

WETLANDS IN THE COASTAL ZONE



Wetlands may be identified by the presence of representative vegetation, soils, or hydrology. In the coastal zone, wetlands are delineated using technical methods and parameters established by the federal government.



What is a Wetland?

“Wetland” means lands within the coastal zone which may be covered periodically or permanently with shallow water and include saltwater marshes, freshwater marshes, open or closed brackish water marshes, swamps, mudflats and fens.

(Coastal Act Section 30121)

How Are Wetlands Delineated In The Coastal Zone?

Wetland Determination

Field Survey

Wetland Delineation

- Jurisdictional wetland determinations are typically based on a preliminary review of available information such as soil maps, aerial photos, and the [National Wetlands Inventory](#). Definitions of what constitutes a wetland are not necessarily equivalent across jurisdictions. In the coastal zone, the Coastal Act definition of wetlands (see above) applies and is further clarified by [Section 13577 of the Commission’s regulations](#).
- Wetland delineations are used to locate the specific boundaries of a wetland, and rely on the methods of the [U.S. Army Corps of Engineers \(ACOE\) 1987 Wetland Delineation Manual](#) and the applicable regional supplement, which in California includes those for the [Arid West Region \(September 2008\)](#) and [Western Mountains, Valleys, and Coast Region \(May 2010\)](#).
- In the coastal zone, wetlands are delineated by the presence of at least one wetland parameter (i.e., wetland hydrology, hydric soils, or hydrophytic vegetation). Each parameter represents a specific delineation criteria and is informed by the observation of field indicators, which are associated with underlying physical, chemical, and biological conditions.
- Wetlands that are manmade, altered, or degraded are generally afforded the same level of protection as healthy natural wetlands under the Coastal Act.



WETLAND HYDROLOGY

Wetland hydrology refers to the timing and extent of flooding or soil saturation. This criteria relies on indicators like the presence of surface water, a high water table, saturated or cracked soils, algal or salt crusts, water marks, aquatic invertebrates, signs of reduced iron, and others. Direct observations of hydrology during wet seasons are the most useful.

HYDRIC SOILS

A hydric soil is one that formed under conditions of saturation, flooding, or ponding that has been sustained long enough during the growing season to develop anaerobic conditions in its upper layers. The *USDA-NRCS Field Indicators of Hydric Soils in the United States* (Version 9.0, 2024) is the accepted standard for making hydric soils determinations.



HYDROPHYTIC VEGETATION

Hydrophytes are plants that have adapted to grow in water or waterlogged substrates where oxygen is limited. Rather than relying on the presence of any particular indicator species, vegetation is assessed as an assemblage to determine if hydrophytes are collectively prevalent or other plants show morphological adaptations for life under wet conditions. Wetland species indicator status should be recognized following the most current version of the ACOE National Wetland Plant List.

For More Information

[California Aquatic Resource Inventory](#)
[Coastal Commission Workshop on Wetlands](#)
[EcoAtlas Mapper](#)
[USDA Soil Information](#)
[USDA Web Soil Survey](#)
[USACE Arid West Regional Field Data Sheet](#)
[USACE Western Mountains, Valleys, & Coast Field Data Sheet](#)
[USFWS National Wetlands Inventory](#)

The **California Coastal Commission** is responsible for confirming wetland delineations based on the review and recommendation of its staff for development under its jurisdiction. Contact the relevant Commission District Office for wetland-related project questions.