

MAP NARRATIVE FOR THE OKLAHOMA CITY 1:250,000  
COVERING THE 1:100,000 MAPS  
OKLAHOMA CITY NW,SW

Map Preparation

The wetland classifications that appear on these National Wetland Inventory (NWI) maps are in accordance with Cowardin, et al. Classification of Wetlands and Deepwater Habitats of the United States (1980). The delineations were produced by stereoscopic interpretation of 1:58,000 scale, color infrared aerial photographs taken during 9/81 and 10/81. Initial ground truthing of the photography occurred during 3/31-4/10/86.

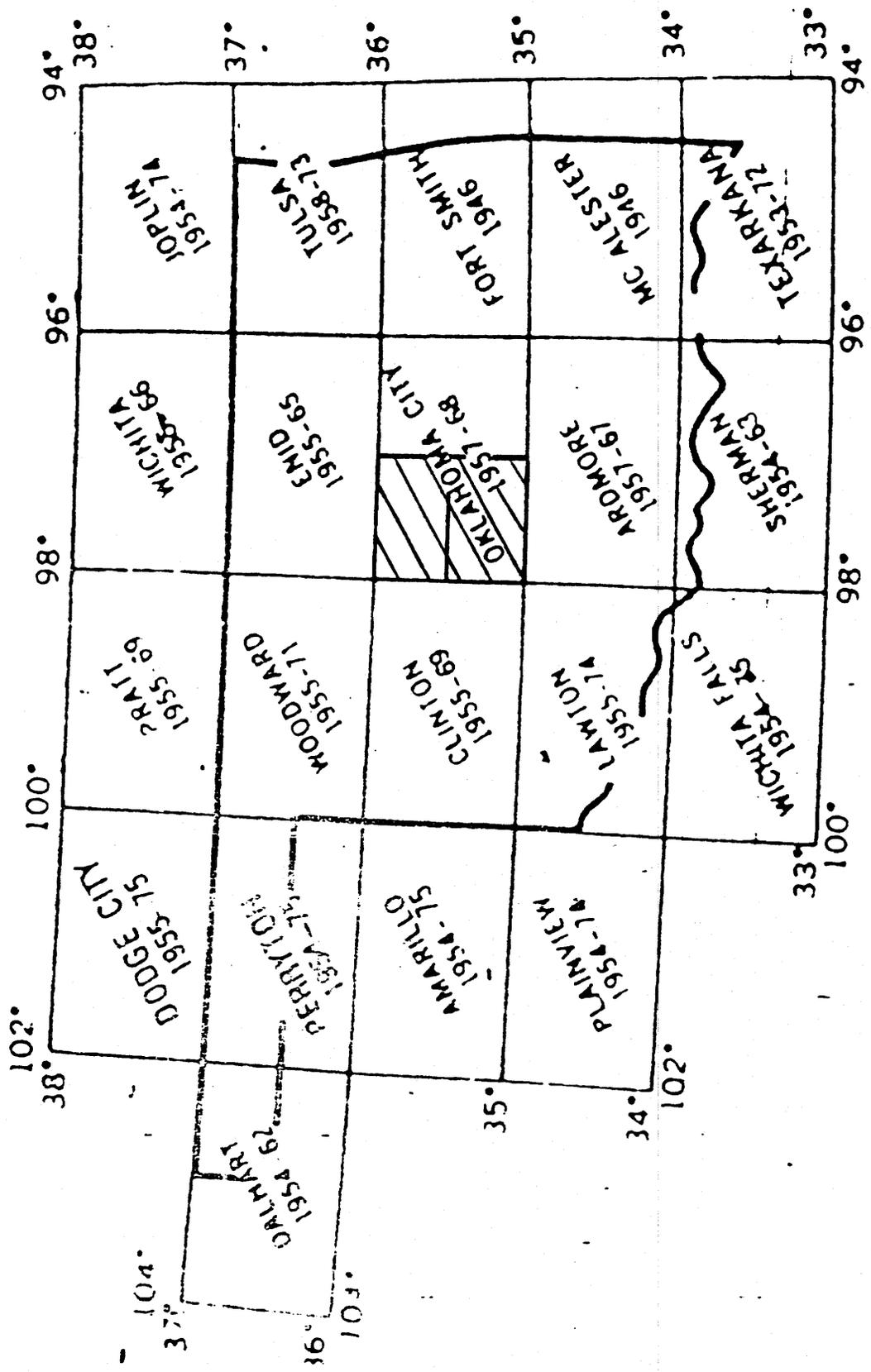
The user of these maps is cautioned that, due to the limitations of mapping primarily through aerial photointerpretation, a small percentage of wetlands may be unidentified. Changes in landscape, or habitat, could have occurred since the time of photography, therefore, some discrepancies between the maps and current field conditions may exist. Any questions regarding omissions, inclusions, or errors should be brought to the attention of the Regional Wetlands Coordinator; U.S. Fish & Wildlife Service, Region 2,500 Gold Street S.W., P.O. Box 1306, Albuquerque, N.M. 87103.

Geography

The maps, Oklahoma City NW and SW, are located in central Oklahoma. The Oklahoma City NW and SW maps are bounded on the west by 98°00'W longitude and on the east by 97°00'W longitude, and on the north 36°00' to 35°30'N latitude, and 35°30' to 35°00' respectively. (See illustration)

According to Bailey, Description of the Ecoregions of the United States (1980), the study area lies within two ecoregion provinces, the Tall Grass Prairie and Prairie Parkland Provinces. The Tall Grass Prairie Province only extends into the westernmost portion of the Oklahoma City NW map. Within the Tall Grass Prairie Province is the Bluestem-Grama Prairie Section, characterized by smooth, flat plains of low relief. The remainder of the Oklahoma City NW map is encompassed by the Oak-Bluestem Parkland Section of the Prairie Parkland Province, characterized by irregular plains of moderate relief (100-300 ft) occasionally interspersed with valleys bounded by steep bluffs.

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The Oklahoma City SW map is encompassed entirely by the Oak-Bluestem Parkland Section. The topography is characterized by irregular plains of moderate relief (100-300 ft) becoming more open with gentle relief in the western portion of the map.

The Cimarron River flows in a broad, meandering pattern from west to east in Oklahoma City NW. Major tributaries include Kingfisher Creek, Walnut Creek, Cottonwood Creek and Skeleton Creek. The North Canadian River, coursing west to east through a broad floodplain, flows into Lake Overholser. Within this map area the North Canadian River is drained almost entirely by intermittent streams. The Deep Fork River, beginning north of Oklahoma City, flows incised in a southwest to northeast direction.

The Canadian River flows in a broad, meandering pattern from northwest to southeast in Oklahoma City SW. Major tributaries include Buggy Creek, West Creek and Walnut Creek. The Washita River flows in a northwest to southeast direction through the southwestern most corner of the map. The Little River, beginning north of Norman, flows west to east and empties into Lake Thunderbird.

There are numerous small ponds and impoundments which are temporarily to permanently flooded throughout the map area. The largest reservoirs within the map area are Lake Thunderbird and Shawnee Reservoir. Other, yet smaller, reservoirs include Lake Overholser, Stanley Draper Lake and Lake Hefner.

### Climate

The Oklahoma City maps are influenced by a temperate, humid continental climate. The seasons are distinct, with cold, dry winters and hot summers. Most of the rainfall occurs during the spring and fall. Average annual temperatures range from 59° to 61°F. The average annual precipitation increases from the western portion of the maps eastward, ranging from 29"/year to 34"/year.

### Wetland Communities

The Palustrine system for these maps is the predominant classification of wetlands. The Palustrine forested areas are primarily riparian and may include other locations such as the backwaters of reservoirs and ponds. The riparian locations may contain species of cottonwood (Populus deltoides), black willow (Salix nigra), green ash (Fraxinus pennsylvanica), hackberry (Celtis occidentalis), elm (Ulmus spp.) and box elder (Acer negundo). These trees, with the exception of cottonwood and willow, usually occur in a temporarily flooded situation. The major seasonally flooded species is black willow and, to a lesser extent, cottonwood. Backwaters of reservoirs and ponds are where most of these seasonally flooded forest wetlands occur.

Shrub wetlands may occur in temporarily, seasonally and semi-permanently flooded conditions. Commonly associated with temporary and seasonally flooded habitats are cottonwood, willow and, to a lesser extent, groundsel (Baccharis sp.). Buttonbush (Cephalanthus occidentalis) and willows are the primary shrubs found in semipermanent conditions. Salt cedar (Tamarix sp.) is the only needle-leaf deciduous shrub occurring in the map area. Primarily associated with rivers, streams and, to a lesser extent, reservoirs, salt cedar most commonly occurs in a temporarily flooded condition. Yet, it may also be found in seasonally and intermittently flooded situations.

Emergent wetlands may occur in temporary, seasonally, semi-permanent, and occasionally, intermittently flooded conditions. These wetlands include a variety of species such as Juncus spp. and smartweed (Polygonum spp.) in temporary areas, Carex spp. and Juncus spp. in seasonal areas, and common cattail (Typha latifolia) predominantly in semipermanently flooded habitat.

Aquatic beds comprised of duckweed (Lemna spp.), American lotus (Nelumbo lutea) and water primrose (Ludwigia spp.) occur in reservoirs and ponds either in semipermanent or permanently flooded conditions.

Natural or artificial open water bodies of twenty (20) acres or more are classified as Lacustrine. The Lacustrine system includes the classes of unconsolidated bottom, unconsolidated shore and aquatic bed. Nonvegetated Lacustrine substrates which are exposed at sometime during the year are classified as unconsolidated shore or unconsolidated bottom. The Lacustrine system is present in the study area as natural, impounded, or excavated water bodies. Lacustrine aquatic beds are classified similar to those in the Palustrine system.

The Riverine system includes the classes: Unconsolidated bottom, unconsolidated shore and streambed. Unconsolidated bottom and shore are restricted to the Riverine lower perennial subsystem. Streams which do not flow throughout the year are classified as Riverine intermittent streambed. In some cases, perennial streams on the topographic quadrangle are called Riverine streambed seasonally or semipermanently flooded. This is done where streambeds are actually dry during some part of the growing season or flow during most of the year but dry up before the end of the year. Some streams may be excavated to improve drainage or routing.

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 flora and fauna lists of those wetlands discussed.

NWI CODE	NWI DESCRIPTION	COMMON DESCRIPTION	VEGETATION/SUBSTRATE
L1UB	Lacustrine limnetic unconsolidated bottom	Open water, lake	Unvegetated mud, sand, gravel
L2UB	Lacustrine littoral unconsolidated bottom	Shallow open water lake, lake bottom	Unvegetated mud, sand, gravel
L2US	Lacustrine limnetic unconsolidated shore	Lake shore	Unvegetated mud, sand, gravel
L1AB4	Lacustrine limnetic aquatic bed floating vascular	Pond weeds, water weeds	Duckweeds ( <u>Lemna</u> spp.)
L2AB4	Lacustrine littoral aquatic bed floating vascular	Pond weeds, water weeds	Duckweeds ( <u>Lemna</u> spp.)
L2AB3	Lacustrine littoral aquatic bed rooted vascular	Pond weeds, water weeds	American Lotus ( <u>Nelumbo lutea</u> ) Water Primrose ( <u>Ludwigia</u> spp.)
R2UB	Riverine lower perennial unconsolidated bottom	Open water, river,	Unvegetated mud, sand, gravel
R2US	Riverine lower perennial unconsolidated shore	River flat or bar	Unvegetated mud, sand, gravel
R4SB	Riverine inter- mittent streambed	Intermittent stream or creek	Unvegetated mud, sand, gravel
PUB	Palustrine unconsolidated bottom	Open water, pond bottom	Unvegetated mud, sand, gravel

NWI CODE	NWI DESCRIPTION	COMMON DESCRIPTION	VEGETATION/SUBSTRATE
PUS	Palustrine unconsolidated shore	Pond shore	Unvegetated mud, sand, gravel
PAB3	Palustrine aquatic bed, rooted vascular	Pond weeds, water weeds	American Lotus ( <u>Nelumbo lutea</u> ) Water Primrose ( <u>Ludwigia</u> spp.)
PAB4	Palustrine aquatic bed, floating vascular	Pond weeds, water weeds	Duckweeds ( <u>Lemna</u> spp.)
PEM1	Palustrine persistent emergent	Marsh or wet meadow	Bulrush ( <u>Scirpus</u> spp.) Common Cattail ( <u>Typha latifolia</u> ) Cocklebur ( <u>Xanthium</u> <u>strumarium</u> ) Cyperus ( <u>Cyperus</u> spp.) Rush ( <u>Juncus</u> spp.) Sedge ( <u>Carex</u> spp.) Smartweed ( <u>Polygonum</u> spp.) Saltgrass ( <u>Distichlis</u> spp.) Aster ( <u>Aster</u> spp.) Dock ( <u>Rumex</u> spp.) Spikerush ( <u>Eleocharis</u> spp.)
PSS1	Palustrine broad leaved deciduous scrub/shrub	Shrub wetland	Cottonwood ( <u>Populus deltoides</u> ) Buttonbush ( <u>Cephalanthus</u> <u>occidentalis</u> ) Groundsel ( <u>Baccharis</u> spp.) Willow ( <u>Salix nigra</u> )
PSS2	Palustrine needle-leaved deciduous scrub/shrub	Shrub wetland	Salt Cedar ( <u>Tamarix</u> spp.)

NWI CODE	NWI DESCRIPTION	COMMON DESCRIPTION	VEGETATION/SUBSTRATE
PFO1	Palustrine broad-leaved deciduous forest	Forest wetland	Cottonwood ( <u>Populus deltoides</u> ) Green ash ( <u>Fraxinus penn-</u> <u>sylvanica</u> ) Hackberry ( <u>Celtis</u> <u>occidentalis</u> ) Elm ( <u>Ulmus</u> spp.) Water elm ( <u>Planera aquatica</u> ) Willow ( <u>Salix nigra</u> ) Sycamore ( <u>Platanus</u> <u>occidentalis</u> ) River birch ( <u>Betula nigra</u> ) Oak ( <u>Quercus</u> spp.) Pecan ( <u>Carya illinoensis</u> ) Box elder ( <u>Acer negundo</u> )