

SOUTH DAKOTA WETLAND INVENTORY  
U.S. FISH & WILDLIFE SERVICE  
1:100,000 MAP NARRATIVE REPORT  
PIERRE SE

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, South Dakota, 57007. Photointerpreters were Tara Wertz and Peggy Year. This report was completed by Tara Wertz. Regional Wetland Coordinator was Charles Elliott, U.S. Fish & Wildlife Service, Denver Federal Center, P.O. Box 25486, Denver, Colorado, 80225.

Wetland delineation and classification of the Pierre SE 1:100,000 quadrangle was done on 1:65,000 NASA taken in April 1986 and on 1:58,000 NHAP taken in April and October 1984. Photography covered 100% of the quadrangle. Classification of wetlands was done according to Cowardin et al (1974). National Wetlands Inventory mapping conventions were used to aid in photointerpretation. Field checking was done on 28 April and 1 May 1987.

Special Mapping Problems:

The NHAP photography was extremely dry, creating a major problem in interpretation. Not only are a large percentage of temporaries missing on the photography, some seasonal wetlands were not present. Even well-defined basins had little or no water present. In comparison, the NASA photography was very wet. Basins were filled and in some instances overflowing. It was very difficult switching from NASA to NHAP and being consistent with calls.

In the Missouri River Breaks region of the quadrangle, determination of water regimes within the riverine system was difficult. The steep banks often shadowed the gullies and water signatures were hard to see.

The western portion of the quad covered by NASA photography was somewhat drier than the eastern portion. The exception was the Bad River flood plain. Even though areas along the river were flooded, water conditions on the photography were helpful in determining temporary and seasonal border zones.

#### Riverine System:

The area of the quad making up part of Missouri River Breaks region was characterized by dendritic drainage patterns. The majority of these were classified as R4SBA or R4SBC depending on water signature and the width of the streambed. There were a few R4SBF classifications on the major rivers. These had a more extensive flood plain and a stronger water signature.

#### Lacustrine Systems:

There were very few lacustrine basins on this quad. Most were impoundments and classified as L2ABG<sub>h</sub>, while natural basins were L2ABG or L2ABF.

#### Paulstrine System:

Emergent temporaries (PEMA) exhibited signatures from light gray to dark blue. Basins were not well-defined usually. Seasonal basins (PEMC) were characterized by light to dark blue signatures and sometimes a vegetated gray on the drier photography.

There were a few palustrine forested areas (PFOA or PFOC) found along the borders of basins or linear systems. Some scrub-shrub areas (PSSA or PSSC) were found as well. Water regime of these areas was determined by the strength of the water signature.

Semi-permanent wetlands were rare on this quad. Vegetation exhibited a white-gray clumped signature. Most had open water as well, therefore, a mixed class (PEM/ABF or PAB/EMF) was used.

Roadditches were classified PEMC<sub>x</sub>. Drainage ditches were delineated only if they represented a portion of a natural stream or if they were large and had a major influence on the drainage area. Most were R4SBF<sub>x</sub> and a few were PEMC<sub>x</sub>.

Gravelpits were classified as PUBF<sub>x</sub>. Dugouts were labeled PABF<sub>x</sub>. Impoundments were classified PABF<sub>h</sub>, PEMC<sub>h</sub>, PEM/ABF<sub>h</sub> or PAB/EMF<sub>h</sub>. Dugouts acting as impoundments were PABF<sub>hx</sub>. Sewage lagoons were called PABF<sub>x</sub>.

Common vegetation found in wetlands were Eleocharis spp. (temporary); Polygonum spp. and Scirpus fluviatilis (seasonal); Typha spp. (semi-permanent); Populus deltoides and Salix spp. (PFO); Salix spp. (PSS).