



LANDSCAPE
CONSERVATION
COOPERATIVES



Southern Rockies LCC

Activities & Accomplishments

2012

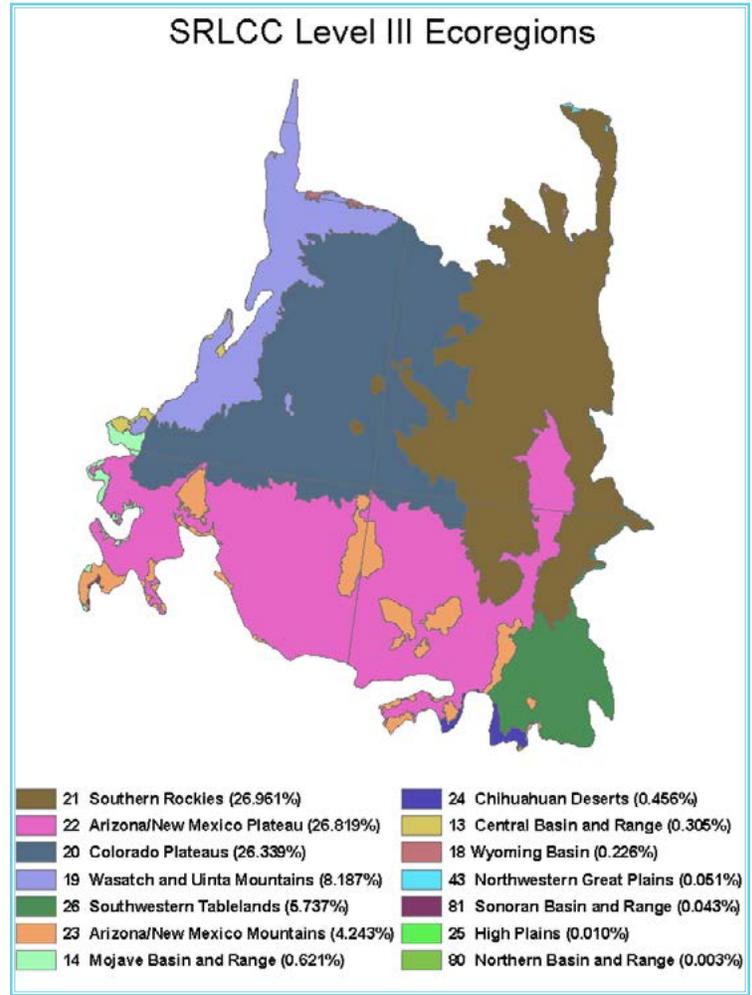
Sunset overlooking the Green River. Water is the lifeblood for many of the animal and human communities living in the SRLCC geographical area.

*Working together
to support on-
the-ground
conservation
efforts through
applied science
for resource
management
decision makers*

The Southern Rockies Landscape Conservation Cooperative is a voluntary network of partners working together to address conservation goals at landscape-scales. In order to achieve shared goals, SRLCC partners share data, science and capacity. They work across boundaries and jurisdictions to identify common efforts, build consensus, and enact a strategic approach to enhancing their individual and collective landscape-scale conservation efforts. Through effective analysis and decision support, SRLCC partners work efficiently to reduce the challenges of conservation in complex ecological systems. This report summarizes the activities and accomplishments of the Southern Rockies Landscape Conservation Cooperative (SRLCC) during fiscal year 2012.



GIS product depicting topographical variation across the SRLCC geographical area. This complex landscape includes variations from 14,000 foot peaks to the Grand Canyon and cold desert basins.



GIS product depicting composition and percent coverage of Level III Ecoregions (National Health and Environmental Effects Research Laboratory, U.S. EPA) within the SRLCC geographical area.



Most of the Rocky Mountain population of Sandhill Cranes breed in the greater Yellowstone area and winter along the Middle Rio Grande Valley near Socorro, New Mexico.



The Southern Rockies LCC is funding several projects in the Middle Rio Grande to assist with water management for this river. The Rio Grande headwaters are in the mountains of southern Colorado.

BUSINESS

■ Staff, Steering Committee, and Science Working Group

At the beginning of the year, John Rice was hired by the Bureau of Reclamation to be the SRLCC Science Coordinator. John brings a diverse array of technical, project management and supervisory experience in applied environmental research, environmental impact assessment and ecosystem restoration. Prior to his arrival with the SRLCC, John worked on projects such as: sage-grouse conservation and research; habitat acquisition and management; large-scale habitat restoration projects; studies on the impact of groundwater withdrawal on wetlands; and mitigation of impacts to wetlands and wildlife. John is stationed at the Bureau of Reclamation Upper Colorado Region office in Salt Lake City, Utah. We are very excited to have John on board.

Ivy Allen was brought on by the Fish and Wildlife Service in August as the Communications Specialist for the SRLCC. Ivy grew up in rural Missouri and has lived and worked across a variety of locations to include Montana, Colorado, Missouri,

New York, California, D.C. and Germany. She is responsible for overseeing development of a communications strategy that involves website development, webinars, newsletters, and coordinating with partner communication programs. Ivy has hit the ground running and you can discover more about our communication efforts in the outreach section of this report.

The SRLCC Steering Committee is comprised of 20 member organizations and they met face-to-face twice in 2012. In February, the Bureau of Reclamation hosted the committee in Albuquerque, New Mexico and in October, the Arizona Game and Fish Department hosted the meeting in Phoenix. During both meetings the discussions were centered around building consensus and recommendations for funding decisions on projects and implementation strategies. The meetings also provided an opportunity for invited scientists and managers to present their work on landscape-scale projects.

During the October meeting Warren Day, Deputy Regional Director for Science, U.S. Geological Survey Southwest Region was elected as the new Vice-Chair to the Steering Committee. Becky Mitchell, Chief of Water Supply Planning, Colorado Water Conservation Board, transitioned from Vice-

Steering Committee member organizations



Chair to Chair and replaced out-going Chair Steve Guertin from the U.S. Fish and Wildlife Service.

The SRLCC Science Working Group had two in-person meetings, hosted by the U.S. Fish and Wildlife Service in Lakewood, Colorado and several ad-hoc calls were convened to conduct additional business. The Science Working Group developed a recommended list of science needs and projects for SRLCC funding in 2012 and 2013. The Group initiated a collaborative effort with the Bureau of Land Management (BLM) on a Challenges and Opportunities Report for BLM's Colorado Plateau Rapid Ecoregional Assessment.

[View Steering Committee and Science Working Group meeting information at: southernrockieslcc.org/about-srlcc/business/](http://southernrockieslcc.org/about-srlcc/business/)

STRATEGIC SYNTHESIS FOR THE DELIVERY OF CONSERVATION SCIENCE

In 2012, we initiated a Strategic Synthesis to:

- » articulate partner identified natural and cultural resource conservation and management objectives,
- » identify the shared priorities such as resources, stressors, and landscape processes of the partnership, and
- » develop a strategy for delivering the science needed to manage these resources in an adaptive fashion over the next five years

Subsequent annual work plans, science plans, and communications plans that articulate specific objectives and science and information needs and products, as well as costs, will tier from this Strategic Synthesis.

The Heinz Center was contracted to work with resource managers and research partners in order to develop a concise understanding of the shared resources of interest and science needed to facilitate resource management. They completed one-on-one interviews with Steering Committee members and staff, and reviewed 45 existing plans and documents from sources that included: the states of Utah, Colorado, New Mexico and Arizona (State Wildlife Action Plans); various Tribal-focused



Bonneville cutthroat trout are one of 14 subspecies of cutthroat trout native to interior regions of western North America. Due to warming climate, these cutthroats became stranded in high mountain streams where they survived for many years.

documents; endangered species recovery plans; the Western Governors Association; non-governmental organizations; USDA Forest Service; National Park Service; and the Association of Fish and Wildlife Agencies.

During the early months of 2013, the Heinz Center will conduct a series of workshops in Arizona, Colorado, New Mexico, and Utah bringing resource managers and researchers together to further refine the results of the interviews and document reviews.

[View information on the development on the Strategic Synthesis at: southernrockieslcc.org/about-srlcc/business/](http://southernrockieslcc.org/about-srlcc/business/)



A seasonal wetland that has dried up. The SRLCC facilitates delivery of applied science to inform natural resource management decisions that address climate change and other stressors such as drought.



SCIENCE AND DECISION SUPPORT

■ Support for Partner Landscape-scale Efforts

Rapid Ecoregional Assessments:

The SRLCC Steering Committee was approached by the Bureau of Land Management requesting assistance with development of an Opportunities and Challenges Report based on the results of BLM's Colorado Plateau Rapid Ecoregional Assessment (CPREA). A report framework and development strategy has been identified which the Science Working Group is implementing in collaboration with BLM.

Learn more about the CPREA at: www.blm.gov/wo/st/en/prog/more/Landscape_Approach/reas/coloplateau.html

Tribal Science Needs:

We entered into two tribal Cooperative Agreements, one with the Pueblo of Jemez and another with the Shivwits Band of Paiutes. The agreements will assist each tribe in identifying their respective priority natural resources, management questions and science needs. Documentation of the Tribes' science needs will help the Southern Rockies LCC integrate Tribal interests into overall planning, research and implementation of landscape-level conservation goals.

A successful outcome will greatly facilitate the appropriate sharing of resource conservation data which in turn can leverage existing conservation efforts and capacities of Tribal and public resource-managing entities.

Crucial Habitat Assessment Tools:

The Southern Rockies LCC continued to support the Western Governors' Association's initiative on Wildlife Corridors and Crucial Habitat through collaboration and financial support of Crucial Habitat Assessment Tools (CHATs) within the states of Arizona, Colorado, New Mexico, and Utah. The Crucial Habitat Assessment Tools are mapping tools that display critical wildlife habitat and corridor information across the landscape. These GIS-based tools will be made publicly available in an online system administered by each state.

Learn more at: www.westgov.org/initiatives/wildlife/102-articles/initiatives/380-chat

Sun setting over sage-grouse habitat. Scientists track sage-grouse to evaluate and fine-tune conservation actions for a vibrant sagebrush community. Photo credit: Conservation Media

Improving Crop Coefficients for the Middle Rio Grande:

The New Mexico Office of the State Engineer, through funding from the SRLCC, is studying ways to improve the estimate of crop water use in the Middle Rio Grande Valley. Using remote sensing technologies that estimate evapotranspiration from individual crops within the basin, researchers hope to improve the calculation accuracy of water use by crops. The results from this project will provide local, state and federal water managers with a better understanding of future water availability estimates from decision-making models that consider climate change and other factors that may limit water availability.

Learn more at:
www.ose.state.nm.us/conservation_index.html

Landscape Approach for Fisheries Database Compilation and Predictive Modeling:

We are financially supporting the Arizona Game and Fish Department and the University of Washington to produce a defensible data set and decision tool for the conservation of fish and other aquatic and riparian species in Arizona. The Arizona Game and Fish Department will also share with neighboring states the expertise and knowledge gained in this project. The project will compile and geo-reference fish observation data into a Geographic Information System. This new spatial database will then be used to develop a decision support tool that can forecast the spread of invasive species across the landscape.

Learn more at:
www.azgfd.gov/w_c/research.shtml

■ Decision Support and Data Integration

The SRLCC funded 15 projects in fiscal year 2012. Over \$900,000 of financial support from the Bureau of Reclamation, U.S. Fish and Wildlife Service, and U.S. Geological Survey was committed and used to leverage an additional \$1.1 million in funding from partners. Funded projects include those listed above and the following:

- » digitization of National Wetland Inventory data
- » restoration of riparian habitats following bio-control of Tamarisk
- » Incorporating ecological flow needs in hydrologic models
- » woody plant regeneration under



Top: Gunnison sage-grouse. Photo credit, Audubon.

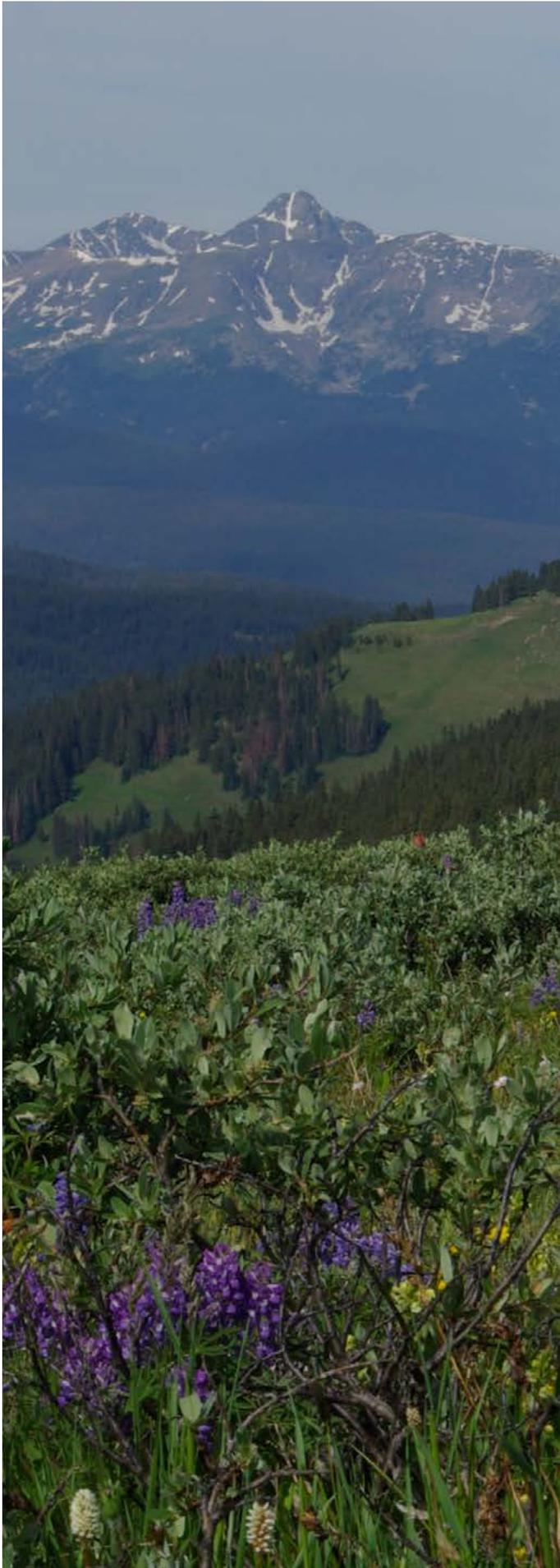
Middle: Big Horn Sheep. Photo credit, USFWS volunteer Ann Hough.

Bottom: Rio Grande cutthroat trout. Photo credit, Fish Eye Guy Photography.

future streamflow scenarios

- » GIS-based evaluation of cottonwood stand dynamics
- » the influence of climate change and ecosystem water balance on desert vegetation
- » vulnerability of riparian obligate species in the Rio Grande to multiple stressors; and
- » SRLCC-wide data discovery, cataloging and general GIS analysis characterizing the landscape across our geographic area.

Learn more about our science projects at:
southernrockieslcc.org/projects/



OUTREACH AND COMMUNICATIONS

To effectively reach diverse and geographically dispersed audiences, the SRLCC developed, and started implementation of an outreach and communications plan. The plan includes presenting information to groups through webinars, hosting workshops and meetings, and disseminating information using online communication tools.

■ Science Webinars

We developed a plan in 2012 to involve our research partners, staff, and resource managers to make public outreach presentations. The presentations will be hosted by SRLCC and conducted through online webinars to share study results with interested individuals or groups. Recorded webinars will be made available on the website and on the SRLCC YouTube channel.

View webinars:
southernrockieslcc.org/products/webinars/

View our YouTube channel:
www.youtube.com/SouthernRockiesLCC

■ Website

SRLCC launched a new website registered under a “.org” domain. The new website features include: an online directory to landscape initiatives and organizations; simple databases for supported science projects; announcements of webinars and meetings; SRLCC business, informational and operational documents; and a slide show on the home page to showcase partners and supported science projects. In the future, some social media will be incorporated to facilitate audience interaction and to improve the timely dissemination of new information.

We have kicked off a quarterly newsletter in an electronic format through a free subscription based e-mail service provider. Our first newsletter was sent out in February 2013.

View our new website at: www.southernrockieslcc.org

The LCC is developing scientific data to inform evolving resource management issues. Conservation and management needs have to be adaptive due to environmental threats and uncertainty. Major ecosystems within the SRLCC include alpine tundra, subalpine and montane forests, piñon-juniper woodlands, desert shrublands and grasslands. Photo credit: Stephen Torbit/ USFWS

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Photo credit: Larry Crist / USFWS



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