

SOUTH DAKOTA WETLAND INVENTORY

U.S. Fish and Wildlife Service

1:100,000 Map Narrative Report

Huron NW

Map Preparation

Contractor for this wetland inventory was the South Dakota Coop. Fish and Wildlife Research Unit, P.O. Box 2206, South Dakota State University, Brookings, South Dakota 57007. Photointerpreters were Kristin K. Sletten and Tara L. Wertz. This report was completed by Tara L. Wertz. Regional Wetland Coordinator was Charles Elliot, U.S. Fish and Wildlife Service, Denver Federal Center, P.O. Box 25486, Denver, Colorado 80225.

Wetland delineation and classification for the Huron NW was done on 1:65,000 color infrared aerial photography taken in April 1986. Photographs used to fill in holiday areas were 1:58,000 scale and taken in April and June 1984. Photography covered 96% of the quadrangle. Classification of wetlands was done according to Cowardin et al. (1979). National Wetlands Inventory mapping conventions were used to assist in photointerpretation. Field checking was done 7 January 1987.

Special Mapping Problems

Few problems were encountered with the 1986 photography. Wetland conditions in April were very pronounced and easily identifiable for the most part.

There may have been an overestimation of seasonal wetlands in conjunction with an underestimation of temporary wetlands due to heavy water conditions this spring. The problem area is on the eastern portion of the quadrangle,

this being part of the Mankato Drift Plain physiographic region. Classification was difficult in some areas, especially in low-lying pasturelands.

Also, semi-permanent wetlands were slightly underestimated. High water conditions flooded the cattail (Typha spp.) leaving no vegetation signature on the photography. Topographic maps were used heavily to aid in classifying semi-permanent wetlands, although most of the maps were from the 1950's and did not show accurate water conditions.

Riverine Systems:

The major drainage system in the quadrangle is Medicine Creek, located in the southwest corner of the quadrangle. It was classified as R4SBF as it flows closer to the Missouri River. This was distinguished by the strength of the water signature and the channel the water cut.

Palustrine Systems:

Temporaries (PEMA) exhibited signatures from a muddy, non-basin oriented blue to a weak, open-water dark blue. The most difficult signature encountered was in plowed fields. With little topographic relief in the area, it was extremely difficult to distinguish a temporary signature from that of ephemeral water.

Palustrine emergent seasonals (PEMC) consistently had strong, open-water blue or black signatures. Some signatures were vegetated and usually had a lighter blue color with a rough texture.

Several seasonal and temporary linears were delineated. Classification (PEMC or PEMA) depended upon the strength of the water signature, usually dark blue or black.

Palustrine forested wetlands (PFO) and palustrine scrub-shrub wetlands (PSS) were present in the quadrangle. Water regime was determined by

photosignature. In areas which had emergents intermingled with the woody vegetation, the type which covered more than 30% of the wetland was considered dominant (i.e. PFO/EMC, PEM/SSA).

Palustrine emergent semi-permanent wetlands (PEMF) were characterized by whitish-gray clumped vegetation signatures. There were also strong open-water signatures classified as PABF if collateral data indicated permanent water. Those areas which had mixed emergent and aquatic beds were PEM/ABF or PAB/EMF depending on the amount of vegetation.

Road ditches with weak water signatures were classified as PEMAx. Ditches with stronger water were called PEMCx. A few PFOCx classifications were used.

Drainage ditches were delineated only if they channelized a portion of a stream. Classifications used were PEMCx, PEM/ABFx and PAB/EMFx.

Gravel pits were classified as PUBFx. Vegetated gravel pits were classified as PEM/ABFx, PAB/EMFx, PEM/FOCx, and PFO/EMCx. Dugouts were called PABFx. Sewage lagoons were labelled as PABFh and PABGh. Other classifications included were PEM/ABFh, PAB/EMFh and PABFhx.

Vegetation commonly found in temporary basins (PEMA) were sedges (Carex spp.) dock (Rumex spp) and prairie cordgrass (Spartina). Emergent seasonals were dominated by smartweed (Polygonum spp) and reed canary grass (Phalaris arundinacea). Cattail (Typha spp) and bulrush (Scirpus spp) dominated semi-permanent wetlands. More detailed descriptions of wetland vegetation in the Dakotas are provided in Stewart and Kantrud (1971, 1972), Fulton (1979) and Larson (1979).

Lacustrine System

Two main classifications for the lacustrine system were L2ABG and L1UBG. An L1 zone was pulled if there was collateral data to support the call, i.e. South Dakota Lakes Survey (1981). Field verification determined a few L2ABF classifications. This was supported by topographic maps. On impoundments over 20 acres of open water, L2ABGh was used.

References

- Cowardin, L.M., V. Carter, F.C. Golet, and E.J. LaRoe. 1979. Classification of wetlands and deepwater habitats of the United States. U.S. Fish and Wildlife Serv. FWS/OBS-79-31. 103pp.
- Fulton, G.W. 1979. Wetland vegetation in southwestern North Dakota. M.S. Thesis, Dept. of Botany, North Dakota State Univ., Fargo. 1970pp.
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- Stewart, R.E. and H.A. Kantrud. 1971. Classification of natural ponds and lakes in the glaciated prairie region. U.S. Bur. Sport Fish Wildl. Resourc. Publ. 92. 57pp.
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