

South Dakota Wetland Inventory
U.S. Fish & Wildlife Service
1:100,000 Map Narrative Report
Huron SW

Map Preparation

Contractor for this wetland inventory was the South Dakota Cooperative Fish & Wildlife Research Unit, P.O. Box 2206, South Dakota State University, Brookings, SD 57007. Photointerpreters were Tara Wertz, Howard Browers, and Peggy Year. This report was completed by Tara Wertz. Regional Wetland Coordinator was Charles Elliot, U.S. Fish & Wildlife Service, Denver Federal Center, P.O. Box 25486, Denver, Colorado 80225.

Wetland delineation and classification for the Huron SW was done on 1:65,000 color infrared aerial photography taken in April, 1986. Photography covered 100% 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 January 8, 1987.

Special Mapping Problems

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

Some areas had large, expansive, basin-oriented wetlands which had very strong water signatures. These basins appeared to be semi-permanent, and topographic maps of the area had intermittent water at these sites. Because vegetation signatures were absent or non-semi-permanent in nature, these wetlands were classified as seasonal. If an area was more than twenty acres in size, it was classified as L2ABF. These areas collectively

may have given an underestimation of semi-permanent wetlands. If further field study confirms this possibility, these areas will be revised accordingly.

Riverine Systems:

Many riverine wetlands were encountered on the quad, particularly in the southwestern portion which included the Missouri River Breaks physiographic region. This region consists of dendritic drainage patterns, interspersing uplands with wooded draws. There was much topographic relief in these areas relative to the surrounding farmland. Most of the draws were steep-sided, making it difficult to identify water signatures present in the streambeds. Collateral data taken from topographic maps was relied upon heavily in this area. If intermittent water was present on the topographic map, the stream was classified as R4SBA or R4SBC, depending on the strength of the water signature. Streams which had permanent water on the topographic map or had a definite channel cut with a strong water signature were classified as R4SBF.

The Missouri River portion of the quadrangle was not interpreted. This will be done in zoom transfer to enable the map to have the water delineated at a specific level in the channel.

Palustrine Systems:

Temporaries (PEMA) exhibited signatures ranging from a muddy, non-basin oriented blue to a weak, open-water dark blue. The Huron SW quadrangle was drier than the other Huron quads. This made the identification of temporaries much easier.

Palustrine emergent seasonals (PEMC) were usually 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 signatures, 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 the photosignature. In areas which had emergents interspersed with woody vegetation, the dominant regetation was classified first (ie. 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 with mixed emergent and aquatic beds were classified as PEM/ABF or PAB/EMF depending on the amount of vegetation present.

Road ditches with weak water signatures were classified as PEMAx. Stronger water signatures in ditches were called PEMCx. A few PFOCx classifications were used. Drainage ditches were delineated only if there channelized a portion of a stream (PEMCx).

Gravel pits were classified as PUBFx. Vegetated gravel pits were classified as PEM/ABFx, PAB/FMFx, PEM/FOCx, and PFO/FMCx. Dugouts were called PABFx. Sewage lagoons were labelled PABFh or PABCh. Other classifications included were PEM/ABFh, PAB/EMFh, and PABFLx.

Vegetation commonly found in temporary basins (PEMA) were dock (Rumex spp) and prairie cordgrass (Spartina pectinata). Emergent seasonals (PEMC) were dominated by bulrush (Scirpus fluviatilis).

Cattail (Typha spp) was present in most 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

The main classification for the lacustrine system was L2ABG. There were a few L2ABF classifications used if collateral data supported the call. On impoundments over twenty acres, L2ABGh was used.

References

- Cowardin, L.M., V. Carter, F.C. Golet, and E.J. Lakoe. 1979. Classification of wetlands and deepwater habitats of the United States. U.S. Fish & Wildlife Service FWS/OBS-79-31. 103 pp.
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