

LARGE SCALE COPY

MAPPING CONVENTIONS

SAN JOAQUIN VALLEY, CALIFORNIA

Field reconnaissance was conducted March 1990. Field conditions were very dry, as the valley is in the middle of a four year drought. When available, the 1987 photography will be followed except where our field notes indicate a drier water regime (e.g. Kern River was classified as seasonal in 1987 and was field checked as intermittently flooded in 1990). However, we want our delineations to reflect normal conditions as best as possible.

Upland classifications will also be used in accordance with the San Joaquin Valley Upland Habitat Classification System.

1. 1987 mapping conventions will be adhered to where possible. However, no subclasses will be used.
2. Split classes should be used sparingly.
3. Irrigation canals are artificially controlled and should be classified R4SBKCx. If concrete lined the artificial substrate modifier (r) will also be used (R4SBKCrX). Lateral canals less than pen width will not be delineated.
4. Natural streams - follow topo.
 - Perennial use "H" (permanent water regime).
 - Intermittent use "A-C" (temporary and seasonal water regimes) exceptions if photo shows water use "C".
5. Vegetated streams and rivers: as a general rule perennials on topo will indicate seasonal flooding, whereas intermittents on topo will indicate temporary flooding. Otherwise go with your photo return where possible to decide appropriate water regime. In emergent areas darker red return will indicate seasonal flooding where as lighter red to pink will indicate temporary flooding. However, some dark purple and lighter pink areas were not wet. In those instances, the geographic situation must be taken into account. In forested and scrub-shrub areas the denser darker red canopy with the darker understory will indicate seasonal flooding whereas a lighter red canopy with a sparse understory will indicate temporary flooding.
6. Linear wetlands in mountainous areas should be delineated on a conservative basis. Show hydrologic connection when delineating these wetlands. Avoid short disjointed linears.

7. The artificial water regime (K) will be used where pumps and/or siphons control the duration and amount of flooding. Example being treatment plants, and some wildlife management areas where flood controls (pumps and levees) are used to attract wetland wildlife. Kern and Pixley wildlife refuges are good examples of flood control in wildlife management areas. Field reconnaissance was conducted in these areas and appropriate water regimes and modifiers will be used.
8. Small ponds and impoundments will be classified PUBH,F (x,h). Small excavated ponds on the Bakersfield 1:250,000 and noted as "numerous small reservoirs" were permanent on topo yet dry at time of field work. These will be classified as PUSC_x. Water regimes will be used for impounded and excavated ponds. The southern San Joaquin Valley is much drier and more seasonal water regimes will be used for these excavated and impounded ponds.
9. The Tulare lake basin was flooded on the photography, yet farmed at time of field work. collateral information received at the Visalia SCS field office indicated the basin floods maybe once in every ten to twenty years and is artificially drained with pumps when flooding occurs. We classified Tulare Lake as a farmed wetland (Lf). We also classified Brush Lake as Lf.

Percolation ponds; these areas were also farmed at time of field work. We will also use the farm modifier on these area (Pf or Lf). These percolation ponds are used for holding surplus water when necessary.
11. Riparian forested areas: these areas on the photography were hard to determine the A-C break. It will be necessary to use all collateral data (topo, soil, etc.) to make this subtle break.
12. Iodine bush/salt grass/ slat flats "J" areas are mixed purplish to brown and gray/white returns on photography - try to generalize these areas. These returns are mixed however it is possible to pull out white areas as PUSJ, smooth brownish purple gray areas as PEMJ, and darker brownish purple gray as PSSJ.
13. Seeps; these were numerous in mountainous areas exhibiting a varied return ranging from pink to red with degree of wetness. These seeps, will be classified PEMB. Springs; springheads exhibiting open water on photo will be classified PUBF. Springheads exhibiting emergent vegetation will be classified according to photo return.

14. San Luis Dam area - San Luis Dam will be classified as L1UBHh. The shoreline will be classified as L2USJh (intermittently flooded). This signature will be delineated with dashed linears. In addition, all signatures within spillway elevation will carry the h modifier.
15. San Joaquin River - The river itself will be classified as R2UBH. The basic convention of PFOC along first bench and PFOA along second bench will be followed whenever possible. During field reconnaissance, dominant forested species observed were cottonwoods, willows, and valley oak. Valley oak is a facultative upland species and will be classified as either PFOA or U41 depending upon its location in the floodplain. Also, the river was observed in many areas to be deeply cut. Attention to topo contours and photo signatures will be required so over delineation of the floodplain can be avoided.
16. Lake Buena Vista will be classified as L1UBKHx. Islands in lake will be delineated as upland.
17. Goose Lake will be classified as L2ABF and L2UBF and will carry the "h" modifier.
18. The California Aqueduct will be labeled R2UBKHrx to be consistent with pre-existing maps.

GP/drs.nwi

Attachment A

SAN JOAQUIN VALLEY UPLAND HABITAT CLASSIFICATION SYSTEM

- U10 Developed Land (five acres minimum size, all non-farm, developed land not included within other categories, e.g., residential, commercial, industrial development, transportation, barren urban land, gravel pits, and rock quarries).
- U20 Agricultural (five acres of minimum size except "Other Agricultural Land" which will have a minimum size of two acres).
 - U21 Cropland (intensively managed, cultivated, and usually irrigated farmland, both row and field crops, including cotton, tomato, bean, alfalfa, irrigated and/or improved pasture, unplanted fields, barren and fallow agricultural land).
 - U22 Orchards (regularly spaced fruit and nut trees).
 - U23 Woodlots (managed forest on farmland, e.g., Eucalyptus groves).
 - U24 Vineyards (grapes).
 - U25 Other Agricultural Land (two acres minimum size, livestock feedlots, farmsteads, including houses and adjacent yards, barns, poultry and livestock sheds, other out buildings, and parking or farm implement storage areas).
- U30 Grassland and Shrubland (five acres minimum size)
 - U31 Grassland/Pasture (annual grassland, unimproved pasture with less than thirty-three percent shrub cover).
 - U32 Mixed Grassland and Shrub (grassland/pasture with greater than thirty-three percent and fifty percent shrub cover).
 - U33 Chaparral (dense communities of needle-leaved and broad-leaved evergreen sclerophyll shrubs, varying in height from three feet to ten feet, rarely to sixteen feet. Vegetation is often dense and impenetrable, and an understory is usually lacking. Dominants include chamise (*Adenostoma fasciculatum*), manzanita (*Arctostaphylos* spp.), and California lilac (*Ceanothus* spp.). Occurs on dry slopes and ridges in the Coast Range, and below the Montane Coniferous Forest in the Sierra Nevada).
 - U34 Other shrubland (shrub dominated rangeland, with greater than fifty percent cover as shrub).

U40 Forest (defined as greater than twenty percent tree cover).
Trees other than Valley Oak and Blue Oak.

U41 Valley Oak (mature stand of large canopied valley oak (*Quercus lobata*), Zero to one-hundred and fifteen feet tall, well-spaced to moderately dense, typically without a well developed woody understory. Tree cover is comprised of fifty percent or more valley oak. If tree cover of valley oak and blue oak are equal, designate as valley oak forest. Valley grassland species dominate the areas between trees. This vegetation type is generally associated with high terrace portions of lower elevation central valley rivers. Valley oak may occur adjacent to other riparian types near streams, or as discontinuous isolated patches away from stream courses. Before extensive land clearing, these isolated patches would have been part of a larger woodland associated with the other riparian vegetation types. this vegetation type usually can be discerned from "Palustrine Forest" of the wetland classification system on the basis of: a darker color; well rounded, separated crowns in older stands; and tree shadows. Valley oak were found to be mainly in riparian habitat.

U42 Blue oak (medium tall, twenty feet to sixty-five feet, dense to open, broad-leaved deciduous forest of blue oak (*Quercus douglassii*). Tree cover is comprised of fifty percent or more blue oak. Locally may include a mixture of needle-leaved evergreen trees and/or shrubs, and in more open stands is underlain with annual grassland species. We found blue oak to occur in the foothills of the Sierra Nevada mountains, adjacent to the Central Valley (San Joaquin Valley).