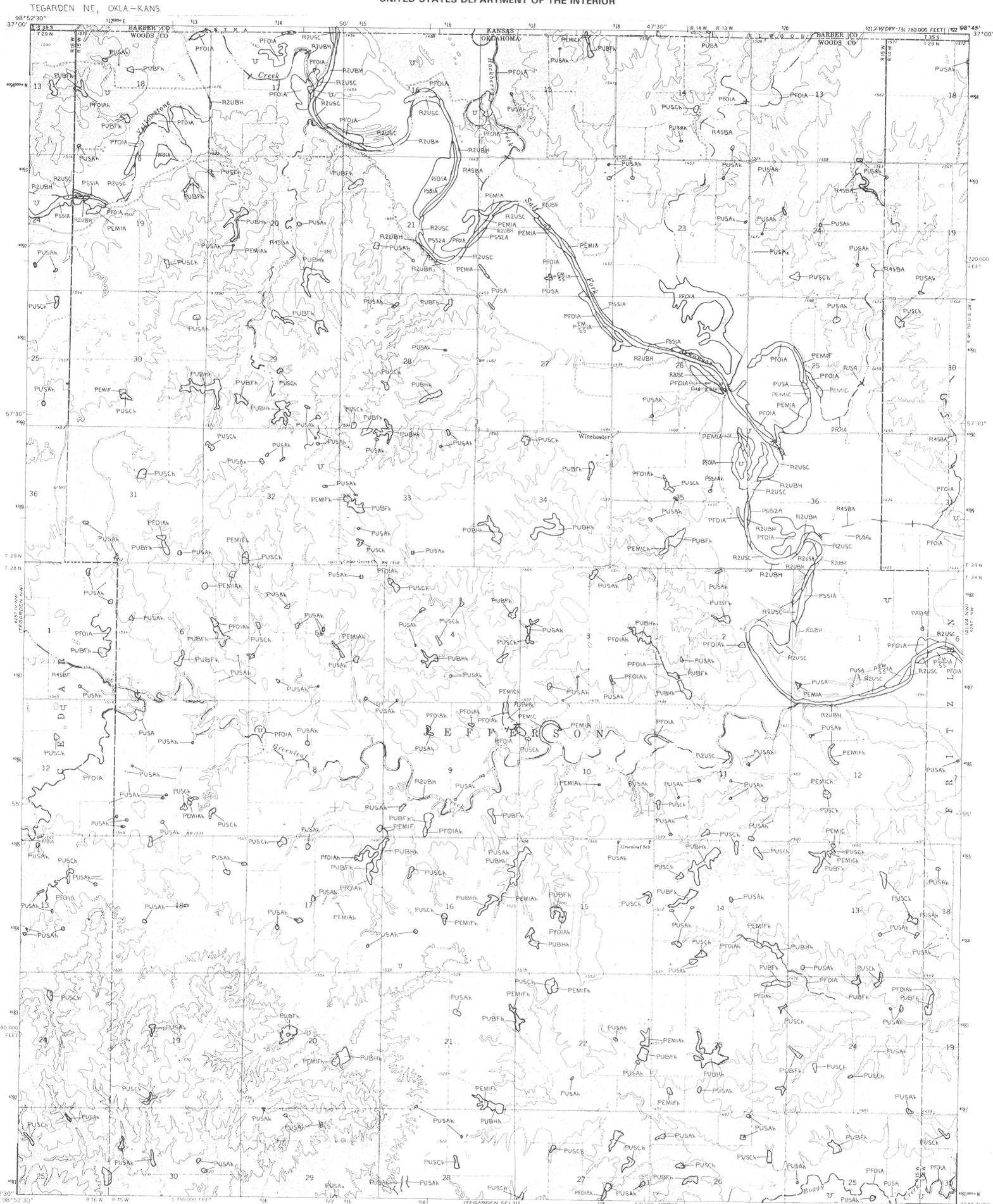


NATIONAL WETLANDS INVENTORY

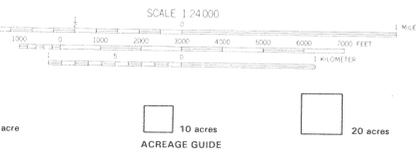
UNITED STATES DEPARTMENT OF THE INTERIOR



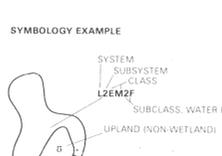
WOODWARD NE ALVA

TEGARDEN NE, OKLA.-KANS

3698-334



SPECIAL NOTE
This document was prepared primarily by stereoscopic analysis of high altitude aerial photographs. Wetlands were identified on the photographs in accordance with 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 this map were developed specifically for NATIONAL WETLANDS INVENTORY mapping.
• Some areas designated as R4SB, R4SBW, or R4SBJ (INTERMITTENT STREAMS) may not meet the definition of wetland.
• This map uses the class Unconsolidated Shore (US). 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
1987

AERIAL PHOTOGRAPHY
DATE 10/81 DATE _____
SCALE 1:58,000 SCALE _____
TYPE CIR TYPE _____

SYSTEM	1 - SUBTIDAL	2 - INTERTIDAL	1 - SUBTIDAL	2 - INTERTIDAL	SYSTEM	
CLASS	RB - ROCK BOTTOM UB - UNCONSOLIDATED BOTTOM AB - AQUATIC BED RF - REEF OW - OPEN WATER/UNKNOWN BOTTOM	AB - AQUATIC BED RS - ROCKY SHORE US - UNCONSOLIDATED SHORE EM - EMERGENT SS - SCRUB SHRUB FO - FORESTED	RB - ROCK BOTTOM UB - UNCONSOLIDATED BOTTOM AB - AQUATIC BED RF - REEF OW - OPEN WATER/UNKNOWN BOTTOM	AB - AQUATIC BED RS - ROCKY SHORE US - UNCONSOLIDATED SHORE EM - EMERGENT SS - SCRUB SHRUB FO - FORESTED	CLASS	
SUBCLASS	1 Bedrock 2 Rubble 3 Cobble Gravel 4 Sand 5 Mud 6 Organic	1 Algal 2 Aquatic Moss 3 Floating Vascular 4 Emergent 5 Unknown Surface	1 Bedrock 2 Rubble 3 Cobble Gravel 4 Sand 5 Mud 6 Organic	1 Algal 2 Aquatic Moss 3 Floating Vascular 4 Emergent 5 Unknown Surface	SUBCLASS	
SYSTEM	1 - TIDAL	2 - LOWER PERENNIAL	3 - UPPER PERENNIAL	4 - INTERMITTENT	5 - UNKNOWN PERENNIAL	SYSTEM
CLASS	RB - ROCK BOTTOM UB - UNCONSOLIDATED BOTTOM AB - AQUATIC BED RF - REEF OW - OPEN WATER/UNKNOWN BOTTOM	RS - ROCKY SHORE US - UNCONSOLIDATED SHORE EM - EMERGENT SS - SCRUB SHRUB FO - FORESTED	RB - ROCK BOTTOM UB - UNCONSOLIDATED BOTTOM AB - AQUATIC BED RF - REEF OW - OPEN WATER/UNKNOWN BOTTOM	RS - ROCKY SHORE US - UNCONSOLIDATED SHORE EM - EMERGENT SS - SCRUB SHRUB FO - FORESTED	RB - ROCK BOTTOM UB - UNCONSOLIDATED BOTTOM AB - AQUATIC BED RF - REEF OW - OPEN WATER/UNKNOWN BOTTOM	CLASS
SUBCLASS	1 Bedrock 2 Rubble 3 Cobble Gravel 4 Sand 5 Mud 6 Organic	1 Algal 2 Aquatic Moss 3 Floating Vascular 4 Emergent 5 Unknown Surface	1 Bedrock 2 Rubble 3 Cobble Gravel 4 Sand 5 Mud 6 Organic	1 Algal 2 Aquatic Moss 3 Floating Vascular 4 Emergent 5 Unknown Surface	1 Bedrock 2 Rubble 3 Cobble Gravel 4 Sand 5 Mud 6 Organic	SUBCLASS
SYSTEM	P - PALUSTRINE					SYSTEM
CLASS	RB - ROCK BOTTOM UB - UNCONSOLIDATED BOTTOM AB - AQUATIC BED RF - REEF OW - OPEN WATER/UNKNOWN BOTTOM					CLASS
SUBCLASS	1 Bedrock 2 Rubble 3 Cobble Gravel 4 Sand 5 Mud 6 Organic					SUBCLASS

MODIFIERS			
WATER REGIME			
Non-Tidal	Tidal	Coastal	Inland
A - Temporally Flooded B - Permanently Flooded C - Seasonally Flooded D - Intermittently Flooded E - Seasonally Flooded F - Intermittently Flooded G - Permanently Flooded H - Intermittently Flooded I - Seasonally Flooded J - Intermittently Flooded K - Temporally Flooded L - Permanently Flooded M - Seasonally Flooded N - Intermittently Flooded O - Temporally Flooded P - Permanently Flooded Q - Seasonally Flooded R - Intermittently Flooded S - Temporally Flooded T - Permanently Flooded U - Seasonally Flooded V - Intermittently Flooded W - Temporally Flooded X - Permanently Flooded Y - Seasonally Flooded Z - Intermittently Flooded	1 - Temporally Flooded 2 - Permanently Flooded 3 - Seasonally Flooded 4 - Intermittently Flooded 5 - Temporally Flooded 6 - Permanently Flooded 7 - Seasonally Flooded 8 - Intermittently Flooded 9 - Temporally Flooded 10 - Permanently Flooded 11 - Seasonally Flooded 12 - Intermittently Flooded 13 - Temporally Flooded 14 - Permanently Flooded 15 - Seasonally Flooded 16 - Intermittently Flooded 17 - Temporally Flooded 18 - Permanently Flooded 19 - Seasonally Flooded 20 - Intermittently Flooded 21 - Temporally Flooded 22 - Permanently Flooded 23 - Seasonally Flooded 24 - Intermittently Flooded 25 - Temporally Flooded 26 - Permanently Flooded 27 - Seasonally Flooded 28 - Intermittently Flooded 29 - Temporally Flooded 30 - Permanently Flooded 31 - Seasonally Flooded 32 - Intermittently Flooded 33 - Temporally Flooded 34 - Permanently Flooded 35 - Seasonally Flooded 36 - Intermittently Flooded 37 - Temporally Flooded 38 - Permanently Flooded 39 - Seasonally Flooded 40 - Intermittently Flooded 41 - Temporally Flooded 42 - Permanently Flooded 43 - Seasonally Flooded 44 - Intermittently Flooded 45 - Temporally Flooded 46 - Permanently Flooded 47 - Seasonally Flooded 48 - Intermittently Flooded 49 - Temporally Flooded 50 - Permanently Flooded 51 - Seasonally Flooded 52 - Intermittently Flooded 53 - Temporally Flooded 54 - Permanently Flooded 55 - Seasonally Flooded 56 - Intermittently Flooded 57 - Temporally Flooded 58 - Permanently Flooded 59 - Seasonally Flooded 60 - Intermittently Flooded 61 - Temporally Flooded 62 - Permanently Flooded 63 - Seasonally Flooded 64 - Intermittently Flooded 65 - Temporally Flooded 66 - Permanently Flooded 67 - Seasonally Flooded 68 - Intermittently Flooded 69 - Temporally Flooded 70 - Permanently Flooded 71 - Seasonally Flooded 72 - Intermittently Flooded 73 - Temporally Flooded 74 - Permanently Flooded 75 - Seasonally Flooded 76 - Intermittently Flooded 77 - Temporally Flooded 78 - Permanently Flooded 79 - Seasonally Flooded 80 - Intermittently Flooded 81 - Temporally Flooded 82 - Permanently Flooded 83 - Seasonally Flooded 84 - Intermittently Flooded 85 - Temporally Flooded 86 - Permanently Flooded 87 - Seasonally Flooded 88 - Intermittently Flooded 89 - Temporally Flooded 90 - Permanently Flooded 91 - Seasonally Flooded 92 - Intermittently Flooded 93 - Temporally Flooded 94 - Permanently Flooded 95 - Seasonally Flooded 96 - Intermittently Flooded 97 - Temporally Flooded 98 - Permanently Flooded 99 - Seasonally Flooded 100 - Intermittently Flooded	1 - High Salinity 2 - Medium Salinity 3 - Low Salinity 4 - Fresh 5 - Brackish 6 - Saline 7 - Oligohaline 8 - Polyhaline 9 - Euhaline 10 - Oligohaline 11 - Polyhaline 12 - Euhaline 13 - Oligohaline 14 - Polyhaline 15 - Euhaline 16 - Oligohaline 17 - Polyhaline 18 - Euhaline 19 - Oligohaline 20 - Polyhaline 21 - Euhaline 22 - Oligohaline 23 - Polyhaline 24 - Euhaline 25 - Oligohaline 26 - Polyhaline 27 - Euhaline 28 - Oligohaline 29 - Polyhaline 30 - Euhaline 31 - Oligohaline 32 - Polyhaline 33 - Euhaline 34 - Oligohaline 35 - Polyhaline 36 - Euhaline 37 - Oligohaline 38 - Polyhaline 39 - Euhaline 40 - Oligohaline 41 - Polyhaline 42 - Euhaline 43 - Oligohaline 44 - Polyhaline 45 - Euhaline 46 - Oligohaline 47 - Polyhaline 48 - Euhaline 49 - Oligohaline 50 - Polyhaline 51 - Euhaline 52 - Oligohaline 53 - Polyhaline 54 - Euhaline 55 - Oligohaline 56 - Polyhaline 57 - Euhaline 58 - Oligohaline 59 - Polyhaline 60 - Euhaline 61 - Oligohaline 62 - Polyhaline 63 - Euhaline 64 - Oligohaline 65 - Polyhaline 66 - Euhaline 67 - Oligohaline 68 - Polyhaline 69 - Euhaline 70 - Oligohaline 71 - Polyhaline 72 - Euhaline 73 - Oligohaline 74 - Polyhaline 75 - Euhaline 76 - Oligohaline 77 - Polyhaline 78 - Euhaline 79 - Oligohaline 80 - Polyhaline 81 - Euhaline 82 - Oligohaline 83 - Polyhaline 84 - Euhaline 85 - Oligohaline 86 - Polyhaline 87 - Euhaline 88 - Oligohaline 89 - Polyhaline 90 - Euhaline 91 - Oligohaline 92 - Polyhaline 93 - Euhaline 94 - Oligohaline 95 - Polyhaline 96 - Euhaline 97 - Oligohaline 98 - Polyhaline 99 - Euhaline 100 - Oligohaline	1 - Organic 2 - Mineral 3 - Partially Decayed 4 - Faded 5 - Resonant 6 - Partially Decayed 7 - Anterior Substrate 8 - Sand 9 - Eroded