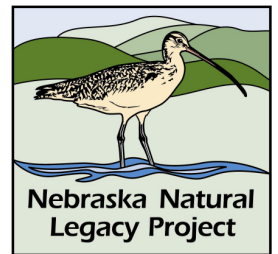




Dismal River Headwaters landscape



includes the Dismal River and the area near its headwaters that occur in Cherry, Grant, Arthur, McPherson, and Hooker counties in the west-central Sandhills. The area consists of high, prairie-covered dunes with interdunal valleys. The high water table in the BUL supports numerous lakes, marshes, wet meadows, and fens. Cropland, primarily center pivot irrigated, occurs only occasionally in the valleys.

The Middle Loup River and the North and South Forks of the Dismal Rivers headwater in this region. The rivers, surrounding floodplain, and marshes of this landscape are used by birds for nesting and migration habitat. The landscape also supports large populations of reptiles and amphibians and includes populations of the federally and state endangered blowout Penstemon. The only protected areas within the landscape are the Frye Lake and De Fair Lake Wildlife Management Areas.

Stresses Affecting Species and Habitats

- ❖ Specific livestock grazing and haying practices that may reduce native plant diversity and promote uniform habitat structure
- ❖ Invasive plants, primarily reed canary grass, smooth brome, narrow-leaf cattail, European phragmites, Garrison creeping foxtail, eastern red cedar, and purple loosestrife
- ❖ Loss of active blowouts on dunes as habitat for the blowout Penstemon. Lack of fire and some present-day range management practices have greatly reduced blowouts.
- ❖ Wetland ditching, which can also lead to lowered groundwater levels and stream channel down-cutting
- ❖ Stream channelization and in-stream structures barring fish movement
- ❖ Stocking of exotic and game fish in streams with rare fish
- ❖ Conversion of prairie and groundwater depletions resulting from center pivot irrigation development
- ❖ Loss of native riparian vegetation from excessive grazing leads to increased run-off, sedimentation, and a lack of stream shading that results in altered water temperatures harmful to fish
- ❖ Poorly sited utility-scale wind turbines

Conservation Strategies

- ❖ Improve implementation of biodiversity management, including increased use of prescribed fire and strategic livestock grazing, on wildlife management areas in the landscape. This is especially critical in

- meadows and wetlands where excessive thatch accumulation causes exotic cool-season grass dominance and loss of diversity.
- ❖ Work with private landowners to develop and implement creative methods of forage utilization on wet meadows that avoid ditching to facilitate haying. Also, work with private landowners to implement strategic grazing on uplands.
 - ❖ Restore the natural hydrology of wet meadows and other wetlands through ditch plugging and water control structures (ensure that in-stream structures allow for fish passage).
 - ❖ Maintain the natural hydrology of Sandhills streams
 - ❖ Reduce the number of culverts on small streams containing rare fish populations by installing bridges
 - ❖ Implement integrated noxious weed control strategies that do not negatively impact western prairie fringed orchid populations nor wetland plant diversity
 - ❖ Work with extension and agronomy groups to prevent the promotion and planting of exotic forage grasses, such as Garrison creeping foxtail and reed canary grass, and forbs in Sandhills wet meadows
 - ❖ Where feasible, create and maintain blowout complexes on public lands as habitat for the blowout Penstemon through use of prescribed fire and intense livestock grazing
 - ❖ Offer environmental education programs about prescribed fire to increase public support
 - ❖ Work with the USDA to ensure that wetlands enrolled in their programs allow occasional moderate grazing, burning, or haying to reduce vegetative litter accumulation and to promote biodiversity. Presently, some program wetlands are fenced and not actively managed.
 - ❖ Discontinue game fish stocking in streams with rare fish species
 - ❖ Work with wind energy companies to select turbine sites that minimize fragmentation and impacts to native species. Avoid placing wind turbines in native prairies or sites used or inhabited recently by threatened and endangered species. Wind farms should not be located within the recommended radius of prairie grouse leks and nesting grounds. Turbines can be halted temporarily during peak migration periods for bats and birds. Pre- and post-construction monitoring should be implemented. See Nebraska Game and Parks Commission guidelines for wind energy development.

Tier I At-risk Species

Plants:

Blowout Penstemon

Animals:

Burrowing Owl

Greater Prairie Chicken

Loggerhead Shrike
Long-billed Curlew
Short-eared Owl
Trumpeter Swan
Blanding's Turtle
Finescale Dace
Plains Topminnow
Regal Fritillary
Ghost Tiger Beetle

Aquatic Communities:

Freshwater Lake*
Alkaline Lake*
Headwater, Cold Water Stream*
Headwater, Warm Water Stream
Mid-order, Warm Water River
Mid-order, Cold Water River

Terrestrial Communities:

Chokecherry-Plum Shrub Thicket
Freshwater Seep
Sandhills Fen*
Sandhills Wet Meadow*
Spikerush Vernal Pool*
Cattail Shallow Marsh*
Reed Marsh*
Western Alkaline Marsh
Northern Pondweed Aquatic Wetland*
Water-lily Aquatic Wetland*
Saline/Alkaline Aquatic Wetland
Sandhills Dune Prairie
Sandhills Dry Valley Prairie
Perennial Sandbar
Sandbar/Mudflat

* 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