Hydrologic Soil Group–Orange County and Part of Riverside County, California
(NEWPORT BEACH CITY HALL)

MAP LEGEND

Area of Interest (AOI)

Soils

Soil Map Units

Soil Ratings

A

A/D

B

B/D

C

C/D

D

Not rated or not available

Political Features

Cities

Water Features

Oceans

Streams and Canals

Transportation

Rails

Interstate Highways

US Routes

Major Roads

Local Roads

MAP INFORMATION

Map Scale: 1:3,810 if printed on A size (8.5” × 11”) sheet.

The soil surveys that comprise your AOI were mapped at 1:24,000.

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

Source of Map: Natural Resources Conservation Service
Coordinate System: UTM Zone 11N NAD83

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

Soil Survey Area: Orange County and Part of Riverside County, California
Survey Area Data: Version 5, Sep 10, 2008

Date(s) aerial images were photographed: 6/7/2005

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.
Hydrologic Soil Group

<table>
<thead>
<tr>
<th>Map unit symbol</th>
<th>Map unit name</th>
<th>Rating</th>
<th>Acres in AOI</th>
<th>Percent of AOI</th>
</tr>
</thead>
<tbody>
<tr>
<td>134</td>
<td>CALLEGUAS CLAY LOAM, 50 TO 75 PERCENT SLOPES, ERODED</td>
<td>D</td>
<td>7.3</td>
<td>43.6%</td>
</tr>
<tr>
<td>162</td>
<td>MARINA LOAMY SAND, 2 TO 9 PERCENT SLOPES</td>
<td>B</td>
<td>0.6</td>
<td>3.5%</td>
</tr>
<tr>
<td>173</td>
<td>MYFORD SANDY LOAM, 2 TO 9 PERCENT SLOPES</td>
<td>D</td>
<td>1.2</td>
<td>7.3%</td>
</tr>
<tr>
<td>177</td>
<td>MYFORD SANDY LOAM, 9 TO 30 PERCENT SLOPES, ERODED</td>
<td>D</td>
<td>7.7</td>
<td>45.5%</td>
</tr>
</tbody>
</table>

Totals for Area of Interest: 16.8 acres, 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.
### MAP LEGEND

<table>
<thead>
<tr>
<th>Area of Interest (AOI)</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Soils</td>
<td>Soil Map Units</td>
</tr>
<tr>
<td>Soil Ratings</td>
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</tr>
<tr>
<td>A</td>
<td>A/D</td>
</tr>
<tr>
<td>B</td>
<td>B/D</td>
</tr>
<tr>
<td>C</td>
<td>C/D</td>
</tr>
<tr>
<td>D</td>
<td>Not rated or not available</td>
</tr>
<tr>
<td>Political Features</td>
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<td>Cities</td>
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<tr>
<td>Water Features</td>
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<tr>
<td>Oceans</td>
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<tr>
<td>Streams and Canals</td>
<td>Streams and Canals</td>
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<tr>
<td>Transportation</td>
<td>Transportation</td>
</tr>
<tr>
<td>Rails</td>
<td>Interstate Highways</td>
</tr>
<tr>
<td>US Routes</td>
<td>Major Roads</td>
</tr>
<tr>
<td>Local Roads</td>
<td></td>
</tr>
</tbody>
</table>

### MAP INFORMATION

- **Map Scale:** 1:6,910 if printed on A size (8.5" × 11") sheet.
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### Hydrologic Soil Group

**Hydrologic Soil Group—Summary by Map Unit—Orange County and Part of Riverside County, California**

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<tr>
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<td>CALLEGUAS CLAY LOAM, 50 TO 75 PERCENT SLOPES, ERODED</td>
<td>D</td>
<td>21.8</td>
<td>21.6%</td>
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<tr>
<td>162</td>
<td>MARINA LOAMY SAND, 2 TO 9 PERCENT SLOPES</td>
<td>B</td>
<td>11.0</td>
<td>10.9%</td>
</tr>
<tr>
<td>173</td>
<td>MYFORD SANDY LOAM, 2 TO 9 PERCENT SLOPES</td>
<td>D</td>
<td>39.7</td>
<td>39.5%</td>
</tr>
<tr>
<td>177</td>
<td>MYFORD SANDY LOAM, 9 TO 30 PERCENT SLOPES, ERODED</td>
<td>D</td>
<td>28.1</td>
<td>27.9%</td>
</tr>
<tr>
<td><strong>Totals for Area of Interest</strong></td>
<td></td>
<td></td>
<td><strong>100.6</strong></td>
<td><strong>100.0%</strong></td>
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