

## ACTIONABLE SCIENCE

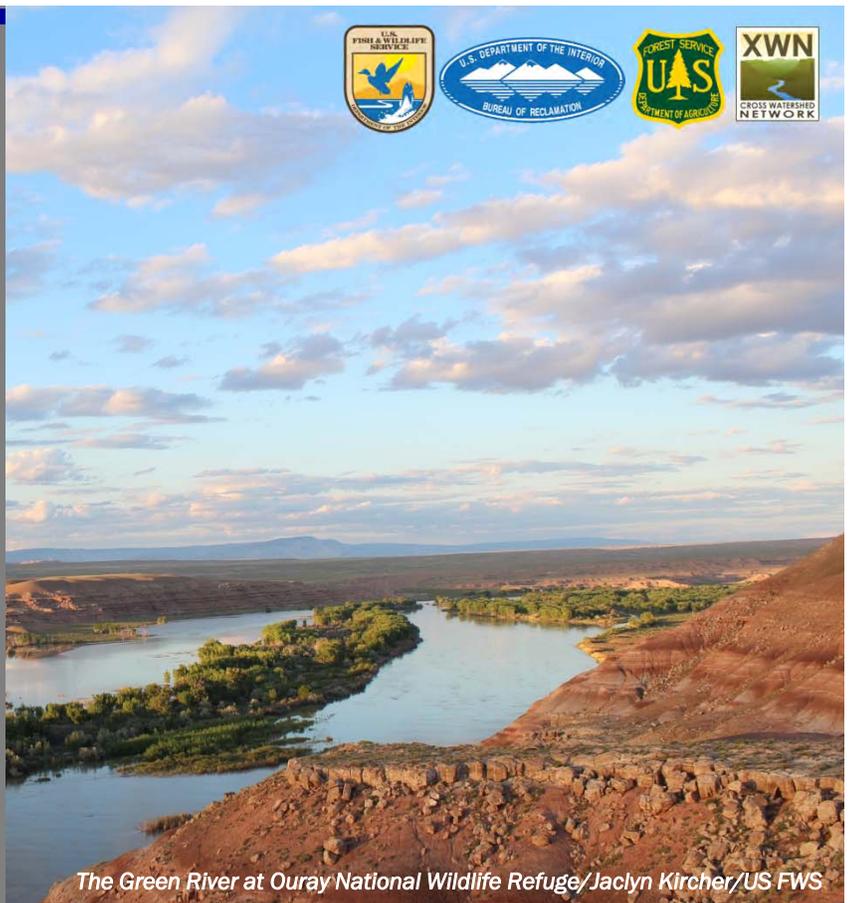
# Green River Basin Landscape Conservation Design Project



The Green River Basin Landscape Conservation Design (GRB LCD) Project is a multi-stakeholder collaborative effort to create tools to identify spatially-explicit conservation opportunities for the Green River Basin. By merging diverse objectives, perspectives and experiences, the GRB LCD brings together regional stakeholders to identify common management objectives and conservation concerns and targets. The effort is designed to identify shared natural resource values in the context of increasing stressors to coupled human-natural systems, and to explore management opportunities based on areas of vulnerability and resilience, and existing priorities of partner organizations.



Project Location



The Green River at Ouray National Wildlife Refuge/Jaclyn Kircher/US FWS

## KEY ISSUES ADDRESSED

Natural resource managers face growing landscape-scale challenges such as climatic and land use changes that cross landscape boundaries. In order to address challenges and leverage limited resources, it is necessary for managers to collaborate and work outside and across jurisdictions. While managers operate under different missions and mandates, they often face similar challenges such as limited financial and human resources. Landscape-scale decision tools, such as maps and models, can help guide the decision-making process by prioritizing the most important needs and where to direct limited resources. Building tools through the Landscape Conservation Design (LCD) process allows stakeholders to identify opportunities to act and to define common goals.

## PROJECT GOALS

- Identify key conservation targets for resource management
- Identify existing conservation efforts
- Collaborate with partners on data analysis
- Deliver data and maps to develop and coordinate future multi-scale action plans
- Promote and increase effective conservation strategies across multiple jurisdictions

## COMMON GROUND

The LCD can complement existing work and leverage resources into effective conservation through partnerships, collaboration to pursue and leverage funding, and information-sharing among partners.



Green River Basin LCD Stakeholder Meeting/Landscape Conservation Initiative

## PROJECT HIGHLIGHTS

**Conservation Opportunity Areas:** The project used an analytical framework that spatially identified areas of vulnerability in the basin, and identified conservation action opportunities based on organizations' and collaborative's existing priorities and gaps.

**A Participant-Driven Process:** A series of needs assessment interviews, in-person workshops, webinars, and numerous technical meetings engaged state wildlife agencies, federal agencies, land trusts, joint ventures, tribes, counties, conservation NGOs, researchers, and others in a participatory analysis that blended science, shared priorities, and practical actions.

**Spatial Products:** Maps of vulnerability and resilience were created to identify common areas of management concern. Assessments were conducted for vulnerability of: Riparian Habitat to Land Uses; Critical Fish Habitat to Oil and Gas Development; Colorado River Cutthroat Trout Habitat to Climate Change; Sagebrush Ecosystem to Oil and Gas Development; Sagebrush Ecosystem Permeability to Human Modification; and Sagebrush Ecosystem to Climate Change.

### Collaborators

- See project resources online for a full list of collaborators

### Funding Partners

- Landscape Conservation Cooperative Network

Case study support provided by US Fish and Wildlife Service, US Bureau of Reclamation, US Forest Service, and Cross Watershed Network. Updated August 2018.

## LESSONS LEARNED

Networking and in-person relationship building were important elements for the project. Multiple methods of communication were used. Moving forward, it was suggested that communications be maintained by an existing organization or collaborative in the Green River Basin.

Numerous data needs were identified and included: addressing cultural resources, accurate floodplain maps, grazing maps, invasive species maps, data in pinyon-juniper habitat, and fire as a stressor. The next step would be to prioritize these data needs.

There was an attempt to close data gaps but some data gaps were not feasible to meet, or beyond the project's scope. In particular, a knowledge gap was identified based around conservation actions. Currently there are several conservation actions repositories that exist, but are not openly available in a spatially explicit format across the basin. A systematic way of sharing information is needed to address this shortcoming.

## NEXT STEPS

- Continue to build ownership of data products
- Use information from the LCD to support collaboration and conservation action
- Advance inter-organizational information sharing and partnerships to broaden vulnerability assessments and evaluate areas for new conservation actions or expand current efforts

## PROJECT RESOURCES

For more information on this project, contact Sasha Stortz or Dave Theobald: [Sasha.Stortz@nau.edu](mailto:Sasha.Stortz@nau.edu), [davet@csp-inc.org](mailto:davet@csp-inc.org)

For additional project resources and case studies, visit the Collaborative Conservation and Adaptation Strategy Toolbox:

[WWW.DESERTLCC.ORG/RESOURCE/CCAST](http://WWW.DESERTLCC.ORG/RESOURCE/CCAST)



Stakeholders on a Stormy Field Trip/Landscape Conservation Initiative