United States Department of the Interior

FISH AND WILDLIFE SERVICE

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NATIONAL WETLAND INVENTORY

NOTES TO USERS

Cape San Martin to San Luis Obispo Bay, California

1:100,000 SCALE MAPS COVERED

CAMBRIA	(San Luis Obispo NW)
SAN LUIS OBISPO	(San Luis Obispo SE)

User Notes - Cambria and San Luis Obispo areas, California

1. Area Covered

The area covered is defined as Cambria and San Luis Obispo, U.S.G.S. 1:100,000 scale quadrangle maps (see attached map). The area is along the South Central California Coast extending from 35°00'N. lat. (approximately Santa Maria) to 36°00'N.lat. (approximately Lucia). The Cambria area extends to the interior to 121°00'W.long. (approximately Nacimiento Reservoir) and the San Luis Obispo area to 120°00'W.long. (the Carrizo Plain).

2. Map Preparation

Wetland classification for the National Wetlands Inventory (NWI) map overlays is in accordance with "Classification of Wetlands and Deep-Water Habitats of the United States (An Operational Draft)", Cowardin, et al, 1977. Delineations were produced through interpretation of U.S.G.S. black and white aerial photography at a scale of 1:80,000 taken during May 1973 and May, June and October 1976. Collateral aerial photography used included color infrared photography taken November 1973.

Limited field checks were conducted during the fall of 1978.

The photographs were viewed stereoscopically at 6X magnification. Delineations were enlarged using a zoom-transferscope to 1:24,000 or 1:62,500 overlays to fit USGS 7 1/2' or 15' topographic map series, respectively. Wetland overlays are included for the following topographic maps:

Cambria 1:100,000 scale map area - Williams Hill, Bryson, Pebblestone Shut-In, Cambria, Pico Creek, San Simeon, Burnett Peak, Jolon, Piedras Blancas, and Cape San Martin (15').

San Luis Obispo 1:100,000 scale map area - Cayucos, Morro Bay North, Morro Bay South, Port San Luis, Atascadero, San Luis Obispo, Pismo Beach, Santa Margarita, Lopez Mtn., Arroyo Grande NE, Oceano, Wilson Corner, Santa Margarita Lake, Far Spring Ridge, Nipomo, Camatta Ranch, Pozo Summit, Calwell Mesa, Huasna Peak, La Panza Ranch, La Panza, Los Machos Hills, Chimney Canyon, La Panza NE, California Valley, Branch Mtn., and Miranda Pine Mtn.

The Project Officer for production of the wetland maps was Dennis Peters, Regional Wetland Coordinator, U.S. Fish and Wildlife Service, Region 1, Lloyd 500 Building, 500 N.E. Multnomah Street, Portland, Oregon 97232, telephone (503) 231-6154. Aerial photo interpretation was completed by Area Information Systems (AIS), Crestline, California. Maps were prepared by the NWI National Team in St. Petersburg, Florida.

3. User Caution

The map document was prepared primarily by stereoscopic analysis of high altitude aerial photographs. Wetlands were identified on the photographs based on vegetation, visible hydrology, and geography. The aerial photographs typically reflected conditions during the specific year and season when they were taken. In addition, there is a margin of error inherent in the use of aerial photographs. Thus a detailed on-the-ground and historical analysis of a single site may result in revision of the wetland boundaries established through photographic interpretation. In addition, some small wetlands and those obscured by dense forest cover may not be included on the map document.

Federal, State, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either design or products of this inventory, to define limits of proprietary jurisdiction of any Federal, State, or local government or to establish the geographical scope of regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate Federal, State, or local agencies concerning specific agency regulatory programs and proprietary jurisdictions that may affect such activities.

Any noted discrepancies, land use changes, or additional information regarding this map or other NWI activities should be provided to the Regional Wetland Coordinator, U. S. Fish and Wildlife Service.

4. Wetland Communities

Deep-water habitats are areas that are permanently flooded (except during periods of extreme drought) and are characterized by open water on the aerial photography. These habitats are classified as open water, or where collateral data or field checks are available, as unconsolidated bottom.

Unvegetated wetlands may include beach/bars, flats, and streambeds. Estuarine flats are seasonally covered with algal mats and/or lined with various emergent vegetation. Scattered patches of eelgrass (Zostra spp.) may be present on these flats. Estuarine streambeds are tidal sloughs that are dewatered during low tide. These are often lined with pickleweed (Salicornia virginica), bulrush (Scirpus spp.), saltbush (Atriplex patula), and/or frankenia (Frankenia grandifolia).

Estuarine intertidal aquatic beds are comprised of eelgrass (Zostera spp.). Eelgrass is tolerant to long-term submergence and is generally associated with an irregularly exposed water regime modifier, i.e., substrate exposed less often than daily.

Estuarine intertidal emergent wetlands are extremely important wetland types identified. These habitats are often referred to as salt marshes. Intertidal emergent wetlands are characterized by a regularly flooded water regime modifier, i.e., flooded daily; or an irregularly flooded

water regime modifier, i.e., flooded less often than daily. The dominant plant species include pickleweed, jaumea (Jaumea carnosa) and frankenia. Associated species include saltgrass (Distichlis spicata) and rush (Juncus spp).

The riverine system includes tidal, lower perennial and upper perennial open water wetlands and intermittent streambeds. The riverbeds are usually unvegetated although they are generally lined with willow (Salix spp.), sycamore (Platanus racemosa), black cottonwood (Populus trichorcarpa) and various shrubs and berries. Where the riparian woody vegetation canopy obscured the streambed on the aerial photography, the units were mapped a Palustrine forested or scrub/shrub.

Palustrine forested and scrub/shrub wetlands are dominated by willow, black cottonwood, sycamore, and assorted berries and herbs. These areas are found as "riparian" strips. The classification of forested or scrub/shrub is determined by height of the woody vegetation - forested greater than 6 m and scrub/shrub less than 6 m.

Palustrine emergent wetlands are dominated by bulrush (Scirpus spp.), cattail (Typha spp.), and dock (Rumex spp.). Associated species include rush, pondweed (Potamogeton spp.) and watercress (Nasturtuim officinate).

Numerous farm ponds are included on the wetland maps. These are classified as palustrine, open water, permanently or semipermanently flooded with an artifically flooded modifier.

5. Sources of Additional Information

The purpose of the user notes is to provide general information regarding the production of the map and the wetlands found within the area of this map. It does not include descriptions of all wetlands found in the area nor complete species information. For additional information, the following publications are recommended:

Bailey, Robert G. 1978. Description of the ecoregions of the United States. U.S. Forest Service, U.S.D.A., Ogden, Utah 77 pp.

Cowardin, Lewis M., Virginia Carter, Francis C. Golet, and Edward T. LaRoe. 1977. "Classification of wetlands and Deep-Water Habitats of the United States (An Operational Draft)", U.S. Fish and Wildlife Service, October 1977.

Gerdes, Gene L., et al. 1974. The Natural Resources of Morro Bay. Calif. Dept. of Fish & Game. Coastal Wetland Series #8. 103 pp. w/app.

Mahrdt, Clark R., et al. 1976. Natural Resources of Coastal Wetlands in Northern Santa Barbara County, California Dept. Fish & Game/U.S. Fish & Wildlife Service, Coastal Wetland Series #14, 99pp. w/app.

Mason, Herbert L. 1969. A Flora of the Marshes of California. Univ. of Calif. Press, Berkeley. 879 pp.

Macdonald, Keith B. 1977. Coastal salt marsh. pp 263-94. In M.G. Barbour and J. Major (eds.). Terrestrial vegetation of California. John Wiley & Sons, Inc.

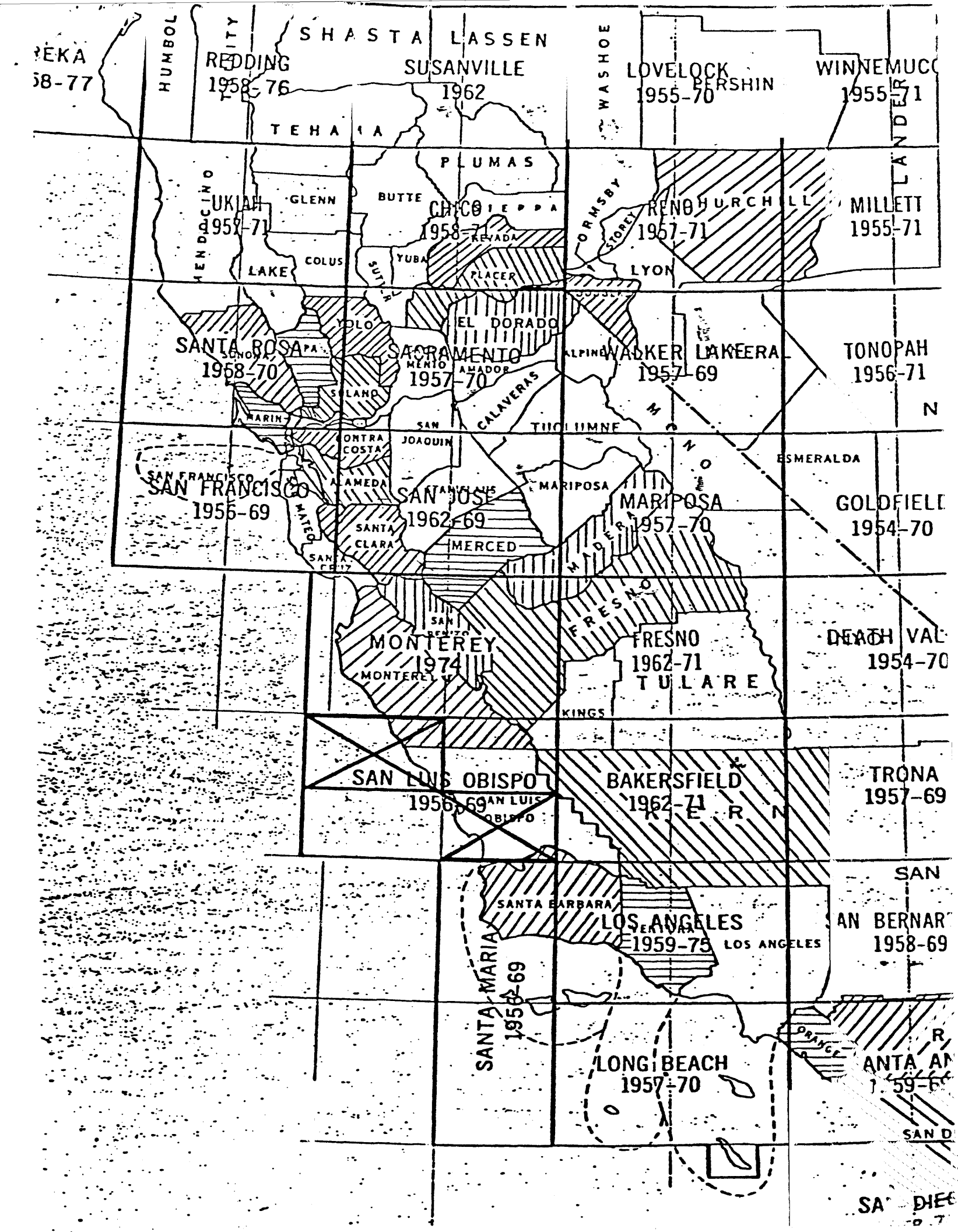
Shaw, Samuel P. and Gordon Fredine. 1956. Wetlands of the United States. U.S. Fish and Wildlife Svc., Circular 39, 67 pp.

Smith, Kent A., 1976. The natural resources of the Nipomo Dunes and wetlands. Calif. Dept. of Fish and Game/U.S. Fish & Wildlife Svc. Coastal Wetland Series #15, 106 pp. w/app.

U.S. Army Corps of Engineers. 1978. Preliminary guide to wetlands of the west coast. Technical Report Y-78-4, U.S. Army Engineer Waterways Experiment Station, Vicksburg, Miss. 66 pp.

U.S. Department of Interior. 1979. Concept plan for waterfowl wintering habitat preservation California coast. U.S. Fish and Wildlife Svc., Portland, OR 122 pp. w/app.

_____ 1972. Southern California estuaries and coastal wetlands, endangered environments. U.S. Fish and Wildlife Svc., Portland, OR. 16 pp.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HUMBOL
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1958-76
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WINNEMUCC
1955-71
TEHAMA
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COLUS
YUBA
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STOREY
RENO
1957-71
CHURCHILL
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1955-71
LYON
YOLO
EL DORADO
SANTA ROSA
1958-70
SONOMA
NAPA
SACRAMENTO
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AMADOR
ALPINE
WALKER LAKE
1957-69
TONOPAH
1956-71
SOLANO
CALAVERAS
MARIN
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CONTRA
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MARIPOSA
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GOLDFIELD
1954-70
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