

# Ecological site group R019XG909CA

## Terrace

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### Key Characteristics

- located on terraces

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 commonly on terraces, escarpments, inset fans, washes, and old alluvial fans. Elevations range from sea level to 3000 feet, with slopes that vary depending on the landforms.

### 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

This ESG is found on varied soils that are typically Alfisols or Mollisols with varying soil textures and depths.

Some soils representative of this concept include Huerhuero, Rincon, Chualar, and Ramona.

### Vegetation dynamics

Chamise chaparral may consist of nearly pure stands of chamise, a mixture of both, or with other shrubs. The purest stands of chamise occur on xeric, south-facing slopes. Toyon, sugar sumac, poison oak, redberry, and California buckthorn are commonly found in drainage channels and on other relatively mesic sites. At upper elevations or on more mesic exposures, chamise mixes with ceanothus, manzanita, scrub oak, and laurel sumac. In southern California, white sage, black sage, and California buckwheat are common at lower elevations and on recently disturbed sites.

Fire is the primary disturbance initiating secondary succession in chamise chaparral. Annuals, perennial herbs, and subshrubs are abundant for several years after a fire. Shrubs begin to appear either as seedlings or rootcrown sprouts beginning the first growing season after burning. As the habitat matures, shrub cover and height increase and herbaceous cover declines. Relatively short-lived shrubs and subshrubs, such as California buckwheat, common deerweed, and most species of ceanothus, may be absent or rare in older stands. After each fire, populations of these species and post-fire herbs regenerate quickly from the seed bank in the soil (Sweeney 1956). In old unburned stands, species diversity is low, growth rates are slow, long-lived shrubs accumulate dead material, and some shrubs may die.

The general schedule of post-fire recovery in chaparral. Herbaceous cover is dominant for 1 to 3 years. Long- and

short-lived shrubs increase in height and cover but canopies generally do not overlap for 3 to 15 years after fire. From 10 to 30+ years, short-lived shrubs die, shrub cover increases, the canopy closes, and dead material begins to accumulate. In southern California, considers chamise older than 60 years to be senescent, but this may occur in 20 to 25 years in northern California. Pure chamise in the San Bernardino Mountains reaches 25 percent cover in 10 years, 50 percent in 40 years, and 70 percent in 55 years. However, recovery rates and peak cover vary with soil type, climatic regime, and slope. For example, most mesic sites supporting chamise and ceanothus reach 50 percent cover in 10 years and 90 percent cover in 25 years. Some sites may reach 90 percent cover in 10 years. At 50 years, shrub cover in mixed stands of chamise and ceanothus may decline to 80 percent total shrub cover as ceanothus dies.

California Wildlife Habitat Relationships System  
California Department of Fish and Game  
California Interagency Wildlife Task Group  
Chamise-Redshank Chaparral  
By A. Sidney England

## Major Land Resource Area

MLRA 019X  
Southern California Coastal Plains and Mountains

### Subclasses

- R019XD001CA–CLAYEY
- R019XD029CA–LOAMY
- R019XD034CA–CIENEGA
- R019XD035CA–SANDY
- R019XD047CA–Coastal Terrace 14-16" p.z.
- R019XD060CA–SHALLOW LOAMY
- R019XD061CA–CLAYPAN
- R019XD062CA–ACID CLAYPAN
- R019XD063CA–CLAYEY 9-20"
- R019XD065CA–SANDY 9-20"
- R019XD068CA–SILTY BASIN
- R019XD069CA–SANDY ALLUVIAL
- R019XD074CA–Salt Marsh 14-16" P.Z.
- R019XD925CA–LOAMY EAST
- R019XD964CA–LOAMY 9-20"
- R019XG909CA–Terrace
- R019XI103CA–Riparian Areas 13-31" p.z.
- R019XI116CA–Clayey slopes 13-31" p.z.
- R019XI118CA–Marine terraces 21-34" p.z.

### Correlated Map Unit Components

23481756, 23481761, 23481769, 23481771, 23481789, 23481864, 23481867, 23481871, 23481874, 23481707, 23482147, 23482149, 23482150, 23482156, 23482158, 23482163, 23482166, 23482332, 23482337, 23482342, 23482346, 23482351, 23482403, 23482406, 23482408, 23482411, 23482413, 23482479, 23482484, 23482490, 23482493, 23477404, 23477407, 23477415, 23477420, 23477425, 23477463, 23477470, 23477542, 23477546, 23477550, 23477552, 23477555, 23477556, 23477560, 23477563, 23477564, 23477570, 23477571, 23477574, 23477588, 23477659, 22665283, 22665615, 22665436, 22665441, 22665193, 22665531, 22665036, 22665040, 22665049, 22665534, 22665370, 22665233, 22665123, 22665262, 22665310, 22665264, 22665603, 23237078, 23237083, 23237085, 23237090, 23237093, 23237098, 23237102, 23237103, 23237290, 23237294, 23237302, 22665828, 22665829, 22665800, 22666244, 22666069, 22666299, 22666606, 22666551, 22666554, 22666816, 22666820, 22666331, 22666634, 22666736, 22666393, 22666459, 22666464, 22666740, 22666471, 22666641, 22666833, 22666836, 22666646, 22666355, 22666664, 22666360, 22666671, 22666495, 22666500, 22644152, 22644156, 22644026, 22644161, 22644162, 22644280, 22644368, 22644036, 22643032, 22643071, 22643553, 22643075, 22644316, 22643096, 22643574, 22643100, 22643790, 22643796, 22643155, 22643622, 22643158,

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**Stage**

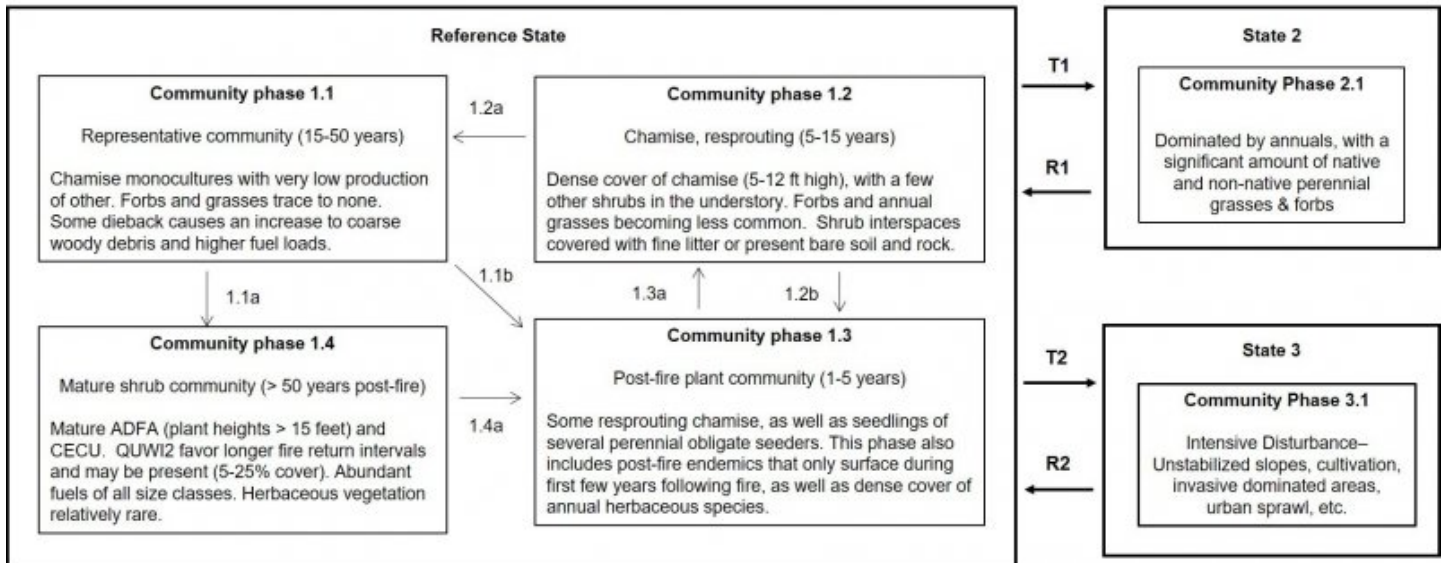
Provisional

**Contributors**

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**State and transition model**

**R019XG909CA - Terraces**



#### 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