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DRAFT

USER REPORT: HOBBS NE and SE, TEXAS

NATIONAL WETLANDS INVENTORY MAPS

A. INTRODUCTION

The U.S. 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. The Classification of Wetlands and Deepwater Habitats of the United States by Cowardin et al. (1979), is the classification system used to define and classify wetlands. Photointerpretation conventions, hydric soils lists, and wetland plant lists are also available to enhance the use and application of the classification system.

B. PURPOSE

The purpose of the notes to users is threefold: (1) to provide localized information regarding the production of NWI maps, including specific imagery and interpretation discussion; (2) to provide a descriptive crosswalk from wetland codes on the map to common names and representative plant species, and (3) to explain local geography, climate, and wetland communities.

C. STUDY AREA

Geography:

This study area is located between 102 degrees and 103 degrees West longitude and 32 degrees to 33 degrees North latitudes. (See Figure 1). Situated in west central Texas, Hobbs NE and SE are found within the ecoregion Steppe Division. This Semiarid Division is further subdivided into the Great Plains-Shortgrass Prairie, Gamma-Buffalograss Section (Bailey 1980). The province is primarily rolling plains with some tableland on moderate relief. Local relief may range from 100-300 feet in elevation. Numerous playas (depressions) are found in the southeastern area of Hobbs SE.

Climate:

The climate of the mapping area is characterized by long, hot summers and relatively short, mild, and dry winters. Annual rainfall averages between 14 and 16 inches with a slight increase from west to east. Seventy-five to eighty percent of the rainfall occurs between April and October, and the average growing season, based on freezing temperatures, is approximately 210 days. The area is noted for highly variable thunderstorm activity in the summer.

Vegetation:

In this High Plains region, the shortgrass prairie is dominant with buffalograss and blue grama being the most abundant native grasses. Other important grasses, though sparsely distributed, include western wheatgrass, sideoats, little bluestem, and switchgrass. There are few shrubs in the area and even fewer trees. Mesquite dominates over yucca, sage, and juniper.

In the east, shrubs and trees combine in much greater numbers to form brushland intermixed with the more predominant prairie. Mesquite remains the dominant shrub species, but exists more frequently in larger, open stands. Juniper and oak are also more widespread and usually found mixed with the mesquite and various prairie grasses.

Soils:

This mapping area has two major soil orders: Aridisols and Mollisols. The Aridisols, which may have a clay horizon, occur in several semidesert shrub areas. Mollisols are characterized by a low humus layer with a friable surface horizons and high base content. Vertisols are associated with the few hydric soils found in this region. The Randall and Lipan Series are found in depression/playa type wetlands. The Roscoe series is also a montmorillinitic clay, although it occurs less frequently. Calcification is the major pedogenic process for this area of low rainfall and sparse ground cover. The majority of all the soils in this region are susceptible to erosion in varying degrees of capabilities.

D. WETLAND CLASSIFICATION CODES AND WATER REGIME DESCRIPTIONS

TABLE 1: NWI CLASSIFICATION FOR HOBBS NE AND SE, TEXAS

NWI CODE (WATER REGIME)	NWI DESCRIPTION	COMMON DESCRIPTION	SUBSTRATE OR CHARACTERISTIC VEGETATION
R2UB (H)	Riverine, lower perennial, unconsolidated bottom	River, stream, creek	Mud, sand, gravel
R4SB (A,C)	Riverine, inter- mittent, streambed	River, stream, creek	Mud, sand, gravel
L1UB (H)	Lacustrine, limnetic, unconsolidated bottom	Lake, reservoir	Mud, sand, gravel
L2UB (F)	Lacustrine, littoral, unconsolidated bottom	Shallow/inter- mittent lake, shoreline	Mud, sand, gravel
L2US (A,C)	Lacustrine, littoral, unconsolidated bottom	Shallow/inter- mittent lake, shoreline	Mud, sand, gravel
L2EM2 (A,C)	Lacustrine, littoral, emergent, non-persistent	Vegetated drawdown zone of lake or reservoir	(Unidentifiable due to flooded field conditions)
PUB (F,H)	Palustrine, unconsolidated bottom	Pond	Mud, sand, gravel
PEM1 (J,A,C,F)	Palustrine, emergent, persistent	Playa, marsh, vegetated stream	<u>Distichlis spicata</u> (saltgrass) <u>Polygonum spp.</u> (smartweeds) <u>Sporobolus airoides</u> (alkali sacaton) <u>Sorghum halepense</u> (Johnson grass) <u>Typha latifolia</u> (cattail) <u>Scirpus spp.</u> (bulrushes)

NWI CODE (WATER REGIME)	NWI DESCRIPTION	COMMON DESCRIPTION	SUBSTRATE OR CHARACTERISTIC VEGETATION
PUS (J,A,C)	Palustrine, unconsolidated shore	Intermittent pond, playa	Mud, sand, gravel
PSS1 (A,C,F)	Palustrine, scrub/shrub, broad-leaved deciduous	Willow thicket, vegetated stream	<u>Salix spp.</u> (willows) <u>Allenrolfea</u> <u>occidentalis</u> (iodinebush)
PSS2 (J,A,C)	Palustrine, scrub/shrub, needle-leaved deciduous	Salt cedar playa, vegetated stream	<u>Tamarix spp.</u> (salt cedar)
PFO1 (A,C)	Palustrine, forested, broad-leaved deciduous	Forested floodplain or stream, wetland depression	<u>Salix spp.</u> (willows) <u>Ulmus spp.</u> (elm) <u>Populus spp.</u> (cottonwoods)

Water Regime Description

- (J) Intermittently Flooded - Substrate is usually exposed, but surface water present for variable periods without detectable seasonal periodicity. Weeks, months, or even years may intervene between periods of inundation. The dominant plant communities under this regime may change as soil moisture conditions change. Some areas exhibiting this regime do not fall within our definition of wetland because they do not have hydric soils or support hydrophytes.
- (A) Temporarily Flooded - Surface water present for brief periods during growing season, but water table usually lies well below soil surface. Plants that grow both in uplands and wetlands are characteristic of this water regime.
- (B) Saturated - The substrate is saturated to surface for extended periods during the growing season, but surface water is seldom present.
- (C) Seasonally Flooded - Surface water is present for extended periods especially early in the growing season, but is absent by the end of the growing season in most years. The water table after flooding ceases is very variable, extending from saturated to a water table well below the ground surface.
- (F) Semipermanently Flooded - Surface water persists throughout the growing season in most years. When surface water is absent, the water table is usually at or very near the land's surface.
- (H) Permanently Flooded - Water covers land surface throughout the year in all years.
- (K) Artificially Flooded - The amount and duration of flooding is controlled by means of pumps or siphons in combination with dikes or dams.

E. MAP PREPARATION

The wetland classification that appears on the Hobbs NE and SE, Texas NWI maps is in accordance with Cowardin et. al. (1977). The delineations were produced through stereoscopic interpretation of 1:58,000 scale color infrared photography. The photography was taken during October and November of 1984.

Field checks of areas found within Hobbs NE and SE photography were made prior to the actual delineation of wetlands. Field check sites were selected to clarify varying signatures found on the photography. These photographic signatures were then identified in the field using vegetation and soil types, as well as additional input from field personnel.

Collateral data included USGS topographic maps (1:24,000 and 1:250,000); SCS soil surveys; and climate, vegetation, and ecoregion information.

F. SPECIAL MAPPING PROBLEMS

None.

G. MAP ACQUISITION

To discuss any questions concerning these maps or to place a map order, please contact:

Regional Wetland Coordinator
U.S. Fish and Wildlife Service - Region 2
5000 Gold Ave. SW
Room 4012, P.O. Box 1306
Albuquerque, NM 87103

To order maps only, contact:

National Cartographic Information Center
U.S. Geological Survey
National Center
Reston, VA 22092

Maps are identified by the name of the corresponding USGS 1:24,000 scale topographic quadrangle name. Topographic map indices are available from the U.S. Geological Survey.

H. LITERATURE CITED

- Bailey, Robert G. 1980. Description of the Ecoregions of the United States; U.S. Department of Agriculture Forest Service. Miscellaneous Publications No. 1391.
- Cowardin, L.M.; V. Carter; F.C. Golet; and E.T. LaRoe, 1979. Classification of Wetlands and Deepwater Habitats of the United States. U.S. Department of the Interior, U.S. Fish and Wildlife Service. Biological Services Program, Washington, D.C., 103 p.
- Soil Survey of Dawson County, Texas; 1960. United States Department of Agriculture, Soil Conservation Service.
- Soil Survey of Martin County, Texas; 1974. United States Department of Agriculture, Soil Conservation Service.
- Soil Survey of Andrews County, Texas; 1974. United States Department of Agriculture, Soil Conservation Service.
- Soil Survey of Gaines County, Texas; 1965. United States Department of Agriculture, Soil Conservation Service.

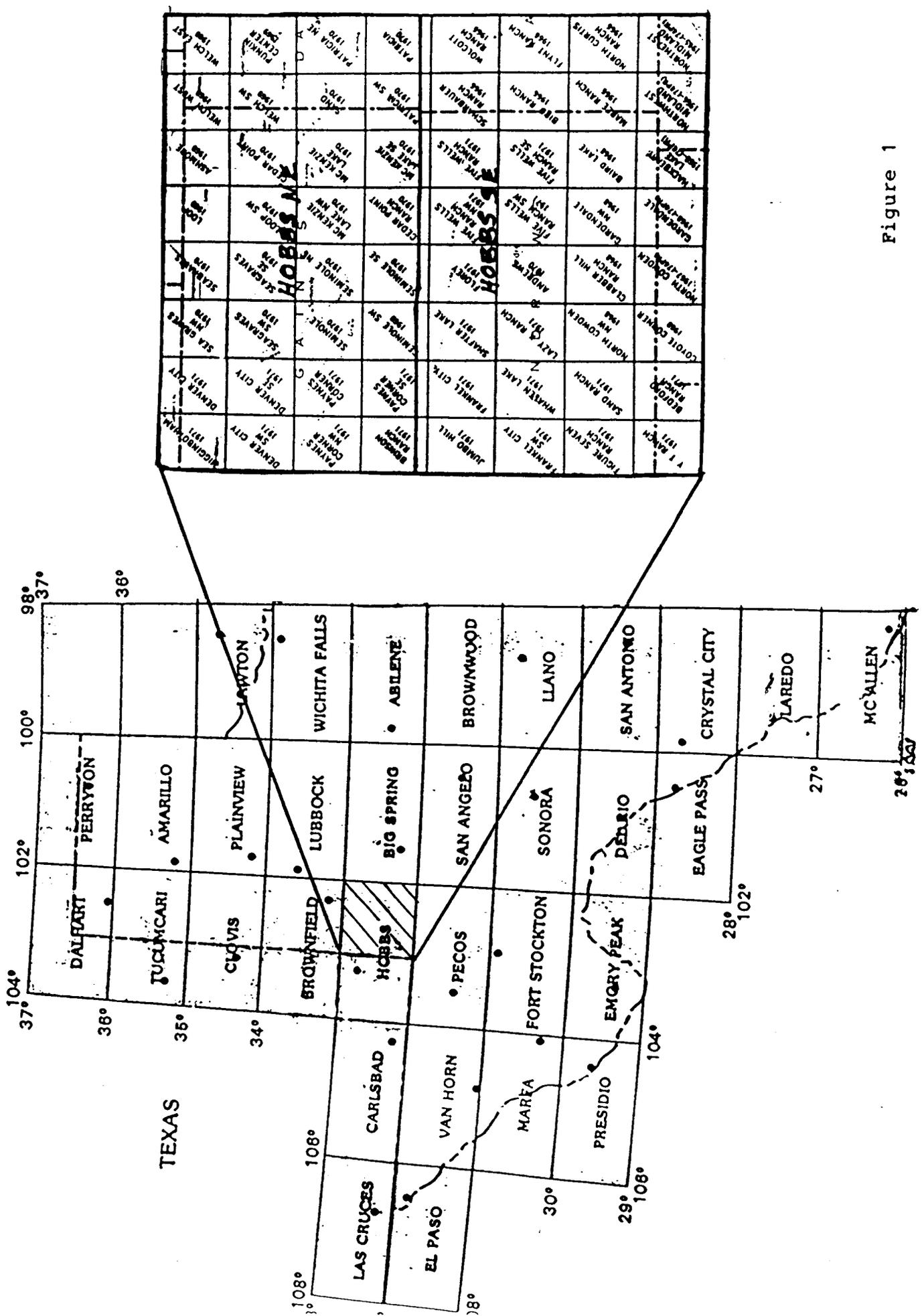


Figure 1