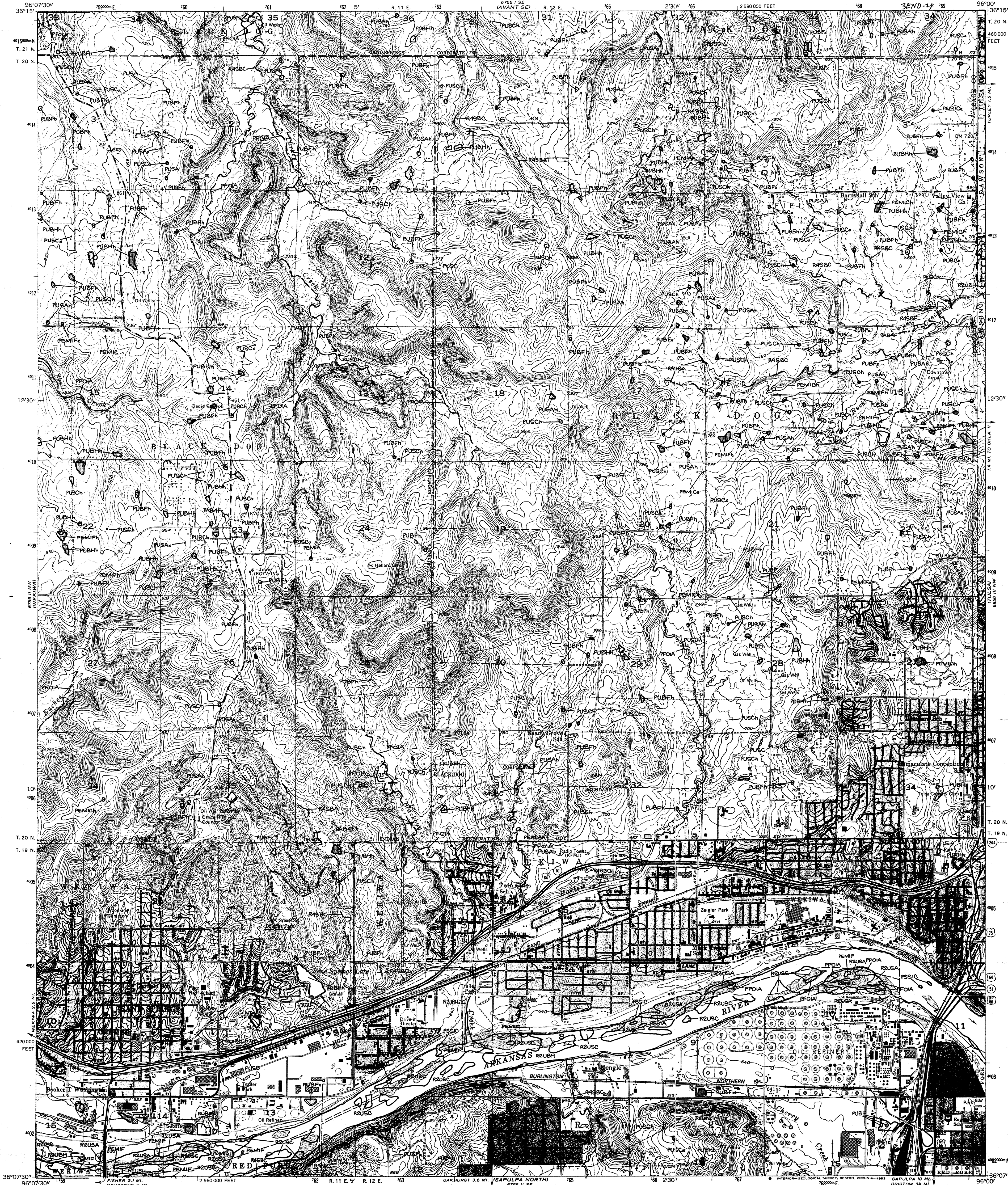
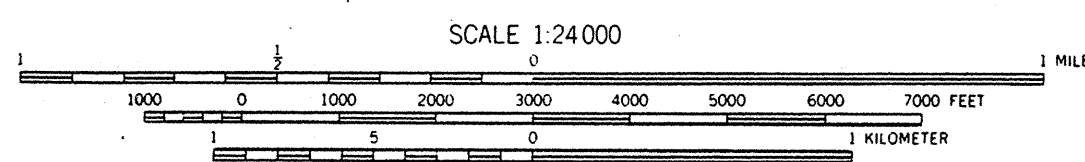


NATIONAL WETLANDS INVENTORY
UNITED STATES DEPARTMENT OF THE INTERIOR

SAND SPRINGS, OKLA.



396-114



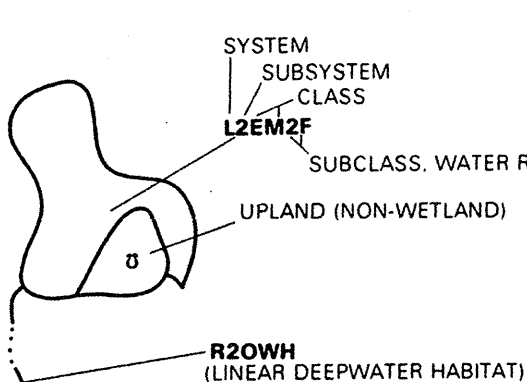
Other information including a narrative report concerning the wetland resources depicted on this document may be available. For information, contact:

Regional Director (ARDE) Region II
U.S. Fish and Wildlife Service
P.O. Box 1306
Albuquerque, New Mexico 87103

SPECIAL NOTE
This document was prepared primarily by stereoscopic analysis of high altitude aerial photographs. Wetlands were identified on the photographs based on vegetation, visible hydrology, and geography in accordance with Classification of Wetlands and Deepwater Habitats of the United States (FWS/OBS-79/31 December 1979). The aerial photographs typically reflect conditions during the specific year and season when they were taken. In addition, there is a margin of error inherent in the use of the aerial photographs. Thus, a detailed on the ground and historical analysis of a single site may result in a revision of the wetland boundaries established through photographic interpretation. In addition, some small wetlands and those obscured by dense forest cover may not be included on this document.

Federal, State and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, State or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate Federal, State or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

SYMBOLGY EXAMPLE



NOTES TO THE USER
1. Wetlands which have been field examined are indicated on the map by an asterisk (*).
2. Additions or corrections to the wetlands information displayed on this map are solicited. Please forward such information to the address indicated.
3. Subsystems, Classes, Subclasses, and Water Regimes in italics were developed specifically for NATIONAL WETLANDS INVENTORY mapping.
4. Some areas designated as R45B, R45BW, or R45BJ (INTERMITTENT STREAMS) may not meet the definition of wetland.
5. This map uses the class Unconsolidated Shore (US). On earlier NAWI maps that class was designated Beach/Bar (BB) or Flat (FL). Subclasses remain the same in both versions.

AERIAL PHOTOGRAPHY

DATE: 9/81
SCALE: 1:58,000
TYPE: CIR



U.S. DEPARTMENT OF THE INTERIOR
FISH AND WILDLIFE SERVICE
Prepared by National Wetlands Inventory

1989

M - MARINE										E - ESTUARINE										SYSTEM
1 - SUBTIDAL					2 - INTERTIDAL					1 - SUBTIDAL					2 - INTERTIDAL					SUBSYSTEM
CLASS	UB - ROCK BOTTOM	UB - UNCONSOLIDATED BOTTOM	AB - AQUATIC BED	RF - REEF	OW - OPEN WATER/Unknown Bottom	AB - AQUATIC BED	RF - REEF	OW - OPEN WATER/Unknown Bottom	UB - UNCONSOLIDATED	RB - ROCK BOTTOM	UB - UNCONSOLIDATED BOTTOM	AB - AQUATIC BED	RF - REEF	OW - OPEN WATER/Unknown Bottom	AB - AQUATIC BED	RF - REEF	OW - OPEN WATER/Unknown Bottom	UB - UNCONSOLIDATED	EM - EMERGENT	SS - SCRUB SHRUB
Subclass	1 Bedrock 2 Rubble 3 Sand 4 Organic	1 Cobble-Gravel 2 Sand 3 Rubble 4 Organic	1 Algal 2 Aquatic Moss 3 Rooted Vascular 4 Floating Vascular 5 Unknown Submerged 6 Unknown Surface	1 Coral 2 Nonpersistent	1 Bedrock 2 Rubble 3 Sand 4 Organic	1 Bedrock 2 Rubble 3 Sand 4 Organic	1 Cobble-Gravel 2 Sand 3 Rubble 4 Organic	1 Algal 2 Aquatic Moss 3 Rooted Vascular 4 Floating Vascular 5 Unknown Submerged 6 Unknown Surface	1 Bedrock 2 Rubble 3 Sand 4 Organic	1 Bedrock 2 Rubble 3 Sand 4 Organic	1 Cobble-Gravel 2 Sand 3 Rubble 4 Organic	1 Algal 2 Aquatic Moss 3 Rooted Vascular 4 Floating Vascular 5 Unknown Submerged 6 Unknown Surface	1 Bedrock 2 Rubble 3 Sand 4 Organic	1 Cobble-Gravel 2 Sand 3 Rubble 4 Organic	1 Algal 2 Aquatic Moss 3 Rooted Vascular 4 Floating Vascular 5 Unknown Submerged 6 Unknown Surface	1 Bedrock 2 Rubble 3 Sand 4 Organic	1 Cobble-Gravel 2 Sand 3 Rubble 4 Organic	1 Algal 2 Aquatic Moss 3 Rooted Vascular 4 Floating Vascular 5 Unknown Submerged 6 Unknown Surface	1 Persistent 2 Nonpersistent	1 Broad-Leaved Deciduous 2 Needle-Leaved Deciduous 3 Broad-Leaved Evergreen 4 Needle-Leaved Evergreen 5 Deciduous 6 Deciduous 7 Evergreen
R - RIVERINE										L - LACUSTRINE										SYSTEM
1 - TIDAL					2 - LOWER PERENNIAL					3 - UPPER PERENNIAL					4 - INTERMITTENT					SUBSYSTEM
CLASS	UB - ROCK BOTTOM	UB - UNCONSOLIDATED BOTTOM	AB - AQUATIC BED	RF - REEF	OW - OPEN WATER/Unknown Bottom	UB - ROCK BOTTOM	UB - UNCONSOLIDATED BOTTOM	AB - AQUATIC BED	RF - REEF	OW - OPEN WATER/Unknown Bottom	UB - ROCK BOTTOM	UB - UNCONSOLIDATED BOTTOM	AB - AQUATIC BED	RF - REEF	OW - OPEN WATER/Unknown Bottom	UB - ROCK BOTTOM	UB - UNCONSOLIDATED BOTTOM	AB - AQUATIC BED	RF - REEF	OW - OPEN WATER/Unknown Bottom
Subclass	1 Bedrock 2 Rubble 3 Sand 4 Organic	1 Cobble-Gravel 2 Sand 3 Rubble 4 Organic	1 Algal 2 Aquatic Moss 3 Rooted Vascular 4 Floating Vascular 5 Unknown Submerged 6 Unknown Surface	1 Coral 2 Nonpersistent	1 Bedrock 2 Rubble 3 Sand 4 Organic	1 Bedrock 2 Rubble 3 Sand 4 Organic	1 Cobble-Gravel 2 Sand 3 Rubble 4 Organic	1 Algal 2 Aquatic Moss 3 Rooted Vascular 4 Floating Vascular 5 Unknown Submerged 6 Unknown Surface	1 Bedrock 2 Rubble 3 Sand 4 Organic	1 Cobble-Gravel 2 Sand 3 Rubble 4 Organic	1 Algal 2 Aquatic Moss 3 Rooted Vascular 4 Floating Vascular 5 Unknown Submerged 6 Unknown Surface	1 Bedrock 2 Rubble 3 Sand 4 Organic	1 Cobble-Gravel 2 Sand 3 Rubble 4 Organic	1 Algal 2 Aquatic Moss 3 Rooted Vascular 4 Floating Vascular 5 Unknown Submerged 6 Unknown Surface	1 Bedrock 2 Rubble 3 Sand 4 Organic	1 Cobble-Gravel 2 Sand 3 Rubble 4 Organic	1 Algal 2 Aquatic Moss 3 Rooted Vascular 4 Floating Vascular 5 Unknown Submerged 6 Unknown Surface	1 Persistent 2 Nonpersistent	1 Broad-Leaved Deciduous 2 Needle-Leaved Deciduous 3 Broad-Leaved Evergreen 4 Needle-Leaved Evergreen 5 Deciduous 6 Deciduous 7 Evergreen	1 Broad-Leaved Deciduous 2 Needle-Leaved Deciduous 3 Broad-Leaved Evergreen 4 Needle-Leaved Evergreen 5 Deciduous 6 Deciduous 7 Evergreen
P - PALUSTRINE										MODIFIERS										SYSTEM
CLASS	UB - ROCK BOTTOM	UB - UNCONSOLIDATED BOTTOM	AB - AQUATIC BED	RF - REEF	OW - OPEN WATER/Unknown Bottom	UB - ROCK BOTTOM	UB - UNCONSOLIDATED BOTTOM	AB - AQUATIC BED	RF - REEF	OW - OPEN WATER/Unknown Bottom	UB - ROCK BOTTOM	UB - UNCONSOLIDATED BOTTOM	AB - AQUATIC BED	RF - REEF	OW - OPEN WATER/Unknown Bottom	UB - ROCK BOTTOM	UB - UNCONSOLIDATED BOTTOM	AB - AQUATIC BED	RF - REEF	OW - OPEN WATER/Unknown Bottom
Subclass	1 Bedrock 2 Rubble 3 Sand 4 Organic	1 Cobble-Gravel 2 Sand 3 Rubble 4 Organic	1 Algal 2 Aquatic Moss 3 Rooted Vascular 4 Floating Vascular 5 Unknown Submerged 6 Unknown Surface	1 Coral 2 Nonpersistent	1 Bedrock 2 Rubble 3 Sand 4 Organic	1 Bedrock 2 Rubble 3 Sand 4 Organic	1 Cobble-Gravel 2 Sand 3 Rubble 4 Organic	1 Algal 2 Aquatic Moss 3 Rooted Vascular 4 Floating Vascular 5 Unknown Submerged 6 Unknown Surface	1 Bedrock 2 Rubble 3 Sand 4 Organic	1 Cobble-Gravel 2 Sand 3 Rubble 4 Organic	1 Algal 2 Aquatic Moss 3 Rooted Vascular 4 Floating Vascular 5 Unknown Submerged 6 Unknown Surface	1 Bedrock 2 Rubble 3 Sand 4 Organic	1 Cobble-Gravel 2 Sand 3 Rubble 4 Organic	1 Algal 2 Aquatic Moss 3 Rooted Vascular 4 Floating Vascular 5 Unknown Submerged 6 Unknown Surface	1 Bedrock 2 Rubble 3 Sand 4 Organic	1 Cobble-Gravel 2 Sand 3 Rubble 4 Organic	1 Algal 2 Aquatic Moss 3 Rooted Vascular 4 Floating Vascular 5 Unknown Submerged 6 Unknown Surface	1 Persistent 2 Nonpersistent	1 Broad-Leaved Deciduous 2 Needle-Leaved Deciduous 3 Broad-Leaved Evergreen 4 Needle-Leaved Evergreen 5 Deciduous 6 Deciduous 7 Evergreen	1 Broad-Leaved Deciduous 2 Needle-Leaved Deciduous 3 Broad-Leaved Evergreen 4 Needle-Leaved Evergreen 5 Deciduous 6 Deciduous 7 Evergreen