

# Southwest Landscape Conservation Cooperatives

In the Southwest, prolonged drought, fire, and habitat fragmentation are having profound effects on the environment, communities and the economy. The Southwest Landscape Conservation Cooperatives (LCCs) develop and share scientific information to improve management of fish, wildlife, and other natural and cultural resources in the face of these threats. Working through collaborative partnerships, the LCCs help natural resource managers and landowners acquire the tools they need for better conservation outcomes. LCCs were established by Department of the Interior Secretarial Order to advance cooperative conservation and the Southwest Region of the U.S. Fish and Wildlife Service plays in active role in helping advance them.



## Great Plains LCC

In a landscape dominated by privately-owned lands, the Great Plains Landscape Conservation Cooperative (GPLCC) takes a practical approach to conservation by bringing together people and partners across the conservation community. Rich soil underlying diverse prairies and meandering rivers has played an important role in economic development in the Great Plains. Playas (small seasonal wetlands) are interspersed throughout the prairies and are among the country's most unique wetland systems, supporting over 200 species of birds and other wildlife. American Bison and other wide-ranging species once freely roamed this richly diverse and productive landscape. The region is also ideal for agricultural and energy development. While our prairies are now one of the most altered ecological systems on Earth they still support over 2,000 native species of plants and animals. The fates of these species are interconnected;

**American Bison. USFWS.**



conservation efforts for some key species will also benefit others and support a balance between human needs and



**Nebraska Grassland. USFWS.**

conservation goals. That's why the GPLCC supported development of a 5 state range-wide plan for the lesser prairie-chicken in coordination with the Western Association of Fish and Wildlife Agencies. Through this effort, the GPLCC not only helped catalyze a shared vision for management of the species, but also funded science to pilot a consistent survey method across the five states. As of January 2015, over 10 million acres have been enrolled by industry and over \$30M derived from mitigation efforts since the publication of the plan in September 2013. <http://www.greatplainslcc.org/>

**Lesser prairie chicken. USFWS.**





## Desert LCC

The Desert Landscape Conservation Cooperative (LCC) is a bi-national, self-directed, public-private partnership representing interests and resources in the Mojave, Sonoran, and Chihuahuan desert regions of the southwestern United States and northern Mexico. The Desert LCC is currently focused on the conservation of water resources and riparian and grassland ecosystems, which are important life support systems for people and wildlife. The Desert LCC is developing science and planning tools to help resource managers handle the

changes they are experiencing now and into the future. For example, springs in this arid region are crucial resources for wildlife and plants, including species increasingly coming under threat from water scarcity and large wildland fires. Desert LCC partners identified the need for seeps and springs inventories and assessments and a regional database for housing and



**Cactus flower with bee.**  
**Aimee Roberson/USFWS.**



**Sky Island.** © Scott Avila, Sky Island Alliance.

servicing information vital to managing these resources into the future. This information has helped land and resource managers, including the Coronado and Kaibab National Forests, develop climate change adaptation strategies, decision-support tools, and recommendations for management of priority springs and seeps. Outcomes include enhancing habitat for Chiricahua leopard frog, pollinators and 16 species of bats.



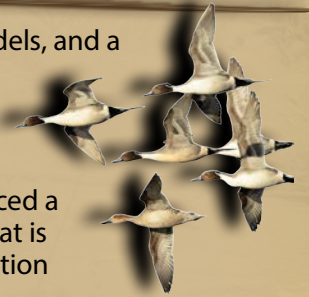
**Chiricahua leopard frog.**  
**Bill Radke/USFWS.**

<http://www.usbr.gov/dlcc/>

## Gulf Coast Prairie LCC

The Gulf Coast Prairie Landscape Conservation Cooperative (GCPLCC) encompasses portions of five US and three Mexican states, an area of over 100 million acres. This area has a rapidly growing population of more than 25 million residents. The GCPLCC is working to improve long-term conservation and management of the oak woodlands, prairies, shrublands, and wetlands of Oklahoma and the Gulf Coast region extending from central Texas to Mississippi. To promote effective long-term conservation, the GCPLCC invests in scientific information aimed at improving natural resource management in the face of future change such as urban expansion, agricultural conversion, and sea level rise. Examples of GCPLCC science investments include improved datasets on species ranges and habitat use, spatial location of habitat types based on up-to-date remotely sensed land cover data, projections of future

sea level rise based on climate models, and a user-friendly online Conservation Planning Atlas for cataloging and serving these data to conservation practitioners. One GCPLCC science project has produced a Grassland Decision support tool that is helping address habitat fragmentation and conversion by applying spatial data to determine the best remaining sites for conservation management and restoration. Another project is assessing the effects of sea level rise on the narrow fringe of coastal habitats in Texas, which not only represents a major migratory flyway, but also supports more than 400 bird species, including economically important waterfowl (e.g., northern pintails) and iconic species (e.g., the endangered whooping crane). Such species-habitat models are being used to inform not only local conservation actions, but also landscape level conservation, such as the Southeast Conservation Adaptation Strategy, a collaborative conservation planning effort that includes 6 southeast LCCs and two Climate Science Centers.



**Northern pintails.** © Ryan Askren/MCFWRU.



**Cameron Prairie NWR marsh land.** USFWS.

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**Whooping crane.** USFWS.



<http://gulfcoastprairieLCC.org/>

Dana Roth, DVM, Assistant Regional Director, Science Applications  
U.S. Fish & Wildlife Service, Albuquerque, NM 87102  
505-248-6928 or Dana\_Roth@fws.gov