

P

DRAFT

NATIONAL WETLANDS INVENTORY

NOTES TO USERS

GEORGIA

1:100,000 SCALE MAP

ATLANTA (ATLANTA NE)

1

21

NATIONAL WETLANDS INVENTORY NOTES TO USERS

MAP NARRATIVE

ATLANTA (ATLANTA NE)

Introduction

The U.S. Fish and Wildlife Service's National Wetlands Inventory Program is conducting an inventory of the wetlands of the United States. The National Wetlands Inventory (NWI) is establishing a wetlands data base in both map and computer forms for the Nation and its territories. The NWI information will serve to identify the current status of U.S. Wetlands and can be used as a reference point from which future changes in wetlands can be evaluated.

Purpose

The purpose of the Notes to Users is to provide general information regarding the production of NWI maps and wetlands found within a relatively similar geographic area.

Area Covered

The project area is defined by the U.S.G.S. Atlanta NE 1:100,000 area (see index Map A). The study area is located in west central Georgia. The 34°00' N latitude is the northern border and the 33°30' N latitude is the southern border. The east-west borders are 84°00' W - 85°00' W longitude. Major wetlands within the area of study include the Chattahoochee River and Lake Spivey.

Bailey classifies the study area into the Humid Subtropical Division Southern Mixed Forest Province. The climax vegetation is medium tall to tall forests of broadleaf deciduous and needleleaf evergreen trees. These stands include loblolly pine, shortleaf pine, or other southern yellow pines. Common bottomland associations include oak, hickory, sweetgum, blackgum, red maple, and winged elm. The work area can be further divided into the Eastern Gulf Atlantic Rolling Plain Section.

The precipitation averages approximately 50 inches per year in the area and the average annual temperature is 60° to 70°F.

Wetlands and Deepwater Habitats

Wetland classification for the NWI maps is in accordance with "Classification of Wetlands and Deepwater Habitats of the United States" by L.M. Cowardin, et al., 1979. A more detailed community description of some of the commonly used designations is given on the following pages.



Commonly Used Designations

- PF01A Palustrine, forested, broad-leaved deciduous, temporarily flooded.

This classification is primarily used to describe bottomland hardwood habitat associated with major rivers and streams. The water table is near the surface during the spring rainy season but is well below the surface for most of the year. Overbank flooding may occur briefly or surface water may pond during heavy or extended rainfall. Mature forests of this type are vegetated by red maple (Acer rubrum) and sweetgum (Liquidambar styraciflua) as well as willow (Salix spp.).

- PF01C Palustrine, forested, broad-leaved deciduous seasonally flooded.

This habitat type is characterized by poorly drained soils and a high water table. Flooding occurs for extended periods especially early in the growing season. The more common woody vegetation include the following species: willow (Salix spp.), red maple (Acer rubrum), green ash (Fraxinus pennsylvanica), river birch (Betula nigra) and sweetgum (Liquidambar styraciflua). This is the most common wetland type in floodplain areas.

Because of the complexity of alluvial topography, inclusions of wetland habitats with slightly wetter or drier characteristics may also occur within the designation. Although these inclusions were often visible on the photography,, scale limitations made them impossible to delineate.

- PF01F Palustrine, forested, broad-leaved, deciduous, semi-permanently flooded.

These areas are characterized by standing water throughout the growing season in most years. Dominant species include green ash (Fraxinus pennsylvanica), and willow (Salix spp.). Frequently found as well are red maple (Acer rubrum), sweetgum (Liquidambar styraciflua) and river birch (Betula nigra). Less frequently found are swamp tupelo (Nyssa sylvatica), red bay (Persea borbonia), swamp chestnut oak (Quercus prinus) and eastern hophornbeam (Ostrya virginiana).

- PF05H Palustrine, forested, dead, intermittently exposed.

The classification describes wetland consisting primarily of dead timber. A minimum 30% areal coverage by dead timber is necessary according to Cowardin et al. in order for this classification to apply. Flooded conditions are present throughout the entire year. The death of trees

often results from the physiological stresses caused by prolonged flooding. Reasons for extended periods of flooding include beaver impoundments, flowage restrictions due to road construction, and blockage of natural drainages by debris or siltation.

PSS1A Palustrine, scrub/shrub, broad-leaved deciduous, temporarily flooded.

The designation usually describes recently cleared bottomland or formerly farmed bottomland in an early stage of succession. Trees are young and are less than 20 feet tall. Typically species are: red maple (Acer rubrum), sycamore (Platanus occidentalis), and sweetgum (Liquidambar styraciflua) and alder (Alnus serrulata).

PSS1C Palustrine, scrub/shrub, broad-leaved deciduous, seasonally flooded.

This habitat is similar to that identified as "PSS1A" except that wetter conditions prevail. These areas remain flooded for extended periods especially early in the growing season. The typical species included in this community are willow (Salix spp.), red maple (Acer rubrum), and alder (Alnus serrulata).

PSS1F Palustrine, scrub/shrub, broad-leaved deciduous, semi-permanently flooded.

Scrub-shrub communities are vegetated with willow (Salix spp.), buttonbush (Cephalanthus occidentalis), red maple (Acer rubrum) and alder (Alnus serrulata). These areas are generally located along streams, in floodplains, in depressions, and on the perimeter of lakes.

PEM1A Palustrine, emergent, persistent, temporarily flooded.

Pasture lands, depressions often located in field corners, or newly cleared bottomland which experience brief flooding early in the growing season or during periods of extended rainfall are included in this category. Species found here include sedge (Carex spp.), bulrush (Scirpus spp.), rush (Juncus spp.) and spikerush (Eleocharis spp.).

PEM1C Palustrine, emergent, persistent, seasonally flooded.

These areas are similar to "PEM1A" but flooding is more prolonged and more water tolerant plant species predominate. Commonly occurring are sedge (Carex spp.), arrowhead (Sagittaria spp.), smartweed (Polygonum spp.) and cattail (Typha spp.).

PEM1F Palustrine, emergent, persistent, semipermanently flooded.

Water usually stands in these areas throughout the growing season. All emergents in these areas are obligate hydrophytes. Species include cattail (Typha spp.), smartweed (Polygonum spp.), arrowhead (Sagittaria spp.), various sedges (Carex spp.) and (Scirpus spp.).

PAB3H Palustrine aquatic bed rooted.

This classification includes yellow lotus (Nelumbo lutea), and watersnail (Brasenia schreberi).

PAB4H Palustrine aquatic bed floating.

This classification includes water velvets (Azolla spp.).

PUSA Palustrine, unconsolidated shore, temporarily flooded.

PUSC Palustrine, unconsolidated shore, seasonally flooded.

PUBH Palustrine, open water, permanently flooded.

This classification usually identifies farm ponds but may also include other open bodies of water less than 20 acres in size. Excavated ponds are considered unconsolidated bottom and labelled PUBHx. Impounded stock ponds are designated as PUBHh.

L1UBHh Lacustrine, limnetic, unconsolidated bottom, permanently flooded, impounded.

Impoundments greater than 20 acres in size or smaller impoundments known to be deeper than 2 meters.

L2AB3H Lacustrine, littoral, rooted aquatic bed, permanently flooded.

Species commonly found are yellow lotus (Nelumbo lutea) and watersnail (Brasenia schreberi).

L2AB4H Lacustrine, littoral aquatic bed, floating, permanently flooded.

R4SBA Riverine intermittent streambed, temporarily flooded.

R4SBC Riverine intermittent streambed, seasonally flooded.

R2USC Riverine, lower perennial, unconsolidated shore, seasonally flooded.

River bars which are normally exposed during the dry season each year.

R2UBH Riverine, lower perennial, open water, permanently flooded.

Perennial rivers and their tributaries normally having well defined floodplains.

R2UBHx Riverine, lower perennial, open water, permanently flooded, excavated.

Identified channelized rivers and streams and new river "cutoffs" forming navigational improvements.

Map Preparation

Mapping was initiated in November of 1986 and completed in 1987. The maps were prepared through photo interpretation of color infrared photography at a scale of 1:58,000 acquired by the National High Altitude Photography Program. Photographs were taken in February and March, 1981. The date of photography used for an individual map is given in the lower right hand corner of that map. Field checking took place in November 1986. Photo interpretation and cartographic production were performed by Martel Laboratories, Inc., service support contractor to the NWI in St. Petersburg, Florida. Materials used to assist in the photo interpretation included United States Geological Survey topographic maps and USDA, Soil Conservation Service, County Soil Surveys where available. Collateral data used included U.S.G.S. topographic maps, and soil, climate, and vegetation information (Bailey 1980, Hammond 1965, Hotchkiss 1972, Little 1985, and Niering 1983).

Special Mapping Problems

The photography was found to be in general representative of wetter conditions than those found during the field trip. Compensation for wetter photography during a dry field season will be taken in classifying wetland areas.

How to Acquire Maps

National Wetlands Inventory maps are available from:

Regional Wetlands Coordinator
U.S. Fish and Wildlife Service
75 Spring Street, S.W.
Atlanta, Georgia 30303

or

National Cartographic Information Center
U.S. Geological Survey
National Space Technology Laboratories
Building 1100
NSTL Station, Mississippi 39529

Maps are identified by the name of the corresponding U.S. Geological Survey 1:24,000 scale topographic quadrangle name. Topographic map indexes are available from the Geological Survey.

REFERENCES AND ADDITIONAL SOURCES OF INFORMATION

Bailey, R.G., 1980. Description of the Ecoregions of the United States. 1980. U.S. Department of Agriculture Miscellaneous Publication. 77pp.

Hammond, E.H., 1965. 1:7,500,000 scale Physical Subdivisions and 1969 1:7,500,000 scale Classes of Land-Surface Form.

Hotchkiss, Neil, 1972. Common Marsh, Underwater and Floating Leaved Plants 123pp.

Little, Elbert L., 1985. Audubon Society Field Guide to North American Trees 714pp.

Niering, William R., and Olmstead, Nancy C., 1983. Audubon Society Field Guide to North American Wildflowers 887pp.

NWI#26

