

National Wetlands Inventory

Notes to Users

**Roswell NE
Carlsbad NE
Carlsbad SE
Hobbs SW**

1:100,000 Scale Maps

USER NOTES
NATIONAL WETLANDS INVENTORY
ROSWELL NE
CARLSBAD NE
CARLSBAD SE
HOBBS SW

Map Preparation:

The wetlands classifications that appear on the Roswell NE, Carlsbad NE, Carlsbad SE, and Hobbs SW National Wetlands Inventory (NWI) maps are in accordance with Cowardin et al. (1977). The delineations were produced through stereoscopic interpretation of 1:58,000 scale color infrared photography taken from June, 1983 to June, 1984.

Field checks were made in December, 1985 to correlate photo signatures with qualifying descriptions of the field conditions in order to achieve consistency.

The user of the map is cautioned that, due to the limitation of mapping, primarily through aerial photo interpretation, a small percentage of wetlands may have gone unidentified. Changes in the landscape could have occurred since the time of photography, therefore some discrepancies between the map and current field conditions may exist. Any discrepancies that are encountered in the use of this map should be brought to the attention of the Regional Wetlands Coordinator; U.S. Fish and Wildlife Service, Region 2, P.O. Box 1306, Albuquerque, New Mexico, 87103.

Geography:

The 1:100,000 scale maps covered by this area are located in southeastern New Mexico. It consists of three ecoregions defined by Bailey Ecoregions of the United States (1980). (See ecoregion map).

Area 1, is defined by Bailey as the Great Plains shortgrass Prairie Province. Land forms consist of flat plains with valleys, canyons, mesas and buttes.

Area 2 is classified as Chihuahuan Desert Province. This province is mostly desert. The area has undulating plains with elevations near 4,000 feet from which somewhat isolated mountains rise. The Pecos River runs north to south through Roswell NE and the two Carlsbad quadrangles and represents the only perennial waterway within the map area. It runs north to south and is controlled by several dams. A network of tributaries and arroyos feed into the Pecos containing spring water and run off from higher elevations.

Area 3 is classified by Bailey as the Colorado Plateau Province. Topographically, this province consists of table lands of moderate relief with widely spaced, narrow stream valleys. To the southwestern part of Carlsbad SE are the Guadalupe Mountains. There are numerous salt lakes within the work area, the most concentrated area being along the Carlsbad SE/Hobbs SW border.

The two major land uses are ranching and drilling for oil. The majority of oil rigs are located in Carlsbad NE and Hobbs SW.

Climate:

The winters are cold, due to the generally high elevation. The summers are characterized by hot days and cool nights. Average annual temperature is between 45° and 55°F.

Summer rains come from thunder storms, but light showers occur in winter. Average annual precipitation is 10 to 20 inches.

Wetland Communities:

The diverse and dynamic wetland community is the Pecos River. It is diked and controlled at McMillan Dam. This is a temporary situation, for a larger dam (Brantley) is under construction downstream. The dominant vegetation in and around McMillan Reservoir is Salt Cedar (Tamarix chinensis).

The Pecos River's main channel consists of an unvegetated substrate of sand. Salt Cedar (Tamarix chinensis), and occasionally cottonwood (Populus sp.) define the external boundary of the floodplain, with Salt Cedar clearly being the dominant vegetation. Saltgrass, smartweed (Polygonum sp.), cocklebur (Xanthium sp.) and Reed Grass (Phragmites sp.) are all common emergent vegetation found within the temporarily flooded region of the floodplain.

There are several playa lakes within the work area. They will generally be classified within the Palustrine system due to the presence of emergent vegetation. Common emergent species include saltgrass, smartweed, wheat grass (Agropyron sp.) and spikerush (Eleocharis sp.).

Springs are also common wetlands within the map area, and contribute to the riverine systems by way of small adjoining tributaries. Common species in spring-fed locations are reed grass (Phragmites sp.), saltgrass (Distichlis spicata), rushes (Juncus sp.), Giant Sacaton (Sporobolus sp.), bulrush (Scirpus sp.), cattail (Typha sp.), and sedges (Carex sp.).

Another common Palustrine wetland is the impounded arroyo. These impoundments provide water for the numerous cattle found in the area. These impoundments will be classified as temporarily or intermittently flooded (PUSAh, PUSJh). These appear quite often with temporarily or intermittently flooded emergents.

The Salt Lakes to the west support no vegetation due to their high alkalinity and salinity. They are however flooded, usually temporarily or seasonally.

NWI CODE	NWI DESCRIPTION	COMMON DESCRIPTION	CHARACTERISTIC VEGETATION AND PHYSIOGRAPHIC FEATURES
R4SB	Riverine, Intermittent, Streambed	Creek, Streambed	Unvegetated. Sand to Cobble-Gravel
R2UB	Riverine, Lower Perennial	River Unconsolidated Bottom	Unvegetated. Mud to Sand, Cobble-Gravel
R2US	Riverine Lower Perennial. Unconsolidated shore	River Flat	Unvegetated. Sand to Cobble-Gravel
L1UB	Lacustrine Limnetic Unconsolidated Bottom	Open Water Lake	Unvegetated. Sand to Mud
L2UB	Lacustrine Littoral Unconsolidated Bottom	Open Water Shallow Lake	Unvegetated Sand to Mud
L2US	Lacustrine Littoral Unconsolidated Shore	Lake Shore Salt Flat	Unvegetated. Sand to Cobble-Gravel
L1AB	Lacustrine Limnetic Aquatic Bed	Pond Weeds, Water Weeds	Duckweed (<u>Lemna sp.</u>)
PUB	Palustrine Unconsolidated Bottom	Open water, Pond	Unvegetated. Sand to Mud
PAB	Palustrine Aquatic Bed	Pond Weeds, Water Weeds	Duckweed (<u>Lemna sp.</u>)
PUS	Palustrine Unconsolidated Shore	Intermittent Pond	Unvegetated. Sand to Cobble-Gravel

NWI CODE	NWI DESCRIPTION	COMMON DESCRIPTION	CHARACTERISTIC VEGETATION AND PHYSIOGRAPHIC FEATURES
PEM	Palustrine Persistent Emergents	Marsh or Meadow	Cattail (<u>Typha sp.</u>) Reedgrass (<u>Phragmites sp.</u>) Sedges (<u>Carex sp.</u>) Bulrush (<u>Scirpus sp.</u>) Rush (<u>Juncus sp.</u>) Spikerust (<u>Eleocharis sp.</u>) Cocklebur (<u>Xanthium sp.</u>) Salt Grass (<u>Distichlis spicata</u>) Wheatgrass (<u>Agropyron sp.</u>) Giant Sacaton (<u>Sporobolus sp.</u>)
PSS2	Palustrine Scrub Shrub Needle Leaved Deciduous	Shrub Wetland	Salt Cedar (<u>Tamarix chinensis</u>)
PF01	Palustrine Forested Broadleaved Deciduous	Forested Wetland	Cottonwood (<u>Populus sp.</u>)

BIBLIOGRAPHY

The purpose of this report is to provide general information about wetland classifications found within the area covered by the Base Map. There has been no attempt to describe all wetlands occurring in the area nor provide complete faunal and floral lists of those wetlands discussed. The references listed below refer to literature cited in the text of this report.

Cowardin, L.M., V. Carter, F.C. Golet, and E.T. LaRoe. 1977. Classification of Wetlands and Deepwater Habitats of the United States (an operational draft). USDI. Fish and Wildlife Serv. Wash., D.C. 100p.

Bailey, R.G. 1978. Description of the Ecoregions of the United States. USDA For. Serv., Intermt. Reg., Ogden, UT. 77p.

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