

Lower Niobrara River

landscape includes the Niobrara River channel and a two-mile buffer on each side of the river from central Brown County eastward to its confluence with the Missouri River in Knox County. The river in this



reach has a broad, braided, and somewhat shallow channel. The channel has many open sandbars and wooded islands. This reach of the Niobrara River has fairly natural flows, with the only obstruction on the river being the low Spencer Dam in Boyd County. Much of the valley bottom is in cropland, though some areas support cottonwood woodlands and bur oak woodlands. Some wet meadows and marshes still remain in the floodplain. The bluff slopes are mainly mixed-grass prairie with some oak woodlands and ponderosa pine woodlands in the west.

Sandbars on the lower stretch of the Niobrara River from western Holt County eastward support numerous colonies of the federally and state listed interior least tern and piping plover. Bald eagles are also known to nest along this reach of the Niobrara River. Protected areas within the landscape include Red Bird, Bohemia Prairie and Greenvale WMA's and Niobrara State Park.

Stresses Affecting Species and Habitats

- ❖ Invasive herbaceous plant species in sandbars, meadows, marshes, and woodlands, primarily reed canary grass, European phragmites, narrow-leaf cattail, purple loosestrife, smooth brome, and potentially garlic mustard
- ❖ Eastern red cedar and Russian olive encroachment of meadows, prairies, and woodlands
- ❖ Additional water diversions
- ❖ Spencer Dam blocking fish movement on the river
- ❖ Continued cabin and home development on river banks

Conservation Strategies

- ❖ Implement invasive tree-clearing projects on privately-owned meadows, prairies and woodlands
- ❖ Develop and implement best management practices to control and manage invasive plant species
- ❖ Build a fish bypass on Spencer Dam
- ❖ Maintain stream flows and hydrology needed to meet biological and ecological conservation goals
- ❖ Coordinate with landowners interested in using conservation easements and voluntary acquisitions to protect undeveloped reaches of the river, wet meadows, and woodlands from development
- ❖ Restore and/or maintain river hydrology necessary to sustain biological diversity and ecosystem function
- ❖ Restore wetland hydrology and connect backwater habitats to the river

Tier I At-risk Species

Plants:

Prairie Moonwort⁴

Animals:

River Otter

Bell's Vireo

Interior Least Tern

Long-billed Curlew

Piping Plover

Whooping Crane

Wood Thrush

Iowa Skipper

Ottoo Skipper

Regal Fritillary

Pallid Sturgeon

Aquatic Communities:

Headwater, Cold Water Stream*

Headwater, Warm Water Stream*

Mid-order, Warm Water River*

Terrestrial Communities:

Cottonwood-Peachleaf Willow Riparian Woodland*

Dry Upland Bur Oak Woodland*

Green Ash- Elm- Hackberry Canyon Bottom Woodland

Sandbar Willow Shrubland

Buffaloberry Shrubland

Freshwater Seep
Cattail Shallow Marsh*
Reed Marsh*
Upland Tall-grass Prairie*
Eastern Sand Prairie*
Great Plains Gravel-Cobble Prairie*
Perennial Sandbar
Sandbar/Mudflat
Northern Chalk Bluff and Cliff*

* Priority for conservation in this BUL

¹ This is the only BUL where the species is known to occur

² Known to occur in only one other BUL

³ Known to occur in only two other BULs

⁴ Known to occur in only three other BULs