USER REPORT: ROCKY MOUNT NW; ROCKY MOUNT SW

A. INTRODUCTION

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. Photo interpretation conventions, hydric soils lists and wetland plant lists are also available to enhance the use and application of the classifications 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 covered by Norfolk SE and SW, and Greensboro SE is located in northeastern North Carolina (Appendix A). Bailey (1980) identifies the study area as the Southeastern Mixed Forest Province. Forest communities consist of a variety of broadleaf deciduous and needleleaf evergreen trees. Relief is flat to gently sloping and contains a multitude of swamps, lakes and slow-moving streams and rivers. Major perennial rivers in the study area include the Roanoke, Tar, Ahoskie, and Fishing Creek.

Climate:

The climate for this region is fairly uniform with hot, humid summers and mild winters (60-70 degrees Farenheit average annual temperature). High rainfall amounts, ranging from 40-60 inches, is evenly distributed over the year (Bailey, 1980).

Vegetation:

According to Bailey, the climax community of the Southeastern Mixed Forest Province consists of medium tall to tall broadleaf deciduous and needleleaf evergreen trees. At least half of forest stands consist of pines (shortleaf, loblolly, and southern yellow) and are found primarily in upland areas. Common deciduous trees are sweetgum, red maple, oaks and blackgum. Cypress and gums predominate in swamps. Bogs or pocosins, found in shallow depressions, support thick stands of evergreen shrubs.

Soils:

A wide variety of upland and wetland soils are present in the study area, ranging from sand to heavy clays. On the level floodplains and low terraces can be found the more poorly drained loamy soils. Soil groups, representative of wetland habitats may include Dorovan, Bibb, Chowan, Scuppernong, Rains, Currituck, and Cape Fear soils.

D. WETLAND CLASSIFICATION CODES AND WATER REGIME DESCRIPTIONS
TABLE- COWARDIN CLASSIFICATION CODES AND DESCRIPTIONS

NWI CODE (Water Regime)	NWI DESCRIPTION	COMMON DESCRIPTION	VEGETATION/SUBSTRATE
E1UB (L)	Estuarine, subtidal unconsoildated bottom	Intracoastal water-ways, including: bays, inlets, and adjacent salt marshes	Unconsolidated bottom
E2EM1 (P)	Estuarine, inter-tidal, emergent persistent	Salt Marsh	Phragmites sp. Cladium sp. (sawgrass)
R2UB (H)	Riverine, lower perennial, unconsolidated bottom	River or drainage ditches	Unconsolidated bottom
L1UB (H)	Lacustrine,limnetic unconsolidated bottom	Lake	Unconsolidated bottom
L2AB3 (G,H)	Lacustrine, littoral, aquatic bed rooted vascular	Lake Marshes	Nymphaea sp. (waterlily) Nelumbo lutea (American lotus)
L1AB4 (H)	Lacustrine, limnetic, aquatic bed floating vascular	Lake	Lemna spp. (duckweed)
PUB (F,G,H)	Palustrine unconsolidated bottom	Pond	Unconsolidated bottom
PAB3 (G,H)	Palustrine, aquatic bed rooted vascular	Ponds or deep marshes	Nymphaea sp. (waterlily) Nelumbo lutea (American lotus)
PAB4 (G,H)	Palustrine, aquatic bed, floating vascular	Pond	Lemna spp. (duckweed)
PEM1 (A,C,F,G)	Palustrine, emergent persistent	Ponded prairies, marshes, depressions or drainage areas	Typha latifolia (cattail) Polygonum sp. (smartweed) Panicum sp. (maidencane)

NWI CODE	NWI DESCRIPTION	COMMON DESCRIPTION	VEGETATION/SUBSTRATE
PEM1 (cont'd)			Juncus sp. (rush) Andropogon virginicus (broomsedge) Xyris spp. (grasses)
PSSI (A,C,F,G)	Palustrine, scrub shrub, broad-leaved deciduous	Willow thicket	Salix sp. (willow) Populus heterophylla (swamp cottonwood) Acer rubrum (red maple) Liquidambar styraciflua (sweetgum) Nyssa sylvatica (blackgum)
PSS7 (A,B,C)	Palustrine, scrub shrub, mixed evergreen	Shrub forest	Persea borbonia (red bay) Myrica cerifera (wax myrtle) Magnolia virginiana (sweetbay) Pinus taeda (loblolly pine) Pinus serotina (pond pine) Cyrilla racemiflora (titi)
PFO1 (A,C,F)	Palustrine,forested broad-leaved deciduous	Floodplains, swamps or depressions	Acer rubrum (red maple) Liquidambar styraciflua (sweetgum) Liriodendron tulipifera (tulip poplar) Quercus nigra (water oak) Ulmus americana (American elm) Betula nigra (River birch) Salix sp. (willow) Nyssa sylvatica (blackgum) Nyssa aquatica (water tupelo)

NWI CODE	NWI DESCRIPTION	COMMON DESCRIPTION	VEGETATION/SUBSTRATE
PFO1 (cont'd)			Quercus laurifolia (laurel oak)
PFO4 (A,B,C)	Palustrine, forested, needle-leaved evergreen	Pine flatwoods	Pinus taeda (loblolly pine) Pinus serotina (pond pine) Chamaecyparis thyoides (Atlantic White Cedar)
PFO7 (A,B,C)	Palustrine forested, mixed evergreen	Bay Swamp/Pine Flatwoods	Magnolia virginiana (Sweetbay) Persea borbonia (red bay) Pinus taeda (loblolly pine) Pinus serotina (pond pine)
PFO6	Palustrine, forested, mixed deciduous	Sloughs,swamps	Taxodium distichum (bald cypress) Nyssa aquatica (water tupelo) Nyssa sylvatica (blackgum) Liquidambar styraciflua (sweetgum) Acer rubrum (red maple) Salix sp. (willow)

Water Regime Description

Tidal

Salt and Brackish Areas - Marine and Estuarine Systems

(L) Subtidal- The substrate is permanently flooded with tidal water.
(M) Irregularly Exposed- Land surface is exposed by tides less often than daily. This corresponds to the area on NOS charts from seaward edge of light green tone (mean low water) to depth contour approximating extreme low water.
(N) Regularly Flooded- Tidal water alternately floods and exposes the land surface at least once daily.
(P) Irregularly Flooded- Tidal water floods land surface less often than daily. The area must flood by tide at least once yearly as a result of extreme highspring tide.

Freshwater Tidal Areas - Lacustrine, Palustrine and Riverine Systems.

(N) Regularly Flooded- Fresh tidal water alternately floods and exposes the land surface at least once daily.
(R) Seasonally Flooded- Tidal
(S) Temporarily Flooded- Tidal
(T) Semipermanently Flooded- Tidal
(V) Permanently Flooded- Tidal

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) Seasonably 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 extremely 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) Artifically Flooded-The amount and duration of flooding is controlled by means of pumps or siphons in combination with dikes or dams.

General Note: Table 1

In the Palustrine Forested NWI codes, the split subclasses will be meant to also include the inverse subclasses. However, the vegetation characteristics will be the same only in different percentages.

Also, any split classes will generally contain those vegetation characteristics found in the singular class.

F. MAP PREPARATION

The wetland classification that appears on the Greensboro SE, Norfolk SE and SW National Wetlands Inventory (NWI) Base Map (Table 1) is in accordance with Cowardin et al. (1977). The delineations were produced through steroscopic interpretation of 1:58,000 scale color infrared photography. The photography was taken during March and April, 1982 and 1983.

Field checks of areas found within Greensboro SE, Norfolk SE & 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 photointerpretation, 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 photointerpretation 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:

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Regional Wetland Coordinator
U.S. Fish and Wildlife Servide - Region IV
R.B. Russell Federal Building
75 Spring Street S.W.
Atlanta, GA 30303

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.

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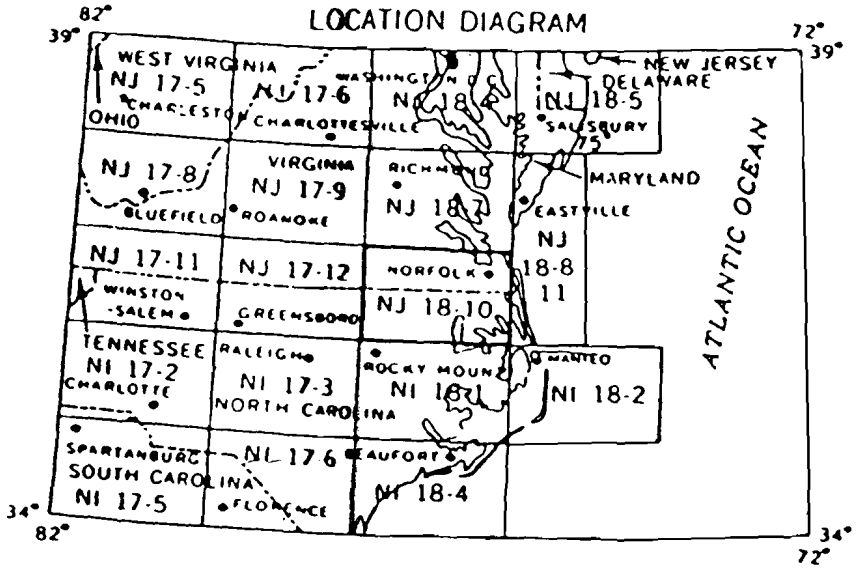
APPENDIX A
1:250,000 - Scale Index Map