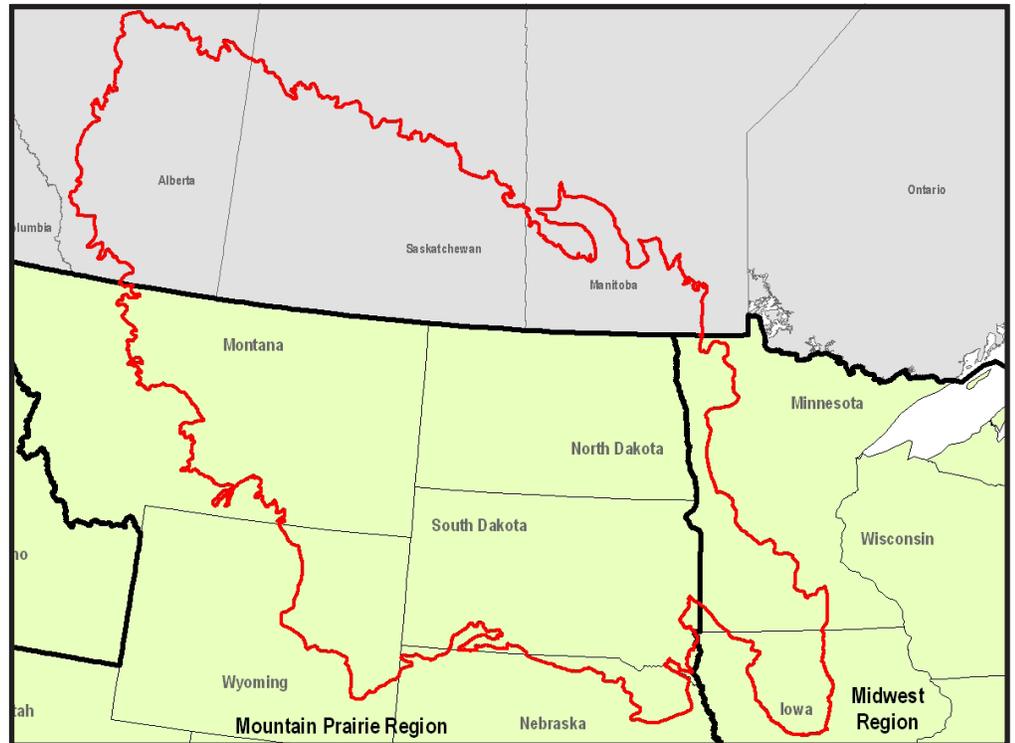


Plains and Prairie Potholes Landscape Conservation Cooperative

Purpose

The Plains and Prairie Potholes Landscape Conservation Cooperative (PPP LCC) is dedicated to the conservation of a landscape unparalleled in importance to a vast array of unique species whose populations are in steep decline. The LCC boundary transcends existing U.S. Fish and Wildlife Service regional boundaries and the international border with Canada (*see map.*)

Currently, the Service and our partners are working to develop and apply the scientific tools necessary to determine how climate change, coupled with existing stressors such as the conversion of native prairie for agricultural purposes may affect the health and productivity of shared natural resources in this landscape. The actions of the Plains and Prairie Pothole LCC will support and supplement State Wildlife Action Plans and enhance protection for fish and wildlife resources in the region.



Plains and Prairie Potholes Landscape Conservation Cooperative Area (outlined in red)

The Habitat

The PPP LCC includes three main sub-units, the Prairie Pothole Region, Northern Great Plains, and the riparian corridors of several major river systems including the Missouri, the Yellowstone and the Red River of the North.

The Prairie Pothole Region - includes millions of wetlands that constitute one of the richest wetland and grassland systems in the world. These “prairie potholes” and their surrounding grasslands are highly productive and support an incredible diversity of wildlife. The area provides habitat for both breeding and migrating birds, as well as a host of other wetland and native grassland dependent species, including waterfowl, shorebirds, grassland birds, native stream fishes and big river fishes such as the pallid sturgeon, and paddlefish.

Northern Great Plains – ecologically the Northern Great Plains is the most diverse subunit within the PPP LCC but also the least protected with less than two percent of the area’s 180 million acres managed for wildlife conservation. Habitats vary from riparian wetlands to isolated forested mountain ridges, such as the Black Hills of South Dakota and the sagebrush steppe east of the Rockies. A combination of climate, grazing, and fire were ecological factors that influenced the development of the diverse landscape. To date, more than 1,500 species of plants like blue grama, sagebrush and coneflower; 300 species of birds, including the greater sage grouse, golden eagle and sandhill crane; and 220 species of butterfly have been recorded in this region. The Northern Great Plains harbors more than 90 species of mammals, including the American bison, the prairie dog and the black-footed ferret - the most endangered mammal in North America.

Rivers and Riparian Corridors – In the PPP LCC the rivers function as ecological “magnets” and corridors not only for wildlife but also people as well. Rivers in the Plains and Prairie Pothole LCC are notorious for their extensive flooding, meandering channels, and for their ability to transport massive amounts of sediment. The upper Missouri River system and its major tributaries, such as the Yellowstone River, provide vital habitat for many threatened and endangered fish and wildlife species.

Adaptation Benefits

The Plains and Prairie Pothole LCC builds off of and continues supporting the outstanding conservation legacies established by 3 migratory bird joint ventures: the Prairie Habitat, the Prairie Pothole, and the Northern Great Plains Joint Ventures. The PPP LCC is one part of an even larger network of conservation science partnerships that provide an unparalleled geographic framework for successful, large scale conservation planning, design, delivery, monitoring and research – the

fundamental elements of what we call Strategic Habitat Conservation. The LCC's support the efforts of on-going activities within the partnership by filling existing gaps in our science capacity and helping us better respond to a changing climate and other stressors.

Organization and Partnerships

Work in the LCC is accomplished through a variety of Service and non-Service partners. The Prairie Pothole, Prairie Habitat and Northern Great Plains Joint Ventures, numerous Missouri River conservation and management organizations, and more than 20 other conservation partners have served as founding members of this LCC. The Plains and Prairie Potholes LCC provides additional science support to the conservation community, including supplying specialized expertise in landscape scale conservation planning and design.

We have a long history of collaboration with USGS's Northern Prairie Wildlife Research Center, and other USGS offices, as well as with universities throughout the LCC. The Service is working with these institutions to develop research capacity to support this LCC. To date the USGS has committed to adding two new research appointments with expertise highly valued by the partnership.

Capacity

The U.S. Fish and Wildlife Service is responsible for coordinating the LCC and ensuring existing program functions continue. However, the strength of the PPP LCC lies in the expertise and technological resources embedded within the partnership. Existing Service science and strategic conservation planning



capacity includes the Habitat and Population Evaluation Team (HAPET) Offices in Fergus Falls, Minn., and Bismarck, ND, and the Fish Technology and Fish Health Center, in Bozeman, Mont. The USGS operates the Northern Prairie Wildlife Research Center and the South Dakota State University Cooperative Research Unit and is planning to establish an Intermountain West Regional Climate Change Hub. The U.S. Fish and Wildlife Service's National Wildlife Refuge System, is providing support to the LCC in the form of inventory and monitoring specialists who will help the partnership to measure the success of their efforts. North Dakota State University has established a team of research scientists who are dedicated to providing support for addressing some of the science needs of the partnership. Other public and private partners have significant scientific capabilities that will provide capacity for this LCC. As our understanding of the science need continues to grow, the LCC may establish additional staff positions.

Next Steps

The Service is co-locating new staff resources acquired through the National Wildlife Refuge System Inventory and Monitoring Program with the Plains and Prairie Pothole LCC. A data manager will be added at the HAPET office in Bismarck, ND and an Inventory and Monitoring Biologist will be stationed at the Fergus Falls Wetland Management District Office, in Fergus Falls, MN and another stationed at Glacial Ridge National Wildlife Refuge in Erskine, MN. The PPP LCC Steering Committee met in April and is in the process of nominating staff to serve on a Technical Committee who will be charged with reviewing and prioritizing science needs.



On-going Projects

As of July 2010, the PPP LCC has held two steering committee meetings to plan project priorities and associated funding. A few of the ongoing project include:

Capture and Interpretation of Down-Scaled Climate Change Models to Benefit Avian Conservation (\$150,000)

- In cooperation with the US Geological Survey, the National Center for Atmospheric Research and the University Corporation for Atmospheric Research we are examining the effects of climate change on grassland and wetland bird distribution and abundance. This project will provide down-scaled climate models for use in determining where to best apply conservation actions.

Regional Assessment of Fish Habitat Condition in Northern Great Plains (\$150,000) - To enhance our ability to develop conservation delivery guidelines we have also partnered with the State of Montana and the U.S. Fish and Wildlife Service to complete digital maps of wetlands such that we will have wall-to-wall coverage of National Wetland Inventory data for the LCC by the end of September 2010. These wetland maps are essential for efficient conservation planning and delivery.

Completion of the National Wetland Inventory for the Northern Great Plains (\$175,000) - The Glacial Lakes and Great Plains Fish Partnerships, part of the National Fish Habitat Action Plan (NFHAP), are working to assess the status of all priority aquatic habitats in the region. The LCC is collaborating with the Midwestern and National Fish Habitat Partnership to assemble and serve data layers that will allow us to conduct fish habitat assessments on streams and rivers, targeting restoration efforts where they are needed most.

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Additional information is available at: <http://midwest.fws.gov/climate/lcc.cfm>