Guidance Regarding Wetland Activities and Platte River Basin Depletions

U.S. Fish & Wildlife Service, Mountain-Prairie Region September 4, 2008

Note: this document is intended to provide **general guidance** for addressing wetland-related depletions to streamflow in the Platte River basin relative to Endangered Species Act (ESA) consultations. This is not intended to supersede other relevant U.S. Fish and Wildlife Service policies, and this may not address the unique circumstances applying to certain individual cases.

The U.S. Fish & Wildlife Service views **wetland creation and/or enhancement** projects as activities that potentially create new or increased depletions to Platte River flows. Because new depletions are likely to adversely affect federally-listed species in the central and lower Platte River (including the whooping crane, piping plover, least tern, pallid sturgeon, and western prairie fringed orchid), such projects trigger the need to consult formally under ESA section 7.

However, the Service has determined that wetland project activities that can be credibly demonstrated to result in the **restoration** of a wetland that historically existed at that location, and/or that establish wetlands specifically to **mitigate for** (replace) wetland losses at another nearby location, are not likely to adversely affect those federally-listed species or designated or proposed critical habitat in the Platte River basin. In this situation, a Federal agency seeking USFWS concurrence on a "not likely to adversely affect" determination for a proposed wetland project would need to consult informally under ESA section 7.

Wetland restoration

The Service has determined that **wetland restoration** projects are not likely to adversely affect federally-listed species or designated or proposed critical habitat. On the contrary, restoration projects whose objective is to restore natural functions that were formerly provided by a wetland at that location are considered to contribute to the recovery of federally-listed species in the Platte River basin. Also, they help preclude the need to list new species pursuant to the ESA. Consequently, any depletion to the Platte River system due to wetland restoration is considered to be offset by the habitat benefits provided to federally-listed species and other fish and wildlife within the basin.

Wetland mitigation through replacement

Federal agencies frequently implement **wetland mitigation** activities to compensate for the loss or degradation of wetlands associated with project actions (*e.g.*, road development). Typically this is done by creating, enhancing, and/or restoring wetlands at other nearby locations.

While such wetland mitigation through replacement activities have the potential to increase the loss of water via evapo-transpiration (*e.g.*, as a result of net increases in total wetland area), no depletion offsets are normally required for such activities.

The U.S. Fish & Wildlife Service issued a letter in 1995 that states:

"Because wetland habitats are beneficial for the recovery of listed species and will help prevent the need to list additional species, the Service believes this type of mitigation [*i.e.*, wetland mitigation in the Platte River basin that adheres to certain general guidelines] is not likely to adversely affect listed species or result in adverse modification of critical habitat." ¹

The "general guidelines" described in that letter include:

- The replacement wetlands should be in the closest proximity feasible to the lost wetlands:
- Wetland restoration is preferred over wetland creation;
- Wetland replacement should be in kind (similar wetland type);
- The area of replaced wetlands should be at least 1.5 times that of the lost wetlands.

Wetland creation

As already mentioned, **wetland creation** (or "establishment"), other than that undertaken for the specific purpose of replacing lost wetlands in the vicinity, is viewed differently. Creation of a new wetland community where none previously existed presents a risk because it may not be successful in establishing quality habitat to offset the adverse effects associated with a new depletion to the Platte River system. Wetland creation tends to be more costly and less likely to succeed in providing quality habitat compared with restoration. Thus, in contrast to wetland restoration, proponents of wetland creation activities need to consult pursuant to section 7 of the ESA on a project-by-project basis, unless undertaken specifically for purposes of mitigation through wetland replacement.

Definitions: Wetland Restoration versus Creation/Enhancement

The USFWS provides the following definitions applicable to wetland activities in the Platte River basin:

Habitat Restoration:

"The manipulation of the physical, chemical, or biological characteristics of a site with the goal of returning full functions to lost or degraded native habitat.² Habitat restoration includes:

¹ From letter to All USFWS Region 6 Project Leaders from the Acting Deputy Regional Director, September 26, 1995, "Subject: Wetland Depletions Involving Water Depletions that Could Trigger Section 7 of Endangered Species Act."

² Note: The Omaha District of the U.S. Army Corps of Engineers (USACOE, 2003 and 2004) provides a very similar definition: "The manipulation of the physical, chemical, or biological characteristics of a site with the goal of returning natural/historic functions to a former or degraded wetland"

- (1) "Practices conducted with the goal of returning a site, to the extent practicable, to the ecological condition that likely existed prior to loss or degradation. Examples include removal of tile drains or plugging drainage ditches in former or degraded wetlands; returning meanders and sustainable profiles to straightened streams; burning grass communities heavily invaded by exotic species to reestablish native grass/plant communities; and planting native plant communities that likely existed previously on the site.
- (2) "Practices conducted when the restoration of a site to its original ecological conditions is not practicable, but will repair one or more of the original habitat functions and involve the use of native vegetation. Examples include installation of a water control structure in a swale on lands isolated from overbank flooding by a major levee in order to simulate natural hydrological processes and placement of streambank or instream habitat diversity structures in streams that cannot be restored to original conditions or profile.
- (3) "Removal of the disturbing/degrading element to enable the native habitat to reestablish or become fully functional. Examples include fencing livestock out of a riparian area; removing constructed barriers to promote movement of aquatic species; and gating a bat cave." (USFWS, 2001, Chapter 1)

Habitat Establishment (Creation):

"The manipulation of the physical, chemical, or biological characteristics present to support and maintain habitat that did not previously exist on the site. Examples include construction of shallow water impoundments on non-hydric soils, and construction of side channel spawning and rearing habitat where none previously existed." ³ (USFWS, 2001, Chapter 1).

Habitat Enhancement

"The manipulation of the physical, chemical, or biological characteristics of native habitat to change specific function(s) or the seral stage present." ⁴ (USFWS, 2001, Chapter 1).

In addition to providing these definitions, the USFWS has articulated preferred standards and criteria for implementing habitat improvements, including wetland improvements. These are detailed in various documents (including USFWS, 2001 and USFWS, 2002).

-

³ The USACOE (2003 and 2004) provides this definition: "The manipulation of the physical, chemical, or biological characteristics present to develop a wetland on an upland or deepwater site, where a wetland did not previously exist."

⁴ The USACOE (2003 and 2004) provides this definition: "The manipulation of the physical, chemical, or biological characteristics of a wetland (undisturbed or degraded) site to heighten, intensity, or improve specific function(s) or to change the growth stage or compostion of the vegetation present."

Guidelines for Recognizing the Historic Existence of Wetlands at a Site

Evidence that wetlands previously existed at a particular site (thereby indicating a potential to "restore" wetlands at that location) may include one or more of the following:

- Soil surveys indicating that hydric soils or reducing soil conditions at shallow depths exist or historically existed on the site;
- Evidence that the site is or was subject to periodic inundation or saturation during the
 growing season. This may include seasonally or permanently shallow water tables,
 location in a flood plain, and/or other features suggesting that, prior to changes in site
 hydrology caused by land and water management, the root zone was periodically
 saturated during the growing season;
- Evidence that site geomorphology was and/or continues to be dominated by dynamic river channel processes, such as long-term channel migration within a broader active corridor. (An example might be a site located within a flood plain and characterized by alluvial landforms -- such as an abandoned oxbow or hummocky terrain -- with alluvially-deposited substrates).
- Other evidence indicative of the historic existence of wetland conditions on the site.

References

- USACOE (U.S. Army Corps of Engineers), 2003. *Draft Wetland Mitigation Banking Standard Operating Procedures*, Joint Federal/State Administrative Procedures for Establishment and Operation of Wetland Mitigation Banks in Nebraska, an Interagency Cooperative Agreement, May 20, 2003 Draft. 30 pp.
- USACOE, 2004. *Wetland Mitigation Banking Guidance*, Operational Draft, Omaha District, http://www.nwo.usace.army.mil/html/op-r/mitbnk.htm. Accessed September 7, 2004.
- USFWS, 2001. *Draft Fish and Wildlife Service Manual, Chapters for the Partners for Fish and Wildlife Program.* Fisheries and Habitat Conservation, Division of Fish and Wildlife Mangement Assistance and Habitat Restoration.
- USFWS, 2002. Revised Intra-Service Section 7 Consultation for Federal Agency Actions Resulting in Minor Water Depletions to the Platte River System. Regional Director, Region 6 (Mountain-Prairie Region) USFWS. 77 pp. plus appendices.