Table 1. Target Habitat Complex Guidelines[8]

1. Riverine Habitat	Characteristics
Location	Between Lexington and Chapman, NE
Channel area	Approximately 2 miles long, 1,150 feet wide and includes both sides of the river. "Channel area" represents the portion of the river that conducts flow and is bounded either by stable banks or permanent islands that obstruct view. At low flows, the channel area includes interconnected small channels and exposed sand or gravel bars and non-permanent islands.
Water depth	A range of depths with approximately 40 percent of the channel area less than 0.7-foot deep during whooping crane migration periods.
Wetted width	90 - 100 percent of channel area inundated during migration periods.
Water velocity	Velocity is variable with depth. During whooping crane migration and least tern and piping plover nesting seasons, velocity should be less than 4 mph in shallow areas.
Sandbars and Channel Morphology	Non-permanent sandbars and low, non-permanent islands throughout the channel area, high enough to provide dry sand during the tern/plover nesting season and free of vegetation that inhibits nesting or creates visual obstructions to whooping cranes. Diverse channel morphology providing a variety of submerged sand bars and other macrohabitats, including backwater areas and side channels inundated by discharge.
Proximity to wet meadow forage habitat	Within 2 miles, but contiguous is preferred.
Distance from disturbance	For whooping cranes: In general, not less than 0.5-mile distant or appropriately screened from potential disturbances. Potential disturbances may include roads, railroads, occupied dwellings, bridges or other activities that would disturb whooping cranes from using a site. For least tern/piping plover: Potential disturbances should be evaluated case-by-case. In general, not less than 0.25 mile distant, or appropriately protected from human disturbances.
Unobstructed View	Good visibility upstream, downstream, and across the channel.
Flight Hazards	Overhead lines should be avoided, if possible. Overhead lines within 0.5 mile of complex boundaries should be evaluated during the screening process to determine whether marking would be appropriate.
Security	Sufficient control to avoid human disturbance to target species.

[9]The Parties have agreed to use these habitat complex characteristics as an initial acquisition, restoration and maintenance target. The states and July 1997 Cooperative Agreement Land Committee continue to disagree that these characteristics represent the "best" habitat or necessary habitat for the target species, or that the Program will be able to sustain the characteristics solely with flow management. The states and July 1997 Cooperative Agreement Land Advisory Committee believe that an approach based on acquiring and developing habitat with a range of characteristics is justified.

2. Wet Meadow Habitat	**Characteristics**
Location	Within 2 miles of the above-described channel area.
Size	Approximately 640 contiguous acres or more.
Distance from Disturbance	In general, not less than 0.5-mile distant or appropriately screened from potential disturbance. Potential disturbances may include roads, railroads, occupied dwellings, bridges or other activities that would disturb target species from using a site.
Vegetation Composition	Native prairie grasses and herbaceous vegetation, lacking or mostly lacking sizable trees and shrubs, occurring in a mosaic of wetland (hydrophytic) and upland (non-hydrophytic) plants.
Hydrology	Swales subirrigated by ground water seasonally near the soil surface and by precipitation and surface water, with the root zone of the soil continuously saturated for at least 5 - 12.5% of the growing season. Except immediately following precipitation events, higher areas may remain dry throughout the year.
Topography and Soils	The topography is generally level or low undulating surface, dissected by swales and depressions. Mosaic of wetland soils with low salinity in swales and non-wetland soils occurring in uplands.
Food Sources	Capable of supporting aquatic, semi-aquatic, and terrestrial fauna and flora characteristic of wet meadows; especially aquatic invertebrates, beetles, insect larvae, and amphibians.
3. Buffer	**Characteristics**
	That portion of a complex used to isolate channel areas and wet meadows from potential disturbances. In general, it is up to 0.5 miles wide, but is variable depending on topography, screening, and other factors. Buffer areas may include an extended wet meadow or channel area, upland grassland, pasture, hay land, cropland, palustrine wetland, woodland, managed sandpits, or a combination of these and other compatible land features.

Table 2. Non-Complex Habitat Guidelines

Sandpit Habitat for Terns and Plovers	**Characteristics**
Location	Within 2 miles of a river channel, between Lexington and Chapman, Nebraska.
Size	Approximately 3 acres or greater of nesting substrate, that may be extended to include a management zone surrounding the nesting area.
Topography and soils	Open expanse of bare or sparsely vegetated (<25%) homogeneous sandy or sand and gravel substrate that provides dry substrate during the nesting season. Scattered small stones, twigs, pieces of wood and other debris may be present.
Security	Sufficient control to avoid human disturbance to terns and plovers.
Non-riparian Habitat for Whooping Cranes	**Characteristics**
Location	Off-channel but within 3.5 miles of the centerline of the channel area, between Lexington and Chapman, Nebraska.
Type of habitat	Wetland area, wet meadow area or both.
Wetlands	Depressional wetlands with semi-permanent, permanent or seasonal shallow body(ies) of water (palustrine wetlands) that are typically wet during the crane migration season and consist of heavy, depressional soils, such as Fillmore, Massie, Scott, and Marsh soils. Water depths should be primarily less than 18 inches and banks should be low. Generally the wetted portion of the habitat area should be greater than approximately 5 acres in size. The habitat area also includes the surrounding areas that protect or enhance the functioning of the ecosystem and/or habitat area. The habitat areas should be lacking trees or tall shrubs. During the migration season, emergent vegetation should either be absent, loosely scattered, or low enough to not restrict whooping crane use.
Wet Meadows	A generally level or low and undulating surface, dissected by swales and depressions. The area consists of a mosaic of wetland soils with low salinity in swales and non-wetland soils occurring in uplands. The area has native prairie grasses and herbaceous vegetation, occurring in a mosaic of wetland (hydrophytic) and upland (non-hydrophytic) plants, and is lacking or mostly lacking sizable trees and shrubs. The area is capable of supporting aquatic, semi-aquatic, and terrestrial fauna and flora characteristic of wet meadows; especially aquatic invertebrates, beetles, insect larvae, and amphibians. Swales wetted by groundwater, surface water or precipitation with the root zone of the soil saturated for at least 7 days during the growing season.

Distance from disturbance	In general, not less than 0.25-mile distant or appropriately screened from potential disturbance. Potential disturbances include paved roads, railroads, occupied dwellings, bridges or other activities that would disturb target species from using a site.
Unobstructed View	Good visibility in all directions.
Security	Sufficient control to avoid human disturbance to target species.