



Chapter 2 – **DRAFT**

Environmental Baseline

Airport Master Plan | Salinas Municipal Airport

Draft

Prepared by:





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2.1 Introduction

This document aims to offer a general overview of existing environmental conditions within the vicinity of Salinas Municipal Airport. This inventory of environmental resources will assist the Salinas Municipal Airport in implementing development alternatives to minimize potential environmental impacts. Coordination between the Sponsor, CALTRANS, FAA, environmental agencies, and the Consulting Team will be essential to bringing together all facts and data relevant to the project and developing a mutual agreement regarding the extent of the required future environmental documentation.

FAA has issued guidance documents to consider the environmental impacts of aviation-related actions under the National Environmental Policy Act (NEPA) of 1969 and implement regulations. At the master planning level, FAA Advisory Circular 150/5070-6B, *Airport Master Plans*, states that environmental considerations should be incorporated into the master planning and alternative development processes. In addition, FAA Order 5050.4B, *NEPA Instructions for Airport Actions*, and FAA Order 1050.1F, *Environmental Impacts: Policies and Procedures*, serve as a guide for the discussion below and identify those resources that will require an evaluation before commencing any project actions.

FAA Order 1050.1F Desk Reference identifies 14 environmental categories that require evaluation. The following pages describe each of those categories, as well as any known resources present within the project area:

- ◆ Air Quality
- ◆ Greenhouse Gas Emissions
- ◆ Biological Resources
- ◆ Coastal Resources
- ◆ Department of Transportation Act Section 4(f)/Prime Farmlands
- ◆ Historical, Architectural, Archeological, and Cultural Resources
- ◆ Land Use Compatibility
- ◆ Noise
- ◆ Hazardous Materials, Solid Waste, Pollution Prevention
- ◆ Water Resources
- ◆ Natural Resources and Energy Supply
- ◆ Socioeconomic, Environmental Justice
- ◆ Visual Effects/Light Emissions
- ◆ Cumulative Impacts

2.2 Air Quality

The U.S. Environmental Protection Agency (EPA) has adopted air quality standards that specify the maximum permissible short-term and long-term concentrations of various air contaminants. The significance of a pollution concentration is determined by comparing it to the state and federal air quality standards. The National Ambient Air Quality Standards (NAAQS) consist of primary and secondary standards for six criteria pollutants, which include: ozone (O₃), carbon monoxide (CO), sulfur dioxide (SO₂), nitrogen oxides (NO_x), particulate matter (PM₁₀ and PM_{2.5}), and lead (Pb).

When compared to federal and state air quality standards, the above-referenced criteria pollutants and their thresholds establish "attainment," "maintenance," or "non-attainment" air quality standards for specific geographic areas. The threshold for non-attainment varies by pollutant. According to the NEPAassist tool (dated April 30, 2022), Monterey County is classified as an attainment area for all criteria pollutants under EPA's ambient air quality standards.

The California Air Resources Board (CARB) has established its own ambient air quality standards. In addition, the North Central Coast Air Basin (NCCAB) has designated the Monterey Bay Air Resources District (MBARD) as the regulatory agency for the area. According to the CARB's attainment and non-attainment maps, Monterey County is listed as a non-attainment area for PM₁₀.

Potential development projects at the Airport will require an air quality assessment to determine compliance with ambient air quality standards. However, it is anticipated that specific project-related emissions would not result in short or long-term impacts on regional air quality. Although airport construction typically results in temporary implications on air quality, these are limited to the duration of the construction period and minimized by appropriate control measures.

Appendix A provides maps of the area and air quality attainment or non-attainment.

2.3 Climate

Increased concentrations of greenhouse gases (GHG) in the atmosphere affect the global climate by increasing the temperature of the earth's atmosphere and oceans and other climate changes such as wind, rainfall, and severe weather events. Although the incremental warming and cooling of the earth is considered a natural process, scientists have recently discovered that this rate increases due to human factors. As a result, scientific research has led most to believe that human activities have been the dominant cause of warming since the mid-twentieth century.

The California Air Resource Board (CARB) is the agency that sets standards and regulates air quality at the state and local levels. Although most projects do not generate large amounts of

GHG emissions, cumulative impacts must be considered for past, present, and future projects. Adherence to the State's GHG Reduction Plan will need to be implemented to ensure that the project does not cumulatively increase GHG emissions.

Under California's Global Warming Solutions Act, established through Assembly Bill 32, the City of Salinas adopted the U. N. Environmental Accords and the Mayors' Climate Action Plan that set a goal to reduce greenhouse gas emissions. The plan is still in development, but any necessary implementations that align with this plan will be utilized.

2.4 Biological Resources

The U.S. Fish and Wildlife Service (FWS) is charged with implementing Section 7 of the *Endangered Species Act* (ESA). Section 7 protects animal and plant species whose populations are threatened by human activities. The FAA and FWS review projects to determine if a significant impact on these protected species will result from implementing a proposed project. Significant effects occur when the proposed action could jeopardize a protected species' continued existence or result in the destruction or adverse modification of federally designated critical habitat in the area. In addition, the Migratory Bird Treaty Act and the Bald and Golden Eagle Protection Act protect birds from being impacted by development activities. Impacts on these species can be mitigated through various measures such as construction phasing to avoid nesting seasons.

The California Endangered Species Act also protects State-listed or proposed species as Rare, Threatened, or Endangered by the California Department of Fish and Wildlife (CDFW). The U.S. Fish and Wildlife Service's Information, Planning, and Consultation System (IPaC) was consulted for federally listed species, and the California Fish and Wildlife BIOS database was consulted for state-listed species. According to the official federal species list, eight threatened, endangered, or candidate species that exist within the project's vicinity; an additional avian species was listed as threatened in ' 'California's Natural Diversity Database. **Appendix B** provides the state and federal species report.

Before development, an Endangered and Threatened Species Study should be conducted. In addition, proposed projects and other new land development may require coordination with U.S. Fish and Wildlife and California Fish and Wildlife to determine if any field investigations for protected species will be needed.



Table 2.1 represents the federally and state-listed threatened and endangered species for Monterey County.

Table 2.1 - Threatened or Endangered Species

Common Name	Species	Federal Status	State Status	Habitat	Likely to Occur
California Condor	<i>Gymnogyps californianus</i>	E		Open space, high perches, cliffs, and large trees	Not likely to occur
Least Bell's Vireo	<i>Vireo bellii pusillus</i>	E		Low-elevation, riparian habitats near water, preferably with canopy and shrub layers	Not likely to occur
Tricolored Blackbird	<i>Agelaius tricolor</i>	-	T	Wetland and grassland habitats	
Southwestern Willow Flycatcher	<i>Empidonax traillii extimus</i>	E		Nesting requires dense riparian habitats	Not likely to occur
California Red-legged Frog	<i>Rana draytonii</i>	T	T	Aquatic habitats	Not likely to occur
California Tiger Salamander	<i>Ambystoma californiense</i>	T	T	Annual grasslands and oak woodlands; ephemeral pools for breeding	
Monarch Butterfly	<i>Danaus plexippus</i>	C		Prairies, meadows, grasslands, and along roadsides	
Vernal Pool Fairy Shrimp	<i>Branchinecta lynchi</i>	T		Vernal pools, seasonal wetlands, and stagnant ditches that fill with water during fall and winter rains and dry up in spring and summer	
Marsh Sandwort	<i>Arenaria paludicola</i>	E		Marshes, swamps, and areas that are wet year-round	Not likely to occur

Source: IPaC - Information for Planning and Consultation. Online Linkage: <https://ecos.fws.gov/ipac/>

2.5 Department of Transportation Act, Section 4(f)/Prime Farmlands

Section 4(f) of the U.S. DOT Act of 1966 (now codified at 49 U.S.C. § 303) protects significant publicly owned parks, recreational areas, wildlife and waterfowl refuges, and public and private historic sites. Section 4(f) provides that the Secretary of Transportation may approve a transportation program or project requiring the use of publicly owned land or a public park, recreation area, or wildlife or waterfowl refuge of national, state, or local significance, or land of a historic site of federal, state, or local significance, only if there is no feasible and prudent alternative to the using that land and the program or project includes all possible planning to minimize harm resulting from the use.

According to the USGS Protected Areas Database, no federally protected lands within the Airport environs exist. However, the Salinas Fairway Golf Course, located north of the Airport, is the closest municipal-owned property. Although not anticipated, consultation may be required if any proposed development would involve acquiring or altering Section 4(f) resources.

Under the Farmland Protection Policy Act (FPPA), federal agencies are directed to identify and consider the adverse effects of federal programs on the preservation of farmland, to consider appropriate alternative actions that could lessen adverse effects, and to assume that such federal programs are, to the extent practicable, compatible with state or local government programs and policies to protect farmland. The FPPA guidelines developed by the U.S. Department of Agriculture (USDA) apply to farmland classified as prime or unique or of state or local importance as determined by the appropriate government agency, with concurrence by the Secretary of Agriculture.

Soil data provided by the USDA Natural Resource Conservation Service's (NRCS) Web Soil Survey shows some Prime farmland within the vicinity of the Airport but not within the airport environs. Furthermore, according to the California Department of Conservation Important Farmland Viewer, the airport property is designated as urban and built-up land exempt from FPPA. If any proposed development or project involves the acquisition or conversion of prime farmland or impact farmlands, additional coordination with the Natural Resources and Conservation Service (NRCS) may be necessary. A map of the area and its proximity to protected farmland can be found below in **Figure 2.1**; green areas denote farmland. The USDA Soil Report can be found in **Appendix C**.

Figure 2.1 - Farmland



Source: <https://maps.conservation.ca.gov/DLRP/CIFF/>

2.6 Historical, Architectural, Archeological, and Cultural Resources

Compliance with the *National Historic Preservation Act (NHPA) of 1966*, as amended for federal undertakings, requires proposed developments to assess the impacts on historical and cultural resources. Historic properties are defined as any prehistoric district, site, building, structure, or object included in, or eligible for inclusion in, the National Register of Historic Places (NRHA). According to the National Register of Historic Places viewer, the closest nationally registered historic place is approximately two miles from the Airport. **Table 2.2** provides a list of buildings on airport property that are 50 years or older. Based on the list of buildings with the potential for NRHP eligibility, future projects should be submitted to the State's Historic Preservation Office for review.

According to the Monterey County Archeological Sensitivity Map, the area is listed as a low archeological sensitive area. The California Native American Heritage Commission Digital Atlas was reviewed for potential Tribal lands of importance and cultural resource surveys. According to the database, the Airport lies within or near the Ohlone Costanoan tribal lands. Due to the proximity of sensitive archeological areas, the Tribal Historic Preservation office will need to be notified before the construction of proposed projects.

Table 2.2 - Potential Historic Building Inventory

Building Name	Year Built	Owner	Condition
Air Terminal Building	1957	City	Excellent
Building J-Shop/Office	1962	City	Good
Hangars A-F2	1962	City	Fair
Hangar F3	1961	City	Fair
Hangar G	1962	City	Good
Hangar H	1962	City	Poor
Hangars M-N	1962	City	Good
Hangar T-52	1962	City	Fair
Maintenance Hangar #1	1940's	City	Fair
Maintenance Hangar #2	1964	Private	Good
Pump House	1969	Private	Good
Tower	1967	FAA	Good
Utility Building	1962	City	Good

Source: Centurion Planning and Design

2.7 Land Use Compatibility

Compatibility of existing and planned land uses within an airport's vicinity typically pertains to noise. However, other effects relating to the adverse impacts on aircraft operations ensure surrounding land uses are compatible with aviation operations. Such non-compatible land uses include landfills, wetlands that attract wildlife hazardous to aviation, and other facilities.

Through Advisory Circular 150/5200-33A, Hazardous Wildlife Attractants on or Near Airports, the FAA guides locating certain land uses that can attract hazardous wildlife on or near public-use airports. For all airports, a minimum separation distance of 5 statute miles is recommended between the farthest edge of the airport's Airport Operations Area (AOA) and known hazardous wildlife attractant if the attractant could cause hazardous wildlife movement into or across the approach or departure airspace.

The Airport's property boundary lies within the City of Salinas and is zoned Public/Semi-Public. The airport is located approximately three miles southeast of Salinas City Hall. Except for the residential development north/northwest of the airport, the surrounding land use is primarily agriculture. Some industrial land uses can be found immediately south of the airport (south of Moffett Street) and southwest of the airport (across Highway 101). Recreational land use (Salinas Fairways Golf Course) can be found within airport property. A small area southwest of the airport is designated as commercial. The closest lake within the vicinity of the Airport is Espinosa Lake,

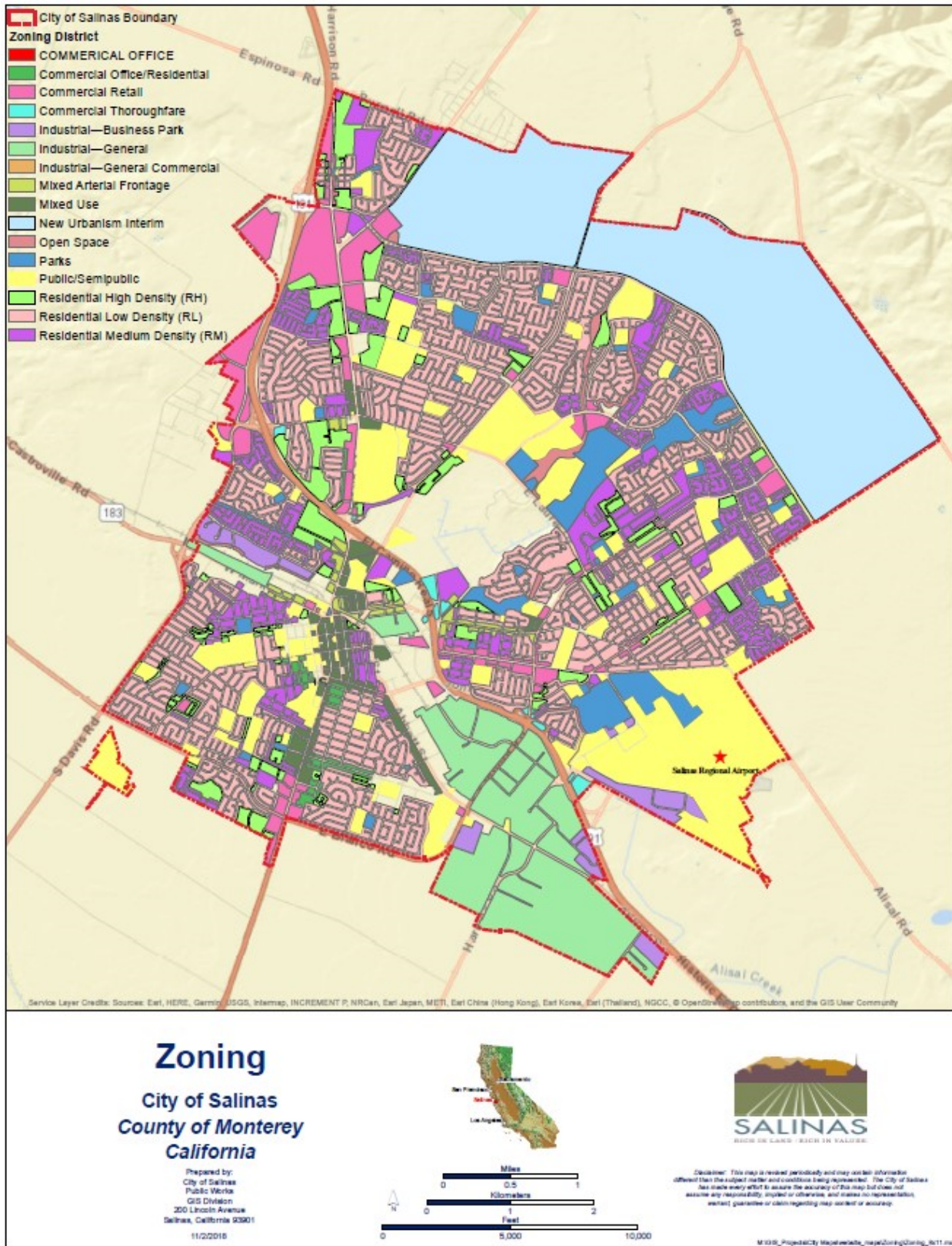


located approximately eight miles from the Airport. In addition, small creeks and unnamed ponds are located at least one mile from the Airport's property. The nearest solid waste facility is Sun Street Transfer Station, located approximately two miles from the Airport.

The Salinas Airport's Land Use Plan denotes that the continued development of the airport exclusively as a general aviation facility is the best option for the Airport and the surrounding property owners. The FAA recommends that an airport sponsor gain control over the land within the RPZs to ensure compatible land uses and activities. Incorporating land use controls and alerting potential real estate buyers to the location of the Airport can assist in facilitating land use compatibility.

Figure 2.2 shows the land uses surrounding Salinas Municipal Airport.

Figure 2.2 - City of Salinas Zoning



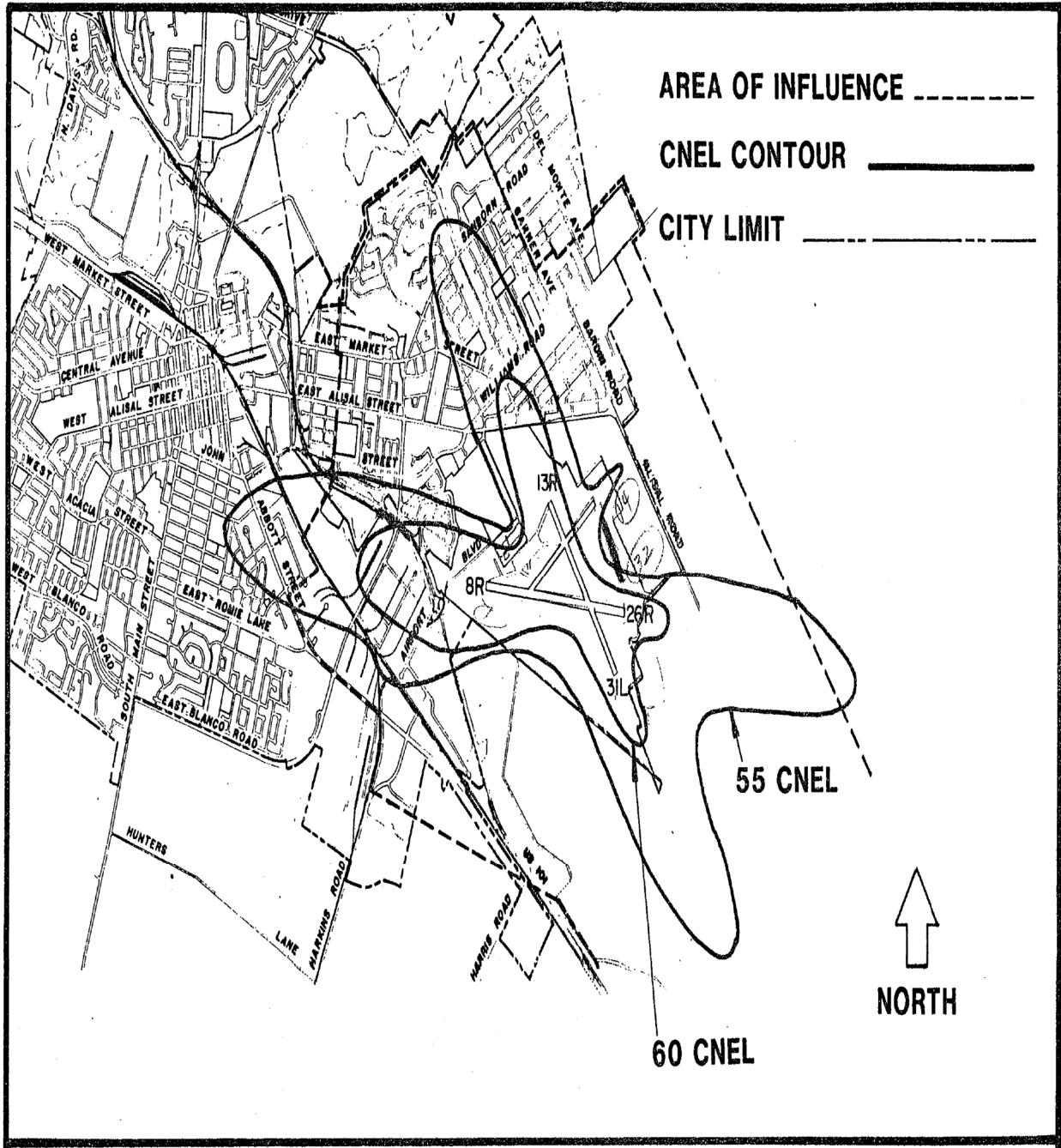
Source: City of Salinas

2.8 Noise

FAA established land use compatibility guidelines relative to certain Day-Night Average Sound Level (DNL) noise levels in 14 Code of Federal Regulations (CFR) Part 150. In addition, the State of California requires the use of Community Noise Equivalent Level (CNEL) metrics when determining noise impacts. Aviation noise primarily results from fixed and rotary-wing aircraft operations, such as departures, arrivals, overflights, taxiing, and engine run-ups. Noise is often the predominant aviation environmental concern of the public. Significant levels of aircraft noise in communities around airports generate the most issues. However, there are increasing concerns in areas of moderate noise exposure, and noise issues are raised by residents in suburban and rural areas where ambient noise is lower than in the more urbanized areas that tend to surround many commercial service airports.

Towards the northwest of the Airport property are two schools near the Airport, Hartnell College and Bardin Elementary School. The Airport has an existing noise abatement program that implements flight procedures to reduce noise pollution for Airport neighbors. Existing noise contours were developed with the Airport's Land Use Plan and are found below. Due to the existing sensitive noise receptors, a noise analysis will be conducted later as individual projects progress if needed. In **Figure 2.3**, you will find the existing CNEL Contours developed in 1980.

Figure 2.3 - 1980 CNEL Contours



Source: Airport Land Use Plan

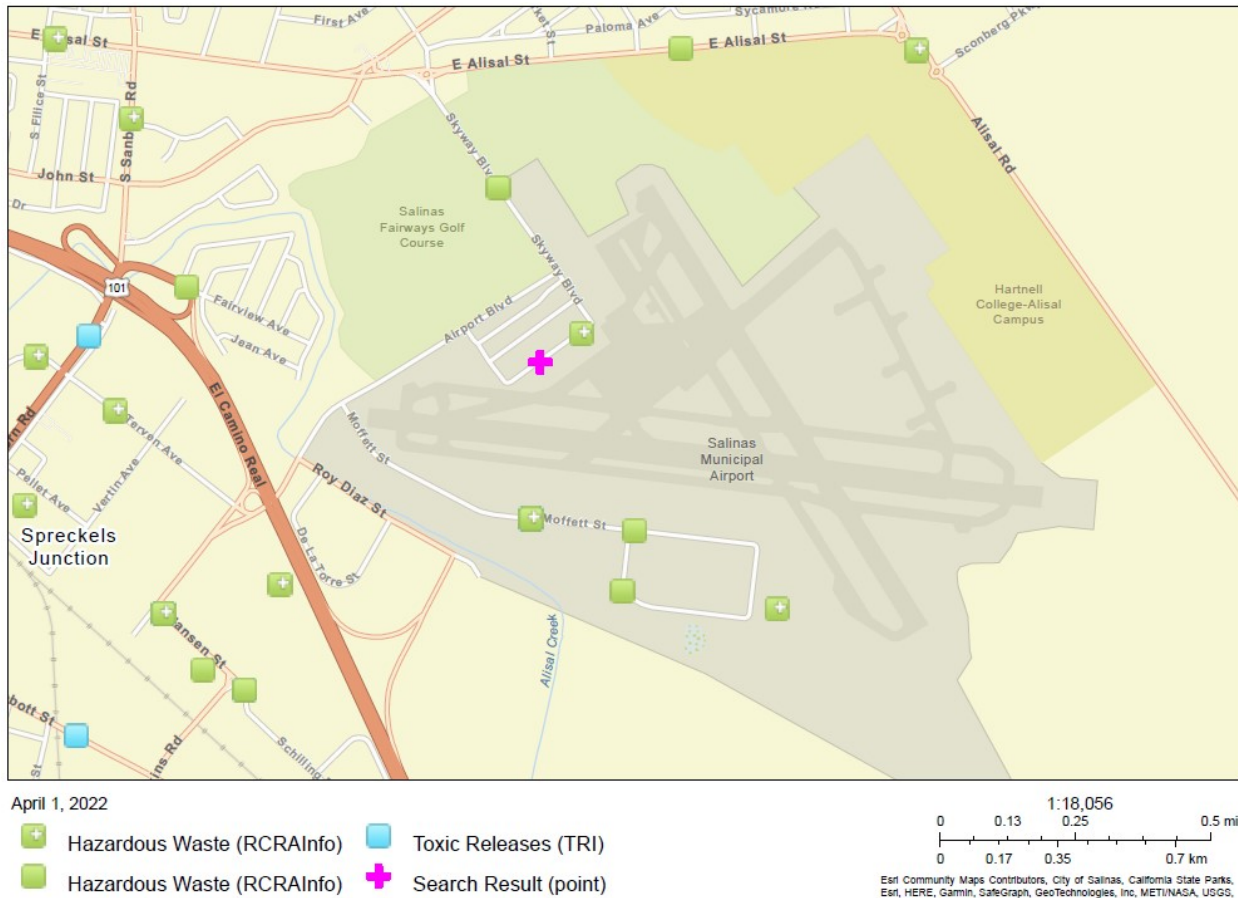
2.9 Hazardous Materials, Solid Waste, Pollution Prevention

Hazardous materials, solid waste, and pollution impacts must evaluate waste streams, hazardous materials used for construction, existing contaminated sites, and ongoing remediation sites. Hazardous materials refer to industrial wastes, hazardous goods, petroleum products, and other contaminants.

Federal, state, and local laws regulate hazardous materials use, storage, transport, and disposal. In addition, regulations extend to past and future landowners of properties containing the above-referenced materials.

The EPA's Enviro-Facts portal was consulted to determine if there are any identified contamination sites and hazardous waste permitted facilities. According to the portal, there are 12 hazardous waste permitted facilities and one toxic release site that was considered compliant in 2000 within the Airport environs. If future development has the potential to affect these properties, an additional environmental assessment may be necessary. There are no listed Superfund or Brownfield sites within the Airport property. The Airport was previously used as the Salinas Army Field and was part of the U.S. Army Corps of Engineers (USACE) Formerly Used Defense Sites (FUDS) program; the area's remediation was completed in 2013. **Figure 2.4** shows the location of the registered facilities within the Airport property.

Figure 2.4 – Registered Sites at Salinas Municipal Airport



Source: City of Salinas

2.10 Water Resources

Water resources are surface waters and groundwater vital to society; they provide drinking water and support recreation, transportation and commerce, industry, agriculture, and aquatic ecosystems. Surface water, groundwater, floodplains, and wetlands do not function as separate and isolated watershed components but rather as a single, integrated natural system. Because of these resources' close and integrated relationship, their analysis is conducted under the all-encompassing impact category of water resources. Wild and Scenic Rivers are included because impacts to these rivers can result from obstructing or altering the free-flowing characteristics of a designated river, an impact more closely resembling an effect on a water resource.

2.10.1 Surface Waters

The Clean Water Act (CWA) establishes the basic structure for regulating discharges of pollutants into waters of the U.S. and regulating quality standards for surface waters. The EPA is the agency that sets forth regulation and enforcement via the National Pollutant Discharge Elimination

System (NPDES). The USACE enforces the CWA by requiring a permit for any activity that results in the deposition or dredging of fill material within the "ordinary high-water mark" of the Waters of the U.S.

According to EPA's WATERS GeoViewer, Alisal Creek, located south of the Airport, has the following listed impairments: Ammonia, Chlorophyll-A, Fecal Coliform, Nitrate, Sodium, Toxicity, and Turbidity. Total Maximum Daily Loads (TMDL) have not been established for sodium, toxicity, and turbidity. Compliance with NPDES for construction and industrial facilities will be required. Updates to the Airport's Spill Prevention Control and Countermeasure (SPCC) plan will need to be implemented for new developments and facilities. A map showing the proximity of Alisal Creek can be found in **Appendix E**.

2.10.2 Groundwater

The site lies within the Salinas Valley Groundwater Basin (SVGB) East Side Aquifer Subbasin and is considered a high priority subbasin with declining groundwater levels. Therefore, the Salinas Valley Groundwater Basin Groundwater Sustainability Plan will need to be followed. The City of Salinas requires that runoff volume from an 85th percentile storm be retained on-site via retention basins or bioretention facilities. The Airport currently has swales, ditches, and channels that convey stormwater to storm sewer systems that direct runoff to the reclamation ditch and Heins Lake. Heins Lake, adjacent to the reclamation ditch, is subject to inundation during storm periods. If the proposed development increases impervious surfaces, stormwater infrastructure may need to be upgraded to account for the increased runoff.

2.10.3 Floodplain

Executive Order 11988 directs federal agencies to take action to reduce the risk of flood loss, minimize the impact of floods on human safety, health, and welfare, and restore and preserve the natural and beneficial values served by the floodplains.

According to NFIP Map number 06053C0236G Panel 236, the Airport is located within Zone X outside the special flood hazard area. However, to the south of the airport is a regulated floodplain. Future development that may infringe on the floodplain would need to assess the impact the development would have downstream and on the identified floodway/floodplain. Coordination with the City of Salinas Engineering Department would need to be conducted to determine if a complete flood study or cursory study would suffice to show no adverse impacts on the floodplain. A map of the floodplain and Airport is found in **Figure 2.5** below.

Figure 2.5 - Floodplain in Vicinity of SNS



Source: Federal Emergency Management Agency, Nation Flood Insurance Program, 2009

2.10.4 Wetlands

Title 40 Code of Federal Regulations (CFR), Section 122.2 establishes the definition of "Waters of the U.S." (WOTUS). WOTUS jurisdiction can include rivers, streams, tributaries, interstate waters, and wetlands. Such areas are regulated and subject to permitting under the Clean Water Act (CWA) by the EPA and the USACE. Wetlands are ecosystems flooded by water, either permanently or seasonally, that support vegetation typically adapted for life in saturated soil conditions under normal circumstances. According to the EPA's WATERS GeoViewer, there are freshwater emergent wetlands to the southeast of the airport but off existing Airport Property. Another identified wetland is found to the northeast of Runway 13-31 but is not on Airport property. **Figure 2.6** provides a map showing the nearby wetlands.

Figure 2.6 - Wetland in Vicinity of SNS



March 31, 2022

Wetlands

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland

- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond

- Lake
- Other
- 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.

Source: U.S. Fish and Wildlife Service, National Wetlands Inventory, 2022

2.10.5 Wild and Scenic Rivers

Wild and Scenic Rivers are rivers having remarkable scenic, recreational, geologic, fish, wildlife, historical, or cultural values as defined by the Wild and Scenic Rivers Act. If the FAA is taking an action that would physically impact resources covered by the Wild and Scenic Rivers Act, there may be consultation requirements under the Act. According to the National Wild and Scenic Rivers viewer, there are no Wild and Scenic Rivers near the Airport.

2.10.6 Coastal Resources

Coastal resources include all-natural resources occurring within coastal waters and their adjacent shorelands. Coastal resources include islands, transitional and intertidal areas, salt marshes, wetlands, floodplains, estuaries, beaches, dunes, barrier islands, coral reefs, and fish and wildlife and their respective habitats within these areas. Coastal resources include the coastlines of the Atlantic and Pacific oceans, the Great Lakes, and the Gulf of Mexico.

Salinas Municipal Airport is not subject to any coastal restrictions; the nearest coastal zone boundary is approximately 12 miles west of the Airport.

2.11 Natural Resources and Energy Supply

As an impact category, natural resources and energy supply provide an evaluation of a project's consumption of natural resources (such as water, asphalt, aggregate, wood, etc.) and use of energy supplies (such as coal for electricity; natural gas for heating; and fuel for aircraft, commercial space launch vehicles, or other ground vehicles). Consumption of natural resources and energy supplies may result from the proposed action's construction, operation, and/or maintenance.

The Airport is served drinking water by the California Water Service Company via a 12" main on Airport Blvd. The existing system offers adequate water supply across the airport. The City of Salinas and the two private companies that serve potable water to the City are currently working with other local government agencies in response to saltwater intrusion.

The Airport's electrical needs are serviced by Pacific Gas and Electric Company (PG&E) through overhead and underground power lines. Natural gas is also provided to the Airport by PG&E via a gas main that runs along Airport Boulevard and Skyway Boulevard.

The Airport's wastewater is serviced by the Monterey County Regional Water Pollution Control Agency. Wastewater is transported to the Salinas Main Pump Station. Republic Services provides solid waste removal weekly as well as recycling removal.

Potential impacts on natural resources and energy sources typically fall under two categories: 1) increased usage of local utilities to the point of a reduction in availability and 2) depleted or unavailable resources to develop, rehabilitate, or expand the property. Further coordination and analysis may be required if either scenario occurs from the proposed development.

2.12 Socioeconomic, Environmental Justice

Environmental justice analysis considers the potential of Federal actions to cause disproportionate and adverse effects on low-income or minority populations. Environmental justice ensures no low-income or minority population bears an unnecessary burden of impact resulting from Federal actions.

Socioeconomics is an umbrella term used to describe a project's social or economic aspects. A socioeconomic analysis evaluates how elements of the human environment such as population, employment, housing, and public services might be affected by the proposed action and alternative(s).

Two socioeconomic indicators exist to the northwest of the Airport, noting people of color within the 90th to 100th percentile and low-income in the 70th to 95th percentile. Therefore, these resources must be evaluated for potential impacts from proposed development projects completed with federal funds.

It is not anticipated that any proposed future development would harm the socioeconomics of the area, nor have any disproportionate impact on low-income or minority populations. In addition, thus far, no concerns have been raised about environmental health risks to children or the elderly within the Airport area.

2.13 Visual Effects/Light Emissions

Airport facilities and operations cause light emissions that can affect visually sensitive land uses in an airport area. Light emissions may emanate from the following sources associated with a proposed action: airfield and apron lighting, visual navigational aids (NAVAIDS), terminal lighting, employee/customer parking lighting, and both airborne and ground-based aircraft operations, and roadway lighting.

Visual effects deal broadly with the extent to which the proposed action contrasts with, or detracts from, the visual resources and/or the visual character of the existing environment. According to the FAA's 1050.1F Desk Reference, visual effects include light emissions, visual resources, and visual character. Light emissions can be produced by emanating light into the surrounding environment. Examples include airfield and apron floodlighting, navigational aids, parking facility lighting, and roadway lighting. Visual resources include buildings, cultural properties, and other visually important sites that can be visually impacted by airport development. Finally, visual character pertains to the overall visual landscape of the existing environment where the proposed development is located.

To assess the potential light emissions impacts, proposed airport lighting should be evaluated to determine if it would create an annoyance or interference to the surrounding community. A visual impact occurs when consultation with federal, state, or local agencies, tribes, or the public shows that these effects contrast with existing environments and are considered objectionable. Any proposed lighting would be installed entirely on airport property and would not differ drastically from existing installations. If proposed projects relating to this master plan include installing lighting on off-airport property or if proposed lighting differs from existing conditions, further analysis will need to occur.



2.14 Cumulative Impacts

The depth of a cumulative impacts analysis should be commensurate with the potential for significant impacts. The scope and extent of the analysis will vary by project type, geographic location, the potential to impact resources, and other factors such as the current condition of potentially affected impact categories. Cumulative impacts are affecting the proposed action would have on a particular resource when added to impacts on that resource due to past, present, and reasonably foreseeable actions within a defined time and geographical area.

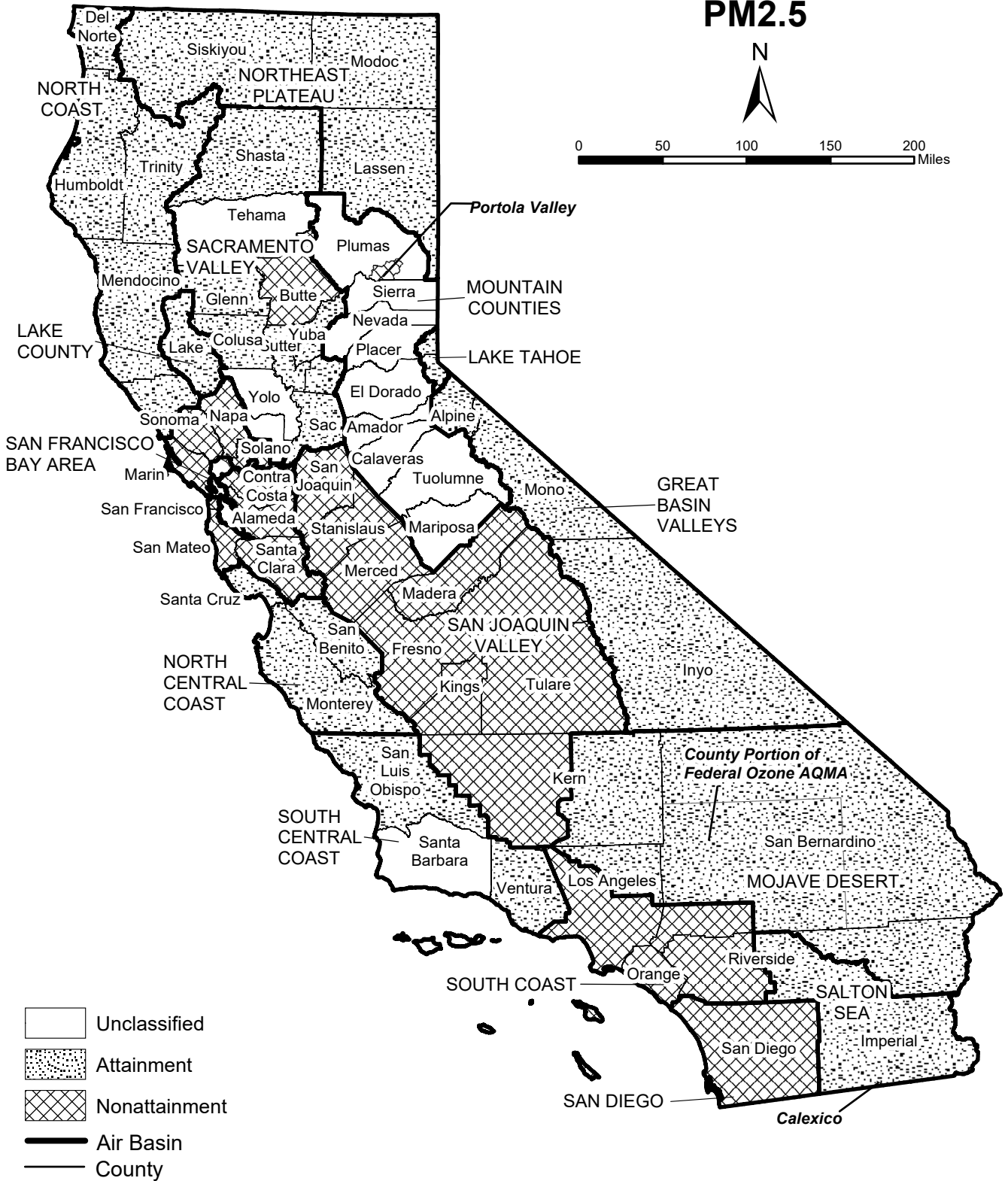


Appendix A - Area Designations for State Ambient Air Quality Standards

2020 Area Designations for State Ambient Air Quality Standards PM₁₀



Area Designations for State Ambient Air Quality Standards PM2.5



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 B - Potentially Impacted Threatened and Endangered Species



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)).

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

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

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 Fisheries¹, 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 final critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/8193	Endangered
Least Bell's Vireo <i>Vireo bellii pusillus</i> There is final critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/5945	Endangered
Southwestern Willow Flycatcher <i>Empidonax traillii extimus</i> There is final critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/6749	Endangered

Amphibians

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

Insects

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

Crustaceans

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

Flowering Plants

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

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	Agelaius tricolor	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-vech	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 C - Protected Farmland within Proximity of Project

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> .

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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

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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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

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.

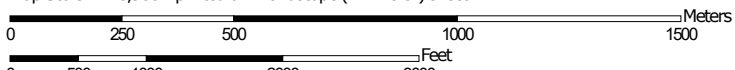
Soil Map

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%
Totals for Area of Interest		750.3	100.0%

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

Custom Soil Resource Report

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, tal
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

Custom Soil Resource Report

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

Custom Soil Resource Report

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

Custom Soil Resource Report

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

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)

Prime and other Important Farmlands—Monterey County, California		
Map Symbol	Map Unit Name	Farmland Classification
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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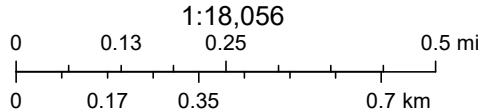
Appendix D - Registered EPA Sites within Airport Property

Salinas Municipal Airport



April 1, 2022

- Hazardous Waste (RCRAInfo)
- Toxic Releases (TRI)
- Hazardous Waste (RCRAInfo)
- Search Result (point)



Esri Community Maps Contributors, City of Salinas, California State Parks, Esri, HERE, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS,





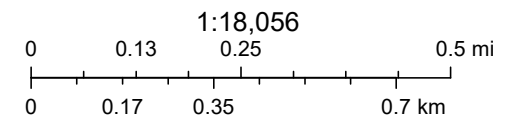
Appendix E - Alisal Creek Alignment

WATERS GeoViewer Print Map



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

-  TMDLs Line
-  303(d) Line



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 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, NINGS12
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)

- * 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

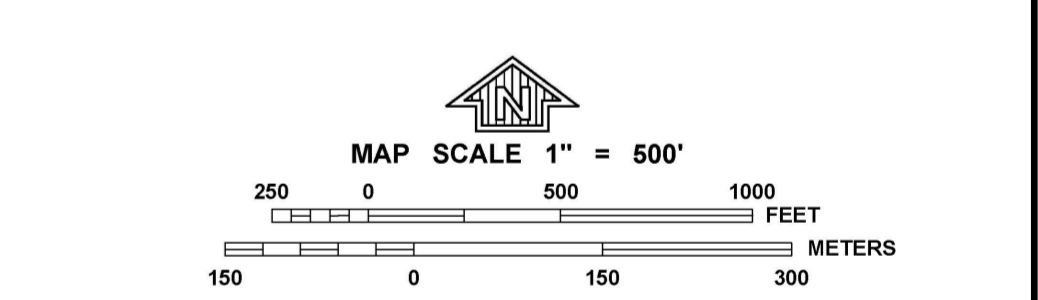
MAP REPOSITORY
Refer to listing of Map Repositories on Map Index

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 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.