

# **National Wetlands Inventory Map Report for Santa Rosa SE**

**Project ID:** Santa Rosa SE

**Project Title or Area:** Santa Rosa SE 1:100,000

**Project area covers the following USGS 7.5 minute quadrangles contained within the Santa Rosa SE 1:100,000**

SANTA ROSA SE (1:100,000):  
Rutherford  
Yountville

## **Source Imagery:**

Type: CIR  
Scale: 1:65,000  
Date: 4/85

## **Collateral Data:**

- USGS 1:24,000 topographic quadrangles
- USDA Soil Surveys of Napa and Sonoma Counties
- Classification of Wetlands and Deepwater Habitats of the United States (Cowardin et al. 1979)
- Bailey's Description of the Ecoregions of the United States
- Hydric Soils of the United States
- National List of Plant Species That Occur in Wetlands: California (Region 0)

**Inventory Method:** The delineations were done by manual interpretation of 1985 aerial photographs. The interpretation was supplemented with field investigations in order to correlate varying signatures found on the photography to actual ground conditions. Vegetation, soils, and hydrologic conditions were examined at field sites. The delineations were transferred to 1: 24,000 scale USGS quadrangle base maps using a Zoom Transfer Scope. The final maps were published in 1987 and converted to a digital format in 2005.

**Data Limitations:** The user of the maps is cautioned that, due to the limitation of mapping primarily through aerial photo interpretation, a small percentage of wetlands may have gone unidentified. Since the photography was taken during a particular time and season, there may be discrepancies between the map and current field conditions. Changes in landscape which occurred after the photography was taken would also result in discrepancies.

**Classification:** The wetland and deepwater habitat classifications that appear in the Rutherford and Yountville quadrangles are in accordance with the *Classification of Wetlands and Deepwater Habitats of the United States* (Cowardin et al. 1979). All other areas are classified as upland.

### **General Description of the Project Area:**

The project area covers two 1:24,000 USGS quadrangles centered in the Napa Valley area in Northern California, approximately 20 miles north of San Pablo Bay. Most of the area is within Napa County. The southwest portion of the Rutherford quad is in Sonoma County.

Napa County is part of the hilly to steep mountains of the California Coast range. The county is characterized by a number of northwesterly parallel mountain ridges and intervening valleys (e.g., Napa Valley) of varying widths.

The soils in Napa valley are generally very deep and have high potential productivity. They are used for vineyards, orchards, and pastures. Three general soil associations cover most of the project area:

**Bale-Cole-Yolo.** Nearly level to gently sloping, well drained and somewhat poorly drained loams, silt loams, and clay loams on floodplains, alluvial fans, and terraces. This association occurs on the floor of Napa Valley.

**Rock Outcrop-Kidd-Hambright.** Rock outcrop and gently sloping to very steep, well drained very stony loams and loams on upland. This association is typical of the mountain ridges on the east side of Napa Valley.

**Maymen-Lodo-Felton.** Steep to very steep, somewhat excessively drained and well drained gravelly loams and loams on uplands. Typical of the ridges to the west of Napa Valley.

In summer, Napa County is protected from the hot weather of the Central Valley by the coastal mountain ranges. The Pacific Ocean provides a source of cool, moist air in summer, and this steady flow of marine air holds temperatures at a moderate level. Average precipitation in the City of Napa is 23.9 inches.

**Description of Wetland Habitats:** The Lacustrine, Riverine, and Palustrine systems are represented in the subject area. Deepwater habitats include perennial rivers such as Napa River and lakes and reservoirs such as Lake Hennessey and Rector Reservoir.

Wetlands include narrow forested and shrub dominated zones on banks and benches along streams; broader floodplain areas that are seasonally flooded and usually dominated by trees; wet meadows; and seeps near the base of hills. Many small wetlands have been created or modified by human activity (e.g., excavation) such as farm ponds and impoundments.

**Description of wetland habitats by Cowardin (1979) classification:**

L1UBH	Permanently flooded, deepwater habitat greater than 20 acres in size (e.g., natural lake).
L1UBHh	Permanently flooded, deepwater habitat greater than 20 acres in size that is created by an impoundment (e.g., reservoir).
R2UBH	Permanently flooded lower perennial rivers.
R2USC	Seasonally flooded unconsolidated substrate (e.g., sand bars) associated with lower perennial riverine systems.
R4SBF	Semi-permanently flooded riverine channels.
PEMA	Temporarily flooded wetlands (e.g., wet meadows) dominated by persistent herbaceous vegetation. Common plants include <i>Juncus</i> spp., <i>Rumex</i> spp., and grasses.
PEMC	Seasonally flooded wetlands dominated by persistent herbaceous vegetation. Common plants include <i>Juncus</i> spp., <i>Carex</i> spp., and <i>Eleocharis</i> spp.
PEMF	Semi-permanently flooded depressions comprised of erect, rooted, herbaceous vegetation (e.g., <i>Scirpus</i> spp., and <i>Typha</i> spp.).
PEMH	Permanently flooded depressions comprised of erect, rooted, herbaceous vegetation.
PSSA	Temporarily flooded scrub-shrub wetland typically found in drainages, along streams, and on the floodplains of rivers. Willow ( <i>Salix</i> spp.) is common in these wetland areas.
PSSC	Seasonally flooded scrub-shrub wetland typically found in drainages, along streams, and on the floodplains of rivers. Willow ( <i>Salix</i> spp.) is common in these wetland areas.
PFOA	Temporarily flooded forested wetland found along streams and on river floodplains. Cottonwood ( <i>Populus</i> spp.) is common in these wetland areas.

PFOC	Seasonally flooded forested wetland found along streams and on river floodplains. Cottonwood ( <i>Populus</i> spp.) is common in these wetland areas.
PUSC	Seasonally flooded basins with little or no vegetation.
PUBF	Semi-permanently flooded ponds.
PUBH	Permanently flooded ponds.

**Note: Some attributes for wetland polygons may show a mix of wetland classes. For example, a seasonally flooded wetland containing a mix of scrub-shrub and emergent vegetation will be labeled PEM/SSC.**

**The codes listed above may be followed by a special modifier described below:**

<b>SPECIAL MODIFIER</b>	<b>DESCRIPTION</b>
<b>b</b>	Beaver - Wetland is created, modified or supported by the action of beavers. The beaver modifier is used on all delineations where visible hydrologic changes have occurred due to beaver activity.
<b>d</b>	Partially Drained - The water level has been artificially lowered, but the area is still classified as wetland because soil moisture is sufficient to support hydrophytes. This modifier is also used to indicate extensive ditch networks in wetlands where, due to the complexity or narrow width of the ditches, individual delineation is not possible.
<b>f</b>	Farmed - The soil surface has been mechanically or physically altered for production of crops, but hydrophytes will become re-established if farming is discontinued.
<b>h</b>	Diked/Impounded - Created or modified by a man-made barrier or dam which obstructs the inflow or outflow of water.
<b>r</b>	Artificial - Substrates classified as Rock Bottom, Unconsolidated Bottom, Rocky Shore and Unconsolidated Shore that were replaced by man using natural or synthetic materials.
<b>X</b>	Excavated - Lies within a basin or channel excavated by man.

**References:**

Cowardin, L.M., V. Carter, F.C. Golet, and E.T. Laroe. 1979. *Classification of Wetlands and Deepwater Habitats of the United States*. United States Department of the Interior, Fish and Wildlife Service, FWS/PBS 79/81, Washington, D.C.

USDA. 1978. *Soil Survey of Napa County, California*. United States Department of Agriculture, Soil Conservation Service, in cooperation with the University of California Agricultural Experiment Station, Washington D.C.

USDA. 1972. *Soil Survey of Sonoma County, California*. United States Department of Agriculture, Soil Conservation Service, in cooperation with the University of California Agricultural Experiment Station, Washington D.C.

U.S. Fish and Wildlife Service. 1988. *National List of Plant Species that Occur in Wetlands: California (Region 0)*. United States Department of the Interior, Fish and Wildlife Service, Washington, D.C.

U.S. Fish and Wildlife Service. 1995. *Photointerpretation Conventions for the National Wetlands Inventory*. United States Department of the Interior, Fish and Wildlife Service, Washington D.C.