

USER NOTES  
NATIONAL WETLANDS INVENTORY  
PADUCAH SW

**DRAFT**

Map Preparation

The wetland classifications that appear on the Paducah SW National Wetland Inventory (NWI) 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 during March 1981. Initial ground truthing of the photography was completed between May 5-6, 1986.

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 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.

Geography

The Paducah SW 1:100,000 scale map is located in northwestern Kentucky. The map area is bisected by the southwesterly flowing Ohio River. The other major river occurring in the map area is the Mississippi which joins the Ohio River from the northwest. Bailey's Ecoregion Classification (1978) describes the area as the Eastern Deciduous Forest Province (Oak-Hickory Forest Section). Most of the area is gently rolling hills, however, some parts are nearly flat. The Ohio and Mississippi Rivers floodplains have been drained and farmed in some areas. The floodplain that is not farmed is nearly level and has a seasonally high water table. The soils in these areas are poorly drained and support bottomland vegetation.

Climate

The climate in the Paducah SW work area is moderate. Generally, the summers are warm and the winters are mild, however extremes in temperature occur. Average annual precipitation is between 40 and 50 inches with the majority falling during the growing season which ranges from April to October.

Wetland Communities

Palustrine forested wetlands occur in temporary, seasonal, semi-permanent, and intermittently exposed water regimes. The majority of these forested wetlands are within floodplains of the Ohio and

Mississippi Rivers. Species in forested temporarily flooded wetlands include: silver maple (Acer saccharinum), green ash (Fraxinus pennsylvanicus) American Elm (Ulmus americana), sugarberry (Cletis laevigata), box elder (Acer negundo), American sycamore (Plantanus occidentalis), eastern cottonwood (Populus deltoides), and paw paw (Asimina trilola). Species indicative of seasonally flooded areas include red maple, river birch (Betula nigra), black willow (Salix nigra), American elm and green ash.

Bald cypress (Taxodium distichum) is indicative of the semipermanently and intermittently exposed water regimes. Bald cypress was also found in seasonally flooded communities, however, in these areas willow and tupelo were usually mixed with the cypress.

Palustrine scrub shrub wetlands occur in temporary, seasonal, semipermanent, and intermittently exposed water regimes. Sapling silver maples (Acer saccharinum) and cottonwoods (Populus spp.) are characteristic of temporarily flooded shrub habitats. Sapling red maples and willows (Salix spp.) are found in seasonally flooded shrub habitats. Willow and button bush (Cephalanthus occidentalis) are found in both semipermanently and intermittently exposed wetland habitats.

Palustrine emergents are found in temporarily, seasonally, and semipermanently flooded habitats. In the temporarily flooded emergent habitats species diversity is common. There are many unidentified grasses along with sedges (Carex spp.), docks (Rumex spp.), reed (Phalaris sp.) and smartweed (Polygonum spp.) Common species occurring in seasonally and semipermanently flooded water regimes are common cattail (Typha latifolia), bulrushes (Scirpus spp.), arrowhead (Sagittaria spp.), rush (Juncus spp.), and spike rush (Eleocharis spp.).

Aquatic bed habitats occurring within the map area are classified as semipermanently flooded or intermittently exposed. Common indicator species include duckweed (Lemna spp.), pondweed (Potamogeton spp.) and yellow water lily (Nuphar advena).

Palustrine open water habitats are classified as semipermanently flooded, intermittently exposed, and permanently flooded. These open water habitats in the mapping area are usually impounded or excavated ponds and reservoirs.

Lacustrine habitats occurring in the study area are classified as seasonal (unconsolidated shore), semipermanently flooded, intermittently exposed and permanently flooded. The seasonal water regime will only be used for unconsolidated shores that are flooded during seasonal high water. Aquatic bed habitats in the Lacustrine systems are classified as semipermanently flooded and intermittently exposed. Common indicator species include duckweed

(Lemna spp.), pondweed (Potamogeton spp.), and yellow water lily (Nuphar advena). Lacustrine open water habitats are classified as intermittently exposed or permanently flooded.

The major Riverine systems occurring in the study area are the Ohio and Mississippi River. All the perennial systems as indicated by USGS are classified as permanently flooded. Many of the intermittent streams channelized to accomodate farming are classified as seasonally flooded with an appropriate excavated modifier. Natural intermittent streambed channels are classified as seasonally flooded.

#### REFERENCES

The purpose of this report is to provide general information about wetland classifications found within the area covered by the Base Map. There has been no attempt to describe all wetlands occurring in the area nor provide complete faunal and floral lists of those wetlands discussed. The references listed below refer to literature cited in the text of this report as well as sources of additional information.

Cowardin, L.M., V. Carter, F.C. Golet, and E.T. LaRoe. 1977. Classification of wetlands and deepwater habitats of the United States (an operational draft). USDI. Fish and Wildl. Serv. Wash., D.C. 100 p.

Bailey, R.G. 1978. Description of the ecoregions of the United States. USDA For. Serv., Intermt. Reg., Ogden, UT. 77 p.

NWI CODE	NWI DESCRIPTION	COMMON DESCRIPTION	CHARACTERISTIC VEGETATION AND PHYSIOGRAPHIC FEATURES
R4SB	Riverine, Intermittent, Streambed	Creek, Streambed	Unvegetated. Sand to Cobble-Gravel
R2UB	Riverine, Lower Perennial, Unconsolidated Bottom	River	Unvegetated. Mud to Sand, Cobble-Gravel
R2US	Riverine, Lower Perennial, Unconsolidated Shore	River Flat	Unvegetated. Sand to Cobble-Gravel
L1UB	Lacustrine, Limnetic, Unconsolidated Bottom	Open Water Lake	Unvegetated. Sand to Mud
L2UB	Lacustrine, Littoral, Unconsolidated Bottom	Shallow Lake	Unvegetated. Sand to Mud
L2US	Lacustrine, Littoral, Unconsolidated Shore	Lake Shore	Unvegetated. Sand to Cobble-Gravel
L1AB	Lacustrine, Limnetic, Aquatic Bed	Pond Weeds, Water Weeds	Duckweed ( <u>Lemna</u> sp.)
L2AB	Lacustrine, Littoral, Aquatic Bed	Pond Weeds, Water Weeds	Duckweed ( <u>Lemna</u> sp.) Yellow water lily ( <u>nuphar</u> sp.)
PUB	Palustrine, Unconsolidated Bottom	Open water, Pond	Unvegetated. Sand to Mud
PAB	Palustrine, Aquatic Bed	Pond Weeds, Water Weeds	Duckweed ( <u>Lemna</u> spp.) Pondweed ( <u>Potamogeton</u> (spp.)) Water Lily ( <u>Nuphar</u> spp.) Pondweed ( <u>Potamogeton</u> (spp.))

NWI CODE	NWI DESCRIPTION	COMMON DESCRIPTION	CHARACTERISTIC VEGETATION AND PHYSIOGRAPHIC FEATURES
PEM	Palustrine, Persistent Emergents	Marsh or Meadow	Cattail ( <u>Typha latifolia</u> ) Narrow-leaved cattail ( <u>Typha angustifolia</u> ) Reed canary grass ( <u>Phalaris</u> spp.) Rush ( <u>Juncus</u> spp.) Bulrushes ( <u>Scirpus</u> spp.) Spike rush ( <u>Eleocharis</u> spp.) Sedges ( <u>Carex</u> spp.) Arrowhead ( <u>Sagittaria</u> spp.) Smartweed ( <u>Polygonum</u> spp.) Cutgrass ( <u>Leersia</u> spp.) Dock ( <u>Rumex</u> spp.) Cocklebur ( <u>Xanthium</u> spp.) Foxtail ( <u>Setaria</u> spp.) Meadow Beauty ( <u>Rhexic</u> spp.) Silver Maple ( <u>Acer saccharinan</u> ) Cottonwood ( <u>populus deltoides</u> )
PSS	Palustrine Scrub Shrub	Shrub Wetland	Silver Maple ( <u>Acer saccharinan</u> ) Cottonwood ( <u>populus deltoides</u> ) Willow ( <u>Salix</u> spp.) Buttonbush ( <u>Cephalanthus occidentalis</u> )
PFO	Palustrine Forested	Forested Wetland	Silver Maple ( <u>Acer saccharinum</u> ) Cottonwood ( <u>Populus deltoides</u> ) Willow ( <u>Salix</u> spp.) Box elder ( <u>Acer negundo</u> ) Green ash ( <u>Fraxinus</u> spp.) River Birch ( <u>Betula nigra</u> ) American elm ( <u>Ulmus americana</u> ) Sugarberry ( <u>Celtis laevigata</u> ) Paw Paw ( <u>Asimira</u> spp.)

NWI CODE	NWI DESCRIPTION	COMMON DESCRIPTION	CHARACTERISTIC VEGETATION AND PHYSIOGRAPHIC FEATURES
PFO (cont.)	Palustrine Forested	Forested Wetland	Red Maple ( <u>Acer</u> <u>rubrum</u> ) Sweetgum ( <u>Liquidambar</u> <u>styraciflora</u> ) Sycamore ( <u>Plantanus</u> ) <u>accidentalis</u> ) Hickory ( <u>Carya</u> sp.) Yellow poplar ( <u>Liridendron</u> <u>tulipifera</u> ) Bald Cypress ( <u>Taxodium</u> <u>distichum</u> ) Black Tupelo ( <u>Nyssa sylvatica</u> )