

NEBRASKA - PLATTE RIVER  
PHOTO INTERPRETATION CONVENTIONS

MCCOOK NW, NORTH PLATTE SW, NORTH PLATTE SE  
AND FREMONT SE

LACUSTRINE SYSTEM:

All lacustrine systems must be greater than twenty (20) acres unless otherwise specified.

- L1UBHh - Lacustrine, limnetic, unconsolidated bottom, permanent, impoundments over twenty (20) acres. Signature is open water, dark or light blue. Lake C.W. McConaughy in North Platte SW.
- L1UBHx - Lacustrine, limnetic, unconsolidated bottom, permanent, impoundments over twenty (20) acres. Signature is open water, dark or light blue. Lake C.W. McConaughy in North Platte SW.
- L2ABGh - Lacustrine, littoral, aquatic bed, intermittently exposed. Impoundments over twenty (20) acres with thirty percent (30%) or more aquatic bed cover. Aquatic bed portion of L1UBHh impoundment. (Possibly upstream side.) Signature is typically duckweed pink.
- L2USCh,Ah - Lacustrine, littoral, unconsolidated shore, seasonal, temporary. Sandy shoreline of impoundments or natural lakes. May be polygon size or linear. Signature is white.

RIVERINE SYSTEM:

- R2UBH - Lower perennial unconsolidated bottom, low gradient, floodplain development, presence of trees and shrubs. Signature is open water, i.e. Platte River Main Channel.
- R2UBHx,Gx - Same as above but channelized as by pass canals, no shrubs. G or H noted on photo jacket or topo.
- R2USC,A - Lower perennial, unconsolidated shore, seasonal, temporary. River sandbars, point bars in channel. Also braided streams between or along side main channel of the Platte Rivers. Signature is R2USC bluish to open water, R2USA white both in linear and sandbar.
- R4SBF - Intermittent, streambed, semipermanent. Lesser rivers and tributaries to Platte River. Frequently with seasonal and temporary emergents along side resulting from subirrigation. Signature is open water.

- R4SBFx - Intermittent channelized stream or frequently major irrigation canal. Signature is open water, streambed, good cut and often connecting directly to Platte River.
- R4SBC - Intermittent, streambed, seasonal weaker than semipermanent. Less chance of open water more of streambed. Found in sand hills and sometimes as tributaries to Platte River. Signature is white, grey, or open water.
- R4SBCx - Same as above but channelized or original excavation for irrigation. Signature is open water.
- R4SBA - Intermittent, streambed, temporary. Typically seen running from sand hills down into riverside agricultural fields. Signature is white.

PALUSTRINE SYSTEM:

- PABGh - Palustrine, aquatic bed, intermittently exposed. Natural ponds under twenty (20) acres. Aquatic bed at least thirty percent (30%) coverage. Signature is open water with pink.
- PABF - Palustrine, aquatic bed, semipermanent. Natural water bodies under twenty (20) acres with thirty percent (30%) or more aquatic bed coverage. Signature is open water with pink. Generally small (a few acres) and weaker looking than PABG.
- PABFh - Impoundments under twenty (20) acres with thirty percent (30%) or more aquatic bed cover. Signature is open water with pink. Generally only a few acres of less.
- PEMF - Palustrine, emergent, semipermanent. Consists mainly of cattails and bulrush. Signature is very textured, dark rusty color with large amounts of interspersed open water (dark). Occasional also pinkish color, cattail colonies and open water. Quantity of open water is the key. Found in fields, drainages, impoundments, and rarely in flood plains.
- PEMFh - Impoundment choked with semipermanent emergents (cattails, bulrushes).
- PEMFx - Drainage or irrigation ditch choked with semipermanent emergents (cattails, bulrushes).

- PEMC - Palustrine, emergent, seasonal. This label encompasses the most variety of wetlands in Nebraska. Listed below are the situations under which it is found.
- \* Windmill overflow - Reddish color around tank
  - \* Floodplains - Rusty color (often subirrigated soil) in pockets or along river banks.
  - \* Swales - Especially in temporary agricultural fields. These swales exist also in upland fields.
  - \* Depressions in agricultural fields - This is not common but does occur. Dark rusty tone, sometimes a little open water. Look for avoidance by plows.
- PEMCD - Drained seasonal wetland (by ditch, level ditch or reuse pit).
- PEMCx - Usually a road ditch but can be irrigation ditch choked with emergents. Signature is open water.
- PEMCh - Rare but found occasionally as an impoundment (perhaps with breached dam). Choked with emergents after drawdown.
- PEMA - Palustrine, emergent, temporary. Most depressions and basins in agricultural fields are PEMA. These usually contain *Polygonum Pennsylvanicum*, a temporary indicator. Signatures are as follows:
- \* Green - small basins and road ditches.
  - \* White - agricultural fields (crops or plowed).
  - \* White with red border - agricultural fields (crops or plowed).
  - \* Very light gray (almost moist tone) - plowed.
  - \* Reddish understory to shrubs and trees - (not common) Platte River.
  - \* Iridescent bluish red - subirrigated, irrigated fields near river. These hay fields are to be pulled out if the signature and irrigation ditches and a subirrigated soil exist. (caution: on floodplains the reddish temporary signature can turn into alfalfa red which is brighter and is U).
  - \* Dull red - generally floodplains of smaller rivers running through sand hills (R4SBF or R4SBC).

- PEMAd - Most typically in agricultural fields, planted or fallow, and drained with a level ditch or reuse pit (looks like dugout). Basins with these ditches or pits are called drained.
- PEMAh - Very dry impoundment. Signature is red.
- PEMAx - Drier road ditches, not common. Signature is green.
- PSSC - Palustrine, scrub shrub, seasonal. Willows or cottonwoods under twenty feet. Found mainly in river floodplain (Platte River) but also in drainages and ditches. Signature is sometimes light due to water stress but this is not reliable enough to be fool proof. Situation and color of understory are more important. For seasonal scrub shrub these need to be very dark.
- PSSA - Palustrine, scrub shrub, temporary, same as above. Common in ditches, road ditches, and most of all along Platte River on sand bars. Red shrubs with white understory (sand bar or linear) is PSSA. Some high water photos may show open water for this, see Platte River supplement.
- PFOA - Palustrine, forested, temporary. Occasionally a color difference from water stress but mostly situation determines delineation. Platte River PFO has either a reddish (PEMA or PSSA) understory or a bright white. The reddish understory can be difficult because it so closely resembles U tones. Elsewhere wet trees appear in ditches and drainages.
- PUBG - Palustrine, unconsolidated bottom, intermittently exposed. Not common, large (but under twenty acres) open water bodies, deep and permanent looking. Signature is open water.
- PUBF - Same as above but smaller and weaker looking. Shallower.
- PUBGx - Large excavated water body (under twenty acres).
- PUBFx - Level ditch, reuse pit. These can be up to fifty feet wide and one-quarter of a mile long. Wetlands containing these features are always given the "d" modifier.

## PLATTE RIVER SUPPLEMENT

The following soils appear in the work area and on the Nebraska hydric soils list: Barney, Colo, Fillmore, Gannett, Haynie, Kezan, Lamo, Lamoure, Lawet, Loup, Luton, Platte, Rauville, Sarpy, Scott, and Tryon. There are also many subirrigated soils extending for several miles beyond the Platte to either side.

Wet on subirrigated soils may be pulled as A or C as long as the signature used are those determined to be wet during the field investigation. The typical "A" field is a iridescent reddish blue. This is sometimes hayed or grazed. If hayed it should be determined if it is U hayed or irrigated or subirrigated. Try not to pull U hayed fields although some error is bound to occur.

There are some alluvial soils found in the river itself that are not on the Nebraska soils list. In this case, and in all cases where the soil is either not wet or not on the list, if the signature is wet pull it. Notable exceptions should be sand hills, hillsides, and any other places where a wetland could not exist. These sand hills are dry unlike the Valentine sand hills.

Use the "normal water" photos to overlap the "high water" photos to maximize the delineation of R2USC along the river. This procedure will result in riverine delineations that approximates the condition most often observed on the South Platte. There are several areas where two or more main channels are joined by a network of interconnecting smaller channels. The "normal water" photos show these braided channels to be R2USC. On the "high water" photos, these same channels appear at first to be part of the R2UBH delineation. There will be the light blue photosignature beneath these small channels, reminiscent of the R2USC bars. Delineate these small channels as R2USC. If you do not see the light blue undertone and feel the channel to be part of the river (R2UBH), then delineate it accordingly. The R2USA delineations are for the most part unaffected by the high water conditions. The R2USA's will have the bright white photosignature.