

USER NOTES: CLOVIS - SW, NATIONAL WETLANDS INVENTORY MAP

Map Preparation

The wetland classifications that appear on the Clovis SW National Wetlands Inventory (NWI) Base Map are in accordance with Cowardin et al. (1977). The delineations were produced through stereoscopic interpretation of 1:80,000 scale color infrared aerial photographs taken in 1976. The delineations were enlarged using a zoom transferscope to overlays of 1:24,000 scale and 1:62,500 scale. These overlays were then transferred to 1:100,000 scale to produce the Base Map.

Field checks of the delineated wetlands of the Clovis - SW NWI Base Map were conducted in April 1982, to determine the accuracy of the aerial photointerpretation and to provide qualifying descriptions of mapped wetland designations.

The user of the map is cautioned that, due to the limitation of mapping primarily through aerial photointerpretation, 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 Warren Hagenbuck, Regional Wetlands Coordinator, U.S. Fish and Wildlife Service, Region 2, P.O. Box 1306, Albuquerque, New Mexico, 87103.

Geography

The area covered by Clovis SW NWI Base Map lies in the east central portion of New Mexico and includes Curry, Roosevelt, Chaves, and DeBaca counties. Bailey's Ecoregion Classification (1978) identifies the area as Great Plains shortgrass prairie province, Grama-Buffalo Grass (3211). The essential feature of this Domain is that annual gains of water at the earth's surface from precipitation is exceeded through evapotranspiration. The Domain is short to mid-grass prairie with buffalo grass and blue and hairy grama predominating climax sites. Large expanses of this area which are suitable for cultivation have been converted to croplands. Much of these lands require irrigation for maintenance of productivity. The largest source of irrigation water is groundwater pumped from the Ogallala Aquifer.

A feature which generally is restricted to the Grama-Buffalo Grass section is playa basins and lakes. The majority of these natural depressions occur in the more level portions of the area in cropland-dominated settings. These basins or lakes support a greatly increased diversity of plant and animal species. Playa lakes are very valuable in providing habitat for both resident and migratory faunal species, including waterfowl, shorebirds, prairie dogs, rabbits, and rodents.

Topography of the study area is described by Hammond's Land Surface Form Classification as being of smooth plains with more than 80% of the area gently sloping. Local relief ranges from 100 to 300 feet.

Climate

Climate in the area is predominantly semi-arid. Precipitation usually falls between May and October in the form of thunderstorms. The annual rate of precipitation is approximately 14".

Temperatures vary considerably from summer to winter. Summer temperatures can rise above 100°F with winter temperatures occasionally falling below 0°F.

Wetland Communities

The most prominent wetland type that occurs in the area is the Palustrine Flat (PFL), a playa or catchment less than 20 ha. The duration of standing water is variable and depends on management of the catchment, a playa's size, and the amount of water. If, when the photography was taken, a playa, stock tank or irrigation catchment pond was holding water, it was designated as Palustrine Open Water (POW). This type of wetland is also common in the area. During periods of standing water, migratory waterfowl and shorebirds may use these wetlands.

Some of the playas or catchments may have a water regime and physiographic features that promotes emergent types of vegetation. These have been designated as Palustrine Emergent (PEM), and might have vegetation such as bulrush or cattail. Riverine Intermittant Stream beds (R4SB) occur as drainages or arroyos of usually sandy substrate through basin floors. These can be subjected to flash flooding during the summer and fall rains; water availability usually of brief duration. Salt cedar and cottonwood vegetation may be associated with these wetland types and are designated as Palustrine Scrub Shrub (PSS) or Palustrine Forrested (PFO).

NWI Code	Description	Common Name	Circular 39 Type	Characteristic Plant Species and Physiographic Features
L2OW	Lacustrine Littoral open water	lake, pond, playa	1,11	Fine sediment bottom blue-green algae <u>Anabaena</u> and <u>Microcystis</u> green algae, cryptophytes, diatoms <u>Euglena</u> and <u>Certium</u>
L2FL	Lacustrine Littoral Flat	alkali flats, playas	1,9	Unvegetated, sand bottom, clay
PFL	Palustrine Flat	playa, stock tank, water catchments	1,9	Unvegetated, sand to clay bottom
POW	Palustrine Open Water	stock tank, playa, irrigation catchment	1,9	Unvegetated, sand to mud bottom
PEM	Palustrine Emergent	lake, pond, stock tank, playa	3,5 1,11	Rulrush, common cattail, commonly artificially flooded
PSS	Palustrine Scrub-Shrub	bosque, forest	6,7	Salt cedar, along edges of playas and waterways
PFO	Palustrine forest	bosque, forest	6,7	Cottonwoods, along edges of arroyos or waterways
R4SB	Riverine Intermittent Streambed	arroyo, dry streambed, gulch, gully	-	Unvegetated, sand, cobble- gravel bottom

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, as well as sources of additional information.

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

Buchanan, Donald E. and W. J. Ross. 1958. Soil Survey of Curry County, New Mexico. USDA Soil Conservation Service. 40 p.

Cowardin, L. M., V. Carter, F. C. Golet, and E. T. LaRoe. 1977. Classification of wetlands and deepwater habitats of the United States. USDI. Fish and Wildl. Serv. Wash., DC. 100 p.

Johnson, R. R. and D. A. Jones (eds.). 1977. Importance, preservation and management of riparian habitat: A Symposium. USDA For. Serv. Rocky Mtn. Range and Exp. Sta. Gen. Tech. Rep. RM-43.

Shaw, S. P. and C. G. Fredline. 1971. Wetlands of the United States, their extent and their value to waterfowl and other wildlife. U.S. Fish and Wild. Serv. Circ. 39. 67 p.