NATIONAL WETLANDS INVENTORY

NOTES TO USERS

1:100,000 SCALE MAP

INDIANAPOLIS NE
INDIANAPOLIS SE
VINCENNES NE
VINCENNES SE
(INDIANA PORTION ONLY)

USER REPORT: INDANAPOLIS NE & SE, VINCENNES NE & SE
NATIONAL WETLANDS INVENTORY MAP

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 the wetlands. Photo interpretation conventions, hydric soils lists and wetland plant lists are also available to enhance the use and application of the classifications 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 area being discussed in this report extends from central Indiana to the Ohio River; from 38°00' to 40°00' North Latitude and from 86°00' to 87°00' West Longitude. (See Appendix I) Bailey classifies this area as being in the Eastern Deciduous Forest Province of the Humid Warm - Summer Continental Division (Bailey 1980). Two sections of the Eastern Deciduous Forest Province are present in the study area. These sections are the Beech-Maple Section to the north and the Oak-Hickory Section to the south (Bailey 1980).

The Interior Middle Upland Western Plains Land Surface Form covers the northern and eastern portions of the work area. This land surface form is characterized by flat to rolling plains. The southern and western portions of the work area are covered by the Eastern Highland Land Surface Form. This land surface form is characterized by open hills that are dissected by moderately sloping to steep drainage ways.

Karst topography is one of the most striking features of the work area. This topography is found in the southern portion of Indianapolis SE and continues south into Vincennes 100,000's. The area is characterized by sinkholes and sinkhole ponds.

Climate:

The climate is considered to be a midcontinental climate characterized by cold winters and hot summers. The average winter temperature is 30'F with an average minimum of 21'F. The average summer temperature is 73'F with an average daily maximum of 85'F. Total annual precipitation is 38". Sixty percent of the precipitation falls between April and September, which is the growing season (Bailey 1980).

Vegetation:

Winter deciduous forest, sometimes called temperate deciduous forest, is characteristic of the Eastern Deciduous Forest Province. It is dominated by tall, broadleaf trees that provide a continuous canopy in the summer and shed their leaves completely in the winter. With the removal of the canopy, small trees, shrubs and a thick layer of herbs can develop. Common species of this region include oak, ash, hickory, walnut, maple and elm. In poorly drained areas alder, willow, elm, ash and hydrophytic shrubs dominate (Bailey, 1980).

Soils:

The soils associated with deciduous forests are the Alfisols (Bailey 1980). Agriculturally, soil is considered the most important natural resource. However, it is also an important element in considering hydric conditions for the mapping of wetlands. Soil surveys, prepared by the Soil Conservation Service, serve as an aid in properly indentifying wetland habitats.

E. WATER REGIME DESCRIPTION

(A) Temporarily Flooded - Surface water present for brief periods during growth 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 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 and dams.

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

F. MAP PREPARATION

The wetland classifications that appear on the Indianapolis and Vincennes National Wetlands Inventory (NWI) Base Maps are in accordance with Cowardin et al (1977). The delineations were produced through stereoscopic interpretation of 1:58,000 scale color infrared photography.

Field checks of areas found within the Indianapolis and Vincennes photography 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 ocurred after the photography was taken would result in such discrepancies.

Aerial photo interpretation and drafting were completed by Geonex Martel, Inc., St. Petersburg, Florida.

G. SPECIAL MAPPING PROBLEMS

The most significant problem encountered was interpreting late spring photography that was leafed out. With this photography it is impossible to see the understory. This situation makes it difficult to make upland - wetland breaks.

H. MAP ACQUISITION

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

Ron Erickson
Regional Wetland Coordinator
U.S. Fish and Wildlife Service - Region 3
Federal Building, Ft. Snelling
Twin Cities, MN 55111

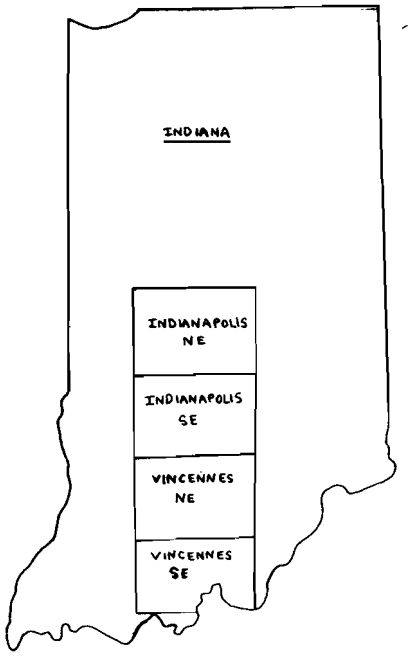
To order maps only, contact:

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.

APPENDIX I

FINISH INDIANA PROJECT AREA



Collateral Data

Bailey, Robert G. 1980. Description of the Ecoregions of the United States.

U.S. Department of Agriculture Forest Service. (1980)

Cowardin, L.M.; V. Carte; F.C. Golet and E.T. LaRue, 1979. Classification of Wetlands and Deepwater Habitats of the United States. U.S. Department of the Interior, U.S. Fish and Wildlife Service. Biological Services program, Washington, D.C.

U.S.D.A. Soil Surveys of Boone, Hendricks, Marion, Morgan, Putnam, Johnson, Hamilton, Bartholomew, Orange, Perry, Spencer, Crawford, Harrison, Lawrence, Monroe and DuBois counties.

Hydric Soils of the State of Indiana; 1985. U.S. Department of Agriculture, Soil Conservation Service.

Wetland Plants of the State of Indiana; 1986. U.S. Department of the Interior, Fish and Wildlife Service.