Ecological site group R019XG908CA Sandy Bottom

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Key Characteristics

- located on basin floors
- sandy texture

Provisional. A provisional ecological site description has undergone quality control and quality assurance review. It contains a working state and transition model and enough information to identify the ecological site.

Physiography

This ESG is found on valley toe slopes ranging from 2-9% at elevations that go from 30 to 350 feet.

Climate

The average annual precipitation of this MLRA covers a diverse landscape of valleys and mountains and can range anywhere from 8 to 53 inches (215 to 1,354 millimeters), increasing with elevation. Most of the rainfall occurs as low- or moderate-intensity, Pacific frontal storms during winter. Rain can turn to snow at the higher elevations. A little snow may fall in winter, but it does not last. Summers are dry, but fog provides some moisture along the coast. The average annual temperature is 38 to 67 degrees F (3 to 19 degrees C). The freeze-free period averages 310 days in the valleys, 245 days in the mountains, and ranges from 125 to 365 days along the coast. It decreases in length with elevation. The longest freeze-free period occurs at the lower elevations along the western edge of the area.

Soil features

The soils of this ESG are varied, but will likely be sandy-skeletal or sandy, deep, and excessively well drained.

A representative soil for this ESG is the Soboba soil, a sandy-skeletal, mixed, thermic Typic Xerofluvent.

Vegetation dynamics

This ESG is dominated by low density of chamise chaparral with a significant cover and density of grasses and forbs. Fire occurs regularly in this ESG and influences habitat structure. Mature chamise is single layered and average 1 to 2 m (3.3 to 6.6 ft) in height on these excessively well drained soils. Total shrub cover may be considerably lower than other chamise dominated sites due to the extremely xeric, nutrient poor soils.

In southern California, white sage, black sage, and California buckwheat are common associated species at lower elevations and on more recently disturbed sites. After fire, the primary disturbance on this ESG, young stands of chamise recovering from fire with greater than 20 percent absolute shrub cover and relatively short-lived subshrubs such as yerba santa are present.

Major Land Resource Area

MLRA 019X Southern California Coastal Plains and Mountains

Subclasses

- R019XD070CA–SANDY BASIN
- R019XG908CA–Sandy Bottom

Correlated Map Unit Components

 $23477466,\,22643238,\,22643726,\,22643964,\,22643966,\,22643976,\,22643980,\,22643983,\,22673385,\,226738276776,\,2267672762,\,22673676,\,22673827,\,226738276,\,22673676,\,2267367$

Stage

Provisional

Contributors

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State and transition model

R019XG908CA - Sandy Bottoms



Reference State Community Pathways

1.1a This community pathway occurs over time without vegetation management or major disturbances.

1.1b This community pathway occurs following a high severity fire. A prescription of mechanical clearing and burning of slash may also produce the same results.

1.2a This community pathway occurs over time without vegetation management or major disturbances.

1.2b This community pathway occurs following a moderate to high severity fire. A prescription of mechanical clearing and burning of slash may have some success in mimicking natural dynamics.

1.3a This community pathway occurs over time and normal progression.

1.4a This community pathway occurs following a high severity fire.

State 2 Community Phase

Community 2.1 - This community phase represents all the varied expressions of non-native and native annual grasses and forbs that may be found across this ecological site concept.

State 3 Community Phase

Community 3.1 - This community phase represents all the varied land uses that significantly alter this ecological site. This is an extremely varied community phase that includes all types of alterations that so significantly alter the ecological site that it is permanently changed and no longer has typical or even representative ecological dynamics.

Transitions

T1 This transition is caused by repeated fires that have removed the chamise seed source and/or significant human alterations that force this ecological site over a threshold and change the function and structure of this site in extensive ways that serve mostly intensive agriculture or urban/housing developments.

R1 This restoration pathway occurs only when significant time and money inputs are focused on returning ecological function and native seed source to the site.

T2 This transition is caused by significant human alterations that force this ecological site over a threshold and change the function and structure of this site in extensive ways.

R2 This restoration pathway occurs only when significant time and money inputs that would require constant maintenance and weed management and should be focused on areas that have not been permanently altered by urban developments.

Citations