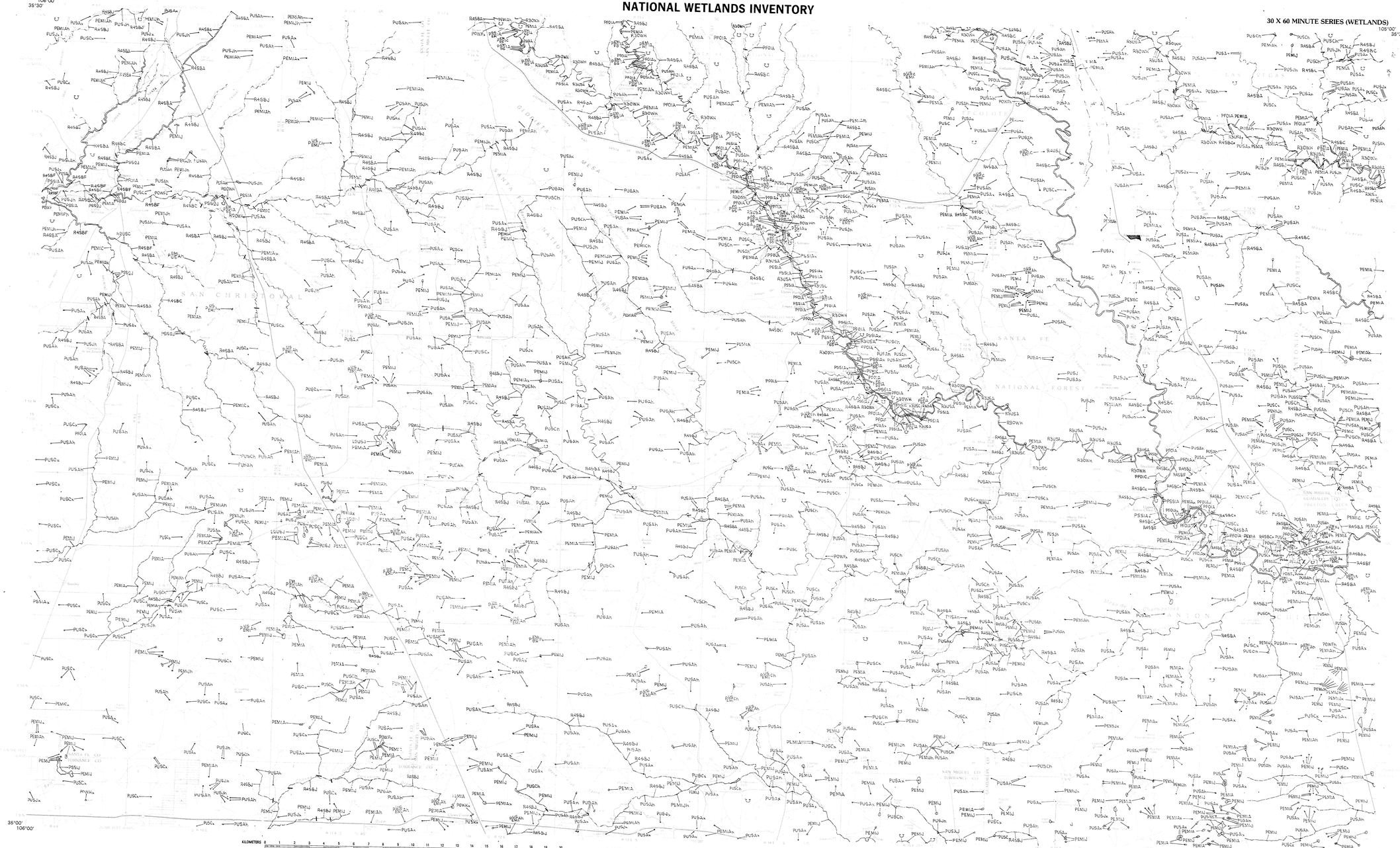
VILLANUEVA, NEW MEXICO

106°00'
35°30'

NATIONAL WETLANDS INVENTORY

30 X 60 MINUTE SERIES (WETLANDS)

105°00'
35°30'



35°00'
106°00'

105°00'
35°00'

KILOMETERS 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20
MILES 0 1 2 3 4 5 6 7 8 9 10 11 12

SCALE 1:100 000
1 CENTIMETER ON THE MAP REPRESENTS 1 KILOMETER ON THE GROUND

0 1000 5000 10 000 15 000 20 000 METERS
0 5000 10 000 15 000 20 000 25 000 30 000 35 000 40 000 45 000 50 000 55 000 60 000 65 000 FEET

VILLANUEVA, NEW MEXICO
(SW ¼ of Santa Fe 1:250,000)

Villanueva
NEW MEXICO

1:100 000 — Scale Map of

National Wetlands Inventory

- Wetland classifications
- Highways, roads and other manmade structures
- Water features
- Geographic names

DEPARTMENT OF THE INTERIOR · FISH & WILDLIFE SERVICE

1984

Produced by the United States Fish and Wildlife Service

Wetlands classifications from 1:58,000 scale color infrared aerial photographs taken 1981, 1982 and other source data.

Projection and 10,000 meter, zone 13
Universal Transverse Mercator
25,000-foot grid ticks based on New Mexico coordinate system, central and east zones (1927 North American datum
To place on the predicted North American Datum 1983 move the projection line 1 meter south and 49 meters east

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 the **Classification of Wetlands and Deep Water Habitats of the United States** (An Operational Draft) Cowardin, et al, 1977. The aerial photographs typically were taken during the growing season of an average year when they were taken. In addition, stains on a margin or error inherent in the use of such photographs. Thus, a detailed on the ground and historical analysis of a single site may be necessary to determine if the wetland boundaries established through photographic interpretation is correct. In addition, some small wetlands and those obscured by dense forest cover may not be included on these maps.

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 by the Service, in 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 should not apply the contents of these activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate Federal, State or local agencies concerning specific agency regulatory programs and proprietary jurisdictions that may affect such activities.

CONVERSION TABLE

Meters	Feet
1	3.2808
2	6.5617
3	9.8425
4	13.1234
5	16.4042
6	19.6850
7	22.9659
8	26.2467
9	29.5276
10	32.8084

To convert meters to feet: multiply by 3.2804
To convert feet to meters: multiply by 0.3048

DECLINATION DIAGRAM

UTM grid convergence (GN) and 1994 magnetic declination (MN) at center of sheet
Diagram is approximate

ADJOINING MAPS

1	2	3
4		5
6	7	8

1. Los Alamos
2. Santa Fe
3. Roy
4. Albuquerque
5. Conchas Lake
6. Belen
7. Vaughn
8. Santa Rosa

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 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

SYSTEM

SUBSYSTEM

CLASS

Subclass

M — MARINE

1 — SUBTIDAL: RB — ROCK BOTTOM (1 Bedrock, 2 Rubble); UB — UNCONSOLIDATED BOTTOM (1 Cobble-Gravel, 2 Sand, 3 Mud, 4 Organic); AB — AQUATIC BED (1 Algal, 2 Rooted Vascular, 3 Floating Vascular, 4 Emergent, Submergent); RF — REEF (1 Coral, 2 Worm); OW — OPEN WATER/UNKNOWN BOTTOM

2 — INTERTIDAL: AB — AQUATIC BED (1 Algal, 2 Rooted Vascular, 3 Floating Vascular, 4 Emergent, Submergent); RF — REEF (1 Coral, 2 Worm); RS — ROCKY SHORE (1 Bedrock, 2 Rubble); US — UNCONSOLIDATED SHORE (1 Cobble-Gravel, 2 Sand, 3 Mud, 4 Organic)

E — ESTUARINE

1 — SUBTIDAL: RB — ROCK BOTTOM (1 Bedrock, 2 Rubble); UB — UNCONSOLIDATED BOTTOM (1 Cobble-Gravel, 2 Sand, 3 Mud, 4 Organic); AB — AQUATIC BED (1 Algal, 2 Rooted Vascular, 3 Floating Vascular, 4 Emergent, 5 Submergent, 6 Moss, 7 Unknown Submergent, 8 Unknown Surface); RF — REEF; SB — STREAMBED (1 Cobble-Gravel, 2 Sand, 3 Mud, 4 Organic); RS — ROCKY SHORE (1 Bedrock, 2 Rubble); US — UNCONSOLIDATED SHORE (1 Cobble-Gravel, 2 Sand, 3 Mud, 4 Organic); EM — EMERGENT (1 Persistent, 2 Nonpersistent); SS — SCRUB-SHRUB (1 Broad-Leaved Deciduous, 2 Needle-Leaved Deciduous, 3 Broad-Leaved Evergreen, 4 Needle-Leaved Evergreen, 5 Dead, 6 Deciduous, 7 Evergreen); FO — FORESTED (1 Broad-Leaved Deciduous, 2 Needle-Leaved Deciduous, 3 Broad-Leaved Evergreen, 4 Needle-Leaved Evergreen, 5 Dead, 6 Deciduous, 7 Evergreen)

2 — INTERTIDAL: AB — AQUATIC BED (1 Algal, 2 Rooted Vascular, 3 Floating Vascular, 4 Emergent, 5 Submergent, 6 Moss, 7 Unknown Submergent, 8 Unknown Surface); RF — REEF (2 Mollusk, 3 Worm); RS — ROCKY SHORE (1 Bedrock, 2 Rubble); US — UNCONSOLIDATED SHORE (1 Cobble-Gravel, 2 Sand, 3 Mud, 4 Organic); EM — EMERGENT (1 Persistent, 2 Nonpersistent); SS — SCRUB-SHRUB (1 Broad-Leaved Deciduous, 2 Needle-Leaved Deciduous, 3 Broad-Leaved Evergreen, 4 Needle-Leaved Evergreen, 5 Dead, 6 Deciduous, 7 Evergreen); FO — FORESTED (1 Broad-Leaved Deciduous, 2 Needle-Leaved Deciduous, 3 Broad-Leaved Evergreen, 4 Needle-Leaved Evergreen, 5 Dead, 6 Deciduous, 7 Evergreen)

L — LACUSTRINE

1 — LIMNETIC: RB — ROCK BOTTOM (1 Bedrock, 2 Rubble); UB — UNCONSOLIDATED BOTTOM (1 Cobble-Gravel, 2 Sand, 3 Mud, 4 Organic); AB — AQUATIC BED (1 Algal, 2 Rooted Vascular, 3 Floating Vascular, 4 Emergent, 5 Submergent, 6 Moss, 7 Unknown Submergent, 8 Unknown Surface); OW — OPEN WATER/Unknown Bottom

2 — LITTORAL: RB — ROCK BOTTOM (1 Bedrock, 2 Rubble); UB — UNCONSOLIDATED BOTTOM (1 Cobble-Gravel, 2 Sand, 3 Mud, 4 Organic); AB — AQUATIC BED (1 Algal, 2 Rooted Vascular, 3 Floating Vascular, 4 Emergent, 5 Submergent, 6 Moss, 7 Unknown Submergent, 8 Unknown Surface); RS — ROCKY SHORE (1 Bedrock, 2 Rubble); US — UNCONSOLIDATED SHORE (1 Cobble-Gravel, 2 Sand, 3 Mud, 4 Organic); EM — EMERGENT (2 Nonpersistent); OW — OPEN WATER/Unknown Bottom

R — RIVERINE

1 — TIDAL: RB — ROCK (1 Bedrock, 2 Rubble); UB — UNCONSOLIDATED BOTTOM (1 Cobble-Gravel, 2 Sand, 3 Mud, 4 Organic); AB — AQUATIC BED (1 Algal, 2 Rooted Vascular, 3 Floating Vascular, 4 Emergent, 5 Submergent); OW — OPEN WATER/Unknown Bottom

2 — LOWER PERENNIAL: *SB — STREAMBED (1 Cobble-Gravel, 2 Sand, 3 Mud, 4 Organic); AB — AQUATIC BED (1 Algal, 2 Rooted Vascular, 3 Floating Vascular, 4 Emergent, 5 Submergent); RS — ROCKY SHORE (1 Bedrock, 2 Rubble); US — UNCONSOLIDATED SHORE (1 Cobble-Gravel, 2 Sand, 3 Mud, 4 Organic, 5 Vegetated)

3 — UPPER PERENNIAL: *SB — STREAMBED (1 Cobble-Gravel, 2 Sand, 3 Mud, 4 Organic); AB — AQUATIC BED (1 Algal, 2 Rooted Vascular, 3 Floating Vascular, 4 Emergent, 5 Submergent); RS — ROCKY SHORE (1 Bedrock, 2 Rubble); US — UNCONSOLIDATED SHORE (1 Cobble-Gravel, 2 Sand, 3 Mud, 4 Organic, 5 Vegetated)

4 — INTERMITTENT: *SB — STREAMBED (1 Cobble-Gravel, 2 Sand, 3 Mud, 4 Organic); US — UNCONSOLIDATED SHORE (1 Cobble-Gravel, 2 Sand, 3 Mud, 4 Organic, 5 Vegetated)

5 — UNKNOWN PERENNIAL: *TSB — UNKNOWN STREAMBED (2 Nonpersistent); OW — OPEN WATER/Unknown Bottom

*STREAMBED is limited to TIDAL and INTERMITTENT SUBSYSTEMS, and comprises the only CLASS in the INTERMITTENT SUBSYSTEM
**UNKNOWN is limited to TIDAL and LOWER PERENNIAL SUBSYSTEMS. The remaining CLASSES are found in all SUBSYSTEMS.

P — PALUSTRINE

RB — ROCK BOTTOM (1 Bedrock, 2 Rubble); UB — UNCONSOLIDATED BOTTOM (1 Cobble-Gravel, 2 Sand, 3 Mud, 4 Organic); AB — AQUATIC BED (1 Algal, 2 Rooted Vascular, 3 Floating Vascular, 4 Emergent, 5 Submergent, 6 Moss, 7 Unknown Submergent, 8 Unknown Surface); US — UNCONSOLIDATED SHORE (1 Cobble-Gravel, 2 Sand, 3 Mud, 4 Organic, 5 Vegetated); MS — MOSS-LICHEN; EM — EMERGENT (1 Persistent, 2 Nonpersistent); SS — SCRUB-SHRUB (1 Broad-Leaved Deciduous, 2 Needle-Leaved Deciduous, 3 Broad-Leaved Evergreen, 4 Needle-Leaved Evergreen, 5 Dead, 6 Deciduous, 7 Evergreen); FO — FORESTED (1 Broad-Leaved Deciduous, 2 Needle-Leaved Deciduous, 3 Broad-Leaved Evergreen, 4 Needle-Leaved Evergreen, 5 Dead, 6 Deciduous, 7 Evergreen); OW — OPEN WATER/Unknown Bottom

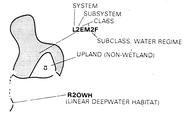
MODIFIERS

In order to more adequately describe wetlands 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 normal modifier may also be applied to the ecological system.

WATER REGIME		WATER CHEMISTRY		SOIL	SPECIAL MODIFIERS
Non-Tidal	Tidal	Coastal Salinity	Inland Salinity	pH Modifiers for all Fresh Water	
A. Temporary to Flooded B. Saturated C. Seasonally Flooded D. Well Drained E. Seasonally Flooded/Well Drained F. Semipermanently Flooded G. Intermittently Exposed	H. Permanently Flooded J. Intermittently Flooded K. Artificially Flooded *Z. Tidal Saturated *Y. Temporarily Tidal *V. Permanently Tidal *X. Unknown	5. Hypersaline 6. Euhaline 7. Mixohaline 8. Polyhaline 9. Oligohaline 0. Fresh	L. Hypersaline M. Euhaline N. Mixohaline P. Fresh	a. Acid b. Circumneutral c. Alkaline	f. Diked/Impounded g. Artificial Substrate h. Spoil i. Excavated

*Tidal water regimes are only used in clearly influenced freshwater systems

SYMBOLOGY EXAMPLE



*Primarily represents upland areas, but may include unclassified wetlands such as man-modified areas, non photographable areas and/or unintentional omissions.

DRAFT