



**Wyoming
Landscape
Conservation
Initiative**

WLCI Update

Looking to the Local Level

The mission of the WLCI is to conduct a long-term science-based program to assess and enhance the quality and quantity of aquatic and terrestrial habitats at a landscape scale in southwest Wyoming, based on community partnerships and facilitation of responsible development.

The Wyoming Landscape Conservation Initiative is creating Local Project Development Teams to use expertise at the local level that will help in the development and prioritization of projects. The teams will provide local input to cooperatively identify resource needs and develop strategies to address issues within the WLCI area.

“This locally-driven structure will make sure the WLCI is tapped in at the ground level to the years of experience and observation that are provided by local landowners and local agency staff. We hope to integrate this experience with the scientific information being provided to make a true difference at the landscape level,” said Renee Dana, WLCI Coordination Team lead.

The main purpose of the Local Project Development Teams is to identify local issues that are important to the landscape and cooperatively create projects to address identified needs for local wildlife, habitat and other resource issues. Each Local Project Development Team includes local biologists, range managers, conservation districts, landowners, county commissioners, and multiple other interested parties.

Workshops were held in 2007 to collect ideas and initiate project development. Ideas brought forward at those workshops were good, but the Coordination Team recognized improved coordination and communication among local stakeholders would lead to better projects that could achieve benefits at a broader landscape scale. Cooperation on pro-

jects also could leverage resources from multiple organizations.

In August 2008, the WLCI held a series of meetings in Rawlins, Pinedale, Kemmerer, and Rock Springs to discuss the best way to encourage local participation in building a more effective program. Based on feedback from these workshops, the Coordination Team explored options and recommended formation of Local Project Development Teams along 8 digit Hy-



Mary Thoman, with the Sweetwater County Conservation District and WLCI Executive Committee presents information at the October Local Project Development Team workshop in Lyman.

drologic Unit Code (HUC) watersheds. This level of organization allows a focus on areas with common issues and encourages looking beyond traditional administrative boundaries.

Additional meetings were held in Pinedale, Lyman, and Rawlins in October to gather project ideas for 2010 projects and to make progress in formalization of the teams. To build from existing networks, the Coordination

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Science Milestones

One of the most unique features of the WLCI is the application of science to decision-making processes. To develop and pursue the science needed for success of the WLCI, the U.S. Geological Survey (USGS) has assembled a Science Team composed of hydrologists, geologists, biologists, geographers, social scientists, and information-management specialists.

The team has developed an overall WLCI science strategy and specific work plans to address management needs identified by WLCI partners. Major strategies include assessing what is already known about southwest Wyoming's ecosystems and people who use the land, conducting monitoring and research to detect changes and improve the knowledge, and developing a means of archiving the knowledge and sharing

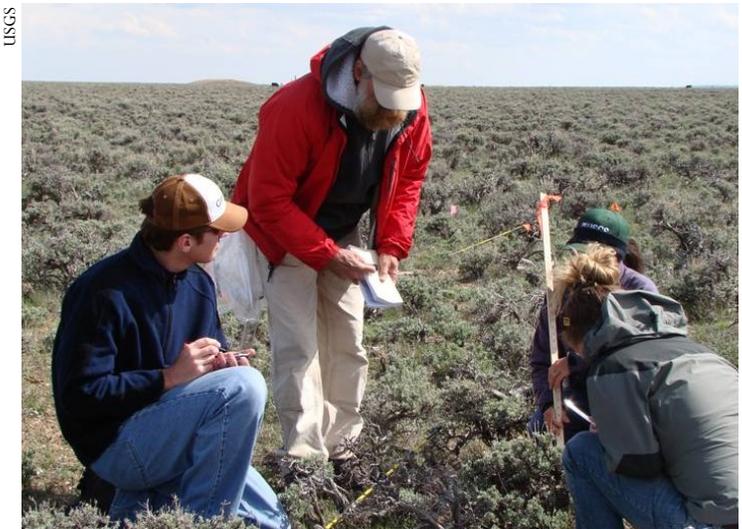
it with collaborators and the public.

The comprehensive assessment compiles and analyzes existing data for the WLCI area to determine current conditions. To date, the USGS and other WLCI partners have acquired 113 datasets. An important part of

the assessment includes developing methods for using spatial images to monitor changing conditions and to map key habitat types, crucial wildlife-use areas, potential development areas, and on-the-ground habitat treatments. In

March, the USGS sponsored a workshop to discuss the initial data collected and solicit additional involvement by key stakeholders. Some of the compiled data are being used to evaluate habitat-improvement projects. Assessment work in 2009 will include acquiring and standardizing additional data and using

that information to guide ongoing and future monitoring and research. Assessment information will be used to update Wyoming's list of Species of Greatest Conservation Need and identify species most likely to be affected by development.



USGS researchers take measurements at a plot during the summer.

In the 2008 field season, the USGS initiated research on wildlife responses to energy development. Studies involve sage-grouse, songbirds, pygmy rabbits, and small mammals. Work included developing and designing research, col-



Tim Assal, USGS, takes the coordinates of an aspen stand with a GPS unit.



Participants at the USGS-hosted WLCI Science Assessment Workshop, held in March at the Fort Collins office.

lecting pilot data, and conducting initial analyses. The information may help clarify which issues are most problematic for wildlife in areas with energy development. Results will be used to refine research objectives and methods

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Science Milestones (continued)



Kevin Hughes, USGS, weighs a least chipmunk with a Pesola scale during the 2008 small mammal research effort.

for the 2009 field season.

In August, the Science Team held a workshop to review preliminary conceptual models, a series of flow charts designed to document and organize the knowledge available about the WLCI area. Eighteen preliminary models were developed to represent how the region's climate and ecosystems function. The models can be used in combination to examine effects of disturbances and should help scientists select suitable indicators for monitoring water, wildlife populations, and overall ecosystem health. Examples of possible indicators include offspring survival, declines in

USGS water quality, or how much a non-native species is spreading. Work planned for 2009 includes reviewing final drafts of the models and convening another workshop to finalize indicator selection and prioritize the indicators.

The Science Team also is developing approaches to monitor long-term changes occurring to southwest Wyoming's soils, water, habitats, and wildlife related to human disturbances and habitat treatments. Monitoring will target priority habitats and wildlife-use areas. Due to the extent of the southwest Wyoming landscape, the Science Team is developing techniques to monitor landscape changes through spatial image inter-

pretation and appropriate ground truthing. In 2009, the team will assess the initial monitoring efforts and make revisions as needed.

The USGS also provides key support to the WLCI by housing data, hosting the WLCI Web site, and providing an information-sharing platform. The

myUSGS platform is an Internet-based means of housing and managing WLCI data and displaying the products of research and monitoring. The Science Team and other WLCI partners are using myUSGS to archive and share data, post meeting notes and documents for review, and participate in discussions. As of October 2008, there were more than 50 pages on the myUSGS site. Password-protected access is available on request. The public Web site, www.wlci.gov, provides information on the WLCI and its guiding documents and allows for public comments. The USGS is enriching this Web site with tools that enable WLCI partners to update content, display project maps, provide links to additional resources, and run queries to find specific information. These enhancements will be available by early 2009.



Sunset at a USGS research plot.

WLCI Activities

2009 Projects

The Executive Committee approved the list of projects to be pursued in fiscal year 2009 at its September meeting. The Coordination Team developed and applied a ranking protocol that helped the Executive Committee determine the priorities for the coming year. The rankings will be applied to funds that come through the Bureau of Land Management and private donations for both on-the-ground projects and research projects. Final funding will be determined once funds are appropriated by Congress or funds are contributed to the WLCI from other sources. A key dis-

cussion during the Executive Committee meeting was whether the WLCI should fund conservation easements. The committee provided approval of the rankings, which include four easements, but wanted to have additional discussion at a later meeting about several issues related to easements. Key issues include whether the federal funds can be used for easements, how use of federal funds affects management of lands covered by the easement, and whether conservation easements are proven to accomplish positive habitat benefits.



WLCI Executive Committee members Mary Thoman, Sweetwater County Conservation District, and Max Ethridge, USGS, review projects prior to finalizing rankings at the September meeting.

New MOU Signed

A new Memorandum of Agreement (MOU) for the Wyoming Landscape Conservation Initiative was signed at the July 9, 2008, Executive Committee meeting, with final signatures collected in August. The new MOU includes the additional participation of the southwest Wyoming conservation districts and south-

west Wyoming county commissions, as the EC had initially agreed to in September 2007. The new MOU also includes slight updates to the structure of the WLCI that became necessary to meet the evolving needs of the interagency program. The MOU is available at www.wlci.gov.



WLCI Coordination Team members Dan Blake, FWS, and Renee Dana, BLM, look at the annual vegetation growth in fall 2008, a year after the Red Canyon/Elk Mountain burn.



Greg Reser, BLM, explains the importance of the Wyoming Front Aspen Treatment during a tour of the project.



FMS

Data and Information Management Team Activities

During 2008, the WLCI Data and Information Management Team (DIMENT) conducted two meetings to discuss WLCI's data needs and to identify potential challenges to integrating data derived from various sources. Collaborative discussions with the Wyoming Geographic Information Science Center (WyGIS) and the application of their GeoLibrary tool have engaged the DIMENT with additional considerations for data sharing. DIMENT members from separate agencies have provided data resources to populate the WLCI Data Clearinghouse. Identifying

data needs and availability, directing data infrastructure through web sharing capabilities, and standardizing data resources used by the WLCI will be the main challenges to be addressed by the DIMENT in 2009. A document outlining WLCI data-handling procedures and management has been initiated and is scheduled for completion during 2009. For more information on the DIMENT please contact Natalie Latysh (U.S. Geological Survey Geospatial Information Office) at nlatysh@usgs.gov or (303) 202-4637.

Al Christophersen of the Rocky Mountain Elk Foundation shows the growth of aspen a year following treatment in the Wyoming Front Aspen Treatment area.

Science Integration

In April, the Science and Technical Advisory Committee (STAC) finished its development of a Science and Management Integration Plan (SMIP), which the Executive Committee adopted at its regular meeting. The SMIP was developed to guide how science is used for on-the-ground application and to provide an adaptive management approach that allows feedback to be used in future conservation and science

work. The SMIP will also facilitate data and information exchange leading to effective communication of scientific principles. Based on a key recommendation in the SMIP, the Executive Committee agreed to create the Monitoring Subcommittee, which will help ensure appropriate monitoring occurs that can be used for the WLCI. Members of this new subcommittee have been identified and plan to meet to discuss their role.

WGFED



Construction on the Grizzly Wildlife Habitat Management Area Fence.



FWS

Looking at aspen growth a year after treatment on the Wyoming Front Aspen Treatment project.

Selection of WLCI Executives

The WLCI Executive Committee installed a chairman and two vice chairmen at its April meeting. John Etchepare, director of the Wyoming Department of Agriculture was selected as the WLCI chairman. Sublette County Commissioner John Linn and U.S. Fish and Wildlife Service Wyoming Field Supervisor Brian Kelly were respectively chosen as

first vice chair and second vice chair. The committee agreed that the three leadership positions would represent local, state and federal membership of the executives. Each position will be held one year, with an annual rotation. The first vice chair is the chair elect and the second vice chair is the first vice chair elect.



WCGM

Overview of a recently completed section of fencing along the Grizzly Wildlife Habitat Management Area.

Creating New Funding Options

The WLCI is developing an agreement with the Wildlife Heritage Foundation of Wyoming that would allow for outside contributions and management of those funds. Federal funds have been the starting point for WLCI work to date, and other sources of funding would provide greater flexibility and enhance the capacity for the WLCI to complete work. The agreement has been discussed at several

Executive Committee meetings and may be finalized this year. Once the agreement is in place, the WLCI will make additional efforts to pursue options for contributions. The agreement would include the state and local partners of the WLCI to avoid some legal issues that arose over the role of the federal government controlling expenditure of non-governmental organization funds.

FWS



Ron Lockwood, Wyoming Game and Fish Department, and Gavin Lovell, BLM, pose in the dense vegetation in fall 2008, a year after the Red Canyon/Elk Mountain burn. Both were heavily involved in development of the project.

FWS



Discussions at the August Local Project Development Team workshop in Rock Springs.

Setting Priorities

Based on input at the August Local Project Development Team workshops, three basic priorities were recognized for on-the-ground projects and research: fragmented habitats, invasive species, and water quality and quantity. The Coordination Team views these priorities as broad enough to address multiple resource

needs and sufficient to provide guidance to the Local Project Development Teams to create projects that meet the Strategic Goals of the WLCI. These priorities would fit within the sagebrush, mountain shrub, aspen, riparian, and aquatic focus communities identified in the WLCI MOU.

WGFD



Ron Rhynes of the O Bar Y Ranch near Cora discusses a successful Lawson aerator treatment with Jill Miller, WGFD, and Coordination Team member Justin Caudill, Wyoming Dept. of Agriculture, in July.



FWS

Coordination Team member Brandon Hoffner, WGFD, presents information at the Rawlins Local Project Development Team meeting in August.



WGFD

An autumn photograph of the Diamond H ranch, where funding of a conservation easement is being considered for 2009.

Building Local Support

The WLCI Coordination Team had a busy schedule through the spring and summer of 2008 visiting with our many potential partners. Representatives from the Wyoming Department of Agriculture and the Wyoming Game and Fish Department traveled throughout the WLCI area discussing the WLCI concept with the conservation districts servicing southwest Wyoming. Friendly offers of drinks and food were often followed by insightful discussions about how the WLCI could benefit the

conservation districts and the producers they represent. Many issues were brought to the table, including the threats of brucellosis, water storage, water quality, soils information needs, wildlife migration, and the use of conservation easements to protect agriculture and wildlife. This interaction with the conservation districts, along with input from landowners and agency staff, helped lay the groundwork for creation of functional Local Project Development Teams.

2008 Funded Projects

WLCI funding and coordination provided support for 29 on-the-ground projects in fiscal year 2008. Both the Bureau of Land Management (BLM) and U.S. Fish and Wildlife Service (FWS) provided WLCI project funding. Projects also garnered support from other groups, who contributed more than \$1.5 million in funding and in-kind support. The adjacent list and map on the following page describe the projects.

Treatments funded through the BLM and FWS helped create or protect 400 acres of wetlands/riparian areas, restore 10 miles of stream, enhance or conserve 1,900 acres of uplands, treat weeds on 4,500 acres, and improve effectiveness of 70,000 acres of forage reserves. Work included an additional 20 miles of fencing to protect key habitats. Conservation work completed benefits multiple species, including sage-grouse, trumpeter swans, cutthroat trout, various warm water fish, various migratory birds, and big game species.

Baggs Fence Project

Development of a deer crossing to reduce vehicle collisions, which included six cattle guards to prevent deer access at key points on fences (BLM funded)

Battle Creek Fish Passage

River restoration of 6,300 feet and improvement of fish passage by replacing two irrigation structures (FWS funded)

Blair Creek Fencing Project

Improvement of habitat by fencing 6 miles of the Blair Creek Wildlife Habitat Area. About 10,000 acres will be used as a forage reserve to improve nearby grazing operations (BLM funded)

Cokeville Area Wetlands

Establishment and enhancement of 298 acres of wetlands through dike and water control structures (FWS funded)

Ferris Mountain Weeds

Treatment of 600 acres with herbicides and inventory of invasive weeds on 900 acres in the Ferris Mountain Wilderness Study Area (BLM funded)

Gooseberry Creek Exclosure

Exclosure of 6 acres along Gooseberry Creek to avoid damage to an erosion control structure that was experiencing a headcut (BLM funded)

Greys River Prescribed Burn

Burning 660 acres in Lower Cottonwood Creek area to restore aspen habitat important for elk calving (BLM funded)

Grizzly Wildlife Habitat Management Area Fence

Installation of wildlife passable fencing in an area south of Rawlins with wildlife migration problems (BLM funded)

La Barge Creek Restoration

Restoration of connectivity to improve fish passage in the La Barge Creek system (FWS funded)

Little Snake Aspen Treatment

Removal of trees and burning 400 acres to remove encroaching conifers in an area south of Rawlins; also planting woody riparian species on 1 mile of stream (BLM funded)

Little Snake River Restoration

Construction of 1 mile of fence along the Little Snake River to improve riparian and stream habitat (BLM funded)

Muddy Creek/ Blacks Fork Tamarisk

Treatment of 193 miles of stream in Muddy Creek (Uinta County) and Blacks Fork River drainages to reduce tamarisk and other invasive plants (BLM funded)

Muddy Creek Improvement

Replacement of 9 miles of fence in the Grizzly/Sandhills area to improve wildlife migration; road improvements to reduce Muddy Creek sediment (BLM funded)

Muddy Creek Riparian and Stream Enhancement

Construction of wildlife passable fence to enhance 3,100 feet of riparian habitat and 5,900 feet of stream channel in Sublette County (FWS funded)

Oregon Slough Exclosure

Reconstruction of an existing 41-acre exclosure to protect the riparian area and a sensitive plant species (BLM funded)

Pacific Creek Exclosure

Reconstruction of an existing 130-acre exclosure to improve riparian habitat along Pacific Creek near South Pass (BLM funded)

Red Creek/ Bitter Creek Tamarisk Removal

Application of herbicides to 400 acres of riparian areas to remove tamarisk and perennial pepperweed along Little Bitter Creek and Red Creek (BLM funded)

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Red Creek Restoration Project

Stabilization and improvement of 3 miles of Red Creek riparian and stream habitat using native riparian woody plants (BLM funded)

Rock Creek Fish Passage

Replacement of four irrigation diversions with fish passable weir structures in a tributary of the Bear River (FWS funded)

Sand Creek Salt Cedar

Application of herbicide to 300 acres of riparian areas in the Little Snake River watershed to remove salt cedar (BLM funded)

Savery Creek Restoration

Restoration of channel morphology, re-establishment of vegetation, and improvement of fish passage along 6,100 feet of Savery Creek (FWS funded)

Sweetwater River Restoration

Restoration of river to its original channel by building a dike, headwall and head gate at the mouth of an irrigation ditch in Fremont County (FWS funded)

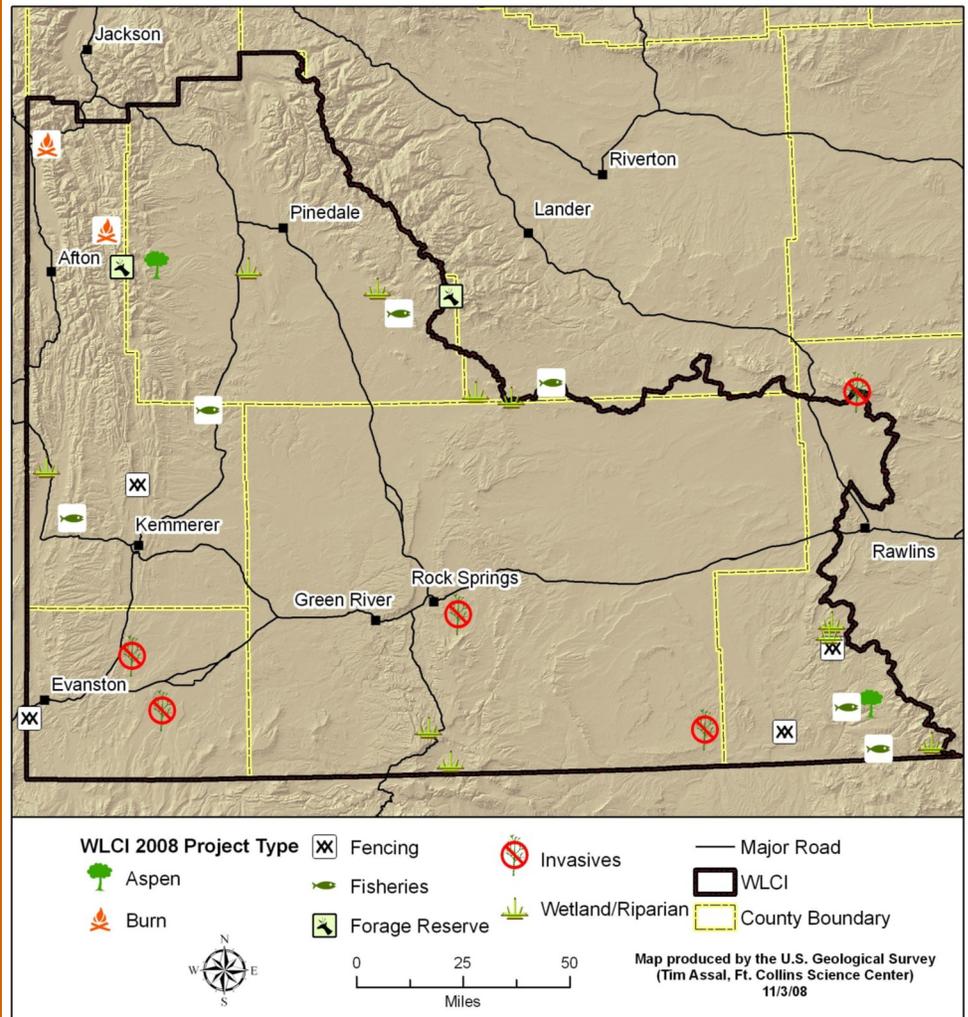
Triple Peak Forage Reserve

Establishment of a 60,000-acre forage reserve to sustain vegetative health and facilitate future wildlife habitat treatments in the area (BLM funded)

Trumpeter Swan Habitat Enhancement

Creation of 25 acres of wetlands on public and private lands near the Green River to benefit trumpeter swans and migratory shorebirds (BLM and FWS funded)

2008 WLCI Funded Projects



Upper Big Sandy Fish Screen

Installation of fish passable irrigation diversion and fish screen on the Upper Big Sandy River (FWS funded)

Wheat Creek Meadows

Construction of enclosure fence around 1,600 acres to protect wildlife habitat and wetlands (BLM funded)

Wyoming Front Aspen

Restoration of 877 acres of aspen stands in the Wyoming Range by removing conifer trees that were encroaching aspen (BLM funded)

Wyoming Youth Conservation Corps Improvement Project

Improvement of fish passage and opportunities for beaver, and installation of riparian exclosures for Muddy Creek and Littlefield Creek (BLM funded)

YC Ranch Fence

Construction of 4,800 feet of wildlife passable fence to assist with a long-term livestock management plan (FWS funded)



Wyoming Landscape Conservation Initiative

Daily management and operation of the WLCI is based out of the BLM Rock Springs Field Office. If you are interested in working with the WLCI or have comments, please contact the office listed below. The feedback form on the WLCI website, located at www.wlci.gov/feedback.htm also allows for submission of comments.

BLM Rock Springs Field Office
280 Highway 191 North
Rock Springs, WY 82901
ATTN: Renee Dana

Phone: (307) 352-0256
Fax: (307) 352-0328
www.wlci.gov



View of the Wyoming Front Aspen Treatment area in Fall 2008.

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Team worked with the conservation districts to reach out to local parties. Approximately 80 people attended one or more of these three meetings.

Proposed projects will be required to meet WLCI goals and objectives to receive funding. The WLCI Coordination Team will continue to guide project priorities to meet the vision for a landscape scale program, and the Executive Committee will continue to have final approval of project rankings. The U.S. Geological Survey and WLCI Science and Technical Advisory Committee will provide scientific findings and recommendations about the status and needs of wildlife in south-

west Wyoming, which can be used by Local Project Development Teams to refine decisions about project work.

As a result of focusing on the local level, the WLCI is successfully beginning to use local expertise to identify key issues, to develop, coordinate, and prioritize projects, and to help spread the word about the program.



Photograph of the Red Canyon/Elk Mountain burn in fall 2008, a year following treatment.