



# National Wetlands Inventory

Ecological Services

Search NWI Website

[Home](#) | [Wetlands Data](#) | [Status and Trends](#) | [Wetlands Layer](#) | [Other Topics](#) | [National Wetlands Inventory](#) | [Contact Information](#)

## Regional Wetlands Coordinator - Region 8 (Pacific Southwest)

The Pacific Southwest Region includes California, Nevada and the Klamath Basin.



[Pacific Southwest Region Website](#)

[Pacific Region by State](#)

Last updated: 04/15/2014 13:13:01

[Home](#) | [Ecological Services Home Page](#) | [EFOs](#) | [Contact Us](#)  
[U.S. Fish and Wildlife Service](#) | [U.S. Fish and Wildlife Service](#) | [U.S. Fish and Wildlife Service](#) | [U.S. Fish and Wildlife Service](#) | [U.S. Fish and Wildlife Service](#) | [U.S. Fish and Wildlife Service](#) | [U.S. Fish and Wildlife Service](#) | [U.S. Fish and Wildlife Service](#)



**Elaine F. Blok**  
Regional Wetlands Coordinator  
U. S. Fish & Wildlife Service  
911 NE 11th Avenue  
Portland, OR 97232-4181  
Phone: 503/231-2192  
Fax: 503/231-2050



# National Wetlands Inventory

Ecological Services

 Search NWM Website

[Home](#) | 
 [Wetlands Data](#) | 
 [Status and Trends](#) | 
 [Wetlands Layer](#) | 
 [Other Topics](#) | 
 [National Wetlands Inventory](#) | 
 [Contact Information](#)

## Data Limitations, Exclusions and Precautions

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.



Wetlands or other mapped features may have changed since the date of the imagery and/or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

**Exclusions** - Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tubercid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

By policy, the Service also excludes certain types of "farmed wetlands" as may be defined by the Food Security Act or that do not coincide with the *Cowardin et al.* definition. Contact the Service's Regional Wetland Coordinator for additional information on what types of farmed wetlands are included on wetland maps.



**Precautions** - 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 the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the 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 specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

Last updated: 04/15/2014 13:12:40

[Home](#) | 
 [Ecological Services Home Page](#) | 
 [EPA](#) | 
 [Contact Us](#) | 
 [U.S. Fish and Wildlife Service Home Page](#) | 
 [Department of the Interior](#) | 
 [USA.gov](#) | 
 [About the U.S. Fish and Wildlife Service](#) | 
 [Accessibility](#) | 
 [Privacy](#) | 
 [Disclaimer](#) | 
 [FOIA](#) | 
 [GSA](#) | 
 [Information](#)

**NATIONAL WETLANDS INVENTORY**

**MAP REPORT**

**SIERRA NEVADA**

**PHOTO INTERPRETATION**

including:

Fresno NE & SE

Mariposa NE, NW, SE, SW

\* EXCERPTS

DATA SOURCE/METHODOLOGY

NWEM

— FROM USFWS WETLANDS WEB PAGE

## TABLE OF CONTENTS

I.	Introduction .....	1
II.	Field Reconnaissance .....	1
III.	Physical Description of Project Area .....	4
IV.	Description of Wetland Habitats in the Project Area .....	4
	Table I - Observed Wetland Vegetation .....	10
	Table II - Observed Wetland Vegetation Table .....	11
V.	Water Regime Description .....	14
VI.	Imagery .....	14
VII.	Map Preparation .....	15
VIII.	Map Acquisition .....	16
IX.	Literature Cited .....	17
	Appendix A Locator Map .....	18

## I. INTRODUCTION

The United States Fish and Wildlife Service's National Wetlands Inventory (NWI) is producing maps showing the location and classification of wetlands and deepwater habitats of the United States. Classification of Wetlands and Deepwater Habitats of the United States by Cowardin et al. (1979) is the document used by the NWI to define and classify wetlands. Photo interpretation conventions, hydric soils lists and wetland plant lists are also used to implement the Cowardin classification system.

The purpose of this map report is to: (1) provide information on the production of NWI maps, including narrative on imagery and interpretation; (2) provide a descriptive crosswalk from NWI wetland codes on the map to common terminology and to representative plant species found on specific wetland sites; and (3) describe local geography, climate, and wetland communities.


## II. FIELD RECONNAISSANCE

Field reconnaissance is a necessary procedure in order to accurately interpret aerial photography. Photographic signatures are correlated to the wetland habitat in the field. Collateral information including vegetative communities, soil types and topographic setting are further evaluated to aid in the photointerpretation process. This information is evaluated for seasonality and conditions existing at the time of photography and at ground truthing.

### Project Area

The project area covers the central and southern portions of the Sierra Nevada Range and encompasses six (6) 1:100,000 scale maps. Fresno NE and Fresno SE are in Tulare, Inyo and Fresno counties and include Sequoia and Kings Canyon National Park and portions of Sequoia and Inyo National Forests. Mariposa NW, Mariposa NE, Mariposa SW and Mariposa SE are in Mariposa, Madera, Fresno, Mono and Inyo counties and include Yosemite National Park and portions of Inyo and Sierra National Forests. A small portion (approximately 15%) of the project area contains Owens Valley.

Field Personnel

- 
- Dennis Peters - U.S. Fish and Wildlife Service  
(October 5-7, 1992)
  - Howard Browsers - U.S. Fish and Wildlife Service
  - Elaine Blok - U.S. Fish and Wildlife Service  
(October 8-12, 1992)
  - David Geddis - Geonex, Inc.
  - Renata Goodridge - Geonex, Inc.
  - Barbara Johnson - Geonex, Inc.
  - Mark Butler - National Park Service,  
Yosemite National Park  
(October 5-6, 1992)
  - Jan Van Wagtendonk - National Park Service,  
Yosemite National Park  
(October 5, 1992)
  - Harold Werner - National Park Service,  
Sequoia and Kings Canyon National Park  
(October 8-9, 1992)
  - Mike Neuman - National Park Service,  
Sequoia and Kings Canyon National Park  
(October 9, 1992)
  - Diane Ingram - National Park Service,  
Sequoia and Kings Canyon National Park  
(October 9, 1992)



Field Dates

October 5-12, 1992

Aerial Photography

Primary Source Data (100%)  
Type: NHAP Color Infrared  
Scale: 1:58,000

<u>1:100,000</u>	<u>Date of Photography</u>	<u>Number of Quads</u>	<u>Percent Coverage</u>
Mariposa SE	08/25/83	7	22.00%
	09/03/83	2	6.25%
	09/04/83	2	6.25%
	08/10/85	10	31.00%
	08/11/85	7	22.00%
	08/30/86	2	6.25%
Mariposa NE	09/15/84	4	12.50%
	09/25/84	11	34.00%
	08/02/85	8	25.00%
	08/11/85	4	12.50%
	09/02/85	3	9.40%
	08/13/86	1	3.25%
	07/25/87	1	3.25%
Mariposa SW	06/28/83	9	28.00%
	09/25/84	2	6.25%
	08/02/85	6	18.75%
	08/11/85	4	12.50%
	08/13/86	8	25.00%
	07/25/87	3	9.49%
Fresno NE	08/25/83	3	9.40%
	09/03/83	9	28.00%
	08/10/85	12	37.50%
	08/11/85	4	12.50%
	09/14/88	4	12.50%
Fresno SE	09/03/83	12	37.50%
	09/04/83	2	6.25%
	08/10/85	12	37.50%
	08/11/85	2	6.25%
	07/25/87	2	6.25%
	09/14/88	2	6.25%
Mariposa NE	08/25/83	4	12.50%
	09/03/83	1	3.20%
	08/10/85	8	25.00%
	08/11/85	3	9.40%
	08/30/86	4	12.50%



# U.S. Fish and Wildlife Service National Wetlands Inventory

Zoom History



Tools

Point Map

Streets

Inventory/Labels

Top: USGS Topo

FISH CAMP

Find Location

Zoom to: select

## Available Layers

- Wetlands
- Riparian
- Riparian Mapping Areas
- Data Source
- Source Type
- Image Scale
- Image Year
- Areas of Interest
- FWS Regions
- Historic Wetland Data

**Wetlands**

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine

**Wetland**

Zoom To Feature  Opacity:

Classification Code: PUBHh ( [details](#) )

Wetland Type: Freshwater Pond

Acres: 0.38

Status: Digital

Image Date(s): 06/83

Source Type: CIR

Image Scale: 58000

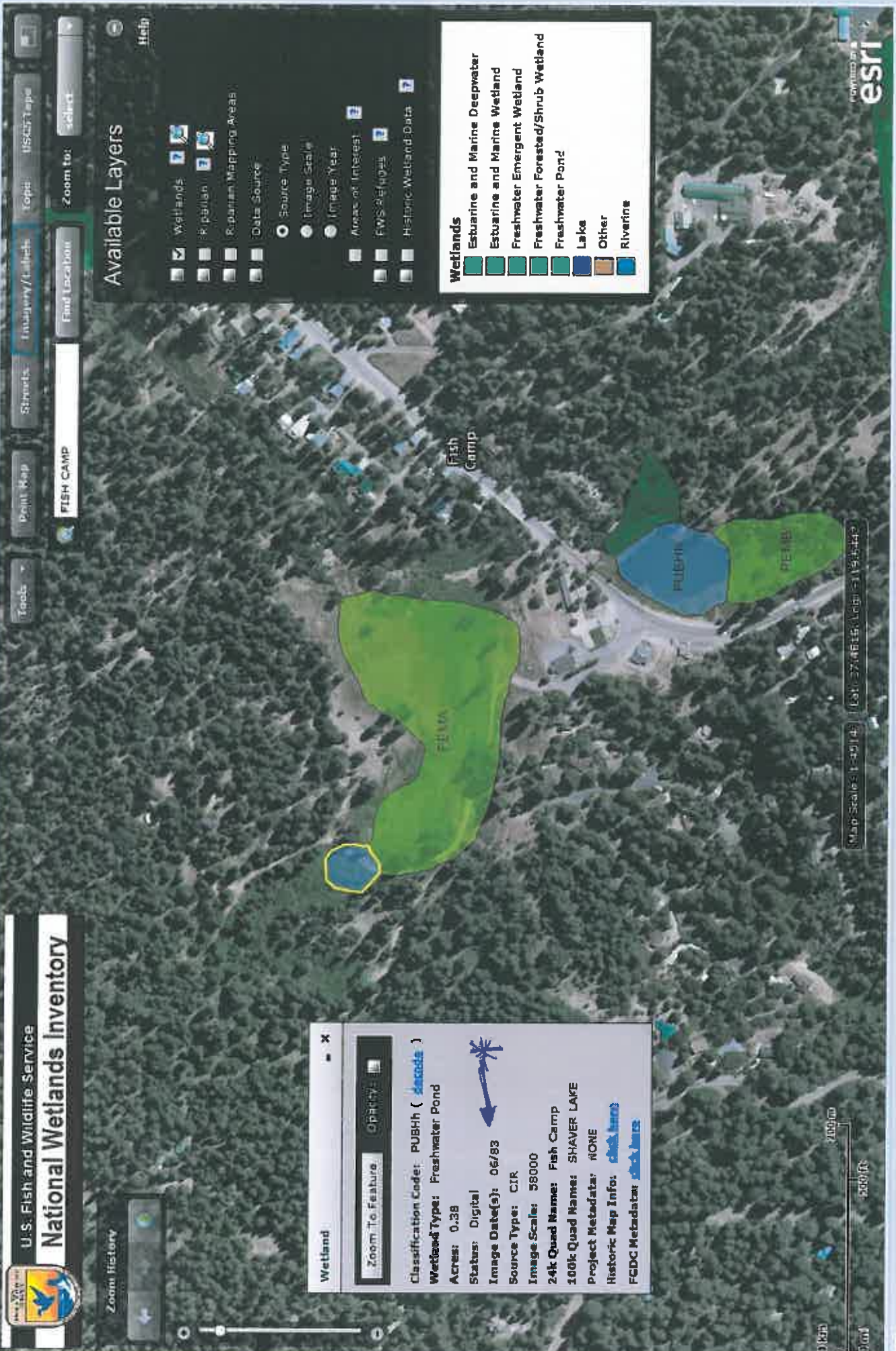
24k Quad Name: Fish Camp

100k Quad Name: SHAVER LAKE

Project Metadata: NONE

Historic Map Info: [click here](#)

FCDC Metadata: [click here](#)



Map Scale(s) 1:100000 | Date: 27/06/15, Login: 1945442







# U.S. Fish and Wildlife Service National Wetlands Inventory

Zoom History

Tools

Print Map

Streets

Imagery/Layers

Home

Help

FISH CAMP

Field Location

Zoom to:

Select

## Available Layers

- Wetlands
- Riparian
- Riparian Mapping Areas
- Data Source
- Source Type
- Image Scale
- Image Year
- Area of Interest
- FWS Refuges
- Historic Wetland Data

### Wetlands

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine



Map Scale: 1:4514 | Lat: 37.4803, Long: -119.6408

### Wetland

Zoom To Feature    Opacity:

Classification Code: **PENM ( [Acres](#) )**

Wetland Type: **Freshwater Emergent Wetland**

Acres: **6.12**

Status: **Digital**

Image Date(s): **06/83**

Source Type: **CIA**

Image Scale: **58000**

24k Quad Name: **Fish Camp**

100k Quad Name: **SHAYER LAKE**

Project Metadata: **NONE**

Historic Map Info: [click here](#)

FGDC Metadata: [click here](#)





Enter Classification code:  (Example: L1UB1Hx)

For geographically specific information\* (optional), please enter a State code:  (Example: TX for Texas)

**DECODE**

Description for code **PUBHh**.

**P** System **PALUSTRINE**: The Palustrine System includes all nontidal wetlands dominated by trees, shrubs, emergents, mosses or lichens, and all such wetlands that occur in tidal areas where salinity due to ocean derived salts is below 0.5 ppt. Wetlands lacking such vegetation are also included if they exhibit all of the following characteristics: 1. are less than 8 hectares ( 20 acres ); 2. do not have an active wave-formed or bedrock shoreline feature; 3. have at low water a depth less than 2 meters (6.6 feet) in the deepest part of the basin; 4. have a salinity due to ocean-derived salts of less than 0.5 ppt.  
Subsystem :

**UB** Class **UNCONSOLIDATED BOTTOM**: Includes all wetlands and deepwater habitats with at least 25% cover of particles smaller than stones (less than 6-7 cm), and a vegetative cover less than 30%.  
Subclass :

Modifier(s):

**HWATER REGIME Permanently Flooded**: Water covers the land surface throughout the year in all years.

**h** SPECIAL MODIFIER **Diked/Impounded**: These wetlands have been created or modified by a man-made barrier or dam which obstructs the inflow or outflow of water. The descriptors 'diked' and 'impounded' have been combined into a single modifier since the observed effect on wetlands is similar. They have been combined here due to image interpretation limitations. For clarification of the extent of impoundment see discussion of Lacustrine System limits.



U.S. Fish &amp; Wildlife Service

## National Wetlands Inventory

Ecological Services

Enter Classification code:  (Example: L1UB1Hx)For geographically specific information\* (optional), please enter a State code:  (Example: TX for Texas)Description for code **PEMA** :

**P** System **PALUSTRINE**: The Palustrine System includes all nontidal wetlands dominated by trees, shrubs, emergents, mosses or lichens, and all such wetlands that occur in tidal areas where salinity due to ocean derived salts is below 0.5 ppt. Wetlands lacking such vegetation are also included if they exhibit all of the following characteristics: 1. are less than 8 hectares ( 20 acres ); 2. do not have an active wave-formed or bedrock shoreline feature; 3. have at low water a depth less than 2 meters (6.6 feet) in the deepest part of the basin; 4. have a salinity due to ocean-derived salts of less than 0.5 ppt.  
Subsystem :

**EM** Class **EMERGENT**: Characterized by erect, rooted, herbaceous hydrophytes, excluding mosses and lichens. This vegetation is present for most of the growing season in most years. These wetlands are usually dominated by perennial plants.  
Subclass :

Modifier(s):

**A** WATER REGIME **Temporary Flooded**: Surface water is present for brief periods during growing season, but the water table usually lies well below the soil surface for most of the growing season. Plants that grow both in uplands and wetlands may be characteristic of this water regime.