



# Snake River

landscape includes the upper reaches of the Snake River from the western end of Merritt Reservoir westward to the stream's headwaters. The landscape includes the river channel and a two-mile buffer on each side of the river. The Snake River begins as a small spring-fed stream flowing through Sandhills meadows. As the stream gains flow, its valley becomes deeply incised. Here, the stream bluffs support pine woodlands and Sandhills prairies. The Snake River is a pristine coldwater stream with a narrow channel that maintains a near constant flow rate throughout the year because of its spring-fed nature. It supports an assemblage of rare fish including the plains topminnow, pearl dace, northern redbelly dace, and finescale dace. Merritt Dam on the lower Snake River blocks fish movement into the upper reaches. There are no permanently protected areas in this landscape.

## Stresses Affecting Species and Habitats

- ❖ Specific grazing and haying practices that may reduce native plant diversity and promote uniform habitat structure
- ❖ Ditching and channel straightening in the upper reaches of the Snake River that lead to stream down-cutting and lowered groundwater levels
- ❖ Stocking exotic game fish into the river and tributary streams with rare fish species
- ❖ Golf course and housing development
- ❖ Invasive species, including, reed canary grass, purple loosestrife, European phragmites, smooth brome, eastern red cedar, Garrison creeping foxtail, and carp
- ❖ Conversion of prairie and water depletions from center pivot irrigation development
- ❖ Poorly-sited utility-scale wind turbines

## Conservation Strategies

- ❖ Work with private landowners to develop and implement creative methods of forage utilization on wet meadows that avoid repeated annual mid-summer haying and do not require ditching to facilitate haying. Also, work with private landowners to implement strategic grazing on uplands.
- ❖ Implement integrated invasive weed control strategies that have minimum impacts to meadow and wetland plant diversity
- ❖ Restore hydrology of wet meadows through ditch plugging and water control structures (ensure that in-stream structures allow for fish passage)
- ❖ Reduce the number of culverts on small streams containing rare fish by installing bridges
- ❖ Maintain the natural hydrology of the river and tributary streams

- ❖ Protect key stretches of the Snake River valley through zoning and conservation easements
- ❖ Discontinue exotic and game fish stocking in the river and tributary streams
- ❖ Work with wind energy companies to select turbine sites that minimize fragmentation and impacts to native species. See Nebraska Game and Parks Commission guidelines for wind energy development.

## Tier I At-risk Species

### Plants:

None

### Animals:

Finescale Dace

Northern Redbelly Dace

Plains Topminnow

Regal Fritillary

Bailey's Eastern Woodrat<sup>3</sup>

### Aquatic Communities:

Headwater, Cold Water Stream\*

### Terrestrial Communities:

Green Ash-Elm-Hackberry Canyon Bottom Woodland

Sandbar Willow Shrubland

Chokecherry-Plum Shrub Thicket

Freshwater Seep

Northern Cordgrass Wet Prairie\*

Sandhills Wet Meadow\*

Cattail Shallow Marsh

Reed Marsh

Eastern Sand Prairie

Sandhills Dune Prairie

Sandhills Dry Valley Prairie

Perennial Sandbar

Sandbar/Mudflat

\* Priority for conservation in this BUL

<sup>1</sup> This is the only BUL where the species is known to occur

<sup>2</sup> Known to occur in only one other BUL

<sup>3</sup> Known to occur in only two other BULs

<sup>4</sup> Known to occur in only three other BULs