

USER REPORT: CRESCENT SW
NATIONAL WETLANDS INVENTORY MAPS

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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:

The study area covered by Crescent SW is located in central Oregon on the eastern side of the Cascade Mountain Range. Bailey (1980) identifies the study area as the Intermountain Sagebrush Province with the Silver Fir-Douglas Fir Section on the extreme western edge of the area. Forest communities in the Intermountain Sagebrush Province consist mostly of needleleaf evergreen trees with sagebrush shrubs. The Silver Fir-Douglas Fir section has conifer forest communities consisting of a variety of needleleaf evergreen trees as well as a variety of shrubs. Relief extends from flat semi-arid terrain (eastward) to steep mountainous areas (westward) and contains very few streams with a small percentage that are permanent. Major perennial rivers include the Little Deschutes and Crescent Creek. Major marshes include Paulina Marsh, Klamath Marsh, and Sellers Marsh.

Climate:

The climate in this region consists of hot summers with moderately cold winters (40 to 55 degrees Fahrenheit average annual temperature). Low rainfall amounts ranging from 5 to 20 inches, with almost no rainfall during the summer months except in the mountains. (Bailey 1980).

Vegetation:

According to Bailey, the climax community of the Intermountain Sagebrush Province may not be sagebrush even though it is now the characteristic plant. Sagebrush may be a disclimax produced by overgrazing. Greasewood, saltgrass, and mixed prairie type grasses also exist. Forests in the montane belt consist of needleleaf evergreens such as ponderosa pine in the lower more exposed slopes and Douglas-fir and Western hemlock in the higher more sheltered ones. Lodgepole pine is a typical wetland tree, while juncus and types of sedge are dominant wetland grasses.

Soils:

Poorly drained soils are widespread in this region. Aridisols dominate all basin and lowland areas in the east. Mollisols are at the higher elevations in the western areas. Some areas have high salt concentration and even shrubs are unable to grow, instead greasewood and saltgrass appear. Hydric soils are rare in the study area. Aquools, Aquepts and Pedigo soils are the major soil groups found in association with wetlands.

D. WETLAND CLASSIFICATION CODES AND WATER REGIME DESCRIPTIONS

Table 1 - NWI Classification for Crescent SW (page 1 of 2)

NWI CODE WATER REGIME	NWI DESCRIPTION	COMMON DESCRIPTION	CHARACTERISTIC VEGETATION
R2UB (H)	Riverine, lower perennial	Rivers	Unconsolidated bottoms
R3UB (H)	Riverine, upper perennial	Rivers	Unconsolidated bottoms
R4SB (F,C,A)	Riverine, intermittent, stream bed	Creek, stream, canal	Unvegetated: sand, mud, gravel
L1UB (H)	Lacustrine, limnetic, unconsoli- dated bottom	Reservoir, lake	Unconsolidated bottoms
L2UB (K)	Lacustrine, littoral, unconsoli- dated bottom	Sewage treatment ponds	Unconsolidated bottoms
PUB (H,G,K,F)	Palustrine, unconsolidated bottom	Ponds, stock tanks, borrow pits	Unconsolidated bottoms
PUS (C,A)	Palustrine, unconsolidated shore	Pond bed, unvegetated depression	Unvegetated mud, sand or gravel
PEM (F,C,B,A)	Palustrine, emergent	Seeps, springs, vegetated streams and canals, wet meadows marshes	<u>Juncus</u> spp. (rushes) <u>Carex</u> spp. (sedges) <u>Typha latifolia</u> (common cattail) <u>Rumex</u> spp. (dock) <u>Veratrum caudatum</u> (false hellebore) <u>Pulchellum</u> (Western shooting star) <u>Alopecurus</u> sp. (fox tail) <u>Collinsia verna</u> (blue-eyed Mary)
PSS (C,B,A)	Palustrine scrub-shrub	Seeps, springs, streams, thickets	<u>Populus</u> spp. (cottonwood) <u>Salix</u> spp. (willow) <u>Rhus</u> spp. (sumac)
PFO (C,B,A)	Palustrine forested	Forested streams, floodplains, depressions, seeps and springs	<u>Populus</u> spp. (cottonwood) <u>Fraxinus latifolia</u> (ash) <u>Salix</u> spp. (willow) <u>Alnus rubra</u> (red alder) <u>Pinus ponderosa</u> (ponderosa pine) <u>Picea Englemannii</u> (Englemann's spruce) <u>Pinus contorta</u> (lodgepole pine)

Table 1 - NWI Classification for Crescent SW (page 1 of 2)

NWI CODE WATER REGIME	NWI DESCRIPTION	COMMON DESCRIPTION	CHARACTERISTIC VEGETATION
PAB (F,H)	Palustrine, aquatic bed	Ponds, stock tanks, canals	<u>Wolffia punctata</u> (watermeal) <u>Lemna minor</u> (duckweed) <u>Potamogeton</u> spp. (pondweed) <u>Nuphar luteum</u> (spatterdock)

Water Regime Description

- (J) Intermittently Flooded - Substrate is usually exposed, but surface water present for variable periods without detectable seasonal periodicity. Weeks or months or even years may intervene between periods of inundation. The dominant plant communities under this regime may change as soil moisture conditions change. Some areas exhibiting this regime do not fall within our definition of wetland because they do not have hydric soils or support hydrophytes.
- (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 surface for extended periods during the growing season, but surface water is seldom present.
- (C) Seasonably 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.
- (H) Permanently Flooded - Water covers land surface throughout the year in all years.
- (K) Artificially Flooded - The amount and duration of flooding is controlled by means of pumps or siphons in combination with dikes or dams.
- (U) Unknown - The water regime is not known.

E. MAP PREPARATION

The wetland classification that appears on the Crescent SW National Wetlands Inventory (NWI) Base Maps (Table 1) is in accordance with Cowardin et al (1977). The delineations were produced through stereoscopic interpretation of 1:58,000 scale color infrared photography. The photography was taken during July, August, and September of 1982.

Field checks of areas found within Crescent SW were made prior to the actual delineation of wetlands. Field check sites were selected to clarify varying signatures found on the photography. These photographic signatures were then identified in the field using vegetation types and soil types, as well as additional input from field personnel.

Collateral data included USGS topographic maps, climate, vegetation, and ecoregional information.

The user of the map is cautioned that, due to the limitation of mapping primarily through aerial photointerpretation, a small percentage of wetlands may have gone unidentified. Since the photography was taken during a particular time and season, there may be discrepancies between the map and current field conditions. Changes in landscape which occurred after the photography was taken would result in such discrepancies.

Aerial photointerpretation and drafting were completed by Martel Laboratories, Inc., St. Petersburg, Florida.

F. SPECIAL MAPPING PROBLEMS

None.

G. MAP ACQUISITION

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

Dennis Peters
Regional Wetland Coordinator
U.S. Fish and Wildlife Service - Region I
Lloyd 500 Building, Suite 1692
Portland, OR 97232

To order maps only, contact:

National Cartographic Information Center
U.S. Geological Survey
National Center
Reston, VA 22092

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.

LITERATURE CITED

Bailey, Robert G.; 1980. Description of the Ecoregions of the United States; United States Department of Agriculture Forest Service. Miscellaneous Publications No. 1391.

Cowardin, L.M.; V. Carter; F.C. Golet and E.T. LaRoe; 1979. Classification of Wetlands and Deepwater Habitats of the United States. U.S. Department of the Interior, U.S. Fish and Wildlife Service. Biological Services Program, Washington D.C., 103 p.

Hotchkiss, Neil; 1972. Common Marsh, Underwater and Floating-leaved Plants of the U.S. and Canada. Dover Publishing Co.

Little, Elbert; 1980. Audubon Society Field Guide to North American Trees: Western Region. Alfred A. Knopf, Inc.

Soil Survey of Lane County, Oregon, 1980. United States Department of Agriculture, Soil Conservation Service.

Soil Survey of Linn County, Oregon, 1980. United States Department of Agriculture, Soil Conservation Service.

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APPENDIX A

1:100,000 - SCALE INDEX MAP

