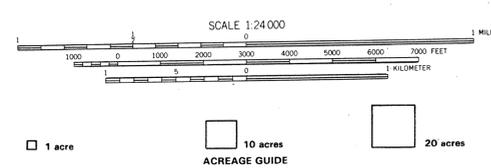
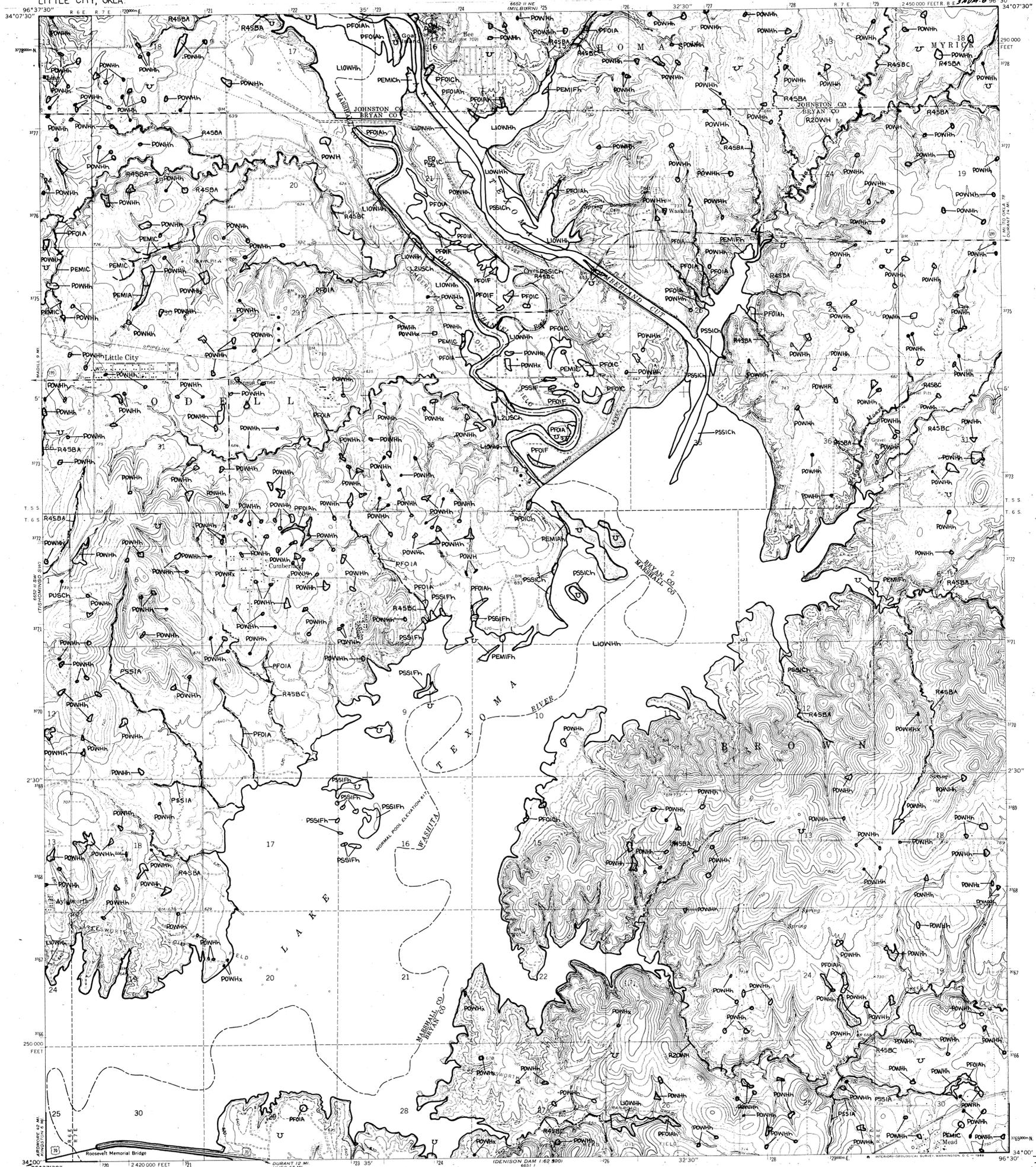


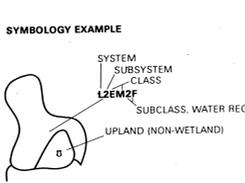
NATIONAL WETLANDS INVENTORY

UNITED STATES DEPARTMENT OF THE INTERIOR

LITTLE CITY, OKLA.



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.



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

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

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

AERIAL PHOTOGRAPHY

DATE: 3/82 DATE: _____
SCALE: 1:65,000 SCALE: _____
TYPE: CIR TYPE: _____

1990

SYSTEM	1 - SUBTIDAL	2 - INTERTIDAL	1 - SUBTIDAL	2 - INTERTIDAL	E - ESTUARINE	1 - SUBTIDAL	2 - INTERTIDAL	L - LACUSTRINE	1 - LIMNETIC	2 - LITTORAL	P - PALUSTRINE	1 - TIDAL	2 - LOWER PERENNIAL	3 - UPPER PERENNIAL	4 - INTERMITTENT	5 - UNKNOWN PERENNIAL
CLASS	RB - ROCK BOTTOM UB - UNCONSOLIDATED BOTTOM	AB - AQUATIC BED REF - REFUGIUM OW - OPEN WATER Unknown Bottom	AB - AQUATIC BED REF - REFUGIUM RS - ROCKY SHORE US - UNCONSOLIDATED SHORE	RB - ROCK BOTTOM UB - UNCONSOLIDATED BOTTOM	AB - AQUATIC BED REF - REFUGIUM RS - ROCKY SHORE US - UNCONSOLIDATED SHORE	AB - AQUATIC BED REF - REFUGIUM RS - ROCKY SHORE US - UNCONSOLIDATED SHORE	AB - AQUATIC BED REF - REFUGIUM RS - ROCKY SHORE US - UNCONSOLIDATED SHORE	RB - ROCK BOTTOM UB - UNCONSOLIDATED BOTTOM	AB - AQUATIC BED REF - REFUGIUM OW - OPEN WATER Unknown Bottom	RB - ROCK BOTTOM UB - UNCONSOLIDATED BOTTOM	AB - AQUATIC BED REF - REFUGIUM OW - OPEN WATER Unknown Bottom	RB - ROCK BOTTOM UB - UNCONSOLIDATED BOTTOM	AB - AQUATIC BED REF - REFUGIUM OW - OPEN WATER Unknown Bottom	AB - AQUATIC BED REF - REFUGIUM OW - OPEN WATER Unknown Bottom	AB - AQUATIC BED REF - REFUGIUM OW - OPEN WATER Unknown Bottom	AB - AQUATIC BED REF - REFUGIUM OW - OPEN WATER Unknown Bottom
SUBCLASS	1 Bedrock 2 Rubble 3 Cobble-Gravel 4 Sand 5 Muds 6 Organic 7 Vegetated	1 Algal 2 Rubble 3 Rooted Vascular 4 Floating Vascular 5 Unknown Submerged 6 Unknown Surface	1 Algal 2 Rubble 3 Rooted Vascular 4 Floating Vascular 5 Unknown Submerged 6 Unknown Surface	1 Bedrock 2 Rubble 3 Cobble-Gravel 4 Sand 5 Muds 6 Organic 7 Vegetated	1 Bedrock 2 Rubble 3 Cobble-Gravel 4 Sand 5 Muds 6 Organic 7 Vegetated	1 Algal 2 Rubble 3 Rooted Vascular 4 Floating Vascular 5 Unknown Submerged 6 Unknown Surface	1 Algal 2 Rubble 3 Rooted Vascular 4 Floating Vascular 5 Unknown Submerged 6 Unknown Surface	1 Bedrock 2 Rubble 3 Cobble-Gravel 4 Sand 5 Muds 6 Organic 7 Vegetated	1 Algal 2 Rubble 3 Rooted Vascular 4 Floating Vascular 5 Unknown Submerged 6 Unknown Surface	1 Bedrock 2 Rubble 3 Cobble-Gravel 4 Sand 5 Muds 6 Organic 7 Vegetated	1 Algal 2 Rubble 3 Rooted Vascular 4 Floating Vascular 5 Unknown Submerged 6 Unknown Surface	1 Bedrock 2 Rubble 3 Cobble-Gravel 4 Sand 5 Muds 6 Organic 7 Vegetated	1 Algal 2 Rubble 3 Rooted Vascular 4 Floating Vascular 5 Unknown Submerged 6 Unknown Surface	1 Algal 2 Rubble 3 Rooted Vascular 4 Floating Vascular 5 Unknown Submerged 6 Unknown Surface	1 Algal 2 Rubble 3 Rooted Vascular 4 Floating Vascular 5 Unknown Submerged 6 Unknown Surface	1 Algal 2 Rubble 3 Rooted Vascular 4 Floating Vascular 5 Unknown Submerged 6 Unknown Surface

MODIFIERS

In order to more adequately describe wetland and deepwater habitats one or more of the water regime, water chemistry, soil, or special modifiers may be applied at the class or lower level in the hierarchy. The "termed modifier" may also be applied to the ecological system.

WATER REGIME	WATER CHEMISTRY	SOIL	SPECIAL MODIFIERS
Non-Tidal A. Temporarily Flooded B. Seasonally Flooded C. Regularly Flooded D. Wet-Dry E. Permanently Flooded F. Intermittently Flooded G. Intermittently Flooded H. Permanently Flooded I. Seasonally Flooded J. Regularly Flooded K. Artificially Flooded L. Seasonally Flooded M. Intermittently Flooded N. Regularly Flooded O. Permanently Flooded P. Intermittently Flooded Q. Seasonally Flooded R. Regularly Flooded S. Permanently Flooded T. Unknown	Tidal 1. Seasonal Tidal 2. Semi-Seasonal Tidal 3. Intermittently Tidal 4. Regularly Tidal 5. Permanently Tidal 6. Unknown	Coastal Salinity 1. Hypersaline 2. Supersaline 3. Saline 4. Fresh Inland Salinity 1. Hypersaline 2. Supersaline 3. Saline 4. Fresh pH Modifiers for all Fresh Water 1. Acid 2. Circumneutral 3. Alkaline	Soil 1. Organic 2. Mineral 3. Brier 4. Marsh 5. Gravel 6. Dune 7. Field 8. Dune 9. Artificially Substrate 10. Escarpment