USER NOTES
NATIONAL WETLANDS INVENTORY
AURORA NE

Map Preparation

The wetland classifications that appear on the Aurora SE National Wetlands Inventory (NWI) map 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 4/83, 5/83, 4/84 and 5/84. Initial ground truthing of the photography was completed between 6/20/85 and 6/21/85.

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 or habitat 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 Ron Erickson, Regional Wetlands Coordinator; U.S. Fish & Wildlife Service, Region 3, Federal Building, Ft. Snelling, Twin Cities, MN. 55111

Geography

This 1:100,000 scale map is located in northeastern Illinois, due west of Chicago. The town of DeKalb, situated on the Kishwaukee River, is located in the northwestern map area. The town of Aurora, situated on the Fox River, is located in the southeastern map area. The other major drainages within the map are the Somonauk, West Branch DuPage and Des Plaines Rivers. Bailey's Ecoregion Classification (1978) describes the area as the northward extent of the Prairie Parkland Province (Oak-Hickory-Bluestem Parkland Section). The topography is gently rolling with glacial morainal features, characterizing the northeastern map area (moraines, kames, drumlins, kettle holes). The southern map area is more level, influenced by glacial outwash, with marshlands, prairie and prairie potholes. The map's boundaries are 41.5° - 42°N latitude and 88° - 89°W longitude.

Climate

The majority of precipitation falls during the growing season and ranges from 23 to 40 inches annually. The subhumid classification by Bailey indicates that precipitation and evapotranspiration balance each other on an annual basis. Temperatures can average up to 55°F annually.

Wetland Communities

Most palustrine forested wetlands occur within the floodplains. These forests are, for the most part, either temporarily or seasonally flooded habitat. Species comprising these include elm (Ulmus spp.), silver maple (Acer saccharinum), box elder (A. negundo), cottonwood (Populus sp.), ash (Fraxinus spp.), willow (Salix sp.), hackberry (Celtis sp.), basswood (Tilia sp.), and bigtooth aspen (Populus grandidentata).

Seasonally flooded palustrine forests occur in old riverine meander scars, oxbows and depressions. Seasonal and temporarily flooded forest occurs along islands in the Fox and Des Plaines Rivers. Extensive alteration of floodplain forest has reduced the extent of forested wetlands along these two rivers. Species indicative of seasonally flooded forest include silver maple, black willow and eastern cottonwood.

No semipermanently flooded forests were observed in the field. It is assumed that willow would predominate a semipermanently flooded forest.

Scrub shrub wetlands are found, for the most part, in temporarily flooded and seasonally flooded water regimes.

Sapling, or shrub, willows and occasional cottonwood sapling are characteristic of a temporarily flooded habitat. Scrub shrub habitats are generally located adjacent to emergent systems, such as along the fringe of a marsh. In disturbed areas, usually where impoundment occurs, black willow dominates in a seasonal or semipermanent water regime.

Palustrine emergents are often found in temporarily, seasonally and semipermanently flooded water regimes.

Emergent habitats most commonly encountered as temporarily flooded contained reed canary grass (Phalaris sp.), sedges (Carex spp.) and foxtail (Setaria sp.)

Common species occurring in seasonally and semipermanently flooded water regimes are common cattail (Typha latifolia), bulrushes (Scirpus sp.), sedges (Carex sp.), arrowhead (Sagittaria sp.), narrow-leaved cattail (Typha angustifolia) and spike rush (Eleocharis sp.). The semipermanently flooded water regime is found mainly near riparian-associated habitat such as meander scars, oxbows or sloughs.

The farmed modifier is used to delineate basins that normally contain water during the growing season, but have been used for planting crops. A basin, as used in this case, may occur as a pothole, depression or meander scar.

Aquatic bed habitats occurring within the map are classified as intermittently exposed or semipermanently flooded. The common indicator species is duckweed (Lemna sp.).

Farm ponds are either the result of an impoundment or excavation, and are dleineated with the appropriate modifier. All farm ponds are classified as intermittently exposed, unless they are under two acres, in which case they will be delineated as semipermanently flooded. All other ponds are mapped as permanently flooded habitat.

Lacustrine habitat, primarily open water systems that are larger than twenty acres, occurs throughout the map area as an impounded reservoir. For the most part, these range from twenty to one hundred acres in size. These open water systems are generally classified as limnetic, unconsolidated bottom. The water regime is permanently flooded with an impounded modifier.

BIBLIOGRAPHY

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 (Lemna sp.)
PUB	Palustrine Unconsolidated Bottom	Open water, Pond	Unvegetated. Sand to Mud
PAB	Palustrine Aquatic Bed	Pond Weeds, Water Weeds	Duckweed (Lemna sp.) Pondweed (Potomageton sp.)

NWI CODE	NWI DESCRIPTION	COMMON DESCRIPTION	CHARACTERISTIC VEGETATION AND PHYSIOGRAPHIC FEATURES
PEM	Palustrine Persistant Emergents	Marsh or Meadow	Cattail (Typha latifolia) Narrow-leaved cattail (Typha angustifolia) Reed canary grass (Phalaris sp.) Rush (Juncus sp.) Bulrushes (Scirpus sp.) Spike rush (Eleocharis sp.) Sedges (Carex sp.) Arrowhead (Sagittaria sp.) Smartweed (Polygonum sp.) Cutgrass (Leersia sp.) Dock (Rumex sp.) Cocklebur (Xanthium sp.) Foxtail (Setaria sp.) Giant ragweed (Ambrosia trifida)
PSS	Palustrine Scrub Shrub	Shrub Wetland	Willow (Salix sp.) Buttonbush (Cephalanthus occidentalis)
PFO	Palustrine Forested	Forested Wetland	Silver Maple (Acer saccharinum) Cottonwood (Populus deltoides) Willow (Salix sp.) Box elder (Acer negundo) Green ash (Fraxinus sp.) Slippery elm (Ulmus rubra) American elm (Ulmus americana) Basswood (Tilia sp.) Honey locust (Gleditsia triacanthos)

NWI CODE	NWI DESCRIPTION	COMMON DESCRIPTION	CHARACTERISTIC VEGETATION AND PHYSIOGRAPHIC FEATURES
PFO	Palustrine Forested	Forested Wetland	Hackberry (Celtis sp.) Sycamore (Plantus sp.) Hickory (Carya sp.) Bigtooth aspen (Populus grandidentata) Tamarack (Larix laricina)

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NATIONAL WETLANDS INVENTORY

NOTES TO USERS

1:100,000 SCALE MAP

AURORA SW

Climate

The majority of precipitation falls during the growing season and ranges from 23 to 40 inches annually. Slightly more rainfall occurs in the northern portion of the map due to its proximity to a more humid, temperate climate. The subhumid classification by Bailey indicates that precipitation and evapotranspiration balance each other on an annual basis. Temperatures can average up to 55°F annually.

Wetland Communities

Most palustrine forested wetlands occur within the floodplains. These forests are, for the most part, either temporarily or seasonally flooded habitat. Species comprising these include elm (Ulmus spp.), silver maple (Acer saccharinum), box elder (A. negundo), cottonwood (Populus sp.), ash (Fraxinus spp.), willow (Salix sp.), hackberry (Celtis sp.), basswood (Tilia sp.), black cherry (Prunus serotina) and swamp white oak (Quercus sp.).

Seasonally flooded palustrine forests occur in old riverine meander scars, depressions and in islands along the Mississippi River. The Mississippi River floodplain within this map includes a diverse species assemblage. The understory in these forests is less vegetated than the temporary forested wetlands. Indicator species for these habitats include black willow, silver maple and eastern cottonwood.

No semipermanently flooded forests were observed in the field. It is assumed that willow would predominate a semipermanently flooded forest.

Scrub shrub wetlands are found, for the most part, in temporarily flooded and seasonally flooded water regimes.

Sapling, or shrub, willows and occasional cottonwood sapling are characteristic of a temporarily flooded habitat. Scrub shrub habitats are generally located adjacent to emergent systems, such as along the fringe of a marsh. In disturbed areas, usually where impoundment occurs, black willow dominates in a seasonal or semipermanent water regime.

Palustrine emergents are often found in temporarily, seasonally and semipermanently flooded water regimes.

Emergent habitats most commonly encountered as temporarily flooded contained reed canary grass (Phalaris sp.), sedges (Carex spp.) and foxtail (Setaria sp.)

Common species occurring in seasonally and semipermanently flooded water regimes are common cattail (Typha latifolia), bulrushes (Scirpus spp.), sedges (Carex spp.), arrowhead (Sagittaria sp.), narrow-leaved cattail (Typha angustifolia) and spike rush (Eleocharis sp.). Many of the semipermanent sites occur along or near the Mississippi River.

The farmed modifier is used to delineate basins that normally contain water during the growing season, but have been used for planting crops. A basin, as used in this case, may occur as a pothole, depression or meander scar.

Aquatic bed habitats occurring within the map are classified as intermittently exposed or semipermanently flooded. The common floating aquatic indicator species is duckweed (Lemna sp.), the common rooted vascular indicator species being pondweed (Potamogeton spp.)

Farm ponds are either the result of an impoundment or excavation, and are delineated with the appropriate modifier. All farm ponds are classified as intermittently exposed, unless they are under two acres, in which case they will be delineated as semipermanently flooded.

Lacustrine habitat, primarily open water systems that are larger than twenty acres, occurs throughout the map area as an impounded reservoir. For the most part, these range from twenty to one hundred acres in size. These open water systems are generally classified as limnetic, unconsolidated bottom. The water regime is permanently flooded with an impounded modifier.

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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 (*Lemna sp.*)
L2AB	Lacustrine Littoral Aquatic Bed	Pond Weeds, Water Weeds	Duckweed (*Lemna sp.*) Coontail (*Ceratophylum demersum*)
PUB	Palustrine Unconsolidated Bottom	Open water, Pond	Unvegetated. Sand to Mud
PAB	Palustrine Aquatic Bed	Pond Weeds, Water Weeds	Duckweed (*Lemna sp.*) Water Lily (*Nymphaea sp.*) Pondweed (*Potomageton sp.*)

NWI CODE	NWI DESCRIPTION	COMMON DESCRIPTION	CHARACTERISTIC VEGETATION AND PHYSIOGRAPHIC FEATURES
PEM	Palustrine Persistant Emergents	Marsh or Meadow	Cattail (Typha latifolia) Narrow-leaved cattail (Typha angustifolia) Reed canary grass (Phalaris sp.) Rush (Juncus sp.) Bulrushes (Scirpus sp.) Spike rush (Eleocharis sp.) Sedges (Carex sp.) Arrowhead (Sagittaria sp.) Smartweed (Polygonum sp.) Cutgrass (Leersia sp.) Dock (Rumex sp.) Cocklebur (Xanthium sp.) Foxtail (Setaria sp.) Giant ragweed (Ambrosia trifida)
PSS	Palustrine Scrub Shrub	Shrub Wetland	Willow (Salix sp.) Buttonbush (Cephalanthus occidentalis)
PFO	Palustrine Forested	Forested Wetland	Silver Maple (Acer saccharinum) Cottonwood (Populus deltoides) Willow (Salix sp.) Box elder (Acer negundo) Green ash (Fraxinus sp.) Slippery elm (Ulmus rubra) American elm (Ulmus americana) Basswood (Tilia sp.) Honey locust (Gleditsia triacanthos)

NWI CODE	NWI DESCRIPTION	COMMON DESCRIPTION	CHARACTERISTIC VEGETATION AND PHYSIOGRAPHIC FEATURES
PFO	Palustrine Forested	Forested Wetland	Hackberry (*Celtis sp.*) Sycamore (*Plantus sp.*) Hickory (*Carya sp.*) Burr and swamp white oaks (*Quercus sp.*) Black cherry (*Prunus serotina*)

NWI#36