

USER NOTES: MOBILE NE AND NW
NATIONAL WETLANDS INVENTORY MAPS

Map Preparation

The wetland classifications that appear on the Mobile NW and NE base maps are in accordance with Cowardin et al. (1977). The delineations were produced through stereoscopic interpretation of 1:58,000 scale color infrared aerial photographs taken from 1980-1983.

Field checks of the study area were conducted in March 1986 to verify wetland vegetation communities and to correlate those communities with tones, textures, colors and other environmental features present on the photography.

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. Changes in the landscape could have occurred since the time of photography, therefore, some discrepancies between the map and current field conditions may exist. Any discrepancies that are encountered in the use of this map should be brought to the attention of John Hefner, Regional Wetlands Coordinator; U.S. Fish and Wildlife Service, Region 4; R.B. Russell Federal Building, 75 Spring Street S.W; Atlanta, GA 30303. Photo interpretation and drafting were completed by Martel Laboratories, Inc., St. Petersburg, Florida.

Geography

The area covered by Mobile NW and the eighteen quads of Mobile NE is located in southern Mississippi and portions of southern Louisiana and Alabama. Most of the work area is located between the Pascagoula River and the Pearl River and between 30°30" and 31°00" North Latitudes.

The area has three major landforms: terraces and floodplains of the Pearl and Pascagoula rivers, flatwoods, and higher lying coastal plains. The floodplains of the major rivers extend the length of the work area and range from five to six miles in width. The floodplain landscape is nearly level and has a seasonally high water table. Soils are somewhat poorly drained to poorly drained. Swamps and channels border the length of the floodplains.

Flatwood areas have a landscape which is very slightly inclined to the south. Soils generally have a higher water table and many areas are poorly drained. Pitcher plant bogs occur in and near flatwood areas. The bogs can be found in dish shaped depressions

on hillsides and near flatwoods adjacent to floodplains. Bogs can also be found in unforested areas of little relief near flatwoods. These open areas are called "savannahs". (Folkerts, 1982, p. 260) Coastal Plain uplands are the major physiographic features in the northern half of the work area. The uplands are nearly level to steep and are well drained to moderately well drained. Stream valleys are deeper than those in other parts of the work area. Principal streams are south-flowing and are roughly parallel before intersecting.

The work area is located in the Outer Coastal Plain Ecoregion as described by Bailey (1978). Bailey further described the region as being forested and supporting the following dominants: beech, sweetgum, magnolia, pine, and oak. The province is a temperate rain forest which differs from a tropical rainforest mainly by the lack of diversity of the species which inhabit it.

The work area is predominantly rural; agriculture is the dominant industry. Commercial forests occupy a large portion of the work area. The paper industry is a major economic force in the region. Some of the other farm products are soybeans, corn, watermelon, beef cattle, and dairy.

Climate

The climate of the area is honest subtropical (CT0) according to the Kippen system (1931) of climatic classification. It is determined by the continental influence of North America, its subtropical latitude, and by the Gulf of Mexico. Winters are mild and rainfall is distributed throughout the year, significantly higher during the summer months.

Wetland Vegetaton Communities

Ponded forested wetland communities occupy most of the area in the mapping effort. Pitcher Plant Bogs are common and unique to the Outer Coastal Forest Province of Alabama, Mississippi, and Louisiana. Wetland communities associated with rivers and lakes are present but not extensive.

Ponded forested wetlands are associated with temporarily flooded areas, seasonally flooded areas, or with saturated soil conditions. The definition of temporarily flooded, seasonally flooded, and saturated are as follows:

Temporarily Flooded--Surface water present for brief periods during growing season, but the water table usually lies well below soil surface. Plants that grow both in uplands and wetlands are characteristic of this water regime.

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. After flooding ceases, the water table is variable, extending from saturated to a water table well below the ground surface.

Saturated--The substrate is saturated to the surface for extended periods during the growing season, but surface water is seldom present.

Temporarily ponded wetlands were found to occur in the upper reaches of forested streams. Species are of a hardwood/coniferous mixture with slash pine being common. Stands of red maple may be found here and in elevated areas in the Pascagoula and Pearl River floodplains. Except for the upper reaches of the streams, floodplains are predominantly seasonally flooded. Floodplains are composed of mixes of deciduous species and also pure stands. The following species are found to occur in seasonally flooded areas: overcup oak (Quercus lyrata), chestnut oak (Quercus montana), swamp hickory (Lanya lecodernis), water hickory (Lanya aquatica), cypress (Taxodium distichum), green ash (Fraxinus pennsylvanica), sweetgum (Liquidambar styraciflua), slash pine (Pinus elliotii) and loblolly pine (Pinus taeda).

Stands of tupelo (Nyssa aquatica) and cypress are found in meander scars in floodplains or in small artificially impounded areas. The stands of tupelo and cypress inhabit areas in which surface water persists throughout the growing season in most years. However, when surface water is absent, the water table is usually at or near the land's surface.

Intermittently exposed ponded areas are found in many cases to contain tupelo and dead trees.

Intermittently exposed wetlands are those areas where water is present throughout the year except in years of extreme drought.

Ponded wetlands characterized by saturated soils (bogs) are most easily identified by the presence of pitcher plants (Sarracenia leucophylla, S. flava, S. purpurea, S. alata, and S. minor). Other carnivorous species are present; sundews (Drosera leucantha, D. capillaris), bladderworts (Utrricula sp.), and butterworts (Pinguicula sp.). Other herbaceous species common to bogs also include wiregrass (Aristida stricta), bog button (Lachnocaulon anceps), and Sphagnum. Mud "chimneys" formed by burrowing crayfish (Cambarus and Procambarus sp.) are abundant in bogs.

The majority of the bogs in the work area have an overstory composed of scrub/shrub although many bogs are forested. The dominant species found in an overstory composed of scrub/shrub are willow (Salix nigra), red bay shrub (Persea borbonia), slash pine scrub (Pinus ellioti), wax myrtle (Myrica cerifera), and loblolly pine (Pinus taeda). Forested overstories consist of slash pine, loblolly pine, sweet bay (magnolia virginiana), red bay, or laurel oak (Quercus laurifolia).

Bodies of water are classified as lakes if they are larger than 20 acres. Lakes are located in meander scars of the Pascagoula and Pearl Rivers and in large impoundments. Lakes and ponds are considered to support aquatic plants if algae or rooted submerged plants can be seen on the photo.

Species such as cattail (Typha latafolia) are present on the shoreline of lakes and ponds predominantly in areas that have been forested. Wet depressions containing emergents are vegetated with cattails (Juncus sp.) and (Scirpus sp.). Floating aquatic beds (PAB4H) consist of duckweed (Lemna) and water meal (Wolffia).

NWI#45

NWI CODE	NWI DESCRIPTION	COMMON DESCRIPTION	CHARACTERISTIC VEGETATION
PUB	Palustrine, Unconsolidated Bottom	Ponds or Borrow Pits	Unconsolidated Bottoms
PAB4	Palustrine, Aquatic Bed, Floating Vascular	Ponds	<u>Lemna</u> spp. (Duckweed) <u>Wolffia</u> spp. (Water Meal)
PEM1	Palustrine, emergent persistent	Ponded Prairies, marshes, Depressions or Drainage Areas	<u>Typha</u> spp. (Cattails) <u>Scirpus</u> spp. (Bullrush) <u>Juncus</u> spp. (Rushes)
PEM1B	Palustrine, Emergent, Persistent, Bogs	Bogs	<u>Sarracenia</u> spp. (Pitcher Plants) <u>Utricularia</u> spp. (Bladderworts) <u>Lachnocaulon anceps</u> (Bog Button) <u>Drosera leucantha</u> (Sundew) <u>Sphagnum</u>
PSS1	Palustrine Scrub/shrub Broad Leaf Deciduous	Scrub/shrub	<u>Salix nigra</u> (Black willow)
PSS6	Palustrine Scrub/shrub Broad leaf/ Needle leaf Deciduous	Scrub/shrub	<u>Taxodium distichum</u> (Bald Cypress) <u>Nyssa aquatica</u> (Tupelo)
PSS3	Palustrine Scrub/shrub Broad leaf Evergreen	Thicket	<u>Persea borbonia</u> (Red Bay)
PSS7	Palustrine Scrub/shrub Broad leaf/ Needle leaf Evergreen	Bog	<u>Persea borbonia</u> (Red Bay) <u>Pinus</u> spp. (Pines)

		COMMON	CHARACTERISTIC
PF01	Palustrine, Forested Broad leaf Deciduous	Flood Plains	<u>Nyssa aquatica</u> (Tupelo) <u>Acer rubrum</u> (Red Maple) <u>Platanus occidentalis</u> (Sycamore) <u>Quercus spp.</u> (Oafs) <u>Liquidambar styraciflua</u> (Sweet Gum) <u>Lanya spp.</u> (Hickory)
PF06	Palustrine, Forested, Broad Leaf/ Needle Leaf Deciduous	Swamp	<u>Taxodium distichum</u> (Cypress) <u>Nyssa aquatica</u> (Tupelo)
PF03	Palustrine, Forested, Broad Leaf Evergreen	Bay Bog	<u>Persea Borbonia</u> (Red Bay)
PF04	Palustrine, Forested Needle Leaf, Evergreen	Pines	<u>Pinus elliottii</u> (Slash Pine) <u>Pinus taeda</u> (Loblolly Pine)
PF01/3	Palustrine Forested Broad Leaf Deciduous/ Evergreen	Bog	<u>Quercus spp.</u> (Oaks) <u>Persea Borbonia</u> (Red Bay)
PF05	Palustrine, Forested, Dead	Swamp	Dead Trees
R2UB	Riverine, Lower Perrenial Unconsolidated Bottom	River	Unconsolidated Bottom