

National Wetlands Inventory
Southeast Virginia Updates
Map Report

Prepared by Gabriel P. DeAlessio

U.S. Fish and Wildlife Service
Region 5

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Project ID: R05Y07P15

I. Introduction

The United States Fish and Wildlife Service's National Wetlands Inventory (NWI) is updating maps showing and classifying the wetlands and deepwater habitats of the United States. Classification of Wetlands and Deepwater Habitats of the United States, by Cowardin et al. (1979) is the document used by NWI to define and classify wetlands.

II. Field Reconnaissance

A. Project Area

Fieldwork for the Southeastern Virginia (SEVA) updates covered 22 quads in 3 1:100K maps. Six quads were located in Washington SE, 3 in Currituck Sound NW, and thirteen with Norfolk NE.

B. Field Personnel

Gabe DeAlessio – Region 5 NWI
Jerry Quesenberry – USDA Soil Scientist
David Byrd – USFWS Biologist

C. Field Dates

July 9-11, 2001

D. Aerial Photography

Aerial photography for these updates included 2 sets, 1:40K CIR 1994 photos, and 1:40K B+W 2000 photos.

E. Collateral Digital Data

Base digital data was the old NWI Digital data. Polygons were updated, but the linears were thrown out and replaced with USGS Hydrology data.

USGS Hydrology DLG's

SSURGO County Soil data for Virginia Beach City, Isle of Wight, and Suffolk Counties.

USGS Transportation DLG's

III. Physical Description of Project Area

The project area is adjacent to Chesapeake Bay, and is mostly flat with few hills. The area is highly developed and continues to be built up. Several military bases and heavy industry in areas limit the amount of natural habitat that remain.

IV. Description of Wetland Habitats

Standard Region 5 NWI conventions are used throughout the project area.

Riverine System

- 1) Extensive ditching is prevalent throughout the area. R4SBCx (more often) and R4SBAX are used.

Lacustrine System

- 1) Most lakes in the area are impounded

Palustrine System

- 1) EM5 is used to indicate *Phragmites australis* (PHAU7)
- 2) EM3 is used to indicate *Juncus roemerianus* (JURO)

V. Commonly Observed Wetland Vegetation

A. Emergent – *Juncus* (JUNCU), *Phragmites* (PHAU7), *Scirpus* (SCCY), *Carex* (CAREX)

B. Scrub-Shrub – *Acer rubrum* (ACRU), *Lindera benzoin* (LIBE3), *Vaccinium corymbosum* (VACO)

C. Forested – *Acer rubrum* (ACRU), *Pinus taeda* (PITA), *Nyssa sylvatica* (NYSY)

VII. Water Regime Description – used standard Region 5 NWI conventions

VIII. Imagery and Digital Transfer Scope

The 1:40K CIR was used as a base for the PI updates, using the old NWI digital data working on the Digital Transfer Scope (DTS). Once the initial updates were completed, the 2000 1:40K B+W photography was used to again update the data.

IX. Photographic Conventions

Digital soils were especially useful; they were available for about half of the project area. Their use helped expand wet flatwood delineation that were omitted by previous NWI mapping.

- 1) Flatwoods (PFO1B, PFO1/4B and PFO4B) were highly undermapped. As a general rule, in this highly developed area, if it is still natural it's likely to be a wetland.
- 2) Initial NWI estuarine breaks were good
- 3) As development occurs, many additional ponds (PUBHx) have been added to the landscape while wetlands have been lost.
- 4) Expect wetland areas that have been partially drained (d) to be developed in the near future as the ditching effort is tremendous
- 5) Intermittent streams and ditches on the USGS Hydro DLG have been checked and included. Others may also have been added if large enough, but many smaller ditches remain unmapped due large amount. As a general rule, ditches equivalent to the USGS DLG ditches were mapped; anything smaller left unmapped.
- 6) "Dot" delineations are not to be used in Region 5. Minimum mapping unit may be considered 1 acre, although single, smaller emergent wetlands and ponds were pulled out wherever possible.

X. Map Preparation

The DTS was used to delineate and classify all the SEVA updates. Collateral data was used to create the product wherever applicable. Maps were produced in ArcView at 1:24,000 scale.

X. Disclaimer

No special situations other than those above noted fall within this project area.