Hydrologic Soil Group—Orange County and Part of Riverside County, California (Newport Beach City Hall)



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Area of Ir	nterest (AOI)	Map Scale: 1:3,810 if printed on A size (8.5" × 11") sheet.
	Area of Interest (AOI)	The soil surveys that comprise your AOI were mapped at 1:24,000.
Soils	Soil Map Units	Please rely on the bar scale on each map sheet for accurate map measurements.
Soil Ra	tings	Source of Map: Natural Resources Conservation Service
	A	Web Soil Survey URL: http://websoilsurvey.nrcs.usda.gov
	A/D	Coordinate System: UTM Zone 11N NAD83
	В	This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.
	B/D	Soil Survey Area: Orange County and Part of Riverside County,
	C	California Survey Area Data: Version 5, Sen 10, 2008
	C/D	Date(s) aprial images were photographed: 6/7/2005
	D	The orthographic another bees men on which the soil lines were
	Not rated or not available	compiled and digitized probably differs from the background
Political	Features	imagery displayed on these maps. As a result, some minor shifting
•	Cities	of map unit boundaries may be evident.
Water Fe	atures	
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\sim	Major Roads	
\sim	Local Roads	

Hydrologic Soil Group

Hydrologic Soil Group— Summary by Map Unit — Orange County and Part of Riverside County, California								
Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI				
134	CALLEGUAS CLAY LOAM, 50 TO 75 PERCENT SLOPES, ERODED	D	7.3	43.6%				
162	MARINA LOAMY SAND, 2 TO 9 PERCENT SLOPES	В	0.6	3.5%				
173	MYFORD SANDY LOAM, 2 TO 9 PERCENT SLOPES	D	1.2	7.3%				
177	MYFORD SANDY LOAM, 9 TO 30 PERCENT SLOPES, ERODED	D	7.7	45.5%				
Totals for Area of Inte	erest		16.8	100.0%				

Description

Hydrologic soil groups are based on estimates of runoff potential. Soils are assigned to one of four groups according to the rate of water infiltration when the soils are not protected by vegetation, are thoroughly wet, and receive precipitation from long-duration storms.

The soils in the United States are assigned to four groups (A, B, C, and D) and three dual classes (A/D, B/D, and C/D). The groups are defined as follows:

Group A. Soils having a high infiltration rate (low runoff potential) when thoroughly wet. These consist mainly of deep, well drained to excessively drained sands or gravelly sands. These soils have a high rate of water transmission.

Group B. Soils having a moderate infiltration rate when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well drained or well drained soils that have moderately fine texture to moderately coarse texture. These soils have a moderate rate of water transmission.

Group C. Soils having a slow infiltration rate when thoroughly wet. These consist chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture. These soils have a slow rate of water transmission.

Group D. Soils having a very slow infiltration rate (high runoff potential) when thoroughly wet. These consist chiefly of clays that have a high shrink-swell potential, soils that have a high water table, soils that have a claypan or clay layer at or near the surface, and soils that are shallow over nearly impervious material. These soils have a very slow rate of water transmission.

If a soil is assigned to a dual hydrologic group (A/D, B/D, or C/D), the first letter is for drained areas and the second is for undrained areas. Only the soils that in their natural condition are in group D are assigned to dual classes.

Rating Options

Aggregation Method: Dominant Condition

Aggregation is the process by which a set of component attribute values is reduced to a single value that represents the map unit as a whole.

A map unit is typically composed of one or more "components". A component is either some type of soil or some nonsoil entity, e.g., rock outcrop. For the attribute being aggregated, the first step of the aggregation process is to derive one attribute value for each of a map unit's components. From this set of component attributes, the next step of the aggregation process derives a single value that represents the map unit as a whole. Once a single value for each map unit is derived, a thematic map for soil map units can be rendered. Aggregation must be done because, on any soil map, map units are delineated but components are not.

For each of a map unit's components, a corresponding percent composition is recorded. A percent composition of 60 indicates that the corresponding component typically makes up approximately 60% of the map unit. Percent composition is a critical factor in some, but not all, aggregation methods.

The aggregation method "Dominant Condition" first groups like attribute values for the components in a map unit. For each group, percent composition is set to the sum of the percent composition of all components participating in that group. These groups now represent "conditions" rather than components. The attribute value associated with the group with the highest cumulative percent composition is returned. If more than one group shares the highest cumulative percent composition, the corresponding "tie-break" rule determines which value should be returned. The "tie-break" rule indicates whether the lower or higher group value should be returned in the case of a percent composition tie.

The result returned by this aggregation method represents the dominant condition throughout the map unit only when no tie has occurred.

Component Percent Cutoff: None Specified

Components whose percent composition is below the cutoff value will not be considered. If no cutoff value is specified, all components in the database will be considered. The data for some contrasting soils of minor extent may not be in the database, and therefore are not considered.

Tie-break Rule: Lower

The tie-break rule indicates which value should be selected from a set of multiple candidate values, or which value should be selected in the event of a percent composition tie.



Web Soil Survey 2.2 National Cooperative Soil Survey

Natural Resources Conservation Service Hydrologic Soil Group—Orange County and Part of Riverside County, California (Newport Beach City Hall Existing)

> 4/29/2009 Page 1 of 4

Area of Interest (AOI) Image: Interest (AOI) Soils Image: Interest (AOI) Soil Map Units Soil Ratings Image: Interest (AOI) Image: Interest (AOI) Soil Ratings Image: Interest (AOI) Image: Interest (MA	AP LEGEND	MAP INFORMATION
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Hydrologic Soil Group— Summary by Map Unit — Orange County and Part of Riverside County, California								
Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI				
134	CALLEGUAS CLAY LOAM, 50 TO 75 PERCENT SLOPES, ERODED	D	21.8	21.6%				
162	MARINA LOAMY SAND, 2 TO 9 PERCENT SLOPES	В	11.0	10.9%				
173	MYFORD SANDY LOAM, 2 TO 9 PERCENT SLOPES	D	39.7	39.5%				
177	MYFORD SANDY LOAM, 9 TO 30 PERCENT SLOPES, ERODED	D	28.1	27.9%				
Totals for Area of Interest			100.6	100.0%				

Description

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Group C. Soils having a slow infiltration rate when thoroughly wet. These consist chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture. These soils have a slow rate of water transmission.

Group D. Soils having a very slow infiltration rate (high runoff potential) when thoroughly wet. These consist chiefly of clays that have a high shrink-swell potential, soils that have a high water table, soils that have a claypan or clay layer at or near the surface, and soils that are shallow over nearly impervious material. These soils have a very slow rate of water transmission.

If a soil is assigned to a dual hydrologic group (A/D, B/D, or C/D), the first letter is for drained areas and the second is for undrained areas. Only the soils that in their natural condition are in group D are assigned to dual classes.

Rating Options

Aggregation Method: Dominant Condition Component Percent Cutoff: None Specified Tie-break Rule: Lower













