

DRAFT

USER REPORT
JACKSONVILLE SW, DAYTONA BEACH NW, PENSACOLA NE
NATIONAL WETLANDS INVENTORY MAPS

A. INTRODUCTION

The U.S. Fish and Wildlife Services National Wetlands Inventory is producing maps showing the location and classification of wetlands and deep water 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 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 covered by Jacksonville SW, Daytona Beach NW, and Pensacola NE is located in northern Florida. Bailey (1980) identifies the study area as the Outer Coastal Plains Forest Province. Bailey includes the area in the Beech-Sweetgum-Magnolia-Pine-Oak Forest Section. 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 Blackwater River, Shoal River, and the Yellow River.

Climate:

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

Vegetation:

According to Bailey, the study area is characterized as Temperate Rainforest. Typical trees are evergreen oaks and members of the laurel and magnolia families. These forests usually have a well developed understory of tree ferns, small palms, shrubs, and herbaceous plants.

The climax vegetation of these mesophytic habitats is the evergreen-oak and magnolia forest. Second growth forests, xerophytic and hydrophytic, are represented by large areas of sandy upland consisting of loblolly and slash pine and swamps where bald cypress is the dominant tree.

Soils:

Temperate rainforests grow on a wide variety of upland soils, but most tend to be wet, acidic, and low in the major plant nutrients. The soils range from heavy clay to gravel, but sandy materials predominate. They are derived mainly from coastal plain sediments of sandy materials. The soils are mainly of three orders: Ultisols, Spodosols, and Entisols.

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

F. MAP PREPARATION

The wetland classification that appears on the Jacksonville SW, Daytona Beach NW, and Penscola NE National Wetlands Inventory (NWI) Base Map is in accordance with Cowardin et al. (1979). The delineations were produced through stereoscopic interpretation of 1:58,000 scale color infrared photography.

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.

D. WETLAND CLASSIFICATION CODES AND WATER REGIME DESCRIPTIONS

Table - Cowardin Classification Codes and Descriptions (1 of 4)

NWI CODE WATER REGIME	NWI DESCRIPTION	COMMON DESCRIPTION	CHARACTERISTIC VEGETATION
R2UB (H)	Riverine, lower perennial, unconsoli- dated bottom	River or drainage ditches	Unconsolidated bottom
L1UB (H)	Lacustrine, limnetic, unconsolidated bottom	Lake	Unconcolidated bottom
L2AB3 (G,H,)	Lacustrine, littoral, aquatic bed rooted vascular	Lake Marshes	<u>Nymphaea</u> sp. (waterlily) <u>Nelumbo lutea</u> (American lotus)
L1AB4 (H)	Lacustrine, limnetic, aquatic bed floating vascular	Lake	<u>Lemna</u> sp. (duckweed)
PUB (F,G,H)	Palustrine, unconsoli- dated bottom	Pond	Unconsolidated bottom
PAB3 (G,H)	Palustrine, aquatic bed, rooted vascular	Ponds or deep marshes	<u>Nymphaea</u> sp. (waterlily) <u>Nelumbo lutea</u> (American lotus)
PAB4 (G,H)	Palustrine, aquatic bed, floating vascular	Pond	<u>Lemna</u> sp. (duckweed)
PEM1 (A,C,F,G)	Palustrine, emergent persistent	Ponded prairies, marshes, depressions, or drainage areas	<u>Typha latifolia</u> (cattail) <u>Polygonum</u> sp. (smartweed) <u>Panicum</u> sp. (maidencane) <u>Carex</u> sp. (sedges) <u>Juncus</u> sp. (rush)

D. WETLAND CLASSIFICATION CODES AND WATER REGIME DESCRIPTIONS

Table - Cowardin Classification Codes and Descriptions (2 of 4)

NWI CODE WATER REGIME	NWI DESCRIPTION	COMMON DESCRIPTION	CHARACTERISTIC VEGETATION
PEM1 (cont)			<u>Andropogon virginicus</u> (broomsedge) <u>Xyris</u> sp. (grasses) <u>Eleocharis</u> sp. (spikerush) <u>Scirpus cyperinus</u> (woolgrass)
PSSI (A,C,F)	Palustrine, scrub shrub, broad leaved deciduous	Willow thicket	<u>Cephalanthus occidentalis</u> (buttonbush) <u>Salix</u> sp. (willow) <u>Acer rubrum</u> (red maple)
PSS3 (A,B)	Palustrine, scrub shrub, broad leaved evergreen	Scrub bog	<u>Persea borbonia</u> (red bay) <u>Myrica cerifera</u> (wax myrtle) <u>Magnolia virginiana</u> (sweetbay) <u>Gordonia lasianthus</u> (loblollybay) <u>Cyrilla racemiflora</u> (titi) <u>Lyonia lucida</u> (fetterbush)

D. WETLAND CLASSIFICATION CODES AND WATER REGIME DESCRIPTIONS

Table - Cowardin Classification Codes and Descriptions (3 of 4)

NWI CODE WATER REGIME	NWI DESCRIPTION	COMMON DESCRIPTION	CHARACTERISTIC VEGETATION
PSS7 (A,B,C)	Palustrine, scrub shrub, mixed evergreen	Shrub forest	<u>Persea borbonia</u> (red bay) <u>Myrica cerifera</u> (wax myrtle) <u>Magnolia virginiana</u> (sweetbay) <u>Pinus taeda</u> (loblolly pine) <u>Pinus serotina</u> (pond pine) <u>Cyrilla racemiflora</u> (titi) <u>Juniperus sp.</u> (juniper)
PFO1 (A,C)	Palustrine, forested, broad leaved deciduous	Floodplains, swamps or depressions	<u>Acer rubrum</u> (red maple) <u>Liquidambar styraciflua</u> (sweetgum) <u>Salix sp.</u> (willow) <u>Nyssa sylvatica</u> (blackgum) <u>Nyssa aquatica</u> (water tupelo) <u>Quercus laurifolia</u> (laurel oak)
PF03 (B)	Palustrine, forested, broad leaved evergreen	Bayheads or swamps	<u>Magnolia virginiana</u> (sweetbay) <u>Persea borbonia</u> (red bay) <u>Gordonia lasianthus</u> (loblolly bay)

D. WETLAND CLASSIFICATION CODES AND WATER REGIME DESCRIPTIONS

Table - Cowardin Classification Codes and Descriptions (4 of 4)

NWI CODE WATER REGIME	NWI DESCRIPTION	COMMON DESCRIPTION	CHARACTERISTIC VEGETATION
PF04 (A,B,C)	Palustrine, forested, needleleaved evergreen	Pine flat- woods	<u>Pinus serotina</u> (pond pine) <u>Pinus elliotti</u> (slash pine)
PF07 (A,B,C)	Palustrine, forested, mixed evergreen	Bay Swamp/ Pine Flat- woods	<u>Magnolia virginiana</u> (sweetbay) <u>Persea borbonia</u> (red bay) <u>Pinus taeda</u> (loblolly pine) <u>Pinus serotina</u> (pond pine)
PF06 (C,F)	Palustrine, forested, mixed deciduous	Sloughs, swamps	<u>Taxodium distichum</u> (bald cypress) <u>Nyssa aquatica</u> (water tupelo) <u>Nyssa sylvatica</u> (blackgum) <u>Liquidambar styraciflua</u> (sweetgum) <u>Acer rubrum</u> (red maple) <u>Salix sp.</u> (willow)
PF02/4 (B,C,F)	Palustrine, forested, needleleaved deciduous/needleleaved evergreen	Depressions	<u>Taxodium distichum</u> (bald cypress) <u>Pinus sp.</u> (pines)

H. MAP ACQUISITION

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

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

To order maps only, please 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.

INFORMATION SOURCES

- Bailey, Robert G. 1980. Description of the Ecoregions of the United States; United States 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. United States Department of the Interior, U.S. Fish and Wildlife Service. Biological Services Program, Washington D.C.
- Sharitz, Rebecca R. and J. Whitfield Gibbons, 1982. The Ecology of Southeastern Shrub Bogs (Pocosins) and Carolina Bays: A Community Profile. U.S. Department of the Interior, Washington D.C.