

L. 111

USER REPORT: ASHTON NW, ASHTON SW
MONTANA/IDAHO

NATIONAL WETLANDS INVENTORY MAP

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 the wetlands. Photo interpretation conventions, hydric soils lists and wetland plant lists are also available to enhance the use and application of the classification 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:

Ashton NW and Ashton SW are located in southwestern Montana and eastern Idaho. Ashton NW is bounded on the west by the 112° meridian and on the east by the 111° meridian. It is bounded on the south by the 44° parallel and on the north by the 45° parallel. Ashton SW is bounded on the west by the 112° meridian and on the east by the 111° meridian. It is bounded on the south by the 43° parallel and on the north by the 44° parallel. (Figure 1)

According to Bailey, Description of the Ecoregions of the United States (1980), the entire project area lies in the Douglas-Fir Forest Section of the Rocky Mountain Forest Province.

The area is mainly comprised of high, rugged mountains rising to more than 10,000 feet (3,000 meters) with local relief between 5,000 feet (1,500 meters) and 7,000 feet (2,100 meters). In the Rocky Mountain trenches there are several valleys along which major rivers such as Red Rock, Henrys Fork, Madison, Warm, and Falls Rivers flow. The dominant wetland features on the landscape are Red Rock

Lakes National Wildlife Refuge and Hebgen Lake in Montana, and Henry's Lake and Island Park Reservoir with Mesa Falls in Idaho. The southwestern portion of the project area consists of ancient lava flows and is flat sagebrush prairie. In addition there are scattered craters throughout the area. The entire project area contains portions of Beaverhead National Forest, Targhee National Forest, and Gallatin National Forest.

Climate:

The Continental Divide forms a natural boundary between Montana and Idaho and separates rivers that flow northeast and southwest. The project area has a colder, continental climate with low humidity.

Winters are usually severe with most of the precipitation falling at that time in the form of snow. Average temperatures for the coldest month can go lower than 32°F and for the warmest month up to 90°F at lower elevations.

Precipitation varies greatly with elevation. At the lower elevations only 10 to 20 inches of rain falls per year. As elevation increases, temperature decreases and rain fall may be as high as 40 inches per year (Bailey, 1980).

Vegetation:

According to Bailey, 1980, the vegetational zone distribution in the Rocky Mountain Forest Province is controlled by a combination of altitude, latitude, direction of prevailing winds, and slope exposure. The upper most belt is the alpine, where trees are absent. Below this is the subalpine belt dominated by Englemann spruce and subalpine fir. Next is the montane belt with ponderosa pine on the lower, drier, more exposed slopes and Douglas-fir on the higher, moister, and more sheltered slopes. After a fire these original forest trees are frequently replaced by aspen or lodgepole pine.

Grasses dominate unforested patches and shrubs of mountain-mahogany and scrub oak cover the foothill belt below the montane. Sagebrush dominates the flat lava flows in the south.

Soils:

In the Rocky Mountain Forest Province the soils occur in accordance with the vegetation zones. The foothill belt contains Aridisols and the montane consists of Alfisols and Mollisols. There are also areas of Inceptisols because of steep slopes and recent glaciation (Bailey, 1980).

D. WETLAND CLASSIFICATION CODES AND WATER REGIME DESCRIPTIONS

Table - Cowardin Classification Codes and Descriptions

NWI CODE WATER REGIME	NWI DESCRIPTION	COMMON DESCRIPTION	CHARACTERISTIC VEGETATION
L1UB (H)	Lacustrine, limnetic, unconsolidated bottom	Open water, Lake	Unvegetated mud, sand, gravel, or cobble
L2UB (H)	Lacustrine, littoral, unconsolidated bottom	Open water, Lake	Unvegetated mud, sand, gravel, or cobble
L2AB (H,G)	Lacustrine, littoral, aquatic bed	Floating or submerged aquatic plants	Water lily (<u>Nuphar</u> sp.)
L2US (C)	Lacustrine, littoral, unconsolidated shore	Lake shore	Unvegetated mud, sand, gravel, or cobble
R3RB (H)	Riverine, upper perennial, rock bottom	Open water, River	Unvegetated stones, boulders, or bedrock
R3UB (G,H)	Riverine, upper perennial, unconsoli- dated bottom	Open water, River	Unvegetated sand, gravel, or cobble
R2UB (G,H)	Riverine, lower perennial, unconsoli- dated bottom	Open water, River	Unvegetated mud, sand, gravel, or cobble
R3US (C)	Riverine, upper perennial, unconsoli- dated shore	River flat or bar	Unvegetated sand, gravel, or cobble
R2US (C)	Riverine, lower perennial, unconsoli- dated shore	River flat or bar	Unvegetated mud, sand, gravel, or cobble
R4SB (A,C,F)	Riverine, inter- mittent, streambed	Intermittent stream or creek	Unvegetated mud, sand, or gravel

D. WETLAND CLASSIFICATION CODES AND WATER REGIME DESCRIPTIONS

Table - Cowardin Classification Codes and Descriptions

NWI CODE WATER REGIME	NWI DESCRIPTION	COMMON DESCRIPTION	CHARACTERISTIC VEGETATION
PUB (F,G,H)	Palustrine, unconsolidated bottom	Open water pond, unvegetated	Unvegetated mud, sand, or gravel
PAB (F,G,H)	Palustrine, aquatic bed	Floating or submerged aquatic plants	Water lily (<u>Nuphar</u> sp.) Duckweed (<u>Lemna</u> sp.)
PUS (A,C)	Palustrine, unconsolidated shore	Pond shore	Unvegetated mud, sand, or gravel
PEM (A,B,C) (F,H)	Palustrine, emergent	Marsh, wet meadow or seeps	Bulrush (<u>Scirpus</u> sp.) Cattail (<u>Typha</u> sp.) Sedges (<u>Carex</u> sp.) Spikerush (<u>Eleocharis</u> sp.) Baltic Rush (<u>Juncus balticus</u>) Tufted hairgrass (<u>Deschampsia cespitosa</u>) Water parsnip (<u>Sium</u> sp.) Mannagrass (<u>Glyceria</u> sp.) Reed canary grass (<u>Phalaris arundinacea</u>) Horsetail (<u>Equisetum fluviatile</u>) Foxtail barley (<u>Hordeum jubatum</u>)

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NWI CODE WATER REGIME	NWI DESCRIPTION	COMMON DESCRIPTION	CHARACTERISTIC VEGETATION
PEM (cont'd)			Cinquefoil (<u>Potentilla</u> sp.) Elk thistle (<u>Cirsium</u> sp.) Wild Onion (<u>Allium</u> sp.) Salt Grass (<u>Distichlis</u> <u>spicata</u>) Glasswort (<u>Salicornia</u> sp.) Timothy (<u>Phleum</u> sp.) Sow thistle (<u>Sonchus</u> sp.) Iris (<u>Iris</u> sp.)
PSS (A,B,C)	Palustrine, scrub-shrub	Shrub wetland, floodplains or seeps	Willow (<u>Salix</u> sp.) Cottonwood (<u>Populus</u> sp.) Quaking Aspen (<u>Populus tremula</u>)
PFO (J,A,B,C)	Palustrine forest	Forest wetland, floodplains	Willow (<u>Salix</u> sp.) Cottonwood (<u>Populus</u> sp.) Quaking Aspen (<u>Populus tremula</u>)

E. 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.
- (B) Saturated - The substrate is saturated to the surface for extended periods during the growing season, but surface water is seldom present.
- (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 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.
- (H) Permanently Flooded - Water covers the land surface throughout the year in all years. Vegetation is composed of obligate hydrophytes.

F. MAP PREPARATION

The wetland classifications that appear on the Ashton National Wetlands Inventory (NWI) Base Maps are in accordance with Cowardin et al (1979). The delineations were produced through stereoscopic interpretation of 1:58,000 scale color infrared photographs that were taken on 07/27/80, 08/21/80, 09/04/80, and 08/31/81. Initial ground truthing of the photography occurred during the period of July 23-28, 1989. 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.

G. SPECIAL MAPPING PROBLEMS

None

H. MAP ACQUISITION

To discuss any questions concerning these maps or to place a map order, please contact:

Regional Wetland Coordinator
U.S. Fish and Wildlife Service
Region 6 - Habitat Resources
Lake Plaza North Boulevard
134 Union Boulevard
Lakewood, Colorado 80228

or

Regional Wetland Coordinator
U.S. Fish and Wildlife Service
Region 1
1002 NE Holladay Street
Portland, Oregon 97232-4181

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 indices are available from the U.S. Geological Survey.

I. LITERATURE CITED

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

Soils in Montana; 1973. Montana Agricultural Experiment Station.

Soil Survey: Fremont County Idaho, U.S. Department of Agriculture, Soil Conservation Service.

MONTANA

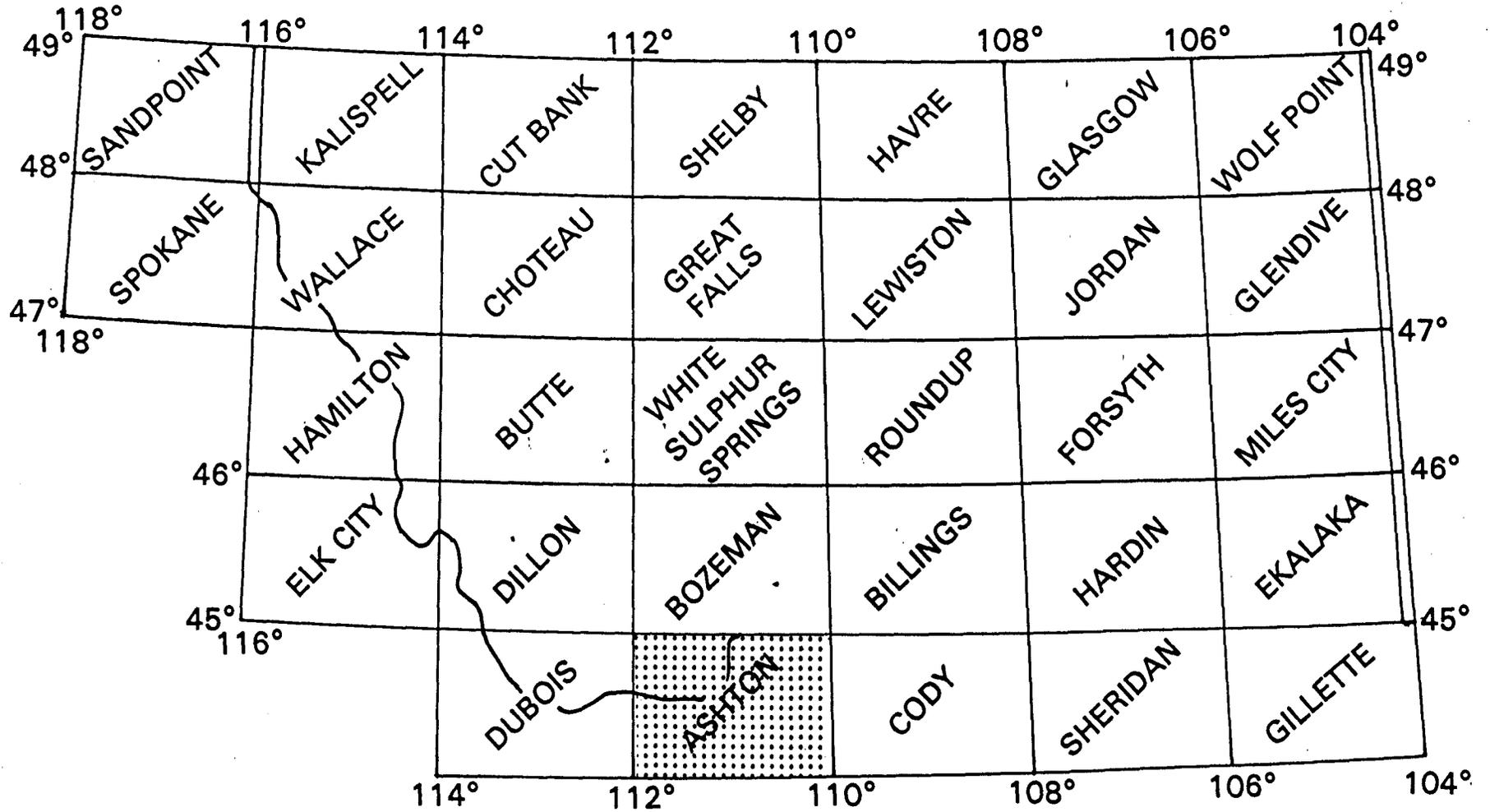


Figure 1