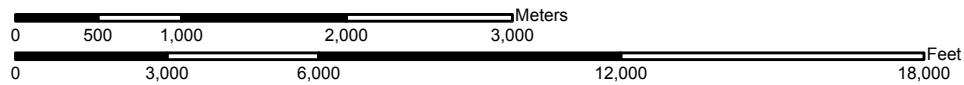
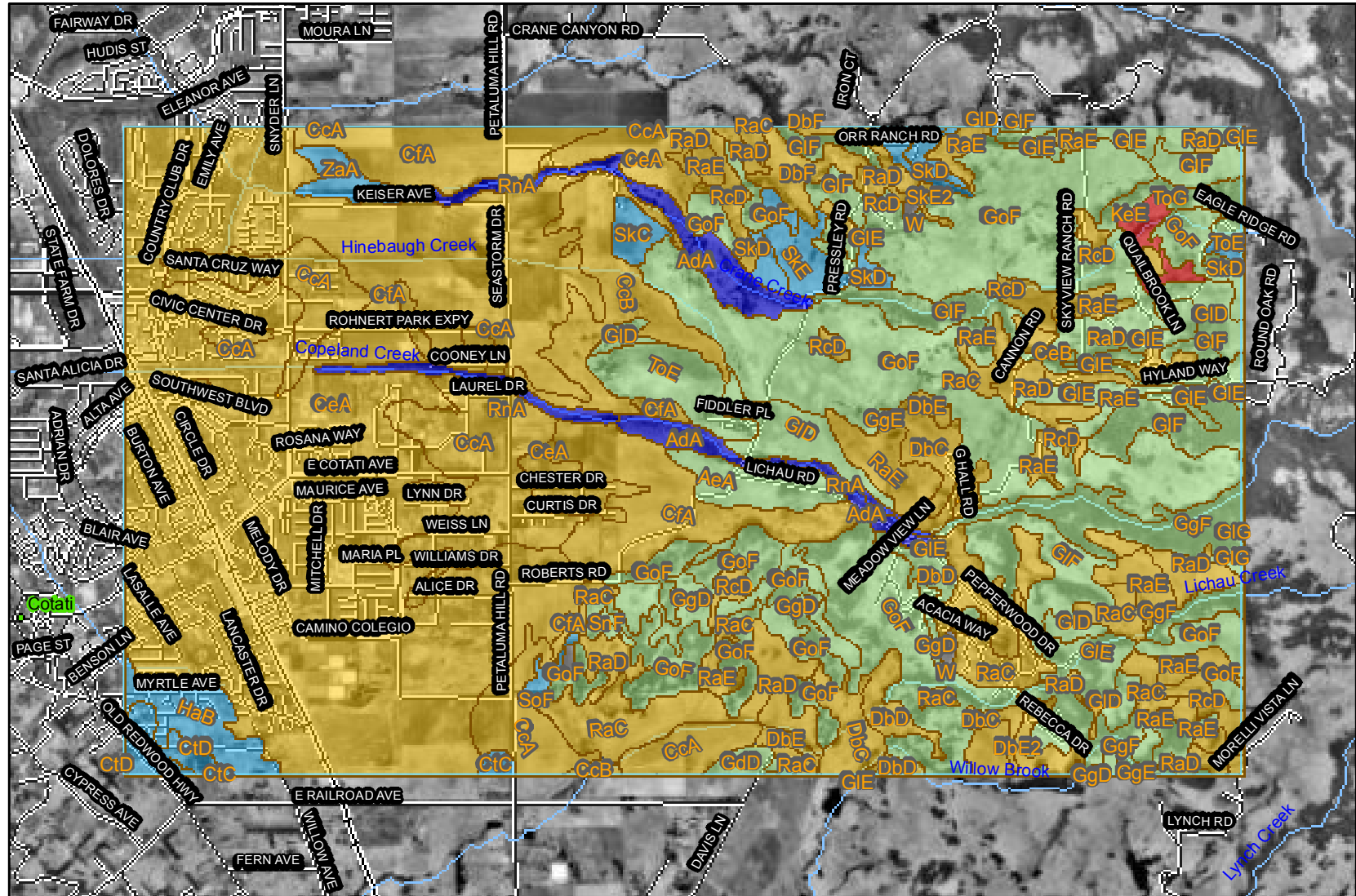



Bulk Density, One-Third Bar—Sonoma County, California



MAP LEGEND







Area of Interest (AOI)

 Area of Interest (AOI)

Soils



 Soil Map Units

Soil Ratings



-  ≤ 0.88
-  > 0.88 AND ≤ 1.38
-  > 1.38 AND ≤ 1.45
-  > 1.45 AND ≤ 1.55
-  > 1.55 AND ≤ 1.65
-  Not rated or not available

Political Features

Municipalities

-  Cities
-  Urban Areas






Water Features

-  Oceans
-  Streams and Canals

Transportation

 Rails

Roads

-  Interstate Highways
-  US Routes
-  State Highways
-  Local Roads
-  Other Roads

MAP INFORMATION

Original soil survey map sheets were prepared at publication scale. Viewing scale and printing scale, however, may vary from the original. Please rely on the bar scale on each map sheet for proper map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL: <http://websoilsurvey.nrcs.usda.gov>
Coordinate System: UTM Zone 10N

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

Soil Survey Area: Sonoma County, California
Survey Area Data: Version 4, Dec 12, 2007

Date(s) aerial images were photographed: 7/10/1993

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.

Bulk Density, One-Third Bar

Bulk Density, One-Third Bar— Summary by Map Unit — Sonoma County, California				
Map unit symbol	Map unit name	Rating (grams per cubic centimeter)	Acres in AOI	Percent of AOI
AdA	ALLUVIAL LAND, SANDY	1.65	145.2	1.5%
AeA	ALLUVIAL LAND, CLAYEY	1.45	85.8	0.9%
CcA	CLEAR LAKE CLAY LOAM, 0 TO 2 PERCENT SLOPES	1.38	630.0	6.4%
CcB	CLEAR LAKE CLAY LOAM, 2 TO 5 PERCENT SLOPES	1.38	219.7	2.2%
CeA	CLEAR LAKE CLAY, 0 TO 2 PERCENT SLOPES	1.38	2,941.2	30.0%
CeB	CLEAR LAKE CLAY, 2 TO 5 PERCENT SLOPES	1.38	13.5	0.1%
CfA	CLEAR LAKE CLAY, PONDED, 0 TO 2 PERCENT SLOPES	1.38	463.3	4.7%
CtC	COTATI FINE SANDY LOAM, 2 TO 9 PERCENT SLOPES	1.55	13.4	0.1%
CtD	COTATI FINE SANDY LOAM, 9 TO 15 PERCENT SLOPES	1.55	29.5	0.3%
DbC	DIABLO CLAY, 2 TO 9 PERCENT SLOPES	1.28	137.4	1.4%
DbD	DIABLO CLAY, 9 TO 15 PERCENT SLOPES	1.28	100.7	1.0%
DbE	DIABLO CLAY, 15 TO 30 PERCENT SLOPES	1.28	45.3	0.5%
DbE2	DIABLO CLAY, 15 TO 30 PERCENT SLOPES, ERODED	1.28	61.7	0.6%
DbF	DIABLO CLAY, 30 TO 50 PERCENT SLOPES	1.28	68.1	0.7%
GdD	GOLDRIDGE FINE SANDY LOAM, 9 TO 15 PERCENT SLOPES	1.45	21.3	0.2%
GgD	GOULDING CLAY LOAM, 5 TO 15 PERCENT SLOPES	1.43	158.6	1.6%

Bulk Density, One-Third Bar— Summary by Map Unit — Sonoma County, California				
Map unit symbol	Map unit name	Rating (grams per cubic centimeter)	Acres in AOI	Percent of AOI
GgE	GOULDING CLAY LOAM, 15 TO 30 PERCENT SLOPES	1.43	13.8	0.1%
GgF	GOULDING CLAY LOAM, 30 TO 50 PERCENT SLOPES	1.43	260.7	2.7%
GID	GOULDING COBBLY CLAY LOAM, 5 TO 15 PERCENT SLOPES	1.43	200.5	2.0%
GIE	GOULDING COBBLY CLAY LOAM, 15 TO 30 PERCENT SLOPES	1.43	261.9	2.7%
GIF	GOULDING COBBLY CLAY LOAM, 30 TO 50 PERCENT SLOPES	1.43	403.7	4.1%
GIG	GOULDING COBBLY CLAY LOAM, 50 TO 75 PERCENT SLOPES	1.43	9.3	0.1%
GoF	GOULDING-TOOMES COMPLEX, 9 TO 50 PERCENT SLOPES	1.45	1,777.9	18.1%
HaB	HAIRE FINE SANDY LOAM, HUMMOCKY, 0 TO 5 PERCENT SLOPES	1.50	123.0	1.3%
KeE	KIDD STONY LOAM, 2 TO 30 PERCENT SLOPES	0.88	41.7	0.4%
RaC	RAYNOR CLAY, 2 TO 9 PERCENT SLOPES	1.35	325.7	3.3%
RaD	RAYNOR CLAY, 9 TO 15 PERCENT SLOPES	1.35	257.8	2.6%
RaE	RAYNOR CLAY, 15 TO 30 PERCENT SLOPES	1.35	287.5	2.9%
RcD	RAYNOR CLAY, SEEPED, 2 TO 15 PERCENT SLOPES	1.35	167.8	1.7%
RnA	RIVERWASH	1.65	95.5	1.0%
SkC	SPRECKELS LOAM, 2 TO 9 PERCENT SLOPES	1.50	45.5	0.5%
SkD	SPRECKELS LOAM, 9 TO 15 PERCENT SLOPES	1.50	62.4	0.6%
SkE	SPRECKELS LOAM, 15 TO 30 PERCENT SLOPES	1.50	54.2	0.6%

Bulk Density, One-Third Bar— Summary by Map Unit — Sonoma County, California				
Map unit symbol	Map unit name	Rating (grams per cubic centimeter)	Acres in AOI	Percent of AOI
SkE2	SPRECKELS LOAM, 15 TO 30 PERCENT SLOPES, ERODED	1.50	22.6	0.2%
SnF	STEINBECK LOAM, 30 TO 50 PERCENT SLOPES	1.45	5.7	0.1%
SoF	STONYFORD GRAVELLY LOAM, 30 TO 50 PERCENT SLOPES	1.50	14.7	0.2%
ToE	TOOMES ROCKY LOAM, 2 TO 30 PERCENT SLOPES	1.45	124.4	1.3%
ToG	TOOMES ROCKY LOAM, 30 TO 75 PERCENT SLOPES	1.45	47.4	0.5%
W	WATER		13.3	0.1%
ZaA	ZAMORA SILTY CLAY LOAM, 0 TO 2 PERCENT SLOPES	1.48	45.0	0.5%
Totals for Area of Interest (AOI)			9,796.7	100.0%

Description

Bulk density, one-third bar, is the oven-dry weight of the soil material less than 2 millimeters in size per unit volume of soil at water tension of 1/3 bar, expressed in grams per cubic centimeter. Bulk density data are used to compute linear extensibility, shrink-swell potential, available water capacity, total pore space, and other soil properties. The moist bulk density of a soil indicates the pore space available for water and roots. Depending on soil texture, a bulk density of more than 1.4 can restrict water storage and root penetration. Moist bulk density is influenced by texture, kind of clay, content of organic matter, and soil structure.

For each soil layer, this attribute is actually recorded as three separate values in the database. A low value and a high value indicate the range of this attribute for the soil component. A "representative" value indicates the expected value of this attribute for the component. For this soil property, only the representative value is used.

Rating Options

Units of Measure: grams per cubic centimeter

Aggregation Method: Dominant Component

Component Percent Cutoff: None Specified

Tie-break Rule: Higher

Interpret Nulls as Zero: No

Layer Options: Surface Layer