Road 25 Almonds

Bill Chance Realty
530-343-7085 office
530-520-1882 cell
billchance@sbcglobal.net
DRE #00969209

Property Information
Road 25 Almonds

Location:	6260 County Road 25, Orland, CA
Acres:	346 Assessor's parcel acres 304 crop acres
Assessor's Parcel Numbers:	024-140-013; 024-140-017
Zoning:	AE-40
Soils:	See Soils Map for Details
Water:	Water is provided by three wells on the property and the south parcel is in the Orland-Artois Irrigation District. The owner has started the process of annexing the north parcel into the district as well. Two of the wells have 125 H.P. electric turbines and one has a 200 H.P. gear head powered by a diesel engine. Distribution is by micro-jet sprinklers.
Crops:	304 acres of almonds in two blocks. 224.3acres planted in 1996 on Lovell rootstock. The varieties are ½ Nonpareil;¼ Butte; 1/8 Sonora; 1/16 Carmel and 1/16 Padre.The spacing is 22' x 18'. The other block is 79.6 acres and was planted in 2019 on Krymsk rootstock. The variety is Independence and the spacing is 23' x 14'.
Improvements:	None
Comments:	Here is an opportunity to own a large block of farmland in one location to be redeveloped with two sources of water. In addition, there is approximately 80 acres that is coming into production. Negotiations shall be done with a Letter of Intent and the Purchase Agreement will be prepared by the Seller's attorney.

Sales Price: $6,900,000

Grower Incoming Report 2021

1260 MUIR AVE CHICO CA 95973
Tel.: 530-566-1405 Fax: 530-566-1408

FARMERS INTERNATIONAL, INC

Grower: JBI, LLC

Field: JBI

Rec'd Date	USDA Date	USDA #	Delivery #	Total Weight	Foreign Material		Shell		Excess Moisture		Kernel Weight	Inedible		Chip / Scratch	GKW	Diss.	Varieties Dissimilar
BUTTE																	
Style: KERNELS																	
11/08/21	11/16/21	752211508	RA20351	46,011	83	0.18%	0	0.00%	0	0.00%	45,928	175	0.38%	9.94%	45,753	1.32%	
11/10/21	11/18/21	752211551	RA20377	34,757	295	0.85%	0	0.00%	0	0.00%	34,462	320	0.93%	10.19%	34,142	1.73%	
11/16/21	11/23/21	752211614	RA20476	7,615	69	0.90%	0	0.00%	0	0.00%	7,546	52	0.69%	10.60%	7,495	2.86%	
			Total for BUTTE KERNELS	**88,383**	**447**	**0.51%**	**0**	**0.00%**	**0**	**0.00%**	**87,936**	**546**	**0.62%**	**10.10%**	**87,390**	**1.61%**	
			BUTTE (3 deliveries)	**88,383**	**447**	**0.51%**	**0**	**0.00%**	**0**	**0.00%**	**87,936**	**546**	**0.62%**	**10.10%**	**87,390**	**1.61%**	
CARMEL																	
Style: INSHELL																	
10/12/21	10/23/21	752211144	RA19691	21,580	604	2.80%	8,425	39.04%	0	0.00%	12,551	293	2.34%	0.00%	12,257	1.33%	
			Total for CARMEL INSHELL	**21,580**	**604**	**2.80%**	**8,425**	**39.04%**	**0**	**0.00%**	**12,551**	**293**	**2.34%**	**0.00%**	**12,257**	**1.33%**	
Style: KERNELS																	
10/11/21	10/20/21	752211074	RA19669	263	3	0.96%	0	0.00%	0	0.00%	260	10	3.66%	16.11%	251	3.06%	
10/11/21	10/20/21	752211074	RA19668	7,260	7	0.09%	0	0.00%	0	0.00%	7,253	44	0.60%	13.28%	7,210	3.69%	
			Total for CARMEL KERNELS	**7,523**	**9**	**0.12%**	**0**	**0.00%**	**0**	**0.00%**	**7,514**	**53**	**0.71%**	**13.38%**	**7,461**	**3.67%**	
			CARMEL (3 deliveries)	**29,103**	**613**	**2.11%**	**8,425**	**28.95%**	**0**	**0.00%**	**20,065**	**347**	**1.73%**	**3.46%**	**19,718**	**1.93%**	

Grower Incoming Report 2021

1260 MUIR AVE CHICO CA 95973
Tel.: 530-566-1405 Fax: 530-566-1408

FARMERS INTERNATIONAL, INC

Grower: JBI, LLC

Field: JBI

Rec'd Date	USDA Date	USDA #	Delivery #	Total Weight	Foreign Material		Shell		Excess Moisture		Kernel Weight	Inedible		Chip / Scratch	GKW	Diss.	Varieties Dissimilar
NONPAREIL																	
Style: INSHELL																	
08/26/21	08/30/21	752210292	RA18565	52,460	84	0.16%	19,358	36.90%	0	0.00%	33,018	63	0.19%	0.00%	32,955	0.54%	
08/25/21	08/30/21	752210292	RA18553	50,580	2,519	4.98%	14,597	28.86%	0	0.00%	33,464	435	1.30%	0.00%	33,029	4.50%	
08/29/21	09/01/21	752210326	RA18623	52,620	1,173	2.23%	16,144	30.68%	0	0.00%	35,303	484	1.37%	0.00%	34,819	1.90%	u - 34.8 - 1.73% cm - 3.2
08/28/21	09/01/21	752210326	RA18606	52,720	1,734	3.29%	15,689	29.76%	0	0.00%	35,296	506	1.43%	0.00%	34,790	1.62%	
08/31/21	09/02/21	752210343	RA18652	12,100	444	3.67%	3,612	29.85%	0	0.00%	8,044	144	1.79%	0.00%	7,900	1.66%	
	Total for NONPAREIL INSHELL			**220,480**	**5,955**	**2.70%**	**69,400**	**31.48%**	**0**	**0.00%**	**145,125**	**1,632**	**1.12%**	**0.00%**	**143,493**	**2.09%**	
Style: KERNELS																	
09/06/21	09/10/21	752210458	RA18783	11,089	33	0.30%	0	0.00%	0	0.00%	11,056	427	3.86%	26.71%	10,629	14.61%	9.8g - 13.97% BU - 6.3g
09/25/21	10/06/21	752210860	RA19236	3,267	23	0.69%	0	0.00%	0	0.00%	3,244	97	2.99%	23.80%	3,147	15.22%	SO - 152.3gms - 15.22%
	Total for NONPAREIL KERNELS			**14,356**	**56**	**0.39%**	**0**	**0.00%**	**0**	**0.00%**	**14,300**	**524**	**3.66%**	**26.05%**	**13,776**	**14.75%**	
	NONPAREIL (7 deliveries)			**234,836**	**6,011**	**2.56%**	**69,400**	**29.55%**	**0**	**0.00%**	**159,425**	**2,156**	**1.35%**	**1.59%**	**157,269**	**2.87%**	
	Total for JBI			**352,322**	**7,071**	**2.01%**	**77,825**	**22.09%**	**0**	**0.00%**	**267,426**	**3,049**	**1.14%**	**3.88%**	**264,377**	**2.48%**	

Grower Incoming Report 2021

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Tel.: 530-566-1405 Fax: 530-566-1408

FARMERS INTERNATIONAL, INC

Grower: JBI, LLC

Totals for Grower: JBI, LLC

Total Weight	Foreign Material		Shell		Excess Moisture		Kernel Weight	Inedible		Chip / Scratch	GKW	Varieties Dissimilar
352,322	7,071	2.01%	77,825	22.09%	0	0.00%	267,426	3,049	1.14%	3.88%	264,377	2.48%

Grower Incoming Report 2021

1260 MUIR AVE CHICO CA 95973
Tel.: 530-566-1405 Fax: 530-566-1408

FARMERS INTERNATIONAL, INC

Report Totals

Total Weight	Foreign Material		Shell		Excess Moisture		Kernel Weight	Inedible		Chip / Scratch	GKW	Varieties Dissimilar
352,322	7,071	2.01%	77,825	22.09%	0	0.00%	267,426	3,049	1.14%	3.88%	264,377	2.48%

GLOBAL AG

Production Report

45 E River Park Place West, Suite 601
Fresno, CA 93720
Phone: (559) 530-2767
Fax: (559) 530-2768
Print Date: 02/16/2021

Crop: **Almonds (0028)** County: **Glenn (021)** Plan: **APH (90)**
Unit: **0001-0000 BU** Type: **NTS (997)** Practice: **IRRIGATED (002)**
Insurability: ☒ I ☐ UI ☐ Yield Cup (YC) Opt Out? Land in Other Counties? ☐ Yes ☐ No Processor # / Name:
Share: **100 %** ☐ New Producer - I certify I have not produced the insured crop(s) in the county for more than two years.
Other Person(s) Sharing in the Crop:

Year	Total Production	Acres	Yield	Desc. (Adj. Yield)	Record Type
2011	660,716.0	303.90	2,174.00	A	
2012	510,549.0	303.90	1,680.00	A	
2013	626,298.0	303.90	2,061.00	A	
2014	512,294.0	303.90	1,686.00	A	
2015	604,572.0	303.90	1,989.00	A	
2016	502,119.0	303.90	1,652.00	A	
2017	560,356.0	303.90	1,844.00	A	
2018	458,920.0	303.90	1,510.00	A	A
2019	283,395.0	224.30	1,263.00	A	M
2020	411,069.0	224.30	1,833.00	A	A

T-Yield Map Area / Area Class: - / -
☐ AL / NC / P / T / TMA ~~ # of Trees or Vines:
Multi Crop Year Reporting Reason:
Farm Name: ARTOIS
Legal Description:** (006) 021N-003W
FSA Farm / Tract / Field #:

T-Yield:	1,650.0	Yield Total:	17,692.0	Prior Yield:	1,756.00
Prelim Yield:	N/A	Avg. Yield:	1,769.0	App. Yield:	**1,769.00**
Rate Yield:	1,769.00	Adj. Yield:	0.0		

765PR (Rev. 12-2020)

See Last Page of Production Report for Required Statements

Artois Center Electric

JOE MACKINNON PUMP TESTS
(530) 345-0267
Pump Test Report

v.5.4 2/4/2014

Customer and Facility Data

Pump/Location: MERLO JBI LLC/RD 25 **HP:** 125 **Utility:** PG&E
GPS Coord.: **Long** -122.2423 **Lat** 39.70085 **Pump Make:** Peerless
Motor Make: U.S. **Type** Turbine **Meter Number:** 1007293218
Customer Addr: MERLO FARMING GROUP **Serial Number:** H057622254-004
1354 EAST AVE STE R #301 **Voltage:** 460 **Amps:** 147
CHICO, CA 95928
Contact: DERRICK HANSING **Our Test #:** JBI LLC
Phone: (530) 342-5195 **Fax:** (530) 342-1817 **Cell:** (530) 519-5755

Test Results

Test Date: 6/17/2016 **Tester:** JOE MACKINNON

Run Number ('E' = used for cost anal):	E-1
1. Pumping Water Level (ft):	181
2. Standing Water Level (ft):	174
3. Draw Down (ft):	7
4. Recovered Water Level (ft):	174
5. Discharge Pressure at Gauge (psi):	33
6. Total Lift (ft):	257
7. Flow Velocity (ft/sec):	3.7
8. Measured Flow Rate (gpm):	959
9. Customer Flow Rate (gpm):	0
10. Specific Capacity (gpm/ft draw):	137.0
11. Acre Feet per 24 Hr:	4.2
Million Gallons per 24 Hr:	1.381
12. Cubic Feet per Second (cfs):	2.1
13. Horsepower Input to Motor:	134
14. Percent of Rated Motor Load (%):	100
15. Kilowatt Input to Motor:	100
16. KiloWatt-hours per acre-foot:	566
17. Cost to Pump an acre-foot:	$130.26
18. Energy Cost ($/hour)	$23.00
19. Base Cost per Kwh:	$0.230
20. Nameplate rpm:	1,780
21. rpm at Gearhead:	0
22. Overall Pumping Efficiency (%):	46

If a Flow Velocity (line 7) is less than 1 ft/second, the accuracy of the test is suspect.

Note any major difference between the "Measured" flow rate and the "Customer's" (lines 8,9).

Remarks

All results are based on conditions during the time of the test. If these conditions vary from the normal operation of your pump, the results shown may not describe the pump's normal performance.

Estimated savings of 176 kWh/AF and $4,278.02 annual energy costs from a retrofit

Current OPE of 46% and estimated potential OPE of 68%

CONFIDENTIAL AND PROPRIETARY INFORMATION
PUMPING COST ANALYSIS FROM: JOE MACKINNON PUMP TESTS

DERRICK HANSING
MERLO FARMING GROUP
1354 EAST AVE STE R #301
CHICO, CA 95928

Test Date: 6/17/2016
Pump: MERLO JBI LLC
Nameplate HP: 125.0
Our Pump Test Number: 601199

This is a water well used for Irrigation - Agriculture and assumed to be operated 600 hours/year.

The following Pumping Cost Analysis is presented as an estimate prepared from data acquired from the pump test performed 6/17/2016 and information provided by you. Please pay careful attention to the assumptions. The estimated savings are only valid for the assumptions made and conditions measured during the pump test. Note that many numbers are rounded during calculations.

*NOTE: * denotes a value that was Assumed or Provided by Customer*	**Measured Pump Condition**	**Assumed Condition After Retrofit**	**Notes**
1. Overall pumping efficiency:	**46 %**	**68 %**	
2. Nameplate Horsepower:	125.0 hp	125.0 hp	
3. Motor Efficiency:	93 %	93 %	
4. Actual Motor Input Horsepower:	134.0 hp	125.3 hp	
5. Motor loaded at:	100 %	93 %	
6. Flow rate (gpm):	959 gpm	1,299 gpm	
7. Pumping Level (ft):	181 ft	183 ft	
8. Discharge Pressure (psi):	33 psi	33 psi	
9. Total Dynamic Head (feet):	257 ft	260 ft	*Rounded TDH = line 7. + (2.31 x line 8.)*
10. Acre-feet Pumped/yr:	105.94 af/yr*	105.94 af/yr*	*Same af/yr AFTER*
11. Average Cost per kWh:	$0.230 /kWh*	$0.230 /kWh*	*Same $/kWh AFTER*
			Estimated Savings from Retrofit
12. Estimated Total kWh per Year:	60,000 kWh/yr	41,400 kWh/yr	18,600 kWh/yr
13. Hours of Operation/yr:	600 hr/yr*	443 hr/yr	157 hr/yr
14. KiloWatt-hours per acre-foot:	566 kWh/af	391 kWh/af	176 kWh/af
15. Average Cost Per acre-foot:	$130.26 /af	$89.88 /af	$40.38/af = 31.00%

- Estimated savings = $40.38/af = 31.00% of energy costs
- If pumping 105.94 af/year this equals about $4,278 annual savings

Analysis Remarks: OPERATES WITH DIESEL PUMP

It is sincerely hoped that this information will prove helpful to you, and that your concerns over maintaining optimum pumping efficiency will continue. If you have any questions, please contact Joe MacKinnon at 5303450267.

Regards,

Joe MacKinnon

Power Services, Inc.

Pump Test Report

Customer and Facility Data

Plant Location: JB 1 Artois NW Well **HP:** 85 **Diesel Make:** New Holland

GPS Coordinates: **Lat** 39 **N** 70054 **Long** -122 **W** 24964 **Pump Make:** Peerless

Pump Type: Turbine

Customer Mailing Address: Merlo Farming Group
1380 East Ave. Ste. 124
Chico, CA 95973 **Gear Head Make:** Johnson

WaterSource: Well

Contact: Rocque Merlo

Phone: **Fax:** **Cell:** (530) 521-0699

Test Results

Test Date: 7/25/2014 **Tester:** Bill Power

Run Number: 1

Standing Water Level (Ft):	243
Recovered Water Level (Ft):	0
Draw Down (Ft):	23.5
Pumping Water Level (Ft):	266.5
Discharge Pressure at Gauge (PSI):	44
Total Lift:	368.1
Power Hydrodynamics Flow Rate (GPM):	532
Customer Flow Rate (GPM):	0
Well Yield:	22.6
Acre Feet per 24 Hr:	2.4
Cubic Feet per Second (CFS):	1.2
RPM at Tachometer:	1600.00
RPM at Gear Head:	1596.0
Name Plate RPM:	1760.00
Water Horse Power Output (HP):	49.5
Assumed Brake Horsepower input:	85.000
Pump Efficiency (%):	58.2

Remarks

All results are based on conditions during the time of the test. If these conditions vary from the normal operation of your pump, the results shown may not describe the pump's normal performance.
The efficiency of this pump is considered to be fair assuming this run represents plant's normal operating condition.
Falling water may have affected the accuracy of our water level measurement. At approximately 240 ft.

Standing water level based on 5 minutes recovery, well could still be recovering.

This pump has an adequate test section.

This pump did not have a flow meter.

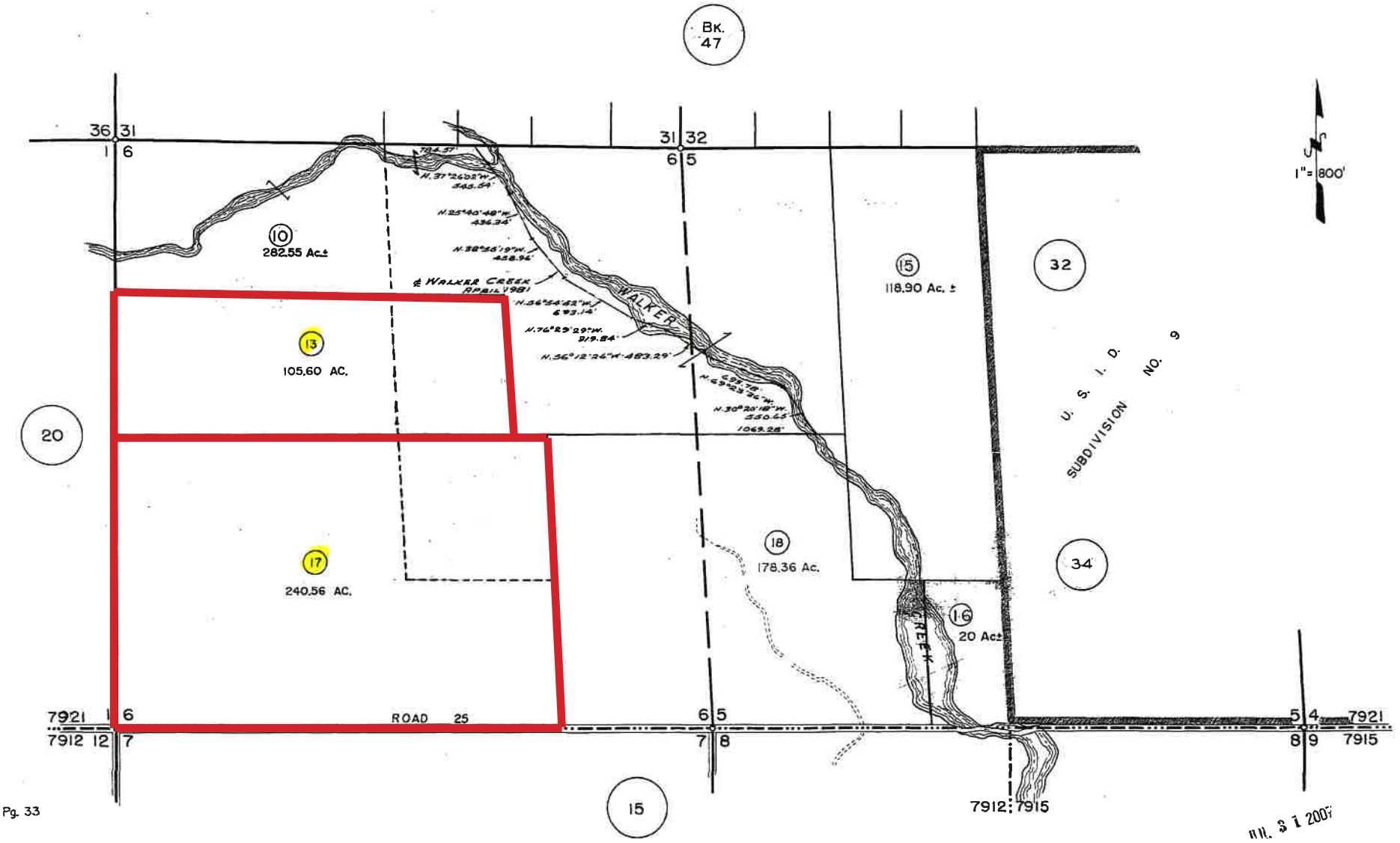
Assumed Brake HP used for this test comes from the power curve for your engine. The actual brake horse power may be different

Report and Data Prepared By Power Hydrodynamics - A Division of Power Services, Inc.


JBI- Artois & Artois 75
17 views
Last edit was seconds ago
Add layer
Share
Preview
Untitled layer
Individual styles
11A
10A
9A
8A
7A
6A
5A
3A
2A
1A
Electric Well
JBI Diesel Tank 37
Point 14
Base map

T 21 N R 3 W

T.C.A. 24-14
7921



3, Pg. 33

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JUL 31 2007

United States Department of Agriculture

Natural Resources Conservation Service

A product of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local participants

Custom Soil Resource Report for Glenn County, California

Road 25 Almonds

Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (https://offices.sc.egov.usda.gov/locator/app?agency=nrcs) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

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Contents

How Soil Surveys Are Made

Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil

scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

Custom Soil Resource Report
Soil Map (Road 25 Almonds)

Map Scale: 1:10,100 if printed on A landscape (11" x 8.5") sheet.

N

Meters
0 100 200 400 600

Feet
0 450 900 1800 2700

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 10N WGS84

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:20,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

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

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

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

Soil Survey Area: Glenn County, California
Survey Area Data: Version 17, Sep 6, 2021

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: May 8, 2019—May 10, 2019

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.

Map Unit Legend (Road 25 Almonds)

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
AoA	Arbuckle gravelly loam, 0 to 2 percent slopes, MLRA 17	35.3	10.7%
Czk	Cortina gravelly fine sandy loam, shallow	9.3	2.8%
Czr	Cortina very gravelly sandy loam, 0 to 3 percent slopes	96.1	29.2%
Czs	Cortina very gravelly sandy loam, shallow	0.2	0.1%
HgA	Hillgate loam, 0 to 2 percent slopes, MLRA 17	63.7	19.3%
HmA	Hillgate gravelly loam, 0 to 2 percent slopes	17.6	5.3%
Me	Maywood loam, shallow over gravel	2.4	0.7%
Rg	Redding gravelly loam, 0 to 3 percent slopes, MLRA 17	54.1	16.4%
Rh	Riverwash	1.5	0.5%
Tb	Tehama loam, deep to gravel, 0 to 3 percent slopes	3.1	0.9%
Tm	Tehama silt loam, 0 to 3 percent slopes, MLRA 17	0.3	0.1%
Wg	Wyo loam, deep over gravel	22.6	6.9%
ZbA	Zamora silty clay loam, 0 to 3 percent slopes, MLRA 17	23.5	7.1%
Totals for Area of Interest		**329.6**	**100.0%**

Map Unit Descriptions (Road 25 Almonds)

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Glenn County, California

AoA—Arbuckle gravelly loam, 0 to 2 percent slopes, MLRA 17

Map Unit Setting

National map unit symbol: 2t7r8
Elevation: 30 to 1,420 feet
Mean annual precipitation: 20 to 32 inches
Mean annual air temperature: 61 to 63 degrees F
Frost-free period: 200 to 280 days
Farmland classification: Prime farmland if irrigated

Map Unit Composition

Arbuckle and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Arbuckle

Setting

Landform: Stream terraces
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium derived from metamorphic and sedimentary rock

Typical profile

A1 - 0 to 2 inches: gravelly loam
A2 - 2 to 14 inches: gravelly loam
Bt1 - 14 to 25 inches: gravelly loam
Bt2 - 25 to 59 inches: gravelly sandy clay loam
Bt3 - 59 to 72 inches: very gravelly loam

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): Moderately high (0.28 to 1.28 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline (0.3 to 0.5 mmhos/cm)
Available water supply, 0 to 60 inches: Moderate (about 8.0 inches)

Interpretive groups

Land capability classification (irrigated): 2s
Land capability classification (nonirrigated): 3s
Hydrologic Soil Group: B
Hydric soil rating: No

Minor Components

Maywood

Percent of map unit: 5 percent

Landform: Flood plains
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: No

Cortina

Percent of map unit: 5 percent
Landform: Flood plains
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: No

Hillgate

Percent of map unit: 5 percent
Landform: Stream terraces
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: No

Czk—Cortina gravelly fine sandy loam, shallow

Map Unit Setting

National map unit symbol: hd7g
Elevation: 30 to 2,400 feet
Mean annual precipitation: 8 to 20 inches
Mean annual air temperature: 61 to 63 degrees F
Frost-free period: 240 to 270 days
Farmland classification: Not prime farmland

Map Unit Composition

Cortina and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Cortina

Setting

Landform: Alluvial fans
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Gravelly alluvium

Typical profile

H1 - 0 to 8 inches: gravelly fine sandy loam
H2 - 8 to 15 inches: stratified very gravelly loamy sand to very gravelly loam
H3 - 15 to 60 inches: stratified very gravelly sand to very gravelly loamy sand

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: 15 inches to strongly contrasting textural stratification
Drainage class: Somewhat excessively drained
Runoff class: Very low
Capacity of the most limiting layer to transmit water (Ksat): High (1.98 to 5.95 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: RareOccasional
Frequency of ponding: None
Available water supply, 0 to 60 inches: Very low (about 1.4 inches)

Interpretive groups

Land capability classification (irrigated): 4s
Land capability classification (nonirrigated): 4s
Hydrologic Soil Group: A
Ecological site: R017XY903CA - Stream Channels and Floodplains
Hydric soil rating: No

Minor Components

Unnamed

Percent of map unit: 10 percent
Hydric soil rating: No

Unnamed

Percent of map unit: 5 percent
Landform: Fans
Hydric soil rating: Yes

Czr—Cortina very gravelly sandy loam, 0 to 3 percent slopes

Map Unit Setting

National map unit symbol: hd7h
Elevation: 30 to 2,400 feet
Mean annual precipitation: 8 to 20 inches
Mean annual air temperature: 61 to 63 degrees F
Frost-free period: 240 to 270 days
Farmland classification: Not prime farmland

Map Unit Composition

Cortina and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Cortina

Setting

Landform: Alluvial fans
Down-slope shape: Linear

Across-slope shape: Linear
Parent material: Gravelly alluvium

Typical profile

H1 - 0 to 8 inches: very gravelly sandy loam
H2 - 8 to 40 inches: stratified very gravelly loamy sand to very gravelly loam
H3 - 40 to 60 inches: stratified very gravelly sand to very gravelly loamy sand

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: 39 inches to strongly contrasting textural stratification
Drainage class: Somewhat excessively drained
Runoff class: Very low
Capacity of the most limiting layer to transmit water (Ksat): High (1.98 to 5.95 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: RareOccasional
Frequency of ponding: None
Available water supply, 0 to 60 inches: Very low (about 2.8 inches)

Interpretive groups

Land capability classification (irrigated): 4s
Land capability classification (nonirrigated): 4s
Hydrologic Soil Group: A
Ecological site: R017XY903CA - Stream Channels and Floodplains
Hydric soil rating: No

Minor Components

Unnamed

Percent of map unit: 5 percent
Landform: Fans
Hydric soil rating: Yes

Unnamed

Percent of map unit: 5 percent
Hydric soil rating: No

Gravel pits

Percent of map unit: 5 percent
Hydric soil rating: No

Czs—Cortina very gravelly sandy loam, shallow

Map Unit Setting

National map unit symbol: hd7j
Elevation: 30 to 2,400 feet
Mean annual precipitation: 8 to 20 inches
Mean annual air temperature: 61 to 63 degrees F
Frost-free period: 240 to 270 days
Farmland classification: Not prime farmland

Map Unit Composition

Cortina and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Cortina

Setting

Landform: Alluvial fans
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Gravelly alluvium

Typical profile

H1 - 0 to 8 inches: very gravelly sandy loam
H2 - 8 to 15 inches: stratified very gravelly loamy sand to very gravelly loam
H3 - 15 to 60 inches: stratified very gravelly sand to very gravelly loamy sand

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: 15 inches to strongly contrasting textural stratification
Drainage class: Somewhat excessively drained
Runoff class: Very low
Capacity of the most limiting layer to transmit water (Ksat): High (1.98 to 5.95 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: Rare
Frequency of ponding: None
Available water supply, 0 to 60 inches: Very low (about 1.0 inches)

Interpretive groups

Land capability classification (irrigated): 4s
Land capability classification (nonirrigated): 4s
Hydrologic Soil Group: A
Hydric soil rating: No

Minor Components

Unnamed

Percent of map unit: 5 percent
Landform: Fans
Hydric soil rating: Yes

Gravel pits

Percent of map unit: 5 percent
Hydric soil rating: No

Unnamed

Percent of map unit: 5 percent
Hydric soil rating: No

HgA—Hillgate loam, 0 to 2 percent slopes, MLRA 17

Map Unit Setting

National map unit symbol: 2t7q5
Elevation: 20 to 1,180 feet
Mean annual precipitation: 17 to 21 inches
Mean annual air temperature: 61 to 63 degrees F
Frost-free period: 225 to 250 days
Farmland classification: Farmland of statewide importance

Map Unit Composition

Hillgate, loam, and similar soils: 90 percent
Minor components: 10 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Hillgate, Loam

Setting

Landform: Terraces
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium derived from metamorphic and sedimentary rock

Typical profile

A1 - 0 to 3 inches: loam
A2 - 3 to 11 inches: loam
A3 - 11 to 19 inches: loam
2Bt1 - 19 to 38 inches: clay
2Bt2 - 38 to 53 inches: clay loam
2Bt3 - 53 to 63 inches: clay loam
2Bt4 - 63 to 73 inches: clay loam

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: 6 to 32 inches to abrupt textural change
Drainage class: Well drained
Runoff class: Very low
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 1 percent
Gypsum, maximum content: 2 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum: 4.0
Available water supply, 0 to 60 inches: Low (about 3.0 inches)

Interpretive groups

Land capability classification (irrigated): 2s
Land capability classification (nonirrigated): 4s
Hydrologic Soil Group: C
Ecological site: R017XE061CA - Loamy Fan Remnant 8-10" P.Z.
Hydric soil rating: No

Minor Components

Capay, clay loam

Percent of map unit: 3 percent
Landform: Basin floors
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: No

Ayar, clay

Percent of map unit: 2 percent
Landform: Hills
Down-slope shape: Concave
Across-slope shape: Concave
Hydric soil rating: No

Altamont, silty clay

Percent of map unit: 2 percent
Landform: Hills
Landform position (two-dimensional): Backslope, footslope
Landform position (three-dimensional): Side slope
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: No

Unnamed

Percent of map unit: 1 percent
Landform: Channels
Hydric soil rating: Yes

Riverwash

Percent of map unit: 1 percent
Landform: Channels
Hydric soil rating: Yes

Arand, very gravelly sandy loam

Percent of map unit: 1 percent
Landform: Flood plains
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: No

HmA—Hillgate gravelly loam, 0 to 2 percent slopes

Map Unit Setting

National map unit symbol: hd84
Elevation: 2,000 feet
Mean annual precipitation: 22 inches
Mean annual air temperature: 64 degrees F
Frost-free period: 275 to 315 days
Farmland classification: Farmland of statewide importance

Map Unit Composition

Hillgate and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Hillgate

Setting

Landform: Terraces
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium derived from sedimentary rock

Typical profile

H1 - 0 to 15 inches: gravelly loam
H2 - 15 to 28 inches: clay
H3 - 28 to 60 inches: silty clay loam

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: 15 inches to abrupt textural change
Drainage class: Well drained
Runoff class: Very high
Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.06 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Very low (about 1.9 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 3s
Hydrologic Soil Group: D
Hydric soil rating: No

Minor Components

Arbuckle

Percent of map unit: 5 percent

Landform: Depressions
Hydric soil rating: Yes

Corning

Percent of map unit: 5 percent
Landform: Fans
Hydric soil rating: Yes

Kimball

Percent of map unit: 5 percent
Hydric soil rating: No

Me—Maywood loam, shallow over gravel

Map Unit Setting

National map unit symbol: hdb7
Elevation: 150 feet
Mean annual precipitation: 12 to 25 inches
Mean annual air temperature: 63 degrees F
Frost-free period: 260 days
Farmland classification: Farmland of statewide importance

Map Unit Composition

Maywood and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Maywood

Setting

Landform: Stream terraces
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium

Typical profile

H1 - 0 to 26 inches: loam
H2 - 26 to 60 inches: sand and gravel

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.57 to 1.98 in/hr)
Depth to water table: About 0 inches
Frequency of flooding: OccasionalNone
Frequency of ponding: None
Available water supply, 0 to 60 inches: Low (about 4.9 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 4s
Hydrologic Soil Group: B/D
Ecological site: R017XY903CA - Stream Channels and Floodplains
Hydric soil rating: Yes

Minor Components

Riverwash

Percent of map unit: 5 percent
Landform: Flood plains
Hydric soil rating: Yes

Unnamed

Percent of map unit: 5 percent
Landform: Drainageways
Hydric soil rating: Yes

Cortina

Percent of map unit: 5 percent
Hydric soil rating: No

Rg—Redding gravelly loam, 0 to 3 percent slopes, MLRA 17

Map Unit Setting

National map unit symbol: 2w8bh
Elevation: 70 to 1,290 feet
Mean annual precipitation: 22 to 30 inches
Mean annual air temperature: 60 to 63 degrees F
Frost-free period: 230 to 320 days
Farmland classification: Not prime farmland

Map Unit Composition

Redding and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Redding

Setting

Landform: Fan remnants
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Loamy alluvium derived from igneous, metamorphic and sedimentary rock over clayey alluvium derived from igneous, metamorphic and sedimentary rock over cemented alluvium derived from igneous, metamorphic and sedimentary rock

Typical profile

A1 - 0 to 8 inches: gravelly loam
A2 - 8 to 15 inches: gravelly loam
A3 - 15 to 19 inches: gravelly loam
Bt - 19 to 22 inches: clay
2Bqm1 - 22 to 24 inches: cemented gravelly material
2Bqm2 - 24 to 35 inches: cemented gravelly material

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: More than 80 inches; 20 to 39 inches to duripan
Drainage class: Moderately well drained
Runoff class: Very high
Capacity of the most limiting layer to transmit water (Ksat): Very low (0.00 in/hr)
Depth to water table: About 15 to 39 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline (0.2 to 0.5 mmhos/cm)
Sodium adsorption ratio, maximum: 2.0
Available water supply, 0 to 60 inches: Very low (about 2.7 inches)

Interpretive groups

Land capability classification (irrigated): 4s
Land capability classification (nonirrigated): 4s
Hydrologic Soil Group: D
Ecological site: R015XD090CA - GRAVELLY LOAM
Hydric soil rating: No

Minor Components

Unnamed, ponded

Percent of map unit: 5 percent
Microfeatures of landform position: Vernal pools
Hydric soil rating: Yes

Red bluff

Percent of map unit: 5 percent
Hydric soil rating: No

Corning

Percent of map unit: 5 percent
Hydric soil rating: No

Rh—Riverwash

Map Unit Setting

National map unit symbol: hdfm
Elevation: 700 to 2,900 feet
Mean annual precipitation: 8 to 15 inches
Mean annual air temperature: 46 to 52 degrees F
Frost-free period: 110 to 180 days

Farmland classification: Not prime farmland

Map Unit Composition

Riverwash: 90 percent
Minor components: 10 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Riverwash

Setting

Landform: Drainageways
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Gravelly alluvium

Typical profile

H1 - 0 to 6 inches: very gravelly sand
H2 - 6 to 60 inches: stratified very gravelly coarse sand to gravelly sand

Properties and qualities

Drainage class: Excessively drained
Runoff class: Very low
Capacity of the most limiting layer to transmit water (Ksat): High to very high (5.95 to 19.98 in/hr)
Depth to water table: About 0 to 24 inches
Frequency of flooding: FrequentNone
Available water supply, 0 to 60 inches: Very low (about 1.2 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 8
Ecological site: R017XY903CA - Stream Channels and Floodplains
Hydric soil rating: Yes

Minor Components

Unnamed

Percent of map unit: 10 percent
Hydric soil rating: No

Tb—Tehama loam, deep to gravel, 0 to 3 percent slopes

Map Unit Setting

National map unit symbol: hdhf
Elevation: 80 to 1,800 feet
Mean annual precipitation: 12 to 20 inches
Mean annual air temperature: 64 to 66 degrees F
Frost-free period: 200 to 300 days
Farmland classification: Prime farmland if irrigated

Map Unit Composition

Tehama and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Tehama

Setting

Landform: Terraces
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium derived from metamorphic and sedimentary rock

Typical profile

H1 - 0 to 9 inches: loam
H2 - 9 to 45 inches: silty clay loam
H3 - 45 to 60 inches: Error

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: 39 inches to strongly contrasting textural stratification
Drainage class: Well drained
Runoff class: Medium
Capacity of the most limiting layer to transmit water (Ksat): Moderately high (0.20 to 0.57 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 5 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: Moderate (about 7.9 inches)

Interpretive groups

Land capability classification (irrigated): 2s
Land capability classification (nonirrigated): 3s
Hydrologic Soil Group: C
Hydric soil rating: No

Minor Components

Plaza

Percent of map unit: 5 percent
Hydric soil rating: No

Hillgate

Percent of map unit: 5 percent
Hydric soil rating: No

Arbuckle

Percent of map unit: 5 percent
Hydric soil rating: No

Tm—Tehama silt loam, 0 to 3 percent slopes, MLRA 17

Map Unit Setting

National map unit symbol: 2srj8
Elevation: 100 to 1,180 feet
Mean annual precipitation: 17 to 21 inches
Mean annual air temperature: 63 degrees F
Frost-free period: 180 to 260 days
Farmland classification: Prime farmland if irrigated

Map Unit Composition

Tehama and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Tehama

Setting

Landform: Terraces
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Fine-silty alluvium derived from metamorphic and sedimentary rock

Typical profile

Ap - 0 to 9 inches: silt loam
BAt - 9 to 12 inches: silty clay loam
Bt1 - 12 to 19 inches: silty clay loam
Bt2 - 19 to 27 inches: silty clay loam
BCtk1 - 27 to 38 inches: silty clay loam
BCtk2 - 38 to 50 inches: silty clay loam
BCtk3 - 50 to 60 inches: silty clay loam

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: High
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.14 to 0.60 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 3 percent
Available water supply, 0 to 60 inches: High (about 11.0 inches)

Interpretive groups

Land capability classification (irrigated): 2s
Land capability classification (nonirrigated): 3s
Hydrologic Soil Group: C

Hydric soil rating: No

Minor Components

Hillgate

Percent of map unit: 5 percent
Hydric soil rating: No

Plaza

Percent of map unit: 5 percent
Hydric soil rating: No

Arbuckle

Percent of map unit: 5 percent
Hydric soil rating: No

Wg—Wyo loam, deep over gravel

Map Unit Setting

National map unit symbol: hdj8
Elevation: 130 to 980 feet
Mean annual precipitation: 12 to 25 inches
Mean annual air temperature: 61 to 64 degrees F
Frost-free period: 300 days
Farmland classification: Prime farmland if irrigated

Map Unit Composition

Wyo and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Wyo

Setting

Landform: Alluvial fans
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium derived from metavolcanics

Typical profile

H1 - 0 to 11 inches: loam
H2 - 11 to 42 inches: loam
H3 - 42 to 60 inches: very gravelly sand

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: 39 inches to strongly contrasting textural stratification
Drainage class: Well drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.57 to 1.98 in/hr)
Depth to water table: More than 80 inches

Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: Moderate (about 6.3 inches)

Interpretive groups

Land capability classification (irrigated): 2s
Land capability classification (nonirrigated): 3s
Hydrologic Soil Group: B
Hydric soil rating: No

Minor Components

Orland

Percent of map unit: 10 percent
Hydric soil rating: No

Cortina

Percent of map unit: 5 percent
Hydric soil rating: No

ZbA—Zamora silty clay loam, 0 to 3 percent slopes, MLRA 17

Map Unit Setting

National map unit symbol: 2xcbv
Elevation: 70 to 720 feet
Mean annual precipitation: 21 to 25 inches
Mean annual air temperature: 61 to 62 degrees F
Frost-free period: 271 to 319 days
Farmland classification: Prime farmland if irrigated

Map Unit Composition

Zamora and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Zamora

Setting

Landform: Flood-plain steps, stream terraces
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Silty and clayey alluvium derived from igneous, metamorphic and sedimentary rock

Typical profile

Ap - 0 to 6 inches: silty clay loam
A - 6 to 11 inches: silty clay loam
Bw1 - 11 to 22 inches: silty clay loam
Bw2 - 22 to 38 inches: silty clay loam

Bw3 - 38 to 60 inches: silty clay loam

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.43 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: RareNone
Frequency of ponding: None
Calcium carbonate, maximum content: 2 percent
Gypsum, maximum content: 1 percent
Maximum salinity: Nonsaline (0.2 to 0.5 mmhos/cm)
Sodium adsorption ratio, maximum: 2.0
Available water supply, 0 to 60 inches: High (about 11.5 inches)

Interpretive groups

Land capability classification (irrigated): 1
Land capability classification (nonirrigated): 3c
Hydrologic Soil Group: C
Hydric soil rating: No

Minor Components

Hillgate

Percent of map unit: 5 percent
Hydric soil rating: No

Yolo

Percent of map unit: 5 percent
Hydric soil rating: No

Marvin

Percent of map unit: 3 percent
Hydric soil rating: No

Myers

Percent of map unit: 2 percent
Hydric soil rating: No

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