

USER REPORT: PERRYTON NE and NW

NATIONAL WETLANDS INVENTORY MAPS

A. The U.S. Fish & Wildlife Service's National Wetlands Inventory 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. is the classification system used to define and classify wetlands. Photointerpretation conventions, hydric soil 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:

The study area for Perryton NE and NW is located in the eastern two-thirds of the Oklahoma panhandle. According to Bailey "Description of the Ecoregions of the United States" (1980), this area is part of the Great Plains-Shortgrass Prairie Province, Grama-Buffalograss Section. It is characterized by short grasses and scattered trees. Perryton NW is described as having flat plains with 100-300 feet of local relief. Perryton NE has 80% of its map area located in tableland of moderate relief (300-500 feet). The remaining 20% of Perryton NE is flat plains.

The primary rivers of these maps are the Cimarron, Beaver, and/or North Canadian. These flow in an easterly direction but may not have water in them throughout the year.

Climate:

The semiarid climate for Perryton NW allows for a yearly temperature average of 56.6°F. The precipitation average is 16.9 inches per year which comes mostly in the spring and summer (Beaver and Texas County soil surveys). The average humidity is low and the evaporation rate is high.

Perryton NE has a continental climate with 57.4°F for the yearly average. The yearly precipitation average is 19.36 inches which is primarily received in late spring and summer.

Vegetation:

The study area is described as Steppe (Bailey, 1980), which is characterized by a shortgrass prairie and isolated trees. Most forested areas are associated with a riparian habitat having such species as cottonwood (Populus deltoides) and willow (Salix nigra).

Soils:

The soils of wetland areas in Perryton NW are in two groups; those associated with playas and depressions and those on bottomland floodplains. Those associated with playas and depressions include Lofton and Randall. Sweetwater, Spur, and Lincoln soils are associated with deep bottomland.

The Lofton and Randall soils are clayey and poorly drained. These playas obtain their water from surrounding areas which drain into the depression.

The deep, bottomland soils are associated with alluvial systems. The Sweetwater soil (subirrigated) is the predominate soil of the three. The Spur and Lincoln soils are flooded regularly during the year as is the Sweetwater although they are not poorly drained. The Spur soil is clayey and loamy. The Lincoln soil is recent sandy alluvium.

The soils of Perryton NE include the Randall, Lincoln and Spur. Additional soils are the Canadian and Las Animas.

The Canadian soil is well drained but its fine sandy loam holds large quantities of water on its alluvial terrace after flooding. The Las Animas soil is subirrigated and poorly drained as was the Sweetwater. This clay loam is occasionally flooded.

WATER REGIME MODIFIERS
(non-tidal)

(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.

(G) Intermittently Exposed--Surface water is present throughout the year except in years of extreme drought.

(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.

(U) Unknown--The water regime is not known.

NWI CODE	NWI DESCRIPTION	COMMON DESCRIPTION	VEGETATION/SUBSTRATE
L1UB (H)	Lacustrine limnetic unconsolidated bottom	Open water, lake	Unvegetated mud, sand, gravel
L2UB (F,H)	Lacustrine littoral unconsolidated bottom	Shallow open water lake, lake bottom	Unvegetated mud, sand, gravel
L2US (A,c)	Lacustrine littoral unconsolidated shore	Lake bed, lake shore	Unvegetated mud, sand, gravel
L1AB1 (F,H)	Lacustrine littoral aquatic bed	Algal mat	Algae
L1AB3 (F,H)	Lacustrine littoral aquatic bed	Rooted vascular	American lotus (<u>Nelumbo lutea</u>)
L1AB4 (F,H)	Lacustrine littoral aquatic bed	Floating Pond weeds, water weeds	Duckweed (<u>Lemna sp.</u>) (<u>Azola sp.</u>)
L2AB4 (F,H)	Lacustrine littoral aquatic bed	Floating Pond weeds, water weeds	Duckweed (<u>Lemna sp.</u>) (<u>Azola sp.</u>)
R2UB (H)	Riverine lower perennial unconsolidated bottom	Open water river, stream	Unvegetated mud, sand, gravel
R2US (A,C)	Riverine lower perennial unconsolidated shore	River flat, bar	Unvegetated mud, sand, gravel
R4SB (J,A,C)	Riverine inter- mittent streambed	Intermittent stream	Unvegetated mud, sand, gravel
PUB (F,H)	Palustrine unconsolidated bottom	Open water, pond bottom	Unvegetated mud, sand, gravel
PUS (J,A,C)	Palustrine unconsolidated shore	Pond shore, pond bed	Unvegetated mud, sand, gravel

NWI CODE	NWI DESCRIPTION	COMMON DESCRIPTION	VEGETATION/SUBSTRATE
PAB1 (F,H)	Palustrine aquatic bed	Algal mat	Algae
PAB3 (F,H)	Palustrine aquatic bed	Rooted vascular	American lotus (<u>Nelumbo lutea</u>)
PAB4 (F,H)	Palustrine aquatic bed	Floating Pond weeds, water weeds	Duckweed (<u>Lemna</u> sp.) (<u>Azola</u> sp.)
PEM1 (J,A,C,F)	Palustrine persistent emergents	Marsh, wet meadow	Bulrush (<u>Scirpus</u> sp.) Cattail (<u>Typha latifolia</u>) Cockleburr (<u>Xanthium</u> sp.) Rush (<u>Juncus</u> sp.) Saltgrass (<u>Distichlis</u> sp.) Sedge (<u>Carex</u> sp.) Smartweed (<u>Polygonum</u> sp.)
PSS1 (A,C,F)	Palustrine scrub shrub, broad leaved deciduous	Shrub wetland	Buttonbush (<u>Cephalanthus occidentalis</u>) Cottonwood (<u>Populus deltoides</u>) Willow (<u>Salix nigra</u>)
PSS2 (J,A,C)	Palustrine scrub-shrub, needle leaved deciduous	Shrub wetland	Salt Cedar (<u>Tamarix</u> sp.)
PFO1 (A,C,F)	Palustrine forested broad leaved deciduous	Forested wetland	Cottonwood (<u>Populus deltoides</u>) Elm (<u>Ulmus</u> sp.) Green Ash (<u>Fraxinus pennsylvanica</u>) Hackberry (<u>Celtis occidentalis</u>) Willow (<u>Salix nigra</u>) Pecan (<u>Carya illinoensis</u>) Sycamore (<u>Platanus occidentalis</u>)

NWI#24

F. MAP PREPARATION

The wetland classification that appears on the Clinton National Wetlands Inventory (NWI) Base Map (Figure 1) is in accordance with Cowardin et. a. (1977). The delineations were produced through stereoscopic interpretation of 1:58,000 scale color infrared photography. The photography was taken during February, March, and June 1985.

Field checks of areas found within Perryton 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 types and soil types, as well as additional input from field personnel.

Collateral data included USGS topographic maps, SCS soil surveys, climate, vegetation, and ecoregional information.

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. Since the photography was taken during a particular time and season, there may be discrepancies between the map and current field conditions. Changes in landscape which occurred after the photography was taken would result in such discrepancies.

Aerial photo interpretation and drafting were completed by Martel Laboratories, Inc., St. Petersburg, Florida.

G. SPECIAL MAPPING PROBLEMS

None.

H. MAP ACQUISITION

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

Regional Wetland Coordinator (ARD-E)
U.S. Fish and Wildlife Service - Region II
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.

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 Beaver County, Oklahoma; 1962. United States Department of Agriculture, Soil Conservation Service.
- Soil Survey of Texas County, Oklahoma; 1961. United States Department of Agriculture, Soil Conservation Service.

