

NATIONAL WETLANDS INVENTORY MAPS

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 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 covers a significant portion of inland southern Georgia. It is part of the Southern Coastal Plain and the Atlantic Coastal Flatwoods. These are major land resource areas where floodplains along streams are level or nearly level and associated streams generally slow moving. Relief is limited to less than 500 feet above sea level and generally level to gently sloping. Prominent depressions (sinks) or low flats are commonly found throughout the landscape. These basins often have no outlet for drainage other than underground percolation, therefore, following heavy rains they can hold water for 1 to 6 months. Many streams dissect the landscape and are impounded more than once.

The Okefenokee Swamp is included in this work area covering approximately 10 quadrangles in the Valdosta NE 1:100,000 map. Major rivers also included within the area are the St. Mary's, Suwannee, Altamaha, Ocmulgee, Satilla and Alapaha. Many other narrower floodplains are present throughout the work area and are associated with rivers such as Hurricane Creek and Withlacoochee River.

This area has been characterized as the Beech-Sweetgum-Magnolia-Pine-Oak Forest within the Outer Coastal Plain

Forest Province of the Humid Subtropical Division by Bailey (1980). He maps the area as Eastern Gulf Atlantic Rolling Plains and Coastal Flats and describes it as a generally flat region with over 54% of the area gently sloping.

This area is heavily utilized for agriculture. Wetlands here are often being altered by man either by drainage ditches or clearing. Pines are planted in many temporarily or seasonally flooded wetlands.

Climate:

Climatic characteristics include a long growing season, hot humid summers and short mild winters. Spring is generally wetter than autumn with most rainfall falling around July and the least in October. The average amount, in inches of yearly precipitation is in the mid 40's. The temperature reaches the low 90's (°F) in August and the low 40's in January.

Vegetation:

The study area is characterized as Temperate Rainforest (Bailey, 1980). 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. Lianas and epiphytes are abundant.

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. Silty soils predominantly occur on large level areas. The soils are mainly of three orders: Ultisols, Spodosols, and Entisols.

Specific soil classifications and descriptions can be found in the soil surveys for the counties within the maps.

Available soil surveys that were used include those for the following counties: Brooks, Thomas, Cook, Colquitt, Berrien, Lanier, Lee, Turner, Irwin, Ben Hill, Tift, Sumter, Crisp, Wheeler, Toombs, Tatnall, Jeff Davis, Appling, Wayne and Pierce. The hydric soils generally are described as poorly drained with sandy surfaces and loamy underlying layers.

Clay or organics can be present in the soil also. These wetland soils are found associated with floodplains, terraces, drainage ways, swamps, bays, depressions, and lowland flats.

D. WETLAND CLASSIFICATION CODES AND WATER REGIME DESCRIPTIONS
 TABLE 1: NWI CLASSIFICATION FOR VALDOSTA NW, NE AND WAYCROSS NW, NE, SW, SE

NWI CODE (WATER REGIME)	NWI DESCRIPTION	COMMON DESCRIPTION	CHARACTERISTIC VEGETATION
R2UB (H)	Riverine, lower perennial, unconsolidated bottom	Rivers or drainage ditches	Unconsolidated bottoms
R2AB4 (H)	Riverine, lower perennial, aquatic bed, floating vascular	Rivers	<u>Lemna</u> spp. (duckweed)
R2AB3 (H)	Riverine, lower perennial aquatic bed rooted vascular	Rivers	<u>Nymphaea</u> spp. (water lilies)
L1UB (H)	Lacustrine, limnetic, unconsolidated bottom	Lakes	Unconsolidated bottoms
L2AB3 (G,H)	Lacustrine, littoral, aquatic bed rooted vascular	Lake marshes	<u>Nuphar advena</u> (spatterdock) <u>Orontium aquaticum</u> (goldenclub or neverwet) <u>Sagittaria graminea</u> (water plantain) <u>Utricularia purpurea</u> (bladderwort) <u>Nymphaea odorata</u> (white water lily) <u>Myriophyllum</u> <u>brasiliense</u> (parrot feather)
L1AB4 (H)	Lacustrine, limnetic, aquatic bed, floating vascular	Lakes	<u>Hydrocotyle umbellata</u> (water pennywort) <u>Lemna</u> sp. (duckweed)
PUB (F,G,H)	Palustrine, unconsolidated bottom	Ponds or pits	Unconsolidated bottoms

NWI CODE (WATER REGIME)	NWI DESCRIPTION	COMMON DESCRIPTION	CHARACTERISTIC VEGETATION
PAB3 (G,H)	Palustrine, aquatic bed, rooted vascular rooted vascular	Ponds or deep marshes	<u>Nuphar advena</u> (spatterdock) <u>Orontium aquaticum</u> (goldenclub or neverwet) <u>Sagittaria graminea</u> (water plantain) <u>Utricularia purpurea</u> (bladderwort) <u>Nymphaea odorata</u> (white water lily) <u>Myriophyllum brasiliense</u> (parrot feather)
PAB4 (G,H)	Palustrine, aquatic bed, floating vascular	Ponds	<u>Hydrocotyle umbellata</u> (water pennywort) <u>Lemna</u> sp. (duckweed)
(C)	Palustrine, emergent, persistent	Ponded prairies, marshes, depres- sions or drainage areas	<u>Typha latifolia</u> (cattail) <u>Xyris smalliana</u> (yellow-eyed grass) <u>Eriocaulon</u> spp. (pipewort) <u>Panicum hemitomonum</u> (maidencare) <u>Eleocharis baldwinii</u> (aquatic spike rush) <u>E. elongata</u> (spike rush) <u>Pontederia cordata</u> (pickerelweed) <u>Iris caroliniana</u> (swamp iris) <u>Eriocaulon compressum</u> (pipewort) <u>Scirpus cyperinus</u> (woolgrass) <u>Arundo donax</u> (giant reed) <u>Andropogon glomeratus</u> (broomsedge bluestem)

NWI CODE (WATER REGIME)	NWI DESCRIPTION	COMMON DESCRIPTION	CHARACTERISTIC VEGETATION
PSS3 (A, B, C, F)	(cont'd.)		<u>Ilex curiacea</u> (holly) <u>Ilex glabra</u> (gallberry) <u>Ilex cassine</u> (dahoon holly) <u>Myrica cerifera</u> (wax myrtle)
PSS7 (A, B, C)	Palustrine, scrub-shrub, evergreen	Thicket or bog	Same plants as found in the above PSS3 classification with the additior of pines: <u>Pinus elliotii</u> (slash pine) <u>Pinus serotina</u> (pond pine) <u>Pinus taeda</u> (loblolly pine)
PFO1 (A, C, F)	Palustrine, forested, broad-leaved deciduous	Floodplains, swamps or depressions	<u>Liriodendron</u> <u>tulipifera</u> (tulip poplar) <u>Acer rubrum</u> (red maple) <u>Quercus nigra</u> (water oak) <u>Quercus laurifolia</u> (laurel oak) <u>Quercus phellos</u> (willow oak) <u>Liquidambar</u> <u>styraciflua</u> (sweetgum) <u>Nyssa sylvatica</u> (black gum) <u>Nyssa aquatica</u> (water tupelo)
PFO2 (C, F, G)	Palustrine, forested, needle-leaved deciduous	Cypress domes, sloughs or swamps	<u>Taxodium distichum</u> <u>nutans</u> (pond cypress)

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

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 all Waycross and northern Valdosta National Wetlands Inventory (NWI) Base Maps is in accordance with Cowardin et al (1977). The delineations were produced through stereoscopic interpretation of 1:58,000 scale color infrared photography. Much of the photography was taken during early 1983 and 1984.

Field checks of areas found within the study area 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:

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, 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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