

USER REPORT: DALLAS NW and SW
NATIONAL WETLANDS INVENTORY MAPS

DRAFT B

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 maps of Dallas NW and SW are located in north central Texas. Situated within the Prairie Parkland Province, Oak-Bluestem Section, the eastern halves of NW and SW Dallas have irregular plains of 100-300 feet in local relief (Bailey, 1980). The western halves are part of the same section but have table land of relief 300-500 feet elevation. Within the very southwest corner of Dallas SW is the Prairie Bushland Province, Juniper-Oak-Mesquite Section. This section consists of irregular plains with relief of 300-500 feet.

Major rivers within the study area are the: Brazos River, West Fork Trinity, Paluxy River, Nolan River, Walnut Creek, and Clear Fork Trinity. Reservoirs are numerous throughout the study area and are subject to irregular drawdowns during the year.

Climate

The subtropical climate of the Dallas NW and SW maps allows for dry mild winters and hot humid summers. Yearly average temperatures may range from 64°-66°F. The precipitation average for the year is 32 inches with a high amount falling in the spring.

Vegetation:

Grasses dominate the prairie vegetation while deciduous trees in floodplain areas dominate there. Cottonwood and willows may also be found around reservoirs. Other common species are elm, hackberry, and sycamore. The vegetation within the Prairie Brushland Province consist of xerophytic grasses, and shrubs. The grasses may include bluestem, buffalograss, and grama. The shrubs may consist of oak, juniper, and mesquite. Trees and shrubs are usually in open stands.

Soil:

All of the following soils occur primarily on the nearly level land of floodplains: Bosque, Bunyan, Gaddy, Gowen, Frio, Hassee, Lincoln, Pulexas, Pursley, Tinn, Yahola, and Yomont. The Frio and Tinn soils are clayey soils which are deep and poor drainage. The remaining soils are various deep loamy soils of different internal drainage and capabilities.

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>Lerna sp.</u>) (<u>Azola sp.</u>)
PEM1 (J,A,C,F)	Palustrine persistent emergents	Marsh, wet meadow	Bulrush (<u>Scirpus sp.</u>) Cattail (<u>Typha latifolia</u>) Cocklebur (<u>Xanthium</u>) Rush (<u>Juncus sp.</u>) Saltgrass (<u>Distichlis sp.</u>) Sedge (<u>Carex sp.</u>) Smartweed (<u>Polygonum sp.</u>)
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 sp.</u>)
PFO1 (A,C,F)	Palustrine forested broad leaved deciduous	Forested wetland	Cottonwood (<u>Populus deltoides</u>) Elm (<u>Ulmus sp.</u>) 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>)

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.

F. MAP PREPARATION

The wetland classification that appears on the Dallas 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 September, October, November, and December, 1981.

Field checks of areas found within Dallas NW and SW 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 Johnson County, Texas; 1985. United States Department of Agriculture, Soil Conservation Service.

Soil Survey of Parker County, Texas; 1977. United States Department of Agriculture, Soil Conservation Service.

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