

SD Wetland Inventory  
U.S. Fish and Wildlife Service  
1:100,000 Map Narrative Report  
New Rockford NE

Map Preparation

Contractor for this wetland inventory was the SDCFWRU, P.O. Box 2206, SDSU, Brookings, SD 57007. Photointerpreter was Tara Wertz. This report was prepared by Tara Wertz and Howard Browers. Regional Wetland Coordinator was Charles Elliott, U.S.F.W.S., Denver Federal Center, P.O. Box 25486, Denver, Colorado 80225.

Wetland delineation and classification for the New Rockford NE 1:100,000 quadrangle was done on 1:65,000 color infrared aerial photographs taken 7 April 1981. Photography covered 100% of the quad. Classification of wetlands was done according to Cowardin et al. (1979). National Wetland Inventory mapping conventions were used to assist in photointerpretation. Field checking was done 19 June 1987 and 5 November 1987.

Special Mapping Problems

Along the western portion of the quad, there were many expansive areas of low prairie which were very difficult to determine the wetland/upland boundaries. Changes were subtle, and topographic maps along with soil surveys were used when available. When collateral data were not helpful, signature differences such as color and texture changes, were followed.

In certain areas of the quad, there were signatures which were classified as saturated areas. These areas usually were associated with scrub-shrub interspersions and were found situated on hillsides and up nearby draws. These signatures were bright white or greenish-

white and had a soil described as "seasonally-saturated" associated with them. These were classified as PEMB, PSSB, PSS/EMB, PFOB, or PSS/FOB.

In general, climate conditions of the photography were dry; most basins being in draw-down stages. It was often difficult to distinguish between PEMC and PEMF basins because of the basins being in drawdown. Some PEMF's were probably cut for hay in the fall prior to date of photography. Thus, some PEMF's may have been labeled PEMC because of the absence of a clumped vegetated signature typical of PEMF's. Many temporary basins and some seasonal basins had very weak signatures, and inevitably some were missed altogether. Additional photos provided in the photo packet were used as collateral data. These photos were dated 4 June 1979 and 24 April 1982. These photos covered approximately 60% of the quad. By using these photos we were able to delineate wetlands which did not have good signatures on the 1981 photos.

The 1981 photography which <sup>was</sup> ~~were~~ used for delineation had a green cast and some photos appeared bleached out. Also, some photos had a few clouds. This was not a major problem, however, some wetlands may not have been delineated.

#### Lacustrine System

There were many lake systems classified as L2ABG. When data on lake depth was available, an L1UEH zone was delineated (e.g. Devils Lake). There were a few basins which had very weak signatures which were classified as L2ABF.

### Riverine System

The Sheyenne and James Rivers traverse the quad. The James was classified as R4SBF. The Sheyenne was classified as R4SBF in part. This classification changed to R2UBG at a point just east of Pekin. A major tributary enters at this point and river discharge data warranted the change from R4 to R2. A few streams cut definite channels and were associated with a relatively high change in relief were classified as R4SBC or R4SBA. These streams also exhibited sinuous channels with flowing water.

### Palustrine

Semi-permanent basins had a dark blue open water signature, classified as PABF. Some had vegetation present, either a clumped white or brownish-gray, and were classified as PEMF. If open water and vegetation were interspersed, the basin was called PEM/ABF or PAB/EMF.

Seasonal basins (PEMC) were usually vegetated and some showed up as white or greenish white on the photography. Seasonal zones around semi-permanent basins were also white. In areas being farmed, many dark blue open water basins were found in plowed fields. There were also open water basins found on the low prairie areas. Drier seasonal basins were light blue to light gray.

Temporary basins (PEMA) were very difficult to delineate in most cases. They rarely had water present, and basins were usually very shallow. This was especially true in plowed fields. In low prairie areas subtle color changes were used to determine upland/wetland

boundaries. Signatures ranged from purple mottled areas to very light grays, whites and tans.

Scrub-shrub areas were classified as PSSC. They were found in association with both emergent and forested areas (PFO/SSC, PEM/SSC, PSS/FOC, PSS/EMC). Signatures ranged from a dark blue undertone to a white vegetated understory. Forested areas had similar signatures and associations.

Streams were classified as PEMC or PEMA depending on the water signature. Relief varied little along the course of these waterways, and a channel may or may not have been present. Road ditches were classified as PEMCx. Dugouts and sewage lagoons were classified as PABFx, and gravel pits called PUBFx.

A h modifier was added to impoundment classifications.

Vegetation commonly found were as follows:

PEMA

foxtail barley	<u>Hordeum jubatum</u>
baltic rush	<u>Juncus balticus</u>

PEMC

slough sedge	<u>Carex atherodes</u>
whitetop	<u>Scolochloa festucacea</u>
smartweed	<u>Polygonum spp.</u>

PEMB

sedges	<u>Carex spp.</u>
cattail	<u>Typha spp.</u>
phragmites	<u>Phragmites australis</u>

PEMF

cattail                      Typha spp.  
hardstem bulrush            Scirpus acutus

PFO

cottonwood                  Populus deltoides  
willow                        Salix spp.

PSS

red-osier dogwood         Cornus stolonifera  
willow                        Salix spp.

More detailed descriptions of wetland vegetation in the Dakotas are provided in Stewart and Kantrud (1971, 1972), Fulton (1979), and Larson (1979).

References

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