

Desert Landscape Conservation Cooperative

Your Invitation...

Land managers are faced with increasing management challenges such as land use conversion, sensitive species protection and recovery, invasive species, water scarcity, and a range of other complex issues—all of which are amplified by climate change. In response, the Bureau of Reclamation (Reclamation) and the U.S. Fish and Wildlife Service (Service) are partnering to develop the Desert Landscape Conservation Cooperative (LCC). This effort represents a broad vision of conservation that includes working with partners across landscapes to ensure that the necessary science capacity is in place to successfully address these 21st-century conservation challenges. We are in the process of reaching out to resource managers and others within the Desert LCC, and invite you to contact us (contacts provided below) if you are interested in participating or would like more information.

What is a Landscape Conservation Cooperative?

In 2010, the Department of the Interior developed a plan for a coordinated, science-based response to climate change impacts on land, water, and wildlife resources. Landscape Conservation Cooperatives (LCCs) are the applied science branch of this strategy. Each LCC will function in a specific geographic area, and will form a national – and ultimately international – network. The Desert LCC will be a self-directed partnership managed by a steering committee comprised of Federal agencies, States, Indian tribes, non-governmental organizations, universities, and Mexican government agencies.

How will the LCC Help?

Through the steering committee and associated working groups and sub-committees, the LCC will facilitate the delivery of applied science to inform resource management decisions that address climate change and other regional scale stressors. The LCC will facilitate an on-going dialog between scientists and land managers to create a mechanism for informed conservation planning, effective conservation delivery, applied research and monitoring, and adaptive management. The LCC partnership



Sonoran Desert in Arizona. Photograph by Mima Falk, USFWS

will build upon existing collaboration, complementing these efforts to support science delivery.

Geography of the Desert LCC

The Desert LCC encompasses portions of five states in the U.S. (Arizona, California, Nevada, New Mexico, and Texas) and ten states in Northern Mexico (Baja California, Sonora, Chihuahua, Sinaloa, Durango, Coahuila, Nuevo Leon, Zacatecas, Nayarit, San Luis Potosí, and Aguascalientes). The area is topographically complex, including three major deserts (Mojave, Sonoran, and Chihuahuan), grasslands and valley bottoms, and isolated mountain ranges. Elevations range from near sea level to over 10,000 ft. The richness of the topography supports equally diverse species composition and habitat for native plants, fish and wildlife, including many endemic species that are extremely susceptible to climate change impacts.

The Desert LCC contains several large river systems, including the lower Colorado, Gila, Rio Grande, San Pedro, Sonora, Yaqui, and Conchos Rivers. The Colorado River Basin is one of the most critical sources of water in the West. The Colorado River and its tributaries supply

water for 30 million people, irrigation of nearly 4 million acres of land, and hydropower facilities that generate more than 4,200 megawatts, helping to meet the power needs of the West. The Colorado River is also the lifeblood for at least 15 Native American tribes, seven National Wildlife Refuges, four National Recreation Areas, and five National Parks.

Resource Management Issues

The Desert LCC will develop science capacity to help resolve resource management issues identified by the steering committee. Examples of resource management issues include:

- The effect of long-term drought on the composition, abundance, and distribution of species.
- The effect of reduced water availability on vegetation, wildlife and human populations.
- Changes in ecosystem productivity, structure, and composition resulting in changes in the rate of carbon sequestration and amount of carbon stored as biomass.

U.S. Fish & Wildlife Service and Bureau of Reclamation

- Change in fire frequencies and intensities, and the relationship to invasion of non-native grasses.
- Effects of warming on insect outbreaks and tree mortality.

Benefits of participating in the Desert LCC

Participants in the Desert LCC will be able to leverage the contributions of each of the partners to ensure a flow of science information and resources across the management interests within the Desert LCC region. The Desert LCC Steering Committee will determine how to allocate resources made available by partners (funding and/or staff support)

for science development, and will identify funding opportunities that address the highest priority science needs shared by the partners. Additionally, the LCC will disseminate science information generated by independent partner efforts in pursuit of their resource management objectives. In this way, LCCs will aggregate capacity, create synergies, and reduce duplication of efforts.

Next steps for the Desert LCC

Over the past year, Reclamation and the Service reached out to other Federal land managers, States, Indian tribes, non-governmental organizations, universities, and Mexican government agencies to



Lower Colorado River Habitat.
Photograph Courtesy of Bureau of Reclamation

begin the initial steps of establishing the Desert LCC. These steps included:

- A series of outreach meetings in Arizona, California, Nevada, New Mexico, and Texas.
- Formation of a scoping team for developing ideas for LCC governance.
- A rapid assessment of science needs, gleaned from existing documents and input from the outreach meetings.

Your invitation to join the Desert LCC partnership

The Desert LCC Steering Committee will be formed in the spring of 2011, and this governing body will then establish permanent working groups and sub-committees, based on input from partners. If you are interested in participating in the Desert LCC, please join us!

For Further Information, Contact

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