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USER REPORT: WOLF POINT NE, MONTANA
NATIONAL WETLANDS INVENTORY MAPS

A. Introduction

The U.S. Fish & Wildlife Service's National Wetlands Inventory is producing maps showing the location and classification of wetlands and deepwater habitats of the United States. The Classification of Wetlands and Deepwater Habitats of the United States by Cowardin et al. is the classification system used to define and classify wetlands. Photo interpretation conventions, hydric soils lists and wetland plant lists are also available to enhance the use and application of the classifications system.

B. PURPOSE

The purpose of the notes to users is threefold: (1) to provide localized information regarding the production of NWI maps, including specific imagery and interpretation discussion; (2) to provide a descriptive crosswalk from wetland codes on the map to common names and representative plant species; and (3) to explain local geography, climate, and wetland communities.

C. STUDY AREA

Geography:

Wolfpoint NE is located in the northeastern corner of Montana. The map is bounded on the west by the 105° meridian and on the east by the 104° meridian. On the north it is bounded by the 49° parallel (U.S. Canadian border) and on the south by the 48° 30' parallel (See locator Map A).

According to Bailey, Description of the Ecoregions of the United States (1980), the area lies in the Wheatgrass-Needlegrass section of the Great Plains-Shortgrass Prairie Province. This region is characterized by rolling plains and tablelands of moderate relief with occasional valleys, canyons and buttes.

The study area has a rolling landscape with scattered intermittent wetlands typical of a glacial till plain. Siltstone bedrock is still visible in many places, especially on valley walls and steep slopes. Elevations range from about 1900 feet along Big Muddy Creek to approximately 2600 feet in the western portion of the map.

Big Muddy Creek is the major drainage system in the study area and all streams and tributaries drain into it. The Big Muddy enters the study area from the northwest and Canada, and meanders southeasterly emptying into the Missouri River. The water level of Medicine Lake Wildlife Refuge is maintained by diverting water from the Big Muddy.

The numerous ponds and lakes in this area supply water for wildlfe, waterfowl and domestic animals. For domestic use, manmade water structures and wells are used as a supplement.

Climate:

The climate is a semiarid continental regime in which maximum rainfall comes in summer, but the total supply of moisture is low. Evaporation usually exceeds precipitation. The average annual temperature is 45 degrees Farenheit throughout most of the region. Winters are cold and dry; the summers warm to hot. The frost free season is generally lower than 100 days with precipitation being about 10 inches at this latitude of the Short-Grass Prairie Province.

Vegetation:

The short grass prairie province, or steppe, is a formation class of short grasses usually bunched and sparsely distributed. Scattered trees and shrubs occasionally appear in the steppe, and extend into semi desert and woodland areas. Since ground cover is scarse, much soil is exposed to erosion. Typical plants of this province are buffalograss, blue grama and little bluestem.

Soils:

Calcification is the dominate pedogenic process in Great Plains soils (Bailey, 1980). These oils contain a large amount of precipitated calcium carbonate and are rich in bases. Salinization is dominant in poorly drained sites. Humus content is low due to sparse vegetation cover. Great Plains soils are generally Mollisols with aridic moisture regimes and frigid temperature regimes (Montagne, et.al. 1982).

D. WETLAND CLASSIFICATION CODES AND WATER REGIME DESCRIPTIONS

TABLE 1: NWI CLASSIFICATION FOR WOLF POINT NE, MONTANA

NWI CODE (WATER REGIME	NWI DESCRIPTION	COMMON DESCRIPTION	CHARACTERISTIC VEGETATION
R2UB (G)	Riverine, lower perennial, unconsolidated bottom	Open water, river	Unvegetated mud, sand or gravel
R2US (C,A)	Riverine, lower perennial, unconsolidated shore	River flat or bar	Unvegetated mud, sand or gravel
R4SB (A,C,F)	Riverine, intermittent, stream bed	Intermittent stream or creek	Unvegetated mud, sand or gravel
L2AB (F,G)	Lacustrine, littoral, aquatic bed	Floating or rooted water plants	Ceratophyllum demersum (Coontail) Myriophylluml heterophyllum (Water milfoil)
L2US (A,C)	Lacustrine, littoral, unconsolidated shore	Lake shore	Unvegetated mud, sand or gravel
PUB	Palustrine, unconsolidated bottom	Open water pond unvegetated	Unvegetated mud, sand or gravel
PAB (F,G)	Palustrine, aquatic bed	Floating or rooted water plants	Lemna minor (duckweed) Potomogeton sp. (pondweed) Ranunculus purshii (yellow crowfoot) Ceratophyllum demersum (Coontail) Myriophyllum heterophyllum (Water milfoil) Utricularia spp. (Bladderwort)

NWI CODE (WATER REGIME	NWI DESCRIPTION	COMMON DESCRIPTION	CHARACTERISTIC VEGETATION
PUS (A,C)	Palustrine, unconsolidated shore	Pond shore	Unvegetated mud, sand or gravel
PEM (A,C,F)	Palustrine, emergent	Marsh or wet marsh, depression, drainage area or seep	Typha latifolia (cattail) Scirpus sp. (bullrush) Eleocharis sp. (spikerush) Carex trichocarpa (slough sedge) Agropyron Smithii (Western Wheatgrass) Polygonomum sp. (smartweed) Juncus spp. (rush) Scolochloa festucacea (White top) Spartina pectinata (Prairie cordgrass) Hordeum jubatum (Foxtail Barley) Phalaris arundinacea (Reed canary grass)
PSS (A,C)	Palustrine scrub-shrub,	Shrub wetland	Salix nigra (Black Willow)
PFO (A,C)	Palustrine Forest	Forest wetland	Salix nigra (Black Willow) Populus deltoides (Cottonwood) Ulmus americanus (American elm)

Water Regime Description

(A) Temporarily Flooded--Surface water present for brief periods during growing season, but water table usually lies well below soil surface. Plants that grow both in uplands and wetlands are characteristic of this water regime.

(C) Seasonally Flooded--Surface water is present for extended periods especially early in the growing season, but is absent by the end of the growing season in most years. The water table after flooding ceases is extremely variable, extending from saturated to a water table well below the ground surface.

(F) Semipermanently Flooded--Surface water persists throughout the growing season in most years. When surface water is absent, the water table is usually at or very near the land's surface.

(G) Intermittently Exposed--Surface water is present throughout the year except in years of extreme drought.

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 1:65,000 scale, color infrared photographs were taken 05-28-82 and 05-26-83. Initial ground truthing of the photography occurred during the period of July 7 to July 18, 1987. Photointerpreters used collateral information from soil surveys, and USGS 1:24,000 scale topographic maps to assist in wetland recognition.

The user of the map 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 Regional Wetlands Coordinator, U.S. Fish & Wildlife Service, Region 6, Habitat Resources, Lake Plaza North Building, 134 Union Boulevard, Lakewood, Colorado, 80228.

Special Mapping Problems:

None

Map Aquisition:

To place an order for a National Wetland Inventory map product, please contact:

Charles Elliott
Regional Wetland Coordinator
U.S. Fish & Wildlife Service
Region 6 - Habitat Resources
Lake Plaza North Blvd
134 Union Blvd
Lakewood, Colorado 80228

-or-

Rocky Mountain Mapping Center
National Cartographic Information Center
U.S. Geological Survey
Box 25046, Stop 504, Federal Center
Denver, Colorado 80225

Maps are identified by the name of the corresponding USGS 1:24,000 scale topographic quadrangle name. Topographic map indicesd are available form the U.S. Geological Survey.

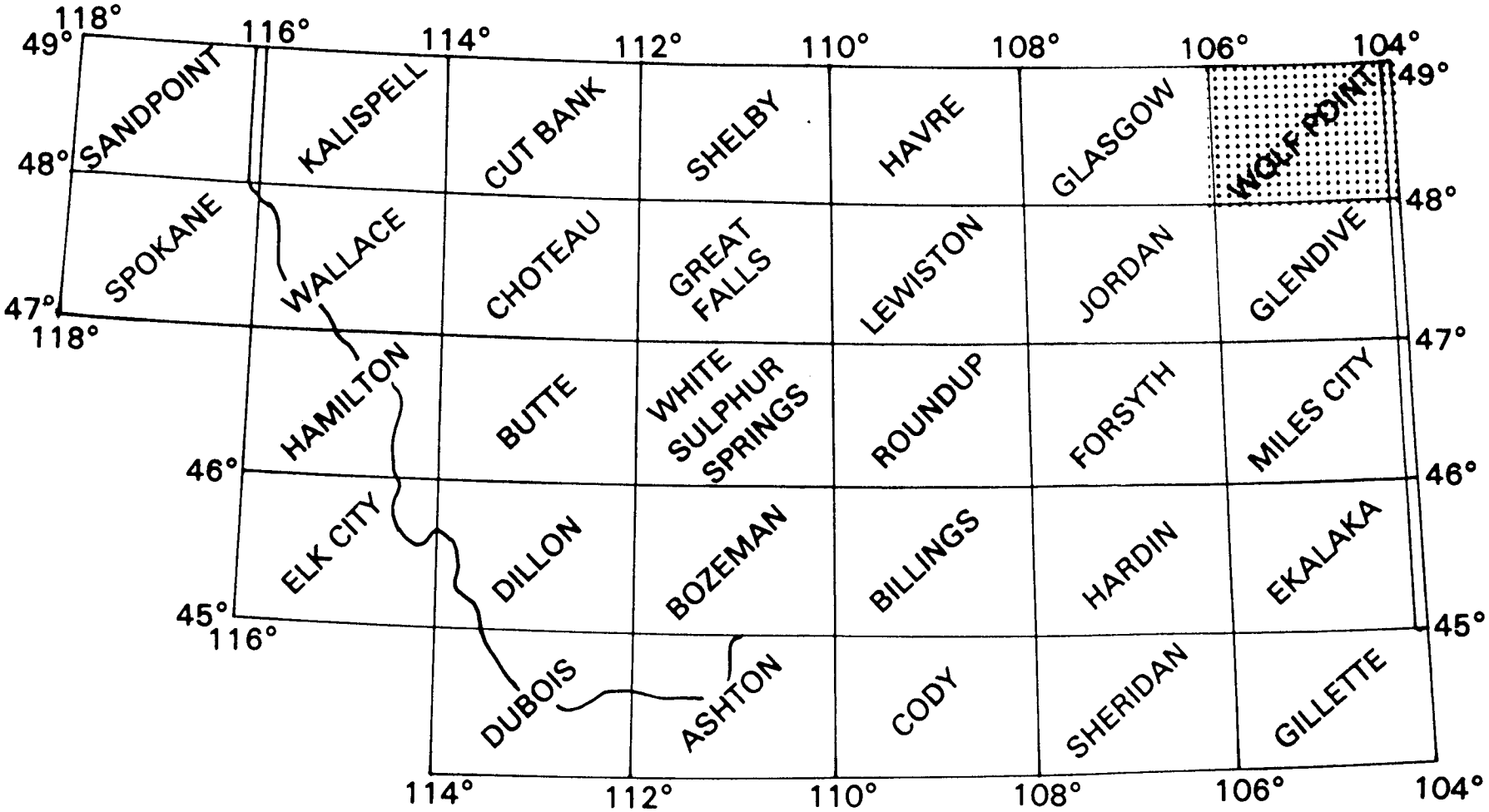
MB/jrg:wp:nwi

LITERATURE CITED

Bailey, R.G., 1980. Description of the Ecoregions of the United States. U.S. Department of Agriculture, Miscellaneous Publication No. 1391, 77 pp.

Montagne, C.; Munn L.C.; Nielson, G.A.; Rogers, J.W. and Hunter, H.E., 1982 Soils of Montana. Montana Agricultural Experiment Station, Montana State University and USDA Soil Conservation Service, Bozeman, Montana, Bulletin 744, 95 pp.

MONTANA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SHELBY
HAVRE
GLASGOW
WOLF POINT
SPOKANE
WALLACE
CHOTEAU
GREAT FALLS
LEWISTON
JORDAN
GLENDIVE
HAMILTON
BUTTE
WHITE SULPHUR SPRINGS
ROUNDUP
FORSYTH
MILES CITY
ELK CITY
DILLON
BOZEMAN
BILLINGS
HARDIN
EKALAKA
DUBOIS
ASHTON
CODY
SHERIDAN
GILLETTE