	SYCAMORE, CLAY	B	TAMFORD	D	TEALSON	D	TEO	B
SUTLEY	B	SUBSTRATUM		TAMMANY CREEK	B	TEALWHIT	D	TEOCULLI	B
SUTPHEN	C	SYCAN	A	TAMMING	F	TEANAWAY	B	TEPETE	D
SUTRO	C	SYCLE	B	TAMP	B	TEAPO	C	TEQUESTA	B/D
SUTTLE	B	SYCOLINE	D	TAMPICO	B	TEASDALE	B	TERADA	B
SUTTON	B	SYENITE	C	TANAMA	D	TEASPOON	D	TERBIES	B
SUVER	D	SYLACAUGA	D	TANANA	D	TEBAY	E	TERENCE	B
SUWANEE	H	SYLCO	C	TANANA, THAWED	B	TEBBS	B	TERESA	D
SVEA	B	SYLVAN	B	TANANA, MODERATELY	C	TEBO	E	TERIND	D
SVENSEN	A	SYLVANIAM	C	WET		TECHADD	D	TERLAN	D
SVERDRUP	B	SYLVESTER	B	TANASEE	B	TECHICK	B	TERLCO	B
SWAGER	C	SYLVIA	C	TANAZZA	E	TECO	B	TERLINGUA	B
SWAINOW	B	SYMCO	C	TANBARK	D	TECOLOTE	B	TERMINAL	D
SWAKANE	D	SYMERTON	B	TANDY	D	TECOMAR	D	TERMO	D
SWALER	D	SYNAREP	E	TANEUM	E	TECOPA	D	TEROMOTE	B
SWALESILVER	D	SYRACUSE	B	TANEY	C	TEDROW	B	TEROUGE	D
SWAMPYDRAW	B	SYRENE	B/D	TANGAIR	C	TEEL	B	TERRA CEIA	B/D
SWAN	D	SYRETT	C	TANGI	C	TEELER	B	TERRA CEIA, TIDAL	D
SWANBOY	D	TABECHEDING	C	TANGLE	C	TEEMAT	B	TERRA CEIA,	D
SWANDAD	B	TABERNASH	B	TANNA	D	TEESTO	D	FREQUENTLY	
SWANLAKE	B	TABLE MOUNTAIN	B	TANNAHILL	B	TEETERS	C	FLOODED	
SWANNER	D	TABLER	D	TANNER	C	TEEWINOT	D	TERRAD	C
SWANSEA	D	TABOR	D	TANNER, LOW	D	TEFTON	C	TERRETON	D
SWANSON	C	TACAN	B	PRECIPITATION		TEGURO	D	TERRETON, STONY	C
SWANTGN	C/D	TACHI	D	TANOR	B	TEHACHAPI	C	TERRIL	B

NOTES: TWO HYDROLOGIC SOIL GROUPS SUCH AS B/C INDICATE THE DRAINED/UNDRAINED SITUATION. MODIFIERS SHOWN, E.G., BEDROCK SUBSTRATUM, REFER TO A SPECIFIC SOIL SERIES PHASE FOUND IN SOIL MAP LEGEND.

Table 2-1.—Hydrologic soil groups for U.S. soils (continued)

TERRO	C	THURLONI	C	TINTON	A	TCLTEC	C	TORSIDO	D
TERRY	C	THURLOW	B	TINYTOWN	B	TOLUCA	B	TORTUGAS	D
TERT	D	THURMAN	A	TIOCANO	D	TOLVAR	B	TORULL	D
TERWILLIGER	C	THURMONT	B	TIOGA	B	TOMAH	E	TOSCA	B
TESAJD	B	THWOOD	C	TIPPAH	C	TOMAHAWK	A	TOSSEK	B
TESSFIVE	D	TIAGOS	B	TIPPECANOE	E	TOMALES	D	TOSTON	C
TETHRICK	B	TIAG	C	TIPPER	C	TOMASAKI	C	TOTAVI	A
TETON	C	TIBAN	B	TIPPERARY	A	TOMAST	C	TOTELAKE	B
TETONJA	B	TIBBITTS	B	TIPPIPAH	B	TOMBAP	C	TOTEM	B
TETONKA	C/D	TIBS	C	TIPPO	C	TOMBSTONE	B	TOTIER	C
TETONVIEW	D	TIBSON	B	TIPTON	B	TOME	B	TOTO	B/D
TETONVILLE	D	TIBURONES	D	TIPTONVILLE	R	TOMEL	D	TOTTEN	C/D
TETONVILLE.	C	TICA	D	TIPTCP	B	TOMERA	C	TOUCHET	C
GRAVELLY		TICE	B	TIRO	B	TOMERA, CEMENTED	D	TOUHEY	C
TETOTUM	C	TICELL	D	TISEURY	D	SUBSTRATUM		TOULA	C
TEVIS	B	TICHNOR	D	TISCH	D	TOMICHI	A	TOULON	B
TEW	C	TICIND	C	TISDALE	C	TOMOKA	B/D	TOURN	C
TEWA	B	TICKAPGO	D	TISHAR	D	TOMOTLEY	B/D	TOURNQUIST	C
TEX	B	TICKASON	B	TISONIA	B	TOMS	D	TOURS	B
TEXANA	D	TIDINGS	B	TISWORTH	B	TOMSHERRY	C	TOUTLE	A
TEXARK	D	TIDWELL	D	TITUS	D	TOMTY	E/D	TOUTLE, FLOODED	B
TEXLINE	B	TIERRA	D	TITUSVILLE	D	TONALEA	C	TOVAR	C
TEXROY	B	TIERRANEGRE	B	TIVOLI	B	TONASKET	A	TOWAVE	B
TEZUMA	C	TIESIDE	D	TIVY	D	TONATA	D	TOWHEE	D
THACKER	D	TIETON	B	TCA	B	TONCANA	B	TOWNER	C
THACKERY	B	TIFFANY	P/D	TCADLAKE	B	TONEY	D	TOWNLEY	B
THADER	C	TIFTON	B	TDAND	B	TONGUE RIVER	C	TOWNSEND	C
THAGE	C	TIGER CREEK	E	TDANO	E	TONIO	B	TOWSAHGY	B
THATCHER	B	TIGERON	B	TOBICO	B	TONKA	C/D	TOXAWAY	B/D
THATUNA	C	TIGIT	C	TOBIN	R	TONKAVAR	A	TOY	D
THAYNE	B	TIGWON	B	TOFISH	C	TONKAWA	C	TOYAH	B
THEBES	B	TIGLEY	B	TOBLER	B	TONKEY	B/D	TOYUSKA	B
THEBO	D	TIGON	D	TOBOSA	C	TONKIN	B	TOZE	B
THEDALUND	C	TIGUA	D	TCBY	R	TONKIN, MODERATELY	C	TRABUCC	C
THEEDLE	C	TIJERAS	B	TOCAL	C	WET		TRACHUTE	B
THENAS	C	TIKI	D	TOCALOMA	C	TONKS	C	TRACK	D
THEODOR	D	TILFER	B/D	TOCAN	B	TONOPAH	A	TRACK, DRAINED	C
THEON	D	TILFORD	B	TOCCCA	B	TONOP	C	TRACOSA	D
THERESA	B	TILLEDA	B	TOCK	C	TONOWEK	B	TRACY	B
THERIOT	D	TILLCUM	B	TOCOI	B/D	TONRA	B	TRADEDOLLAR	B
THERMO	D	TILLMAN	C	TODDLER	B	TONSINA	E	TRAER	B/D
THERMOPOLIS	D	TILLMONT	B	TODDSTAV	D	TONTI	C	TRAG	B
THESS	B	TILLOU	C	TODDVILLE	B	TONUCO	D	TRAG, COOL	C
THETFORD	A	TILMA	C	TODOS	C	TOOLES	D	TRAHAM	C
THETIS	B	TILSIT	C	TOEHEAD	B	TOOLESBORD	B	TRAIL	A
THIEFRIVER	B/D	TILTON	E	TGEJA	B	TOOMES	D	TRAILAMP	D
THIEL	B	TIMBALIER	D	TOEM	C	TOONE	C	TRAILCREEK	C
THIESSEN	C	TIMBERG	C	TOGCHA	B	TOONE, LOAMY	B	TRAILHEAD	B
THIKE	D	TIMBERHEAD	B	TOGNOI	D	SUBSTRATUM, STONY		TRAINER	B
THIOKOL	B	TIMBERLY	B	TOGO	B	TOP	C	TRAITORS	D
THIRST	D	TIMBERVILLE	B	TOGUS	D	TOPEKI	D	TRAMPAS	C
THISTLEBURN	B	TIMBLIN	D	TOHONA	C	TOPEMAN	D	TRAMWAY	B
THISTLEDEW	B	TIMBUCTOO	C	TOIMI	C	TOPIA	D	TRANQUILAR	C
THOENY	D	TIMENTWA	B	TOINE	B	TOPLIFF	B	TRANSYLVANIA	B
THOMAS	B/D	TIMHILL	D	TOISNOT	B/D	TOPONCE	C	TRAPPER	B
THOMHILL	B	TIMHUS	B	TOISNOT, PONDED	D	TOPPENISH	D	TRAPPIST	C
THOMS	D	TIMKEN	C	TOIYABE	C	TOPPENISH, DRAINED	C	TRAPPS	B
THORNBURGH	B	TIMMERMAN	B	TOKAY	B	TOPPER	B	TRASK	C
THORNDALE	D	TIMMONS	B	TOKEEN	C	TOPSEY	C	TRAVELERS	D
THORNDIKE	C/D	TIMPANUTE	C	TOKLAT	D	TOQUERVILLE	D	TRAVER	B
THORNOCK	D	TIMPANOGOS	B	TCKOPER	D	TOQUI	D	TRAVERTINE	C
THORNTON	D	TIMPANOGOS,	C	TKKUL	C	TOOUGP	A	TRAVESSILLA	D
THOROUGHFARE	B	MODERATELY WELL		TKLANY	B	TCP	D	TRAVIS	C
THORP	C/D	DRAINED		TKLEY	B	TORROY	A	TRAVSON	D
THOUT	C	TIMPER	D	TOLEDO	D	TORCHLIGHT	C	TRAWICK	B
THOW	B	TIMULA	B	TOLEX	E	TORDIA	D	TRAY	C
THOWSON	B	TINA	C	TOLICHA	D	TOREX	B	TREADWAY	D
THRASH	B	TINAJA	B	TOLKE	E	TORHUNTA	C	TREATY	B/D
THREADGILL	B	TINAMOU	C	TOLL	A	TORNEY	D	TREBLE	B
THREECHOP	B	TINAHAY	B	TOLLGATE	R	TORNILLO	B	TREBLOC	D
THREEDOT	D	TINDAHAY, GRAVELLY	A	TOLLHOUSE	D	TORNING	B	TREBOR	C
THREEK	C	TINE	A	TOLMAN	D	TORODA	B	TREEKOR	D
THREEMILE	B	TINEMAN	B	TOLNA	E	TORONTO	C	TREEKOR, NONSTONY	C
THREETOP	C	TINEMAN, WET	C	TOLD	B	TORPEDO LAKE	D	TREEN	D
THROCK	C	TINGEY	B	TOLONIER	B	TORREON	C	TREGO	C
THULEPAH	C	TINKER	C	TOLSONA	D	TORREON, COBBLY	D	TREHARNE	C
THUMBERLAND	B	TINN	D	TOLSONA, TILL	B	TORRES	A	TRELK	B
THUNDERBIRD	D	TINNIN	A	SUBSTRATUM		TORRO	B	TRELONA	D
THURBER	D	TINSLEY	A	TOLSTOI	D	TORRY	B/D	TREMANT	B

NOTES: TWO HYDROLOGIC SOIL GROUPS SUCH AS B/C INDICATE THE DRAINED/UNDRAINED SITUATION. MODIFIERS SHOWN, E.G., BEDROCK SUBSTRATUM, REFER TO A SPECIFIC SOIL SERIES PHASE FOUND IN SOIL MAP LEGEND.

Table 2-1.—Hydrologic soil groups for U.S. soils (continued)

TREMABLES	B	TRUSCREEK	B	TURSON	C	UHLAND	B	UTABA	A
TREMABLES, MODERATELY WET	C	TRUSSEL	D	TURTON	D	UHLIG	B	UTALINE	B
TREMONA	C	TRUVAR	C	TUSAYAN	C	UHLORN	C	UTE	D
TREMPE	A	TRYDN	D	TUSCAN	D	UINTA	B	UTICA	B
TREMPEALEAU	B	TSALI	C	TUSCARAWAS	C	UKIAM	D	UTLEY	B
TRENARY	B	TSCHICOMA	B	TUSCAWILLA	D	ULA	C	UTSO	B
TRENHOLM	D	TSIRKU	C	TUSCOLA	B	ULEN	B	UTUADO	B
TRENT	D	TSOSIE	B	TUSCOSSO	B	ULIDA	D	UVADA	D
TRENTON	B	TUB	C	TUSCUMBIA	D	ULLOA	B	UVALDE	B
TREON	D	TUBAC	C	TUSEL	B	ULM	C	UVI	B
TREDN	D	TUBERET	C	TUSIP	B	ULRANT	B	UWALA	B
TREP	B	TUCANNON	C	TUSK	B	ULRIC	C	UWHARRIE	B
TRES HERMANOS	B	TUCKAHOE	B	TUSKAHOMA	D	ULRICHER	B	UZONA	B
TRESANO	B	TUCKER	C	TUSKEGO	C/D	ULTRA	D	VABEM	D
TRESED	C	TUCKERMAN	D	TUSLER	B	ULUPALAKUA	B	VABUS	C
TRESTLE	B	TUCSON	B	TUSQUITEE	B	ULY	B	VACHERIE	B
TRETEN	B	TUCUMCARI	B	TUSSY	D	ULYSSES	B	VADADO	D
TREVINO	D	TUFFIT	C	TUSTELL	C	UMA	A	VADER	B
TREVLAC	B	TUFFO	D	TUSTIN	B	UMAPINE	D	VADNAIS	C
TREY	A	TUGHILL	D	TUSTUMENA	E	UMAPINE, DRAINED	C	VADO	B
TRIANGLE	D	TUJUNGA	A	TUTE	B	UMATILLA	B	VAEDA	D
TRIBBEY	C	TUKEY	C	TUTHILL	B	UMBARG	C	VAIDEN	D
TRICON	C	TUKUHNIAK	C	TUTNI	E	UMBERLAND	D	VAILTON	B
TRID	C	TUKWILA	D	TUTTLE	C	UMIAT	D	VAIVA	D
TRID, NONSTONY	B	TUKWILA, DRAINED	C	TUTUILLA	C	UMIKOA	E	VALBY	C
TRIDELL	B	TULA	C	TUTWILER	P	UMIL	D	VALCO	C
TRIGGER	D	TULANA, DRAINED	B	TUWEEP	B	UMPA	B	VALCREEK	B
TRIGO	D	TULANA, NONFLOODED	C	TUXEKAN	B	UMPCOOS	D	VALCREST	C
TRIMAD	B	TULARE	D	TWEBA	D	UMPUMP	B	VALDEZ, CLAYEY	D
TRIMBLE	B	TULARGO	B	TWEBA, MODERATELY	B	UNA	D	SUBSTRATUM	
TRIMMER	C	TULAROSA	B	WET	B	UNADILLA	B	VALDEZ, SALINE	D
TRINIDAD	D	TULASE	B	TWEBA, DRAINED	C	UNAKA	B	VALDEZ, CLAYEY	C
TRINITY	D	TULCH	B	TWEEDY	C	UNAKWIK	D	SUBSTRATUM	
TRIO	D	TULECAN	C	TWEENER	D	UNAWEEP	B	SALINE	
TRIOMAS	B	TULELAKE	D	TWICK	D	UNCAS	D	VALDEZ, DRAINED	C
TRIPIT	C	TULIA	B	TWIG	D	UNCOMPAGRE	D	VALDOSTA	A
TRIPLEN	B	TULL	B	TWILIGHT	B	UNDERWOOD	B	VALE	B
TRIPOLI	B/D	TULLAHASSEE	C	TWIN CREEK	C	UNDUSK	B	VALENCIA	B
TRIPP	B	TULLER	D	TWINING	C	UNGERS	B	VALENT	A
TRISTAN	B	TULLOCK	C	TWINSI	C	UNICOI	B	VALENTINE	A
TRITON	D	TULLY	C	TWISSELMAN	C	UNION	C	VALERA	C
TRIX	B	TULOSO	D	TWISSELMAN,	D	UNIONTOWN	B	VALHALLA	A
TROCKEN	B	TUMAC	B	SALINE-ALKALI,	B	UNIONVILLE	B	VALKARIA	B/D
TROJAN	B	TUMALO	C	WET		UNISON	B	VALKARIA,	D
TROMP	C	TUMARION	D	TWISSELMAN,	D	UNIUS	D	DEPRESSIONAL	
TRONSEN	B	TUMBLETON	C	SALINE-ALKALI		UNIVEGA	D	VALLAN	D
TROOK	B	TUMTUM	D	TWOMILE	C/D	UNLIC	B	VALLE	B
TROOK, SALINE	C	TUNBRIDGE	C	TWOTOP	C	UNSEL	D	VALLECITOS	D
TROPAL	D	TUNEHILL	D	TYBO	D	UNSON	B	VALLEONO	B
TROPIC	B	TUNICA	D	TYEE	D	UPDEGRAFF	B	VALLERS	C
TROSI	D	TUNIS	D	TYGART	D	UPDIKE	D	VALLEYCITY	D
TROSKY	B/D	TUNITAS	C	TYGH	C	UPSATA	C	VALMAR	C
TROUGHS	D	TUNK	A	TYLER	D	UPSHUR	D	VALMONT	C
TROUP	A	TUNKHANNOCK	A	TYNDALL	C	UPSON	B	VALMY	B
TROUT CREEK	C	TUNNEL	B	TYNDALL, DRAINED	B	UPSON, STONY	C	VALNOR	C
TROUT RIVER	A	TUNNISON	D	TYNER	A	UPSPRING	D	VALOIS	B
TROUTDALE	C	TUOMI	B	TYONEK	D	UPSTEER	B	VALPAC	C
TROUTER	C	TUPELO	D	TYRE	A/D	UPTMOR	C	VALSETZ	C
TROUTVILLE	B	TUPUKNUK	D	TYRONE	C	UPTON	C	VALTO	D
TROVE	B	TUQUE	B	TYSON	B	UPVILLE	B	VALTON	B
TROXEL	B	TURBEVILLE	C	TYZAK	D	URACCA	B	VALVERDE	B
TRUAX	B	TURBOTVILLE	C	UANA	D	URBANA	C	VAMER	D
TRUBLE	C	TURBYFILL	B	UBANK	B	URBO	D	VAMONT	D
TRUCE	C	TURK	C	UBAR	D	UREAL	D	VAMP	C
TRUCHOT	C	TURKEYSPRINGS	B	UBEHFBE	C	URICH	C/D	VAN DUSEN	B
TRUCKEE	C	TURLEY	B	UBIK	B	URIPNES	D	VAN HORN	B
TRUCKEE, DRAINED	B	TURLIN	B	UBLY	B	URIPNES, GRAVELLY	C	VAN NOSTERN	C
TRUCKTON	B	TURLOCK	D	UCHEE	A	URLAND	C	VAN WAGONER	D
TRUDAU	B	TURMOUND	D	UCOLO	D	URNE	B	VANAJO	D
TRUDE	A	TURNBACK	C	UCOPIA	E	URNES	B/D	VANANDA	D
TRUEF ISSUE	B	TURNBULL	D	UDAHO	B	URSA	C	VANBRUNT	C
TRUESDALE	C	TURNER	B	UDEL	D	URSINE	D	VANCE	C
TRUHOY	D	TURNERCREST	C	UDELOPE	D	URTAH	C	VANDA	D
TRULAE	D	TURNERVILLE	B	UDOLPHO	B/D	URWIL	C	VANDALIA	D
TRULON	C	TURNERY	B	UFFENS	B	USAL	C	YANDAMME	B
TRUMAN	B	TURRAH	C	UFFENS, FLOODED	C	USAL, GRAVELLY	B	VANDAMORE	B
TRUMBULL	D	TURRET	B	UGAK	D	USHAR	B	VANDERGRIFT	C
TRUMP	D	TURRIA	B	UHALDI	B	USINE	A	VANDERHOFF	C
TRUNK	D	TURRIA, WET	C	UHL	B	USK	C	VANDERLIP	A

NOTES: TWO HYDROLOGIC SOIL GROUPS SUCH AS B/C INDICATE THE DRAINED/UNDRAINED SITUATION. MODIFIERS SHOWN, E.G., BEDROCK SUBSTRATUM, REFER TO A SPECIFIC SOIL SERIES PHASE FOUND IN SOIL MAP LEGEND.

Table 2-1.—Hydrologic soil groups for U.S. soils (continued)

VANEPPS	C	VERDE	C	VILLY, DRAINED	B	WABASSO	B/D	WALES, OVERBLOWN	C
VANET	D	VERDEL	D	VILOT	C	WABASSO,	D	WALFORD	B/D
VANG	B	VERDICO	D	VIVILLE	D	DEPRESSIONAL		WALHALLA	B
VANGUARD	C	VERDIGRIS	B	VINA	B	WABASEKA	D	WALKE	C
VANMETER	C	VERDUN	D	VINCENNES	D	WABEK	C/D	WALKNOLLS	D
VANNI	B	VERENDRYE	B/D	VINCENT	B/D	WABEN	C	WALKON	B
VANNOY	C	VERGAS	C	VINCOM	C	WABUSKA	C	WALL	C
VANOCKER	B	VERGENNES	C	VINDICATOR	D	WACA	D	WALLA WALLA	B
VANOSS	B	VERHALEN	D	VINEGARROON	D	WACAHOOOTA	C	WALLACE	B
VANPETTEN	B	VERICK	C	VINEYARD	C	WACOTA	C	WALLEN	B
VANSICKLE	D	VERITAS	B	VINGO	B	WACOSTA	B	WALLER	B/D
VANSON	B	VERJELES	C	VINING	D	WADAMS	C	WALLINGTON	C
VANSTEL	B	VERLAND	D	VININI	D	WADDOUNS	D	WALLKILL	C/D
VANTAGE		VERLOT	D	VINITA	D	WADDELL	C	WALLKILL,	B/D
VANVOR	B	VERMEJO	D	VINJE	D	WADENA	B	NONFLOODED	B
VANWYPER	C	VERMILLION	C	VINLAND	C	WADENILL	D	WALLOWA	C
VANZANDT	C	VERMISA	D	VINSAD	D	WADER	C	WALLROCK	C
VAQUERO	D	VERNADO	D	VINSON	D	WADESPRINGS	E	WALLSBURG	D
VARCO	D	VERNAL	B	VINT	B	WADLEIGH	B	WALLSON	B
VARDEN	B	VERNALIS	B	VINT, NET	B	WADMALAW	C	WALLUSKI	C
VARELUM	B	VERNDALE	B	VINTAS	B	WADSWORTH	A	WALNETT	C
VARELUM, CLAY LOAM	C	VERNIA	A	VINTON	A	WAGES	E	WALDNG	B
SUBSTRATUM		VERNON	D	VIOLA	D	WAGNER	D	WALPOLE	C
VARGAS	C	VERNONIA	B	VIPONT	B	WAGONBOX	D	WALREES	C
VARICK	D	VERO	B/D	VIRATON	C	WAGONTIRE	C	WALSH	B
VARINA	C	VERO, DEPRESSIONAL	B/D	VIRCEN	B/D	WAGRAM	D	WALSTEAD	B
VARNA	C	VERSHIRE	C	VIRGELLE	C	WAHA	C	WALTERS	B
VARNEY	B	VERSON	C	VIRGIL	B	WAHATOYA	B	WALTERSHOW	B
VARRD	B	VERTEL	D	VIRGIN PEAK	D	WAHEE	D	WALTI	D
VARYSBURG	B	VERTREES	B	VIRGIN RIVER	C	WANGUYHE	C	WALUM	B
VASA	B	YES	B	VIRKULA	B	WAHIAWA	B	WALVAN	B
VASHTI	C	VESEY	B	VIRTUE	B	WAHIKULI	C	WALVILLE	B
VASQUEZ	C	VESSER	D	VISTA	D	WAHKEENA	B	WAMBA	D
VASSALBORD	D	VESSER	C	VITALE	C	WAHLUKE	C	WAMBA, DRAINED	C
VASSAR	B	VESSILLA	D	VITZTHUM	D	WAHOO	D	WAMDUSKA	A
VASSETT	B	VESTA	B	VIUDA	B	WAMPETON	C	WAMEGO	C
VASTINE	C	VESTABURG	A/C	VIUM	A/C	WAMREKAM	D	WAMIC	B
VASTINE,	D	VESTON	D	VIVES	D	WAMSTAL	C	WAMPOD	D
SALINE-ALKALI		VETA	B	VIVI	B	WAHTIGUP	B	WAMPSVILLE	B
VAUCLUSE	C	VEVAL	B	VIXEN	B	WAHTUM	D	WANAGAN	B
VAUGHAN	D	VETEADO	C	VIZCAINO	C	WAHWEAP	D	WANBLEE	D
VAUGHNSVILLE	C	VEYO	D	VIZCAPOINT	D	WAIABA	D	WANDA	B
VAY	B	VIA	B	VLASATY	B	WAIAKOA	C	WANDD	A
VAYAS	D	VIAN	B	VLECK	D	WAIALEALE	D	WANETTA	B
VEAL	B	VIBLE	A	VLY	C	WAIALUA	D	WANILLA	C
VEATCH	B	VIBO	B	VOATS	B	WAIAWA	B	WANN	B
VEATCH, STONY	C	VIBORAS	D	VOCA	C	WAIHUNA	C	WANNACOTT	B
VEAZIE	B	VIBORG	E	VODEPMAIER	E	WAIKALOA	B	WANOGA	B
VEBAR	B	VICEE	B	VOLIGHT	B	WAIKANE	B	WANOWIE	C
VECONT	D	VICK	C	VOLADORA	B	WAIKAPU	B	WANSE	D
VEEDUM	D	VICKERY	C	VOLASH	C	WAIKOMO	B	WANSE, DRAINED	B
VEET	B	VICKING	B	VOLBORG	B	WAILUKU	D	WAPAL	A
VEGA	C	VICKING, DRY	D	VOLCC	D	WAIMEA	B	WAPAL, BEDROCK	B
VEGA ALTA	B	VICKSBURG	B	VOLENTE	B	WAINEE	C	SUBSTRATUM	
VEGA BAJA	C	VICKTON	B	VOLINIA	B	WAINOLA	B	WAPAL, BEDROCK	B
VEKOL	D	VICTINE	D	VOLKMAR	D	WAIPAHU	C	SUBSTRATUM	
VEKOL, COOL	C	VICTOR	B	VOLNEY	B	WAIKA	B	WAPATO	D
VELASCO	D	VICTORIA	D	VOLPERIE	D	WAIITS	C	WAPELLO	B
VELDA	B	VICTORYVILLE	B	VOLTA	D	WAKE	D	WAPI	D
VELDKAMP	B	VICTORY	B	VOLTAGE	B	WAKEEN	B	WAPINITIA	B
VELMA	B	VICU	C	VOLTAIRE	C	WAKEFIELD	D	WAPPING	B
VELOW	B	VIDA	C	VOLTAIRE, DRAINED	C	WAKELAND	C	WAPPINGER	B
VELVA	B	VIDAURI	D	VOLTAIRE, GRAVELLY	C	WAKEPISH	B	WAPPO	D
VENA	C	VIDRINE	D	SUBSTRATUM		WAKITA	D	WAPSHILLA	B
VENABLE	D	VIEJA	D	VOLUSIA	D	WAKONDA	B	WAPSTIE	B
VENADITO	D	VIENNA	B	VONA	B	WAKONDA, TILL	C	WAPTUS	C
VENANGO	C	VIEQUES	E	VONALEE	E	SUBSTRATUM		WARBA	B
VENAPASS	D	VIGAR	C	VONASON	C	WAKULLA	B	WARDROD	A
VENATOR	C	VIGIA	D	VOORHIES	C	WALCAN	C	WARDELL	C
VENETA	D	VIGNOLO	C	VORE	R	WALCOTT	B	WARDEN	B
VENEZIA	D	VIGO	D	VOSBURG	D	WALDBILLIG	B	WARDENOT	A
VENICE	C	VIGUS	B	VOSS	B	WALDECK	C	WARDWELL	C
VENLO	D	VIKING	D	VOSSET	D	WALDEN	B	WARE	B
VENTRIS	D	VIL	D	VULCAN	D	WALDO	C	WAREAGLE	B
VENTURE	D	VILAS	A	VYLACH	A	WALDORF	D	WAREHAM	C
VENUM	D	VILLA	B	WAAS	B	WALDPORT	E	WARM SPRINGS	D
VENUS	B	VILLA GROVE	B	WABANICA	B	WALDRON	C	WARM SPRINGS,	C
VERBOORT	D	VILLEGREEN	C	WABASH	C	WALDROUP	D	DRAINED, CLAY	D
VERCLIFF	C	VILLY	D	WABASHA	D	WALE	B	SUBSTRATUM	

NOTES: TWO HYDROLOGIC SOIL GROUPS SUCH AS B/C INDICATE THE DRAINED/UNDRAINED SITUATION. MODIFIERS SHOWN, E.G., BEDROCK SUBSTRATUM, REFER TO A SPECIFIC SOIL SERIES PHASE FOUND IN SOIL MAP LEGEND.

Table 2-1.—Hydrologic soil groups for U.S. soils (continued)

WARM SPRINGS, DRAINED, ALKALI	C	WAUPECAN	B	WELD	C	WETTERHORN	C	WIBAUX	B
WARM SPRINGS, DRAINED	C	WAUQUIE	B	WELDA	C	WETZEL	D	WICHITA	C
WARM SPRINGS, COOL	C	WAURIKA	D	WELLER	C	WEVERTON	B	WICHUP	D
WARMAN	B/D	WAUSEON	B/D	WELLINGTON	D	WEWELA	B	WICKAHONEY	D
WARMAN, GRAVELLY SUBSOIL	A/D	WAUTOMA	B/D	WELLMAN	B	WEWOKA	C	WICKENBURG	D
WARNEKE	D	WAVELAND	B/D	WELLS	B	WEYERS	C/D	WICKERSHAM	B
WARNERS	C/D	WAVELAND, DEPRESSIONAL	D	WELLSBORO	C	WEYNOUTH	C	WICKETT	B
WARNOCK	B	WAVERLY	B/D	WELLS CREEK	B	WHAKANA	B	WICKHAM	B
WARRENTON	D	WAWASEE	B	WELLSSED	C	WHALAN	B	WICKIUP	C
WARSAW	B	WAWINA	A	WELLSTON	B	WHALEY	D	WICKSBURG	B
WARSING	B	WAX	C	WELLSVILLE	B	WHARTON	C	WICUP	C
WARMICK	A	WAXPOOL	D	WELLTOM	B	WHATCOM	C	WIDEMAN	A
WASA	D	WAYAH	B	WELDY	C	WHATELY	D	WIDEN	C
WASATCH	A	WAYBE	B	WELRING	D	WHEATLEY	A/D	WIDTSON	B
WASCO	B	WAYCUP	B	WELSUM	D	WHEATRIDGE	D	WIEHL	C
WASDA	B/D	WAYDEN	B	WELTER	D	WHEATVILLE	B	WIELAND	D
WASEPI	B	WAYLAND	C/D	WEMPLE	B	WHEELER	B	WIERGATE	C
WASHBURN	D	WAYMOR	B	WENAS	D	WHEELERVILLE	B	WIFFO	B
WASHINGTON	B	WAYNECO	D	WENAS, DRAINED	C	WHEELING	B	WIGGLER	D
WASHINGTON, WET SUBSTRATUM	C	WAYNESBORO	B	WENATCHEE	C	WHEELON	D	WIGGLETON	B
WASHOE	B	WAYNETOWN	C	WENDANE	C	WHE TROCK	C	WIGTON	A
WASHOUGAL	B	WEA	B	WENDANE, DRAINED	B	WHE STONE	B	WILAH	A
WASHTENAW	C/D	WEASH	C	WENDOVER	D	WHICHMAN	D	WILBANKS	D
WASTILLA	D	WEATHERFORD	B	WENDTE	D	WHIDBEY	C	WILBRAHAM	C
WASTOJA	B	WEAVER	B	WENONA	C	WHILPHANG	D	WILBUR	B
WASKISH	D	WEAVERVILLE	C	WENTWORTH	B	WHIPPANY	C	WILBURTON	B
WASKOP	C	WEBB	C	WEDGUFKA	B	WHIPPLE	D	WILCO	C
WASPO	D	WEBBRIIDGE	C	WEPD	C	WHIPSTOCK	C	WILCOX	D
WASSAIC	B	WEBBTOWN	C	WERELD	B	WHIRLO	B	WILCOXSON	C
WASSIT	D	WEBER	B	WERLOG	C	WHISKEYDICK	C	WILDALE	C
WATAB	C	WEBER	B	WERNER	D	WHISPERING	D	WILDCAT	C
WATAAMA	C	WEBILE	C	WERNOCK	B	WHISTLE	B	WILDERNESS	D
WATAUGA	B	WEBSTER	B/D	WESCONNETT	D	WHIT	B	WILDGEN	A
WATCHABOB	C	WEDEKIND	D	WESDY	D	WHITAKER	C	WILDHORSE	B
WATCHAUG	B	WEDERTZ	B	WESFIL	B	WHITE HOUSE	D	WILDORS	C
WATCHUNG	D	WEDGE	A	WESIX	A	WHITE STORE	D	WILDWOOD	D
WATERBURY	D	WEDLAR	B	WESKA	C	WHITE SWAN	D	WILE	C
WATERCANYON	B	WEDDOWEE	R	WESLEY	B	WHITECAP	B	WILEY	B
WATEREE	B	WEED	B	WESD	B	WHITECLOUD	B	WILHITE	C/D
WATERMAN	D	WEEDING	D	WESPAC	D	WHITECOW	D	WILHOIT	B
WATERTOWN	A	WEEDMARK	B	WESPAC, SANDY	B	WHITECROSS	C	WILKES	C
WATERVILLE	B	WEEDIACHEE	B	WEST SUBSTRATUM	D	WHITEFISH	C	WILKESON	B
WATKINS	B	WEEDS	C	WESSEL	C	WHITEFORD	B	WILKINS	D
WATKINS RIDGE	B	WEEKSVILLE	B/D	WESTBROOK	D	WHITEHALL	D	WILL	B/D
WATO	B	WEENA	D	WESTBURY	C	WHITEHILLS	C	WILLABY	B
WATONGA	D	WEPAH	C	WESTBUTTE	C	WHITEHORN	D	WILLACY	C
WATOOPAH	B	WEESATCHE	B	WESTCAMP	B	WHITEHORSE	C	WILLAKENZIE	C
WATROUS	B	WEGA	B	WESTCREEK	B	WHITENOBB	B	WILLAMAR	B
WATSEKA	B	WEHADKEE	D	WESTE	C	WHITELAKE	C	WILLAMETTE	B
WATSON	C	WEIGANG	D	WESTERVILLE	B	WHITEMAN	B	WILLAMETTE, WET	D
WATSONIA	D	WEIGLE	C	WESTFORK	D	WHITEPEAK	D	WILLANCH	C
WATSONVILLE	D	WEIKERT	B	WESTHAVEN	C/D	WHITERIVER	B	WILLAPA	C
WATT	D	WEIMER	D	WESTHAVEN,	D	WHITEROCK	C	WILLARD	B
WATTON	C	WEINBACH	C	SALINE-ALKALI	C	WHITESBORO	C	WILLETTE	A/D
WATUSI	C	WEINGART	D	WESTINDIAN	D	WHITESBURG	C	WILLHILL	C
WAUBAY	B	WEINGARTEN	D	WESTLAKE	C	WHITESON	D	WILLHO	D
WAUBEEK	B	WEIR	D	WESTLAND	B/D	WHITESTONE	B/D	WILLIAMS	B
WAUBERG	D	WEIRMAN	C	WESTMORE	C	WHITETHORN	C	WILLIAMS	B
WAUBONISIE	B	WEIRMAN, WET	D	WESTMORELAND	D	WHITETWATER	B	WILLIAMSON	C
WAUCEDAH	D	WEIRMAN,	B	WESTON	A	WHITETWOLF	D	WILLIAMSPORT	C
WAUCHULA	B/D	NONFLOODED	B	WESTOVER		WHITETWOOD	B	WILLIAMSTOWN	C
WAUCHULA, DEPRESSIONAL	D	WEISBURG	C	WESTPHALIA	C	WHITEWOOD,	B/D	WILLIAMSVILLE	C
WAUCOBA	D	WEISER	B	WESTPLAIN	B	NONFLOODED		WILLIMAN	B/D
WAUCOMA	B	WEISHAUP	D	WESTPORT	D	WHITEWRIGHT	A	WILLIS	C
WAUCONDA	B	WEISSENFELS	C	WESTPORT, THIN	B	WHITING	B	WILLISTON	C
WAUKEE	B	WEITAS	B	SURFACE	B	WHITINGER	C	WILLOW CREEK	B
WAUKEGAN	B	WEITCHPEC	C	WESTSHORE	C	WHITLEY	D	WILLOWDALE	B
WAUKENA	D	WEKODA	D	WESTVACO	C	WHITLOCK	C	WILLOWEMOC	C
WAUKON	B	WELAKA	A	WESTVIEW	B	WHITMAN	D	WILLOWMAN	B
WAULD	B	WELBY	B	WESTVILLE	B	WHITNEY	C	WILLOWS	D
WAUMAC	B	WELCH	D	WESTWEGO	D	WHITORE	B	WILLWOOD	A
WAUMBEC	B	WELCH, GRAVELLY	B	WESWIND	C	WHITSOL	B	WILMA	B
WAUNA	C	SUBSTRATUM,	D	WESWOOD	B	WHITSON	D	WILMER	C
WAUPACA	B/D	DRAINED	B	WETA	D	WHITTIER	B	WILMINGTON	D
		FLOODED, DRAINED	B	WETHERSFIELD	C	WHITWELL	C	WILMONT	B
		WELCH, DRAINED	C	WETHEY	C	WHOBREY	C	WILMONTON	B
		WELCHLAND	B	WETHEY, DRAINED	A	WHOLAN	B	WILPAR	C
		WELCME	B	WETMORE	D	WHORLED	C	WILPOINT	D
				WETSAW	C	WHY	B	WILSHIRE	A

NOTES: TWO HYDROLOGIC SOIL GROUPS SUCH AS B/C INDICATE THE DRAINED/UNDRAINED SITUATION. MODIFIERS SHOWN, E.G., BEDROCK SUBSTRATUM, REFER TO A SPECIFIC SOIL SERIES PHASE FOUND IN SOIL MAP LEGEND.

Table 2-1.—Hydrologic soil groups for U.S. soils (continued)

WILSON	D	WISHARD	C	WOODS CROSS	D	WYNOOSE	D	YEGEN	B
WILSONGULCH	B	WISHBONE	B	WOODSEYE	D	WYOCENA	B	YEGUAS	C
WILSONVILLE	D	WISHEYLU	C	WOODSFIELD	C	WYOMING	A	YELJACK	B
WILSOR	B	WISHKAH	D	WOODSIDE	B	WYRENE	B	YELLOWBAY	B
WILST	C	WISHKAH, DRAINED	C	WOODSLAKE	D	WYSOCKING	C/D	YELLOWHOUND	B
WILTON	B	WISKAN	C	WOODSON	D	XANA	B	YELLOWROCK	A
WINADA	C	WISKIFLAT	B	WOODSTOCK	C/D	XANADU	B	YELLOWSTONE	D
WINBERRY	C	WISNER	B/D	WOODSTOWN	C	XAVIER	C	YELM	C
WINCHESTER	A	WISTER	C	WOODTELL	D	XENIA	D	YEMASSEE	C
WINCHUCK	C	WITBECK	B/D	WOODVILLE	D	XENO	B	YENCE	C
WIND RIVER	B	WITFELS	B	WOODWARD	B	XERTA	B	YENLO	B
WINDCOAT	D	WITHAM	D	WOODWEST	D	XERXES	D	YENRAB	A
WINDER	B/D	WITHEE	C	WOODFUS	D	XICA	C	YEDMAN	B
WINDER, DEPRESSIONAL	D	WITHERBEE	A/D	WOOLPER	C	XINE	C	YEOPIM	B
WINDHAM	B	WITHERELL	D	WOOLSEY	B	XIPE	D	YERINGTON	A
WINDCREEK	A	WITHERS	C	WOOLSTALF	C	XIPE, MODERATELY	C	YERMO	B
WINDHILL	B	WITT	B	WOOLSTED	B	WET	B	YESUM	B
WINDSOR	A	WITTEN	D	WOONSOCKET	D	XMAN	D	YETTEM	B
WINDTHORST	C	WITTENBERG	B	WOOSLEY	C	YACOLT	B	YETULL	A
WINDWHISTLE	C	WITZEL	D	WOOSTER	C	YAGO	C	YIGO	B
WINDWHISTLE, WARM	B	WIX	C	WORCESTER	C	YAHANA	C	YIPOR	B
WINDY	B	WIXOM	B	WORDEN	C	YAHARA	C	YLIG	C
WINDYPOINT	B	WOCKLEY	C	WORDEN	D	YAHNE	C	YOBE	C
WINEG	B	WODA	D	WORDFKA	D	YAHOLA	B	YOCHUM	C
WINEMA	C	WODEN	B	WORDFMAN	D	YAHOO	D	YOCKEY	C
WINETTI	B	WODSKOW	C	WORDSTONE	C	YAINAX	B	YODER	B
WINEVADA	C	WODSKOW, DRAINED	B	WORK	C	YAKI	D	YODY	C
WINFALL	B	WOHLY	B	WORK, GRAVELLY	B	YAKIMA	B	YOHURT	D
WINFIELD	B	WOLCO	C	WORLAND	C	YAKUS	C	YOKAYO	D
WING	D	WOLCOTT	B/D	WORLEY	D	YAKUTAT	D	YOKOHL	D
WINGATE	B	WOLDALE	D	WORMSER	C	YALELAKE	B	YOKUT	B
WINGER	B/D	WOLDALE, DRAINED	C	WOROCK	B	YALESVILLE	C	YOLLABOLLY	D
WINGINAW	D	WOLF	B	WORSHAM	D	YALLANI	B	YOLO	B
WINGVILLE	D	WOLF POINT	C	WORTH	C	YALMER	B	YOLOGO	D
WINIFRED	C	WOLFCREEK	D	WORTHEN	B	YAMAC	B	YOMBA	B
WINK	B	WOLFESON	C	WORTHING	C	YAMHILL	C	YOMONT	P
WINKEL	D	WOLFESON, WET	B	WORTMAN	D	YAMO	B	YONGES	D
WINKLEMAN	C	WOLFEPEN	C	WORTMAN, SANDY	A	YAMSAY	D	YONNA	D
WINKLEMAN, WET	D	WOLFTEVER	A	WOVOKA	D	YANA	D	YORBA	D
WINKLER	B	WOLLARD	C	WRANGELL	D	YANCY	B	YORK	C
WINLER	D	WOLLENT	C	WRANGO	A	YANKEE	D	YORK TOWN	D
WINLO	D	WOLLOT	D	WRAYHA	D	YANKTON	B	YORK TREE	C
WINN	C	WOLVERINE	B	WREDAH	B	YANKUSH	B	YORKVILLE	D
WINNEBAGO	B	WOMACK	A	WRENCOE	D	YAP	B	YOST	D
WINNECONNE	C	WOO	C	WRENMAN	C	YAPOAH	B	YOST, DRAINED	C
WINNECOOK	C	WOO, OVERWASH	B	WRENTHAM	C	YAQUI	B	YOUD	D
WINNEMUCCA	B	WOO, WET	C	WRIGHT	C	YAQUINA	D	YOUGA	B
WINNESHIEK	B	WOOD RIVER	D	WRIGHTMAN	C	YAQUINA, DRAINED	C	YOUGA, SANDY	D
WINNETT	D	WOODBEEK	C	WRIGHTSBORO	C	YARCO	D	SUBSTRATUM	D
WINNSBORO	D	WOODBINE	B	WRIGHTSVILLE	D	YARDLEY	C	YOUJAY	D
WINDM	D	WOODBRIE	B	WRIGHTWOOD	F	YARTS	B	YOUMAN	C
WINDNA	D	WOODBURN	C	WUKOKI	B	YATAHONEY	C	YOUNGSTON	B
WINDOSKI	B	WOODBURY	C	WUKSI	A	YATAHONEY, STONY	D	YOUNGSTON, WET	C
WINOPEE	B	WOODOCK	D	WULFERT	D	YATES	D	YOURAME	B
WINRIDGE	D	WOODCOCK	B	WUNJEY	B	YAUCO	C	YOUTLKUE	D
WINSHIP	C	WOODFORD	D	WUPATKI	D	YAUHANNAH	B	YOVIIPA	D
WINSPECT	B	WOODGULCH	A	WURNO	C	YAUPON	D	YPSI	C
WINSTON	B	WOODHALL	C	WURSTEN	B	YAWDIM	D	YRIBARREN	D
WINT	D	WOODHURST	C	WURTSBORO	C	YAWHEE	B	YSIDORA	C
WINTERFIELD	A/D	WOODIN	C	WYALUSING	D	YAWKEY	B	YTURBIDE	A
WINTERHAVEN	B	WOODINGTON	B/D	WYANDOTTE	D	YAXON	B	YTURRIA	A
WINTERIDGE	B	WOODINVILLE	D	WYANT	C	YEAGER	A	YUBA	D
WINTERS	C	WOODINVILLE, DRAINED	C	WYARD	E	YEARY	C	YUKO	D
WINTERSBURG	C	WOODLAWN	B	WYARNO	B	YEATES HOLLOW	B	YUKON	D
WINTERSET	C	WOODLEAF	C	WYATT	C	YEATES HOLLOW,	C	YULEE	D
WINTHROP	A	WOODLY	B	WYCOLO	C	LOAMY SUBSTRATUM,		YUNES	D
WINTLEY	B	WOODLYN	D	WYE	B	STONY		YUNQUE	C
WINTON	C	WOODMANSIE	B	WYEAST	D	YEATES HOLLOW,	C	YURM	D
WINTONER	B	WOODMERE	B	WYETH	B	LOAMY SUBSTRATUM		YUTRUE	D
WINU	C	WOODMONT	C	WYEVILLE	B	YEATES HOLLOW,	C	YUVAS	D
WINZ	D	WOODPASS	C	WYICK	D	STONY		ZAAR	D
WIOTA	B	WOODROCK	B	WYKHAM	B	YEATES HOLLOW,	C	ZABA	B
WIPPLE	C	WOODROW	C	WYKOFF	B	NONSTONY		ZACA	D
WIRT	B	WOODROW,	B	WYMAN	B	YEATES HOLLOW, DRY	C	ZACHARIAS	B
WISCOW	D	WOODROW,	C	WYMCRE	D	YEATES HOLLOW,	C	ZACHARY	C
WISE	C	SALINE-ALKALI		WYNDMERE	B	COBBLY		ZACK	D
WISEMAN	A	WOODROW,	C	WYNN	B	YEATON	C	ZADOG	A/D
WISFLAT	D	OCCASIONALLY FLOODED		WYNNVILLE	C	YECROSS	A	ZADVAR	D
				WYNDNA	C	YEDLICK	B	ZAFRA	B

NOTES: TWO HYDROLOGIC SOIL GROUPS SUCH AS B/C INDICATE THE DRAINED/UNDRAINED SITUATION. MODIFIERS SHOWN, E.G., BEDROCK SUBSTRATUM, REFER TO A SPECIFIC SOIL SERIES PHASE FOUND IN SOIL MAP LEGEND.

Table 2-1.—Hydrologic soil groups for U.S. soils (continued)

ZAGG	C	ZOMNER	D
ZAHILL	C	ZOLA	C
ZAHL	B	ZOLFO	C
ZAIDY	C	ZOLTAY	C
ZAKME	D	ZOOK	C/D
ZALCO	A	ZOOK, SILTY	C
ZALDA	D	SUBSTRATUM	
ZALLA	A	ZORRA	D
ZAMORA	B	ZORRAVISTA	A
ZAMSCAN	B	ZOYER	D
ZANBUR	B	ZUBER	C
ZANE	B	ZUFELT	C
ZANEIS	B	ZUKAN	D
ZANESVILLE	C	ZULCH	D
ZANGO	D	ZUMAN	D
ZAPA	C	ZUMAN, PROTECTED	C/D
ZAPATA	C	ZUMBRO	A
ZARK	C	ZUMWALT	C
ZATOVILLE	C	ZUNDELL	C
ZAU	C	ZUNHALL	C
ZAVALA	B	ZUNI	D
ZAVCO	C	ZURICH	B
ZAYANTE	A	ZWICKER	C
ZAZA	D	ZWIEFEL	C
ZEALE	B	ZWINGLE	D
ZEB	B	ZYGORE	B
ZEBA	B	ZYME	D
ZECANYON	C	ZYMER	B
ZEEBAR	B	ZYNBAR	B
ZEEKA	C	ZYNBAR, TILL	C
ZEELNOT	B	SUBSTRATUM	
ZEESIX	C	ZYPLAR	D
ZEGRO	C	ZYZYL	B
ZEIBRIGHT	B	ZYZZI	D
ZELL	B	ZYZZUG	D
ZEN	C		
ZENDA	C		
ZENI	C		
ZENIFF	B		
ZENITH	B		
ZENKER	B		
ZENOD	B		
ZENOR	B		
ZENORIA	C		
ZEONCMT	A		
ZEONA	A		
ZEORELY	B		
ZEPHAN	C		
ZEPHYR	D		
ZEPP	B		
ZER	B		
ZERK	B		
ZERKER	B		
ZEVADEZ	C		
ZIA	B		
ZIBATE	D		
ZIEGENFUSS	D		
ZIEGLER	C		
ZIGWEID	B		
ZILABUY	D		
ZILLAH	D		
ZILLAH, DRAINED	C		
ZILLION	B		
ZILLMAN	B		
ZIMMERMAN	A		
ZINEB	B		
ZING	C		
ZINZER	B		
ZINZER, SALINE	C		
ZION	C		
ZIPP	D		
ZIPPEL	B/D		
ZIRAM	D		
ZITA	B		
ZITTAU	C		
ZOAR	C		
ZOATE	D		
ZOE	D		
ZOESTA	D		

NOTES: TWO HYDROLOGIC SOIL GROUPS SUCH AS B/C INDICATE THE DRAINED/UNDRAINED SITUATION. MODIFIERS SHOWN, E.G., BEDROCK SUBSTRATUM, REFER TO A SPECIFIC SOIL SERIES PHASE FOUND IN SOIL MAP LEGEND.

Table 2-2.—Runoff depth for selected CN's and rainfall amounts¹

Rainfall	Runoff (Q) for curve number of—											
	40	45	50	55	60	65	70	75	80	85	90	95
	----- inches -----											
1.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.08	0.17	0.32	0.56
1.2	.00	.00	.00	.00	.00	.00	.03	.07	.15	.27	.46	.74
1.4	.00	.00	.00	.00	.00	.02	.06	.13	.24	.39	.61	.92
1.6	.00	.00	.00	.00	.01	.05	.11	.20	.34	.52	.76	1.11
1.8	.00	.00	.00	.00	.03	.09	.17	.29	.44	.65	.93	1.29
2.0	.00	.00	.00	.02	.06	.14	.24	.38	.56	.80	1.09	1.48
2.5	.00	.00	.02	.08	.17	.30	.46	.65	.89	1.18	1.53	1.96
3.0	.00	.02	.09	.19	.33	.51	.71	.96	1.25	1.59	1.98	2.45
3.5	.02	.08	.20	.35	.53	.75	1.01	1.30	1.64	2.02	2.45	2.94
4.0	.06	.18	.33	.53	.76	1.03	1.33	1.67	2.04	2.46	2.92	3.43
4.5	.14	.30	.50	.74	1.02	1.33	1.67	2.05	2.46	2.91	3.40	3.92
5.0	.24	.44	.69	.98	1.30	1.65	2.04	2.45	2.89	3.37	3.88	4.42
6.0	.50	.80	1.14	1.52	1.92	2.35	2.81	3.28	3.78	4.30	4.85	5.41
7.0	.84	1.24	1.68	2.12	2.60	3.10	3.62	4.15	4.69	5.25	5.82	6.41
8.0	1.25	1.74	2.25	2.78	3.33	3.89	4.46	5.04	5.63	6.21	6.81	7.40
9.0	1.71	2.29	2.88	3.49	4.10	4.72	5.33	5.95	6.57	7.18	7.79	8.40
10.0	2.23	2.89	3.56	4.23	4.90	5.56	6.22	6.88	7.52	8.16	8.78	9.40
11.0	2.78	3.52	4.26	5.00	5.72	6.43	7.13	7.81	8.48	9.13	9.77	10.39
12.0	3.38	4.19	5.00	5.79	6.56	7.32	8.05	8.76	9.45	10.11	10.76	11.39
13.0	4.00	4.89	5.76	6.61	7.42	8.21	8.98	9.71	10.42	11.10	11.76	12.39
14.0	4.65	5.62	6.55	7.44	8.30	9.12	9.91	10.67	11.39	12.08	12.75	13.39
15.0	5.33	6.36	7.35	8.29	9.19	10.04	10.85	11.63	12.37	13.07	13.74	14.39

¹ Interpolate the values shown to obtain runoff depths for CN's or rainfall amounts not shown.

Table 2-3a.—Runoff curve numbers for cultivated agricultural lands¹

Cover description		Hydrologic condition ³	Curve numbers for hydrologic soil group—			
Cover type	Treatment ²		A	B	C	D
Fallow	Bare soil	—	77	86	91	94
	Crop residue cover (CR)	Poor	76	85	90	93
		Good	74	83	88	90
Row crops	Straight row	Poor	72	81	88	91
		Good	67	78	85	89
	Straight row + CR	Poor	71	80	87	90
		Good	64	75	82	85
	Contoured (C)	Poor	70	79	84	88
		Good	65	75	82	86
	Contoured + CR	Poor	69	78	83	87
		Good	64	74	81	85
	Contoured & terraced (C&T)	Poor	66	74	80	82
		Good	62	71	78	81
	Contoured & terraced + CR	Poor	65	73	79	81
		Good	61	70	77	80
Small grain	Straight row	Poor	65	76	84	88
		Good	63	75	83	87
	Straight row + CR	Poor	64	75	83	86
		Good	60	72	80	84
	Contoured	Poor	63	74	82	85
		Good	61	73	81	84
	Contoured + CR	Poor	62	73	81	84
		Good	60	72	80	83
	Contoured & terraced	Poor	61	72	79	82
		Good	59	70	78	81
	Contoured & terraced + CR	Poor	60	71	78	81
		Good	58	69	77	80
Close-seeded or broadcast legumes or rotation meadow	Straight row	Poor	66	77	85	89
		Good	58	72	81	85
	Contoured	Poor	64	75	83	85
		Good	55	69	78	83
	Contoured & terraced	Poor	63	73	80	83
		Good	51	67	76	80

¹ Average runoff condition.

² *Crop residue cover (CR)* applies only if residue is on at least 5% of the surface throughout the year.

³ Hydrologic condition is based on combination of factors that affect infiltration and runoff, including (a) density and canopy of vegetative areas, (b) amount of year-round cover, (c) amount of grass or close-seeded legumes in rotations, (d) percent of residue cover on the land surface (good \geq 20%), and (e) degree of surface roughness.

Poor: Factors impair infiltration and tend to increase runoff.

Good: Factors encourage average and better than average infiltration and tend to decrease runoff.

Table 2-3b.—Runoff curve numbers for other agricultural lands¹

Cover type	Cover description	Hydrologic condition	Curve numbers for hydrologic soil group—			
			A	B	C	D
Pasture, grassland, or range—continuous forage for grazing. ²		Poor	68	79	86	89
		Fair	49	69	79	84
		Good	39	61	74	80
Meadow—continuous grass, protected from grazing and generally mowed for hay.		—	30	58	71	78
Brush—brush-weed-grass mixture with brush the major element. ³		Poor	48	67	77	83
		Fair	35	56	70	77
		Good	30 ⁴	48	65	73
Woods-grass combination (orchard or tree farm). ⁵		Poor	57	73	82	86
		Fair	43	65	76	82
		Good	32	58	72	79
Woods ⁶		Poor	45	66	77	83
		Fair	36	60	73	79
		Good	30 ⁴	55	70	77
Farmsteads—buildings, lanes, driveways, and surrounding lots.		—	59	74	82	86

¹ Average runoff condition.

² *Poor*: <50% ground cover or heavily grazed with no mulch.

Fair: 50% to 75% ground cover and not heavily grazed.

Good: >75% ground cover and lightly or only occasionally grazed.

³ *Poor*: <50% ground cover.

Fair: 50 to 75% ground cover.

Good: >75% ground cover.

⁴ Actual curve number is less than 30; use CN = 30 for runoff computations.

⁵ CN's shown were computed for areas with 50% woods and 50% grass (pasture) cover. Other combinations of conditions may be computed from the CN's for woods and pasture.

⁶ *Poor*: Forest, litter, small trees, and brush have been destroyed by heavy grazing or regular burning.

Fair: Woods are grazed but not burned, and some forest litter covers the soil.

Good: Woods are protected from grazing, and litter and brush adequately cover the soil.

Table 2-3c.—Runoff curve numbers for arid and semiarid rangelands¹

Cover description		Curve numbers for hydrologic soil group—			
Cover type	Hydrologic condition ²	A ³	B	C	D
Herbaceous—mixture of grass, weeds, and low-growing brush, with brush the minor element.	Poor		80	87	93
	Fair		71	81	89
	Good		62	74	85
Oak-aspen—mountain brush mixture of oak brush, aspen, mountain mahogany, bitter brush, maple, and other brush.	Poor		66	74	79
	Fair		48	57	63
	Good		30	41	48
Pinyon-juniper—pinyon, juniper, or both; grass understory.	Poor		75	85	89
	Fair		58	73	80
	Good		41	61	71
Sagebrush with grass understory.	Poor		67	80	85
	Fair		51	63	70
	Good		35	47	55
Desert shrub—major plants include saltbush, greasewood, creosotebush, blackbrush, bursage, palo verde, mesquite, and cactus.	Poor	63	77	85	88
	Fair	55	72	81	86
	Good	49	68	79	84

¹ Average runoff condition. For rangelands in humid regions, use table 2-3b.

² *Poor*: < 30% ground cover (litter, grass, and brush overstory).

Fair: 30% to 70% ground cover.

Good: > 70% ground cover.

³ Curve numbers for group A have been developed only for desert shrub.

Table 2-3d.—Runoff curve numbers for urban areas¹

Cover description	Average percent impervious area ²	Curve numbers for hydrologic soil group—			
		A	B	C	D
<i>Fully developed urban areas (vegetation established)</i>					
Open space (lawns, parks, golf courses, cemeteries, etc.) ³ :					
Poor condition (grass cover < 50%)		68	79	86	89
Fair condition (grass cover 50% to 75%)		49	69	79	84
Good condition (grass cover > 75%)		39	61	74	80
Impervious areas:					
Paved parking lots, roofs, driveways, etc. (excluding right-of-way)		98	98	98	98
Streets and roads:					
Paved; curbs and storm sewers (excluding right-of-way)		98	98	98	98
Paved; open ditches (including right-of-way)		83	89	92	93
Gravel (including right-of-way)		76	85	89	91
Dirt (including right-of-way)		72	82	87	89
Western desert urban areas:					
Natural desert landscaping (pervious areas only) ⁴		63	77	85	88
Artificial desert landscaping (impervious weed barrier, desert shrub with 1- to 2-inch sand or gravel mulch and basin borders)		96	96	96	96
Urban districts:					
Commercial and business	85	89	92	94	95
Industrial	72	81	88	91	93
Residential districts by average lot size:					
1/8 acre or less (town houses)	65	77	85	90	92
1/4 acre	38	61	75	83	87
1/3 acre	30	57	72	81	86
1/2 acre	25	54	70	80	85
1 acre	20	51	68	79	84
2 acres	12	46	65	77	82
<i>Developing urban areas</i>					
Newly graded areas (pervious areas only, no vegetation) ⁵		77	86	91	94
Idle lands (CN's are determined using cover types similar to those in table 2-2a).					

¹ Average runoff condition.

² The average percent impervious area shown was used to develop the composite CN's. Other assumptions are as follows: impervious areas are directly connected to the drainage system, impervious areas have a CN of 98, and pervious areas are considered equivalent to open space in good hydrologic condition.

³ CN's shown are equivalent to those of pasture. Composite CN's may be computed for other combinations of open space cover type.

⁴ Composite CN's for natural desert landscaping should be computed based on the impervious area (CN = 98) and the pervious area CN. The pervious area CN's are assumed equivalent to desert shrub in poor hydrologic condition.

⁵ Composite CN's to use for the design of temporary measures during grading and construction should be computed using the degree of development (impervious area percentage) and the CN's for the newly graded pervious areas.

Table 2-4.— I_a values for runoff curve numbers

Curve number	I_a (in)	Curve number	I_a (in)
40	3.000	68	0.941
41	2.878	69	0.899
42	2.762	70	0.857
43	2.651	71	0.817
44	2.545	72	0.778
45	2.444	73	0.740
46	2.348	74	0.703
47	2.255	75	0.667
48	2.167	76	0.632
49	2.082	77	0.597
50	2.000	78	0.564
51	1.922	79	0.532
52	1.846	80	0.500
53	1.774	81	0.469
54	1.704	82	0.439
55	1.636	83	0.410
56	1.571	84	0.381
57	1.509	85	0.353
58	1.448	86	0.326
59	1.390	87	0.299
60	1.333	88	0.273
61	1.279	89	0.247
62	1.226	90	0.222
63	1.175	91	0.198
64	1.125	92	0.174
65	1.077	93	0.151
66	1.030	94	0.128
67	0.985	95	0.105

Worksheet 1: Runoff curve number (CN)

Client _____ By _____ Date _____

County _____ State _____ Checked _____ Date _____

Practice _____

Soil name and hydrologic group (table 2-1)	Cover description (cover type, treatment, and hydrologic condition)	CN (table 2-3)	Area (acres or %)	Product of CN × area
Totals =				

CN (weighted) = _____ = _____ ;

Use CN =

Worksheet 2: Time of concentration and peak discharge

Client _____ By _____ Date _____
 County _____ State _____ Checked _____ Date _____
 Practice _____

Estimating time of concentration

1. Data:

Rainfall distribution type = _____ (I, IA, II, III)
 Drainage area A = _____ ac
 Runoff curve number CN = _____ (Worksheet 1)
 Watershed slope Y = _____ %
 Flow length l = _____ ft

2. T_c using l , Y, CN and figure 2-27..... = _____ hrs

or using equation 2-5

$$T_c = \frac{l^{0.8} \left[\frac{1000}{CN} - 9 \right]^{0.7}}{1140 Y^{0.5}} = \frac{(\quad)^{0.8} (\quad)^{0.7}}{1140 (\quad)^{0.5}} = \quad \text{hrs}$$

Estimating peak discharge

1. Frequency yr
2. Rainfall, P (24-hour) in
3. Initial abstraction, I_a in
(Use CN with table 2-4)
4. Compute I_a/P ratios
5. Unit peak discharge q_u cfs/ac/in
(Use T_c and I_a/P with exhibit 2-11)
6. Runoff, Q in
(Use P and CN with figure 2-26 or table 2-2)
7. Peak discharge, q_p cfs
(Where $q_p = q_u AQ$)

	Storm #1	Storm #2	Storm #3
1. Frequency			
2. Rainfall, P (24-hour)			
3. Initial abstraction, I_a (Use CN with table 2-4)			
4. Compute I_a/P ratios			
5. Unit peak discharge q_u (Use T_c and I_a/P with exhibit 2-11)			
6. Runoff, Q (Use P and CN with figure 2-26 or table 2-2)			
7. Peak discharge, q_p (Where $q_p = q_u AQ$)			

