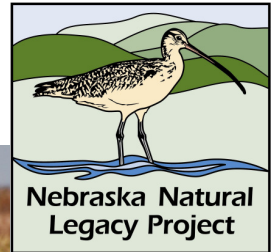


Rainwater Basin

landscape occupies parts of 17 counties in south-central Nebraska. The topography is flat to gently rolling loess plain. The surface water drainage system is poorly developed and many watersheds drain into



low-lying wetlands. Soil survey maps from the early 1900s indicate that approximately 4,000 larger wetlands totaling nearly 100,000 acres occurred in the region prior to Euro-american settlement. By the beginning of the 20th Century most uplands in the landscape had been converted to cropland. A 1983 survey indicated that only ten percent of the original wetlands had not been drained or filled. Nearly all remaining Rainwater Basin wetlands have been farmed at some time in the last century.

The Rainwater Basin has been recognized as a significant migratory bird area. The wetlands have been identified by the North American Waterfowl Management Plan as a waterfowl habitat area of major concern in North America. The basins are a concentration point in the central flyway for spring migrating ducks, geese, and shorebirds. They also provide important migration habitat for whooping cranes, bald eagles, and many other bird species. It is estimated that nearly the entire North American population of buff-breasted sandpipers stage in the eastern Rainwater Basins during their spring migration. In fact, the Western Hemisphere Shorebird Reserve Network (WHSRN) designated the Rainwater Basin as its first landscape of hemispheric importance.

These wetlands are also important to taxonomic groups besides birds. Muskrats thrive in the basin marshes. And, wetlands in the Rainwater Basin serve as breeding sites for amphibian species.

Natural Legacy Demonstration Site

Kissinger Basin Wildlife Management Area – Nebraska Game and Parks Commission

The Kissinger Basin Wildlife Management Area is located one mile north of Fairfield, Clay County in the Rainwater Basin Biologically Unique Landscape. This site has a wetland that was restored by filling a pit and removing a berm and sediment. The site has installed fencing and a well to facilitate grazing as a

management tool. Local managers target grazing of uplands and wetlands seasonally to improve wildlife habitat. Kissinger Basin WMA is visited regularly by migrating waterfowl and shorebirds.

Stresses affecting Species and Habitats

- ❖ Invasive plant species in wetlands, primarily reed canary grass, narrow-leaf cattail, smooth brome, Kentucky bluegrass and potentially European phragmites
- ❖ Lack of fire on the landscape and fire departments not regularly issuing burn permits
- ❖ Drainage or filling of wetlands and creation of water storage pits to convert to a non-wetland for development
- ❖ Sedimentation and chemical run-off into wetlands from adjacent cropland
- ❖ Excessive plant litter accumulation in wetlands which limits available open water and mudflats
- ❖ Limited resources influence habitat management on public lands
- ❖ Inadequate protection and conservation of isolated, temporary wetlands
- ❖ An increase in the number of transmission lines through bird migration routes and potential wind farm development.
- ❖ Localized opposition to wetland conservation easements

Conservation Strategies

- ❖ Protect and restore priority wetland acres and adjacent upland habitat
- ❖ Provide a reliable water source when necessary for priority wetland acres to assure sufficient water quantity, quality, and distribution
- ❖ Develop and implement best management practices to control and manage invasive plant communities
- ❖ Offer training about prescribed fire to increase comfort levels and awareness of the needs for prescribed burn plans and permits to address both safety and liability concerns
- ❖ Coordinate with willing landowners to protect key habitats with a variety of conservation methods, while taking into consideration conservation costs and benefits, landowner acceptance, and potential local impacts
- ❖ Work with public and private landowners to develop an efficient system to conduct ecologically appropriate cattle grazing in the basins
- ❖ Create grassland buffers around basins and in uplands to reduce sedimentation and chemical run-off (promotion CRP and other similar programs)
- ❖ Take measures to reduce the negative impacts to migrating birds resulting from power lines (e.g., “fireflies”)
- ❖ Work with wind energy companies to select turbine sites that minimize impacts to wildlife. See Nebraska Game and Parks Commission guidelines for wind energy development.

Tier I At-risk Species

Plants:

None

Animals:

Buff-breasted Sandpiper²

Burrowing Owl

Henslow's Sparrow

Whooping Crane

Regal Fritillary

Pimpleback

Aquatic Communities:

Headwater, Warm Water Stream

Terrestrial Communities:

Buckbrush Shrubland

Cattail Shallow Marsh*

Eastern Cordgrass Wet Prairie

Eastern Bulrush Deep Marsh*

Freshwater Seep

Wheatgrass Playa Grassland*

Playa Wetland*

Eastern Bulrush Deep Marsh*

Cattail Shallow Marsh*

Loess Mixed-grass Prairie

Lowland Tall-grass Prairie

Upland Tall-grass Prairie

* 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