



## **Appendix 2-A - Area Designations for State Ambient Air Quality Standards**

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# 2020 Area Designations for State Ambient Air Quality Standards PM<sub>10</sub>





# Area Designations for State Ambient Air Quality Standards SULFUR DIOXIDE



# Area Designations for State Ambient Air Quality Standards NITROGEN DIOXIDE



# Area Designations for State Ambient Air Quality Standards

## LEAD



# Area Designations for State Ambient Air Quality Standards HYDROGEN SULFIDE



# Area Designations for State Ambient Air Quality Standards CARBON MONOXIDE



# Area Designations for State Ambient Air Quality Standards SULFATES



# Area Designations for State Ambient Air Quality Standards VISIBILITY REDUCING PARTICLES





## **Appendix 2-B - Potentially Impacted Threatened and Endangered Species**

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## United States Department of the Interior



FISH AND WILDLIFE SERVICE  
Ventura Fish And Wildlife Office  
2493 Portola Road, Suite B  
Ventura, CA 93003-7726  
Phone: (805) 644-1766 Fax: (805) 644-3958

In Reply Refer To:  
Project Code: 2022-0026746  
Project Name: Salinas

March 31, 2022

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

### To Whom It May Concern:

The enclosed list identifies species listed as threatened and endangered, species proposed for listing as threatened or endangered, designated and proposed critical habitat, and species that are candidates for listing that may occur within the boundary of the area you have indicated using the U.S. Fish and Wildlife Service's (Service) Information Planning and Conservation System (IPaC). The species list fulfills the requirements under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 et seq.). Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the species list should be verified after 90 days. We recommend that verification be completed by visiting the IPaC website at regular intervals during project planning and implementation for updates to species lists following the same process you used to receive the enclosed list. Please include the Consultation Tracking Number in the header of this letter with any correspondence about the species list.

Due to staff shortages and excessive workload, we are unable to provide an official list more specific to your area. Numerous other sources of information are available for you to narrow the list to the habitats and conditions of the site in which you are interested. For example, we recommend conducting a biological site assessment or surveys for plants and animals that could help refine the list.

If a Federal agency is involved in the project, that agency has the responsibility to review its proposed activities and determine whether any listed species may be affected. If the project is a major construction project\*, the Federal agency has the responsibility to prepare a biological assessment to make a determination of the effects of the action on the listed species or critical habitat. If the Federal agency determines that a listed species or critical habitat is likely to be adversely affected, it should request, in writing through our office, formal consultation pursuant to section 7 of the Act. Informal consultation may be used to exchange information and resolve conflicts with respect to threatened or endangered species or their critical habitat prior to a written request for formal consultation. During this review process, the Federal agency may

engage in planning efforts but may not make any irreversible commitment of resources. Such a commitment could constitute a violation of section 7(d) of the Act.

Federal agencies are required to confer with the Service, pursuant to section 7(a)(4) of the Act, when an agency action is likely to jeopardize the continued existence of any proposed species or result in the destruction or adverse modification of proposed critical habitat (50 CFR 402.10(a)). A request for formal conference must be in writing and should include the same information that would be provided for a request for formal consultation. Conferences can also include discussions between the Service and the Federal agency to identify and resolve potential conflicts between an action and proposed species or proposed critical habitat early in the decision-making process. The Service recommends ways to minimize or avoid adverse effects of the action. These recommendations are advisory because the jeopardy prohibition of section 7(a)(2) of the Act does not apply until the species is listed or the proposed critical habitat is designated. The conference process fulfills the need to inform Federal agencies of possible steps that an agency might take at an early stage to adjust its actions to avoid jeopardizing a proposed species.

When a proposed species or proposed critical habitat may be affected by an action, the lead Federal agency may elect to enter into formal conference with the Service even if the action is not likely to jeopardize or result in the destruction or adverse modification of proposed critical habitat. If the proposed species is listed or the proposed critical habitat is designated after completion of the conference, the Federal agency may ask the Service, in writing, to confirm the conference as a formal consultation. If the Service reviews the proposed action and finds that no significant changes in the action as planned or in the information used during the conference have occurred, the Service will confirm the conference as a formal consultation on the project and no further section 7 consultation will be necessary. Use of the formal conference process in this manner can prevent delays in the event the proposed species is listed or the proposed critical habitat is designated during project development or implementation.

Candidate species are those species presently under review by the Service for consideration for Federal listing. Candidate species should be considered in the planning process because they may become listed or proposed for listing prior to project completion. Preparation of a biological assessment, as described in section 7(c) of the Act, is not required for candidate species. If early evaluation of your project indicates that it is likely to affect a candidate species, you may wish to request technical assistance from this office.

Only listed species receive protection under the Act. However, sensitive species should be considered in the planning process in the event they become listed or proposed for listing prior to project completion. We recommend that you review information in the California Department of Fish and Wildlife's Natural Diversity Data Base. You can contact the California Department of Fish and Wildlife at (916) 324-3812 for information on other sensitive species that may occur in this area.

[\*A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)).

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For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

Attachment(s):

- Official Species List
-

## **Official Species List**

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

**Ventura Fish And Wildlife Office**

2493 Portola Road, Suite B

Ventura, CA 93003-7726

(805) 644-1766

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## Project Summary

Project Code: 2022-0026746  
Event Code: None  
Project Name: Salinas  
Project Type: Airport - Maintenance/Modification  
Project Description: Airport Master Planning  
Project Location:

Approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@36.660563800000006,-121.61901954151486,14z>



Counties: Monterey County, California

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## Endangered Species Act Species

There is a total of 8 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries<sup>1</sup>, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

1. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

### Birds

NAME	STATUS
California Condor <i>Gymnogyps californianus</i> Population: U.S.A. only, except where listed as an experimental population There is <b>final</b> critical habitat for this species. The location of the critical habitat is not available. Species profile: <a href="https://ecos.fws.gov/ecp/species/8193">https://ecos.fws.gov/ecp/species/8193</a>	Endangered
Least Bell's Vireo <i>Vireo bellii pusillus</i> There is <b>final</b> critical habitat for this species. The location of the critical habitat is not available. Species profile: <a href="https://ecos.fws.gov/ecp/species/5945">https://ecos.fws.gov/ecp/species/5945</a>	Endangered
Southwestern Willow Flycatcher <i>Empidonax traillii extimus</i> There is <b>final</b> critical habitat for this species. The location of the critical habitat is not available. Species profile: <a href="https://ecos.fws.gov/ecp/species/6749">https://ecos.fws.gov/ecp/species/6749</a>	Endangered

### Amphibians

NAME	STATUS
California Red-legged Frog <i>Rana draytonii</i> There is <b>final</b> critical habitat for this species. The location of the critical habitat is not available. Species profile: <a href="https://ecos.fws.gov/ecp/species/2891">https://ecos.fws.gov/ecp/species/2891</a>	Threatened
California Tiger Salamander <i>Ambystoma californiense</i> Population: U.S.A. (Central CA DPS) There is <b>final</b> critical habitat for this species. The location of the critical habitat is not available. Species profile: <a href="https://ecos.fws.gov/ecp/species/2076">https://ecos.fws.gov/ecp/species/2076</a>	Threatened

## Insects

NAME	STATUS
Monarch Butterfly <i>Danaus plexippus</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/9743">https://ecos.fws.gov/ecp/species/9743</a>	Candidate

## Crustaceans

NAME	STATUS
Vernal Pool Fairy Shrimp <i>Branchinecta lynchi</i> There is <b>final</b> critical habitat for this species. The location of the critical habitat is not available. Species profile: <a href="https://ecos.fws.gov/ecp/species/498">https://ecos.fws.gov/ecp/species/498</a>	Threatened

## Flowering Plants

NAME	STATUS
Marsh Sandwort <i>Arenaria paludicola</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/2229">https://ecos.fws.gov/ecp/species/2229</a>	Endangered

## Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

## **IPaC User Contact Information**

Agency: Monterey city  
Name: Shannon McMillan  
Address: 19 W Beauregard  
Address Line 2: Ste. A  
City: San Angelo  
State: TX  
Zip: 76903  
Email: shannon@plan.design  
Phone: 4092008074

## **Lead Agency Contact Information**

Lead Agency: Federal Aviation Administration

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**CNDDDB Quad Species List 19 records.**

Element Type	Scientific Name	Common Name	Element Code	Federal Status	State Status	CDFW Status	CA Rare Plant Rank	Quad Code	Quad Name	Data Status	Taxonomic Sort
Animals - Amphibians	<i>Ambystoma californiense</i> pop. 1	California tiger salamander - central California DPS	AAAAA01181	Threatened	Threatened	WL	-	3612165	NATIVIDAD	Mapped and Unprocessed	Animals - Amphibians - Ambystomatidae - <i>Ambystoma californiense</i> pop. 1
Animals - Amphibians	<i>Rana draytonii</i>	California red-legged frog	AAABH01022	Threatened	None	SSC	-	3612165	NATIVIDAD	Mapped and Unprocessed	Animals - Amphibians - Ranidae - <i>Rana draytonii</i>
Animals - Amphibians	<i>Spea hammondii</i>	western spadefoot	AAABF02020	None	None	SSC	-	3612165	NATIVIDAD	Mapped	Animals - Amphibians - Scaphiopodidae - <i>Spea hammondii</i>
Animals - Birds	<i>Accipiter cooperii</i>	Cooper's hawk	ABNKC12040	None	None	WL	-	3612165	NATIVIDAD	Mapped	Animals - Birds - Accipitridae - <i>Accipiter cooperii</i>
Animals - Birds	<i>Eremophila alpestris actia</i>	California horned lark	ABPAT02011	None	None	WL	-	3612165	NATIVIDAD	Mapped	Animals - Birds - Alaudidae - <i>Eremophila alpestris actia</i>
Animals - Birds	<i>Agelaius tricolor</i>	tricolored blackbird	ABPBXB0020	None	Threatened	SSC	-	3612165	NATIVIDAD	Mapped and Unprocessed	Animals - Birds - Icteridae - <i>Agelaius tricolor</i>
Animals - Birds	<i>Setophaga petechia</i>	yellow warbler	ABPBX03010	None	None	SSC	-	3612165	NATIVIDAD	Unprocessed	Animals - Birds - Parulidae - <i>Setophaga petechia</i>
Animals - Birds	<i>Coturnicops noveboracensis</i>	yellow rail	ABNME01010	None	None	SSC	-	3612165	NATIVIDAD	Mapped	Animals - Birds - Rallidae - <i>Coturnicops noveboracensis</i>
Animals - Birds	<i>Athene cunicularia</i>	burrowing owl	ABNSB10010	None	None	SSC	-	3612165	NATIVIDAD	Mapped and Unprocessed	Animals - Birds - Strigidae - <i>Athene cunicularia</i>
Animals - Fish	<i>Oncorhynchus mykiss irideus</i> pop. 9	steelhead - south-central California coast DPS	AFCHA0209H	Threatened	None	-	-	3612165	NATIVIDAD	Unprocessed	Animals - Fish - Salmonidae - <i>Oncorhynchus mykiss irideus</i> pop. 9
Animals - Mammals	<i>Dipodomys venustus venustus</i>	Santa Cruz kangaroo rat	AMAFD03042	None	None	-	-	3612165	NATIVIDAD	Mapped	Animals - Mammals - Heteromyidae - <i>Dipodomys venustus venustus</i>
Animals - Reptiles	<i>Emys marmorata</i>	western pond turtle	ARAAD02030	None	None	SSC	-	3612165	NATIVIDAD	Mapped and Unprocessed	Animals - Reptiles - Emydidae - <i>Emys marmorata</i>
Plants - Vascular	<i>Centromadia parryi</i> ssp. <i>congdonii</i>	Congdon's tarplant	PDAST4R0P1	None	None	-	1B.1	3612165	NATIVIDAD	Mapped	Plants - Vascular - Asteraceae - <i>Centromadia parryi</i> ssp. <i>congdonii</i>
Plants - Vascular	<i>Lessingia hololeuca</i>	woolly-headed lessingia	PDAST5S030	None	None	-	3	3612165	NATIVIDAD	Unprocessed	Plants - Vascular - Asteraceae - <i>Lessingia hololeuca</i>
Plants - Vascular	<i>Astragalus tener</i> var. <i>tener</i>	alkali milk-vetch	PDFAB0F8R1	None	None	-	1B.2	3612165	NATIVIDAD	Mapped	Plants - Vascular - Fabaceae - <i>Astragalus tener</i> var. <i>tener</i>

Plants - Vascular	Fritillaria liliacea	fragrant fritillary	PMLIL0V0C0	None	None	-	1B.2	3612165	NATIVIDAD	Mapped	Plants - Vascular - Liliaceae - Fritillaria liliacea
Plants - Vascular	Clarkia lewisii	Lewis' clarkia	PDONA050N0	None	None	-	4.3	3612165	NATIVIDAD	Unprocessed	Plants - Vascular - Onagraceae - Clarkia lewisii
Plants - Vascular	Leptosiphon latisectus	broad-lobed leptosiphon	PDPLM09150	None	None	-	4.3	3612165	NATIVIDAD	Unprocessed	Plants - Vascular - Polemoniaceae - Leptosiphon latisectus
Plants - Vascular	Eriogonum nortonii	Pinnacles buckwheat	PDPGN08470	None	None	-	1B.3	3612165	NATIVIDAD	Mapped	Plants - Vascular - Polygonaceae - Eriogonum nortonii



## **Appendix 2-C - Protected Farmland within Proximity of Project**

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# Protected Areas Database of the United States Viewer






















## Legends

### Fee Managers

<https://maps.usgs.gov/padus/>

## Protected Areas Database of the United States (PAD-US) v2.1

	Department of Defense (DOD)
	American Indian Areas (Census Bureau)
	Bureau of Land Management (BLM)
	National Park Service (NPS)
	Forest Service (USFS)
	Army Corps of Engineers (USACE)
	Bureau of Reclamation (USBR)
	U.S. Fish and Wildlife Service (FWS)
	Natural Resources Conservation Service (NRCS)
	Other Federal (TVA, ARS, BPA, DOE, etc)
	Non-Governmental Organization
	State Trust Land
	Other State (NHP, DOT, HS, etc.)
	State Fish and Wildlife
	State Park and Recreation
	County / Regional Agency Land
	City Land
	Private Conservation; Private Corporation
	Joint, Other, Unknown

## Dataset Details

## Fee Managers

### Data Description

An ArcGIS WebService representing fine level manager or administrative agency name standardized for the Nation (USFS, BLM, State Fish and Wildlife, State Parks and Rec, City, NGO, etc). Where available this layer includes fee simple parcels from the PAD-US 2.1 Fee feature Class plus DOD and Tribal from the Proclamation feature class. Use for categorization by manager name, with detailed federal managers and generic state/local/other managers. DOD and Tribal areas shown with 50% transparency. For more information about PAD-US: <https://doi.org/10.5066/P92QM3NT> .

### Service Description

An ArcGIS WebService representing fine level manager or administrative agency name standardized for the Nation (USFS, BLM, State Fish and Wildlife, State Parks and Rec, City, NGO, etc). Where available this layer includes fee simple parcels from the PAD-US 2.1 Fee feature Class plus DOD and Tribal from the Proclamation feature class. Use for categorization by manager name, with detailed federal managers and generic state/local/other managers. DOD and Tribal areas shown with 50% transparency. For more information about PAD-US: <https://doi.org/10.5066/P92QM3NT> .

### Copyright Text

U.S. Geological Survey (USGS) Gap Analysis Project (GAP), 2020, Protected Areas Database of the United States (PAD-US) 2.1: U.S. Geological Survey data release, <https://doi.org/10.5066/P92QM3NT> .



United States  
Department of  
Agriculture

**NRCS**

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 **Monterey County, California**



# Preface

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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](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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# How Soil Surveys Are Made

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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

## Custom Soil Resource Report

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

## Custom Soil Resource Report

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

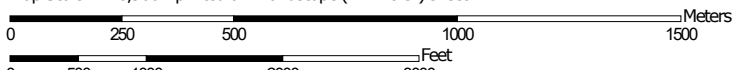
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The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce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

# Custom Soil Resource Report Soil Map




Map Scale: 1:16,900 if printed on A landscape (11" x 8.5") sheet.



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 1:24,000.

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: Monterey County, California  
 Survey Area Data: Version 18, Sep 10, 2021

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

Date(s) aerial images were photographed: Apr 13, 2020—Jun 13, 2020

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

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
AeA	Antioch very fine sandy loam, 0 to 2 percent slopes	308.1	41.1%
AeC	Antioch very fine sandy loam, 2 to 9 percent slopes	47.6	6.3%
CbA	Chualar loam, 0 to 2 percent slopes	299.4	39.9%
Cg	Clear Lake clay, sandy substratum, drained, 0 to 1 percent slopes, MLRA 14	48.2	6.4%
EaA	Elder sandy loam, 0 to 2 percent slopes, MLRA 14	16.4	2.2%
Xc	Xerorthents, loamy	30.6	4.1%
<b>Totals for Area of Interest</b>		<b>750.3</b>	<b>100.0%</b>

## Map Unit Descriptions

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

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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.

## Monterey County, California

### AeA—Antioch very fine sandy loam, 0 to 2 percent slopes

#### Map Unit Setting

*National map unit symbol:* h90z

*Elevation:* 0 to 1,100 feet

*Mean annual precipitation:* 12 to 21 inches

*Mean annual air temperature:* 58 to 62 degrees F

*Frost-free period:* 243 to 278 days

*Farmland classification:* Farmland of statewide importance

#### Map Unit Composition

*Antioch and similar soils:* 85 percent

*Minor components:* 15 percent

*Estimates are based on observations, descriptions, and transects of the mapunit.*

#### Description of Antioch

##### Setting

*Landform:* Terraces, alluvial fans

*Landform position (two-dimensional):* Footslope

*Landform position (three-dimensional):* Tread, talf

*Down-slope shape:* Linear

*Across-slope shape:* Linear, convex

*Parent material:* Fine-loamy alluvium derived from sedimentary rock

##### Typical profile

*H1 - 0 to 21 inches:* very fine sandy loam

*H2 - 21 to 40 inches:* clay

*H3 - 40 to 67 inches:* sandy clay loam

##### Properties and qualities

*Slope:* 0 to 2 percent

*Depth to restrictive feature:* More than 80 inches

*Drainage class:* Moderately well drained

*Runoff class:* 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

*Maximum salinity:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)

*Sodium adsorption ratio, maximum:* 20.0

*Available water supply, 0 to 60 inches:* Low (about 3.9 inches)

##### Interpretive groups

*Land capability classification (irrigated):* 3s

*Land capability classification (nonirrigated):* 3s

*Hydrologic Soil Group:* D

*Ecological site:* R014XE028CA - CLAYPAN

*Hydric soil rating:* No

**Minor Components**

**Rincon**

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

**Gloria**

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

**Salinas**

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

**Cropley**

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

**Chualar**

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

**Placentia**

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

**Danville**

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

**Santa ynez**

*Percent of map unit: 1 percent*  
*Hydric soil rating: No*

**AeC—Antioch very fine sandy loam, 2 to 9 percent slopes**

**Map Unit Setting**

*National map unit symbol: h910*  
*Elevation: 0 to 1,100 feet*  
*Mean annual precipitation: 12 to 21 inches*  
*Mean annual air temperature: 58 to 62 degrees F*  
*Frost-free period: 243 to 278 days*  
*Farmland classification: Farmland of statewide importance*

**Map Unit Composition**

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

## Description of Antioch

### Setting

*Landform:* Alluvial fans, terraces  
*Landform position (two-dimensional):* Footslope  
*Landform position (three-dimensional):* Tread, talf  
*Down-slope shape:* Linear  
*Across-slope shape:* Convex, linear  
*Parent material:* Fine-loamy alluvium derived from sedimentary rock

### Typical profile

*H1 - 0 to 21 inches:* very fine sandy loam  
*H2 - 21 to 40 inches:* clay  
*H3 - 40 to 67 inches:* sandy clay loam

### Properties and qualities

*Slope:* 2 to 9 percent  
*Depth to restrictive feature:* More than 80 inches  
*Drainage class:* Moderately well drained  
*Runoff class:* 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  
*Maximum salinity:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)  
*Sodium adsorption ratio, maximum:* 20.0  
*Available water supply, 0 to 60 inches:* Low (about 3.9 inches)

### Interpretive groups

*Land capability classification (irrigated):* 3e  
*Land capability classification (nonirrigated):* 3e  
*Hydrologic Soil Group:* D  
*Ecological site:* R014XE028CA - CLAYPAN  
*Hydric soil rating:* No

## Minor Components

### Unnamed

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

### Unnamed

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

## CbA—Chualar loam, 0 to 2 percent slopes

### Map Unit Setting

*National map unit symbol:* h91q  
*Elevation:* 50 to 2,000 feet

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*Mean annual precipitation:* 12 to 25 inches  
*Mean annual air temperature:* 57 to 61 degrees F  
*Frost-free period:* 175 to 300 days  
*Farmland classification:* Prime farmland if irrigated

### Map Unit Composition

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

### Description of Chualar

#### Setting

*Landform:* Alluvial fans, terraces  
*Landform position (two-dimensional):* Footslope  
*Landform position (three-dimensional):* Tread, talf  
*Down-slope shape:* Linear  
*Across-slope shape:* Convex, linear  
*Parent material:* Loamy alluvium derived from igneous and metamorphic rock

#### Typical profile

*H1 - 0 to 21 inches:* loam  
*H2 - 21 to 44 inches:* sandy clay loam  
*H3 - 44 to 59 inches:* gravelly sandy loam  
*H4 - 59 to 80 inches:* gravelly coarse sand

#### 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 (0.20 to 0.57 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 8.6 inches)

#### Interpretive groups

*Land capability classification (irrigated):* 1  
*Land capability classification (nonirrigated):* 3c  
*Hydrologic Soil Group:* C  
*Ecological site:* R014XG917CA - Dry Loamy Fan  
*Hydric soil rating:* No

### Minor Components

#### Gloria

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

#### Danville

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

#### Arroyo seco

*Percent of map unit:* 3 percent

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*Hydric soil rating:* No

### **Elder**

*Percent of map unit:* 3 percent

*Hydric soil rating:* No

### **Placentia**

*Percent of map unit:* 3 percent

*Hydric soil rating:* No

## **Cg—Clear Lake clay, sandy substratum, drained, 0 to 1 percent slopes, MLRA 14**

### **Map Unit Setting**

*National map unit symbol:* 2vbt9

*Elevation:* 10 to 1,240 feet

*Mean annual precipitation:* 11 to 22 inches

*Mean annual air temperature:* 55 to 61 degrees F

*Frost-free period:* 160 to 300 days

*Farmland classification:* Prime farmland if irrigated

### **Map Unit Composition**

*Clear lake, drained, sandy substratum, and similar soils:* 85 percent

*Minor components:* 15 percent

*Estimates are based on observations, descriptions, and transects of the mapunit.*

### **Description of Clear Lake, Drained, Sandy Substratum**

#### **Setting**

*Landform:* Basin floors

*Landform position (three-dimensional):* Tread

*Down-slope shape:* Linear

*Across-slope shape:* Linear

*Parent material:* Basin alluvium derived from igneous, metamorphic and sedimentary rock over flood plain alluvium derived from igneous, metamorphic and sedimentary rock

#### **Typical profile**

*Apg - 0 to 18 inches:* clay

*Bssg1 - 18 to 24 inches:* clay

*Bssg2 - 24 to 33 inches:* silty clay loam

*Cg - 33 to 54 inches:* silt loam

*2Cg - 54 to 62 inches:* loamy very fine sand

#### **Properties and qualities**

*Slope:* 0 to 1 percent

*Depth to restrictive feature:* More than 80 inches

*Drainage class:* Poorly drained

*Runoff class:* High

*Capacity of the most limiting layer to transmit water (Ksat):* Moderately low to moderately high (0.06 to 0.20 in/hr)

## Custom Soil Resource Report

*Depth to water table:* About 36 to 60 inches  
*Frequency of flooding:* Rare  
*Frequency of ponding:* Frequent  
*Calcium carbonate, maximum content:* 4 percent  
*Maximum salinity:* Nonsaline to very slightly saline (0.5 to 3.0 mmhos/cm)  
*Sodium adsorption ratio, maximum:* 7.0  
*Available water supply, 0 to 60 inches:* High (about 10.3 inches)

### Interpretive groups

*Land capability classification (irrigated):* 2w  
*Land capability classification (nonirrigated):* 3w  
*Hydrologic Soil Group:* D  
*Ecological site:* R014XG904CA - Dry Clayey Bottom  
*Hydric soil rating:* Yes

### Minor Components

#### Cropley

*Percent of map unit:* 4 percent  
*Hydric soil rating:* No

#### Pacheco

*Percent of map unit:* 4 percent  
*Hydric soil rating:* No

#### Mocho

*Percent of map unit:* 4 percent  
*Hydric soil rating:* No

#### Salinas

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

## EaA—Elder sandy loam, 0 to 2 percent slopes, MLRA 14

### Map Unit Setting

*National map unit symbol:* 2tyyj  
*Elevation:* 50 to 1,570 feet  
*Mean annual precipitation:* 11 to 29 inches  
*Mean annual air temperature:* 57 to 61 degrees F  
*Frost-free period:* 300 to 365 days  
*Farmland classification:* Prime farmland if irrigated

### Map Unit Composition

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

### Description of Elder

#### Setting

*Landform:* Flood plains, alluvial fans

## Custom Soil Resource Report

*Landform position (two-dimensional):* Toeslope  
*Landform position (three-dimensional):* Tread  
*Down-slope shape:* Linear  
*Across-slope shape:* Linear  
*Parent material:* Mixed alluvium

### Typical profile

*Ap - 0 to 8 inches:* sandy loam  
*A - 8 to 23 inches:* sandy loam  
*AC - 23 to 31 inches:* sandy loam  
*C - 31 to 60 inches:* sandy 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):* High (2.83 to 9.92 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:* Moderate (about 6.6 inches)

### Interpretive groups

*Land capability classification (irrigated):* 1  
*Land capability classification (nonirrigated):* 3c  
*Hydrologic Soil Group:* A  
*Ecological site:* R014XY001CA - LOAMY BOTTOMLAND  
*Hydric soil rating:* No

### Minor Components

#### Arroyo seco

*Percent of map unit:* 4 percent  
*Landform:* Alluvial fans  
*Landform position (two-dimensional):* Toeslope  
*Landform position (three-dimensional):* Tread  
*Down-slope shape:* Linear  
*Across-slope shape:* Linear  
*Hydric soil rating:* No

#### Gorgonio

*Percent of map unit:* 4 percent  
*Landform:* Alluvial fans  
*Landform position (two-dimensional):* Toeslope  
*Landform position (three-dimensional):* Tread  
*Down-slope shape:* Linear  
*Across-slope shape:* Linear  
*Hydric soil rating:* No

#### Elkhorn, sandy loam

*Percent of map unit:* 2 percent  
*Landform:* Marine terraces  
*Landform position (two-dimensional):* Toeslope  
*Landform position (three-dimensional):* Tread  
*Down-slope shape:* Linear

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*Across-slope shape:* Linear  
*Hydric soil rating:* No

**Watsonville, loam**

*Percent of map unit:* 1 percent  
*Landform:* Marine terraces  
*Landform position (two-dimensional):* Toeslope  
*Landform position (three-dimensional):* Tread  
*Down-slope shape:* Linear  
*Across-slope shape:* Linear  
*Hydric soil rating:* Yes

**Baywood, loamy sand**

*Percent of map unit:* 1 percent  
*Landform:* Dunes  
*Landform position (two-dimensional):* Backslope, toeslope  
*Landform position (three-dimensional):* Tread, rise  
*Down-slope shape:* Convex, linear  
*Across-slope shape:* Convex, linear  
*Hydric soil rating:* No

**Xerofluvents, sand**

*Percent of map unit:* 1 percent  
*Landform:* Flood plains  
*Landform position (two-dimensional):* Toeslope  
*Landform position (three-dimensional):* Tread, talf  
*Down-slope shape:* Linear  
*Across-slope shape:* Linear  
*Hydric soil rating:* Yes

**Metz, loamy sand**

*Percent of map unit:* 1 percent  
*Landform:* Flood plains  
*Landform position (two-dimensional):* Toeslope  
*Landform position (three-dimensional):* Tread, talf  
*Down-slope shape:* Linear  
*Across-slope shape:* Linear  
*Hydric soil rating:* No

**San emigdio, sandy loam**

*Percent of map unit:* 1 percent  
*Landform:* Alluvial fans  
*Landform position (two-dimensional):* Toeslope  
*Landform position (three-dimensional):* Tread, talf  
*Down-slope shape:* Linear  
*Across-slope shape:* Linear  
*Hydric soil rating:* No

## **Xc—Xerorthents, loamy**

### **Map Unit Setting**

*National map unit symbol:* h97q  
*Elevation:* 20 to 2,000 feet  
*Mean annual precipitation:* 10 to 25 inches  
*Mean annual air temperature:* 57 to 61 degrees F  
*Frost-free period:* 245 to 350 days  
*Farmland classification:* Not prime farmland

### **Map Unit Composition**

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

### **Description of Xerorthents, Loamy**

#### **Setting**

*Landform:* Terraces, alluvial fans  
*Landform position (two-dimensional):* Footslope  
*Landform position (three-dimensional):* Tread, talf  
*Down-slope shape:* Linear  
*Across-slope shape:* Linear, convex  
*Parent material:* Mixed loamy alluvium

#### **Typical profile**

*H1 - 0 to 60 inches:* clay loam

#### **Properties and qualities**

*Slope:* 15 to 50 percent  
*Depth to restrictive feature:* More than 80 inches  
*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  
*Maximum salinity:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)  
*Available water supply, 0 to 60 inches:* Moderate (about 7.8 inches)

#### **Interpretive groups**

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 6e  
*Hydrologic Soil Group:* C  
*Ecological site:* R015XD024CA - FINE LOAMY  
*Hydric soil rating:* No

**Minor Components**

**Salinas**

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

**Badland**

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

**Cropley**

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

**Mocho**

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

**Xerorthents, sandy**

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

# Soil Information for All Uses

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## Soil Reports

The Soil Reports section includes various formatted tabular and narrative reports (tables) containing data for each selected soil map unit and each component of each unit. No aggregation of data has occurred as is done in reports in the Soil Properties and Qualities and Suitabilities and Limitations sections.

The reports contain soil interpretive information as well as basic soil properties and qualities. A description of each report (table) is included.

## Land Classifications

This folder contains a collection of tabular reports that present a variety of soil groupings. The reports (tables) include all selected map units and components for each map unit. Land classifications are specified land use and management groupings that are assigned to soil areas because combinations of soil have similar behavior for specified practices. Most are based on soil properties and other factors that directly influence the specific use of the soil. Example classifications include ecological site classification, farmland classification, irrigated and nonirrigated land capability classification, and hydric rating.

## Prime and other Important Farmlands (Salinas Regional Airport)

This table lists the map units in the survey area that are considered important farmlands. Important farmlands consist of prime farmland, unique farmland, and farmland of statewide or local importance. This list does not constitute a recommendation for a particular land use.

In an effort to identify the extent and location of important farmlands, the Natural Resources Conservation Service, in cooperation with other interested Federal, State, and local government organizations, has inventoried land that can be used for the production of the Nation's food supply.

*Prime farmland* is of major importance in meeting the Nation's short- and long-range needs for food and fiber. Because the supply of high-quality farmland is limited, the U.S. Department of Agriculture recognizes that responsible levels of government, as well as individuals, should encourage and facilitate the wise use of our Nation's prime farmland.

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Prime farmland, as defined by the U.S. Department of Agriculture, is land that has the best combination of physical and chemical characteristics for producing food, feed, forage, fiber, and oilseed crops and is available for these uses. It could be cultivated land, pastureland, forestland, or other land, but it is not urban or built-up land or water areas. The soil quality, growing season, and moisture supply are those needed for the soil to economically produce sustained high yields of crops when proper management, including water management, and acceptable farming methods are applied. In general, prime farmland has an adequate and dependable supply of moisture from precipitation or irrigation, a favorable temperature and growing season, acceptable acidity or alkalinity, an acceptable salt and sodium content, and few or no rocks. The water supply is dependable and of adequate quality. Prime farmland is permeable to water and air. It is not excessively erodible or saturated with water for long periods, and it either is not frequently flooded during the growing season or is protected from flooding. Slope ranges mainly from 0 to 6 percent. More detailed information about the criteria for prime farmland is available at the local office of the Natural Resources Conservation Service.

For some of the soils identified in the table as prime farmland, measures that overcome a hazard or limitation, such as flooding, wetness, and droughtiness, are needed. Onsite evaluation is needed to determine whether or not the hazard or limitation has been overcome by corrective measures.

A recent trend in land use in some areas has been the loss of some prime farmland to industrial and urban uses. The loss of prime farmland to other uses puts pressure on marginal lands, which generally are more erodible, droughty, and less productive and cannot be easily cultivated.

*Unique farmland* is land other than prime farmland that is used for the production of specific high-value food and fiber crops, such as citrus, tree nuts, olives, cranberries, and other fruits and vegetables. It has the special combination of soil quality, growing season, moisture supply, temperature, humidity, air drainage, elevation, and aspect needed for the soil to economically produce sustainable high yields of these crops when properly managed. The water supply is dependable and of adequate quality. Nearness to markets is an additional consideration. Unique farmland is not based on national criteria. It commonly is in areas where there is a special microclimate, such as the wine country in California.

In some areas, land that does not meet the criteria for prime or unique farmland is considered to be *farmland of statewide importance* for the production of food, feed, fiber, forage, and oilseed crops. The criteria for defining and delineating farmland of statewide importance are determined by the appropriate State agencies. Generally, this land includes areas of soils that nearly meet the requirements for prime farmland and that economically produce high yields of crops when treated and managed according to acceptable farming methods. Some areas may produce as high a yield as prime farmland if conditions are favorable. Farmland of statewide importance may include tracts of land that have been designated for agriculture by State law.

In some areas that are not identified as having national or statewide importance, land is considered to be *farmland of local importance* for the production of food, feed, fiber, forage, and oilseed crops. This farmland is identified by the appropriate local agencies. Farmland of local importance may include tracts of land that have been designated for agriculture by local ordinance.

**Report—Prime and other Important Farmlands (Salinas Regional Airport)**

<b>Prime and other Important Farmlands—Monterey County, California</b>		
<b>Map Symbol</b>	<b>Map Unit Name</b>	<b>Farmland Classification</b>
AeA	Antioch very fine sandy loam, 0 to 2 percent slopes	Farmland of statewide importance
AeC	Antioch very fine sandy loam, 2 to 9 percent slopes	Farmland of statewide importance
CbA	Chualar loam, 0 to 2 percent slopes	Prime farmland if irrigated
Cg	Clear Lake clay, sandy substratum, drained, 0 to 1 percent slopes, MLRA 14	Prime farmland if irrigated
EaA	Elder sandy loam, 0 to 2 percent slopes, MLRA 14	Prime farmland if irrigated
Xc	Xerorthents, loamy	Not prime farmland

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## Custom Soil Resource Report

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## **Appendix 2-D - Registered EPA Sites within Airport Property**

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## Appendix 2-E - Alisal Creek Alignment



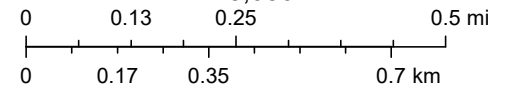
# WATERS GeoViewer Print Map



4/1/2022, 3:42:19 PM

-  TMDLs Line
-  303(d) Line

1:18,056



US EPA, Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL,

US Environment Protection Agency

City of Salinas, Bureau of Land Management, Esri, HERE, Garmin, GeoTechnologies, Inc., USGS, METI/NASA, EPA, USDA | US EPA |



## Appendix 2-F - Floodplains Map



**NOTES TO USERS**

This map is for use in administering the National Flood Insurance Program. It does not necessarily identify all areas subject to flooding, particularly from local drainage sources of small size. The community map repository should be consulted for possible updated or additional flood hazard information.

To obtain more detailed information in areas where **Base Flood Elevations (BFEs)** and/or **floodways** have been determined, users are encouraged to consult the Flood Profiles and Floodway Data and/or Summary of Stillwater Elevations tables contained within the Flood Insurance Study (FIS) report that accompanies this FIRM. Users should be aware that BFEs shown on the FIRM represent rounded whole-foot elevations. These BFEs are intended for flood insurance rating purposes only and should not be used as the sole source of flood elevation information. Accordingly, flood elevation data presented in the FIS report should be utilized in conjunction with the FIRM for purposes of construction and/or floodplain management.

**Coastal Base Flood Elevations** shown on this map apply only landward of 0.0' North American Vertical Datum of 1988 (NAVD 88). Users of this FIRM should be aware that coastal flood elevations are also provided in the Summary of Stillwater Elevations tables in the Flood Insurance Study report for this jurisdiction. Elevations shown in the Summary of Stillwater Elevations should be used for construction and/or floodplain management purposes when they are higher than the elevations shown on this FIRM.

Boundaries of the **floodways** were computed at cross sections and interpolated between cross sections. The floodways were based on hydraulic considerations with regard to requirements of the National Flood Insurance Program. Floodway widths and other pertinent floodway data are provided in the Flood Insurance Study report for this jurisdiction.

Certain areas not in Special Flood Hazard Areas may be protected by **flood control structures**. Refer to Section 2.4 "Flood Protection Measures" of the Flood Insurance Study report for information on flood control structures for this jurisdiction.

The **projection** used in the preparation of this map was Universal Transverse Mercator (UTM) Zone 10. The **horizontal datum** was NAD 83, GRS80 spheroid. Differences in datum, spheroid, projection or UTM zones used in the production of FIRMs for adjacent jurisdictions may result in slight positional differences in map features across jurisdiction boundaries. These differences do not affect the accuracy of this FIRM.

Flood elevations on this map are referenced to the North American Vertical Datum of 1988. These flood elevations must be compared to structure and ground elevations referenced to the same vertical datum. For information regarding conversion between the National Geodetic Vertical Datum of 1929 and the North American Vertical Datum of 1988, visit the National Geodetic Survey website at <http://www.ngs.noaa.gov> or contact the National Geodetic Survey at the following address:

NGS Information Services  
NOAA, N/INGS12  
National Geodetic Survey  
SSMC-3, #6202  
1315 East-West Highway  
Silver Spring, Maryland 20910-3282  
(301) 713-3242

To obtain current elevation, description, and/or location information for **bench marks** shown on this map, please contact the Information Services Branch of the National Geodetic Survey at (301) 713-3242, or visit its website at <http://www.ngs.noaa.gov>.

**Base map** information shown on this FIRM was derived from U.S. Geological Survey Digital Orthophoto Quadrangles produced at a scale of 1:12,000 from photography dated 1987 or later.

This map reflects more detailed and up-to-date **stream channel configurations** than those shown on the previous FIRM for this jurisdiction. The floodplains and floodways that were transferred from the previous FIRM may have been adjusted to conform to these new stream channel configurations. As a result, the Flood Profiles and Floodway Data tables in the Flood Insurance Study Report (which contains authoritative hydraulic data) may reflect stream channel distances that differ from what is shown on this map.

**Corporate limits** shown on this map are based on the best data available at the time of publication. Because changes due to annexations or de-annexations may have occurred after this map was published, map users should contact appropriate community officials to verify current corporate limit locations.

Please refer to the separately printed **Map Index** for an overview map showing the layout of map panels; community map repository addresses; and a Listing of Communities table containing National Flood Insurance Program dates for each community as well as a listing of the panels on which each community is located.

Contact the **FEMA Map Service Center** at 1-800-358-9616 for information on available products associated with this FIRM. Available products may include previously issued Letters of Map Change, a Flood Insurance Study report, and/or digital versions of this map. The FEMA Map Service Center may also be reached by Fax at 1-800-358-9620 and its website at <http://msc.fema.gov>.

If you have **questions about this map** or questions concerning the National Flood Insurance Program in general, please call 1-877-FEMA MAP (1-877-336-2627) or visit the FEMA website at <http://www.fema.gov>.



**LEGEND**

**SPECIAL FLOOD HAZARD AREAS SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD**

The 1% annual flood (100-year flood), also known as the base flood, is the flood that has a 1% chance of being equaled or exceeded in any given year. The Special Flood Hazard Area is the area subject to flooding by the 1% annual chance flood. Areas of Special Flood Hazard include Zones A, AE, AH, AO, AR, A99, V, and VE. The Base Flood Elevation is the water-surface elevation of the 1% annual chance flood.

- ZONE A** No Base Flood Elevations determined.
- ZONE AE** Base Flood Elevations determined.
- ZONE AH** Flood depths of 1 to 3 feet (usually areas of ponding); Base Flood Elevations determined.
- ZONE AO** Flood depths of 1 to 3 feet (usually sheet flow on sloping terrain); average depths determined. For areas of alluvial fan flooding, velocities also determined.
- ZONE AR** Special Flood Hazard Area formerly protected from the 1% annual chance flood by a flood control system that was subsequently destroyed. Zone AR indicates that the former flood control system is being restored to provide protection from the 1% annual chance or greater flood.
- ZONE A99** Area to be protected from 1% annual chance flood by a Federal flood protection system under construction; no Base Flood Elevations determined.
- ZONE V** Coastal flood zone with velocity hazard (wave action); no Base Flood Elevations determined.
- ZONE VE** Coastal flood zone with velocity hazard (wave action); Base Flood Elevations determined.

**FLOODWAY AREAS IN ZONE AE**  
The floodway is the channel of a stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 1% annual chance flood can be carried without substantial increases in flood heights.

**OTHER FLOOD AREAS**  
**ZONE X** Areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood.

**OTHER AREAS**  
**ZONE X** Areas determined to be outside the 0.2% annual chance floodplain.  
**ZONE D** Areas in which flood hazards are undetermined, but possible.

**COASTAL BARRIER RESOURCES SYSTEM (CBRS) AREAS**  
**OTHERWISE PROTECTED AREAS (OPAs)**  
CBRS areas and OPAs are normally located within or adjacent to Special Flood Hazard Areas.

- 1% annual chance floodplain boundary
- 0.2% annual chance floodplain boundary
- Floodway boundary
- Zone D boundary
- CBRS and OPA boundary
- Boundary dividing Special Flood Hazard Area Zones and boundary dividing Special Flood Hazard Areas of different Base Flood Elevations, flood depths or flood velocities.
- Base Flood Elevation line and value; elevation in feet\* (EL 987)
- Base Flood Elevation value where uniform within zone; elevation in feet\*

- \* Referenced to the North American Vertical Datum of 1988
- Cross section line
- Transect line
- Geographic coordinates referenced to the North American Datum of 1983 (NAD 83), Western Hemisphere
- 1000-meter Universal Transverse Mercator grid values, zone 10
- 600000 FT
- 5000-foot grid ticks; California State Plane coordinate system, zone IV (FIPSZONE 0404), Lambert Conformal Conic projection
- Bench mark (see explanation in Notes to Users section of this FIRM panel)
- DX5510 x
- M 1.5
- River Mile

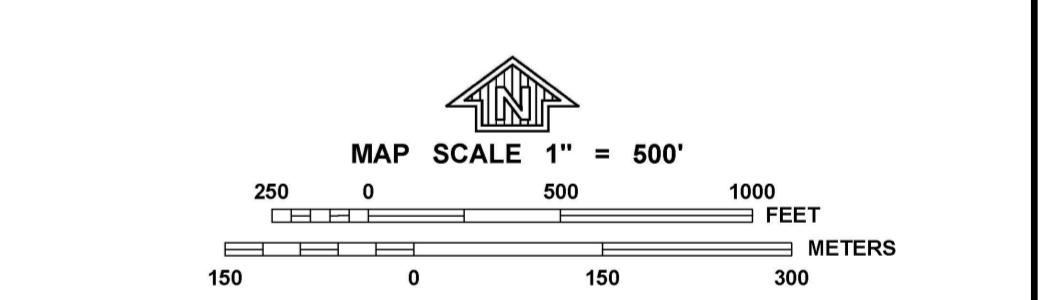
MAP REPOSITORY  
Refer to listing of Map Repositories on Map Index

EFFECTIVE DATE OF COUNTY-WIDE FLOOD INSURANCE RATE MAP  
April 2, 2009

EFFECTIVE DATE(S) OF REVISION(S) TO THIS PANEL

For community map revision history prior to countywide mapping, refer to the Community Map History table located in the Flood Insurance Study report for this jurisdiction.

To determine if flood insurance is available in this community, contact your Insurance agent or call the National Flood Insurance Program at 1-800-638-6620.



**NATIONAL FLOOD INSURANCE PROGRAM**

PANEL 0236G

**FIRM**  
FLOOD INSURANCE RATE MAP

MONTEREY COUNTY, CALIFORNIA AND INCORPORATED AREAS

PANEL 236 OF 2050  
(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
MONTEREY COUNTY	060195	0236	G
SALINAS, CITY OF	060202	0236	G

Notice to User: The Map Number shown below should be used when placing map orders; the Community Number shown above should be used on insurance applications for the subject community.

**MAP NUMBER**  
06053C0236G

**EFFECTIVE DATE**  
APRIL 2, 2009

Federal Emergency Management Agency









## Appendix 2-G - Wetlands Map





March 31, 2022

### Wetlands

- |   |                                |   |                                   |   |          |
|---|--------------------------------|---|-----------------------------------|---|----------|
|  | Estuarine and Marine Deepwater |  | Freshwater Emergent Wetland       |  | Lake     |
|  | Estuarine and Marine Wetland   |  | Freshwater Forested/Shrub Wetland |  | Other    |
|   |                                |  | Freshwater Pond                   |  | Riverine |

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.