



GREAT NORTHERN LANDSCAPE CONSERVATION COOPERATIVE

Volume 1, Issue 1

Fall 2010

A Welcome from the Steering Committee - Mountain-Prairie Regional Director

By Chairperson Steve Guertin, Regional Director, US Fish and Wildlife Service Mountain-Prairie Region

Welcome to the inaugural newsletter of the Great Northern Landscape Conservation Cooperative. Whether you have been fully engaged or are completely new, we welcome you to the GNLCC team.

Landscape Conservation Cooperatives are broad-based management-science partnerships that bring together partners to collaboratively provide the information needed to improve landscape conservation efforts. The GNLCC is part of an international network of [LCCs](#).

The goal of the GNLCC is to coordinate, facilitate, promote, and add value to large landscape conservation initiatives to build resource resilience in the face of climate change and other landscape-level stressors. We will reach this goal by supporting science development, effective coordination, informing conservation action, monitor-

ing and evaluation, and communication and education.

During this formative year, our primary focus has been on developing the originating Steering Committee, creating the Advisory Team, creating a governance structure, establishing our primary goals, and funding science projects aligned with the initial priorities established by the Steering Committee (Habitat Connectivity; Data Sharing, Management, and Integration; and Water Resources Vulnerability Assessments). At the same time, GNLCC staff have been meeting with partners to get input into GNLCC priorities and to build a foundation for the Regional Forums we will establish in 2011.

At our October Steering Committee meeting we will finalize our governance structure, begin working on GNLCC priorities and long-term strategy, and discuss how to launch the Regional Forums. We look for-

ward to you joining us as we build the relationships that will serve as the foundation for long-term landscape conservation.



How We Work—Governance

We are a three-tiered organization with a Steering Committee; staff that are supported by a broad-based Advisory Team, and Regional Forums comprising partners in three eco-regions (Rocky Mountain, Sage Steppe, and Columbia).

The Steering Committee includes 25 executive-level representatives from federal, state, tribal and non-governmental organizations, as well as Canadian provinces. They set the vision, goals, and priorities for the GNLCC, provide direction to the Coordinator and staff, and approve long-term strategy and annual funding.

Currently, the staff includes a Coordinator, NPS Landscape Adaptation Coordinator, and Science Coordinator. The Ad-

visory Team, made up of federal, state, and NGO staff, works to support GNLCC staff and goals, develops foundational concepts, drafts [governance](#) and operational documents, provides recommendations to the Steering Committee on formative and operative needs, and serves as a “think tank” to develop strategic concepts analyze issues.

We will work with local and regional conservation partners through Regional Forums which will be self directed, but supported and coordinated by GNLCC staff. Regional forum partners will identify priority science products and information needs that are strategically aligned to meet the needs of specific agency, program or partnership outcome-based adaptive management processes. As part of each forum, feedback on and input to the GNLCC process and products will be used to iteratively improve GNLCC effectiveness and coordinated landscape adaptation strategies. These Regional Forums will be developed in 2011.

GNLCC Calendar

September 27-29
Advisory Team Meeting
Salmon, Idaho

October 21-22
Steering Committee Meeting
Boise, Idaho

November 2-4
National LCC Coordinator
Meeting
NCTC, Shepherds Town, WV

Date TBD
EGLES/TOPS workshop
Boise, Idaho

Regional Events

September 23-24
[Remarkable Beyond Borders](#)
Shaping the Future of the Crown
of the Continent

October 11-13
[10th Biennial Science Conference](#)
Yellowstone National Park

October 26-27
[2010 Wild Links Conference](#)
Seattle, Washington



2010 Funded Science

The GNLCC in partnership with USFWS R1, USGS, NPS, and others contributed approximately 1.4 million dollars to fund [16 projects for fiscal year 2010](#). The projects were selected based on their application to three primary thematic categories: (a) Habitat Connectivity, (b) Data Sharing, Integration and Management, (c) Water Resource Vulnerability Assessments.

- The Washington Connected Landscapes Project, Parts I & II: Supporting Connectivity Conservation Now and Under Future Climates
- Development of a Transboundary Decision Support System to Guide and Implement Conservation, Land Use, Energy, Transportation, and Climate Change Management and Monitoring
- Long-term Changes in Environmental Characteristics Required by Sage Grouse Predicted under Climate Change
- GNLCC Multi-dimensional Synthesis of Existing Information
- Predicting Effects of Climate Change on Aquatic Ecosystems in the Great Northern Landscape: Combining Vulnerability Assessments, Landscape Genomics, and Modeling for Conservation
- Document Fine-scale Linkage Areas and Conservation Delivery of the Northern Rockies in US and Canada
- SageSTEP Long-term Ecological Monitoring Network
- National Wetlands Inventory for the Great Northern Landscape Conservation Cooperative
- Forecasting the Impacts of Climate Change in the Columbia River Basin: Threats to Fish Habitat Connectivity
- Species Adaptations to Climate Change: Baseline Data for Grassland, Sagebrush, and Riparian-associated Landbirds in Bird Conservation Region 10
- A Landscape Analysis and Monitoring Program for the Crown of the Continent Ecosystem
- Distribution Model for Fishers in the Northern US Rocky Mountains—Phases 2 and 3
- Wyoming Interagency Spatial Database & Online Management Tools for Wildlife
- Service and Capacity for Dynamical Downscaled Model Projections for GNLCC
- State of Montana Data Integration and Collaborative Services for Crucial Areas Assessments
- Yellowstone Ecological Research Center Workshop and TOPS/EAGLES Pilot for WGA DSSs

Featured Science: Washington Connected Landscapes

The Washington Connected Landscapes Project will provide a framework to address the interacting impacts of habitat fragmentation and climate change on ecological systems and wildlife species within portions of Washington, Oregon and Idaho that are within the GNLCC boundary.

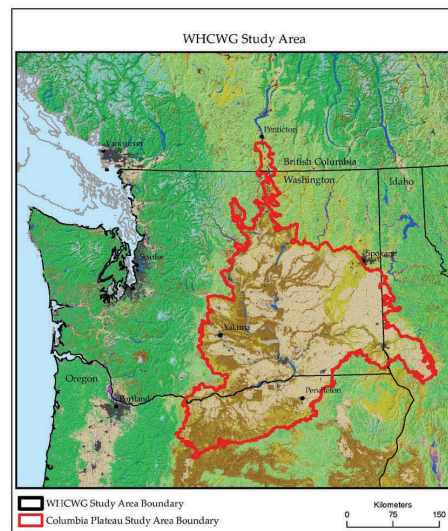
The two-part project will identify essential habitats and habitat linkages under both existing conditions and future climate change scenarios. Specifically, this project will:

- Conduct comprehensive

habitat connectivity analyses for Washington, including lands in adjacent states and provinces.

- Incorporate climate change into connectivity analyses, such that essential habitats and linkages are likely to be resilient to climate change, while providing for the movement of species and systems in response to climate change.
- Develop and release innovative methods and GIS tools to support land managers' efforts to plan for connectivity conservation and "climate-smart" connectivity.

Final products include analysis and decision support tools for connectivity conservation and climate adaptation, tests of emerging strategies for connectivity conservation and climate adaptation planning, and connectivity analyses that will describe resource conditions in Washington and adjacent landscapes under both current conditions and future climate scenarios.



Project Coordinator:
Joanne Schuette-Hames, (360) 902-2695,
joanne.schuette.hames@dfw.wa.gov

GNLCC Database Portal

Often, in large landscape conservation efforts, there is a need for spatial databases that are seamless across multiple jurisdictions. The GNLCC is collaborating with the USGS Fort Collins Science Center to develop a data portal that serves spatial and tabular data, images, and documents to GNLCC partners and the public. The portal is intended to be a multi-agency, multi-level (federal and state) collaborative system that will help to promote data sharing and ultimately, efficiency in resource utilization. As such, the intent is to complement, not compete with, other efforts to serve data such as the various decision support system efforts funded through the Western

Governors' Association.

Basic data layers such as digital elevation models are being gathered. When all are collected, full data sets will be available for download, options for "cookie-cutting" a specific geographic extent will be available, and downloading all or a subset of the available data will be possible. The portal will use Arc Server technology (available in ArcGIS version 10) that allows a user to access the data from their desktop and within their GIS software if they, too, are using ArcGIS 10. The portal will also allow a user to access the site via a web browser and do relatively simple GIS analyses directly on the portal, which will be

using Arc Server technology to access other distributed databases. The goal of this project is to organize large numbers of spatial databases distributed across the GNLCC, and beyond, so that users can easily discover and use distributed data pertinent to landscape conservation efforts in the region. We are focusing on typical base data layers, but the approach will be expanded to any spatially explicit data, such as biological survey data, hydrologic gaging stations, geologic fault locations, or anything else with spatial coordinates. When fully deployed, the portal will have the capability to deal with any type of digital data, including tabular data, im-

ages, and documents.

We will use standardized web service protocols allowing users to access and query spatial data via a number of OGC and ESRI compliant web service clients. Example protocols include SOAP, REST (ESRI), WMS, WFS, and CSW.

The portal will allow for role-based security that can allow data portal managers to control what data outside users can view, edit, or upload to the portal. Some data can be made available to the public while other datasets can be limited to select GNLCC community members.



Shed elk antler, Yellowstone N.P.

GNLCC-State Wildlife Action Plan Workshop

GNLCC staff and Advisory Team members, as well as Coordinators from the neighboring Prairies, Plains, and Potholes and Southern Rockies LCCs, met with State Wildlife Action Plan (SWAP) Coordinators from Wyoming, Montana, Idaho, and Washington in Bozeman on August 18-19. Meeting goals were to develop a convergence of resource priorities based on SWAP/GNLCC integration as a first-step for developing GNLCC priorities; identify next steps for long-term strategic direction based on these priorities; develop recommendations to the GNLCC Steering Committee to coordinate and leverage major landscape conservation initiatives, including the [LCCs](#), the BLM Rapid Ecoregional Assessments and the [Western Governors' Association Wild-](#)

[life Corridors and Crucial Habitat Initiative](#).

[State Wildlife Action Plans](#) are action plans to conserve wildlife and habitat before they become more rare and costly to protect. These 56 completed plans (one for each state and territory present) create a national action agenda for preventing wildlife from becoming endangered.

The impetus for this historic planning effort came from the Teaming with Wildlife Coalition, representing more than 3,500 agencies. The coalition's work led to passage of the Wildlife Conservation and Restoration Program and the State Wildlife Grants Program in 2000. As a requirement of these programs, Congress asked each state wildlife agency to de-

velop a "comprehensive wildlife conservation strategy" (wildlife action plan) that evaluates wildlife conservation needs and outlines the necessary action steps.

While plans share a common framework of the eight required elements, they are tailored to reflect each state's unique wildlife, habitat, and conservation needs. States worked closely through the Association of Fish and Wildlife Agencies and the U.S. Fish and Wildlife Service on the development of the plans. By combining the best scientific information available with extensive public participation, states developed effective plans that will work for wildlife and for people.

The workshop resulted in several recommendations that

will be presented at the next Steering Committee, including a strong recommendation that the LCC should support, link, and leverage existing landscape conservation efforts including the BLM REA and the Western Governors' Association Pilot projects through the Wildlife Corridors and Crucial Habitat initiative; acknowledgement that State Wildlife Plan Coordinators have begun to move beyond species priorities into habitat and ecosystem priorities; and that the combined priorities of existing landscape conservation programs could serve as a basis for GNLCC priorities.



GNLCC Quarterly

GREAT NORTHERN LANDSCAPE CONSERVATION COOPERATIVE

Volume 1, Issue 1

Fall 2010

Partnerships Toward Progress: BLM Rapid Ecological Assessment

The BLM recognizes that a landscape approach is needed to tackle increasingly complex and widespread environmental challenges that transcend traditional management boundaries. A landscape approach looks across jurisdictional boundaries to more fully recognize natural resource conditions and opportunities for resource conservation, restoration, and development. It seeks to identify important ecological values and patterns of environmental change that may not be evident when managing smaller, local areas.

This broader perspective will help focus and integrate local management efforts and provide an important foundation for developing coordinated management strategies with partner agencies, stakeholders, and American Indian Tribes. Partnerships

are critical to addressing landscape issues and engaging in successful resource stewardship where responses need to be planned and implemented across land ownerships.

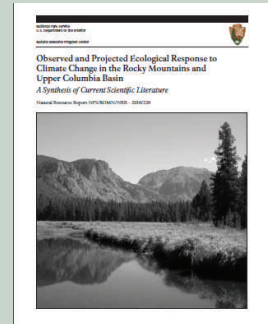
The first step in the BLM's landscape approach is preparation of Rapid Ecoregional Assessments (REAs). REAs build from and synthesize existing information (from state, Federal, and other sources) about resource conditions and trends within an ecoregion for a portion of a LCC. They highlight and map ecological value and gauge potential risks from climate change, wildfires, invasive species, energy development, and urban growth. REAs establish landscape-scale baseline ecological data to gauge future management actions. Following completion of an REA the

BLM will identify key management priorities with partner agencies, stakeholders, and Tribes. Then the management priorities and strategies identified can be put into practice on-the-ground.

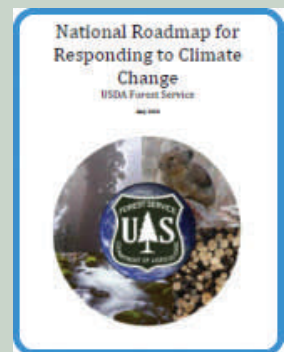
The LCCs and the BLM's landscape approach are complementary efforts that are working together to improve the effectiveness and efficiency of conservation actions. The LCC provides a forum to share information, leverage resources, and identify data gaps and questions. This forum is vital to the REAs, which will integrate and build on Western Governors Association Initiatives, state Forestry Assessments, and landscape work from Federal and non-Federal partners. Assessment products are then available to the partnership to help inform decisions.

What's New?

Click on the thumbnail images of the reports to view or download them.



This report, sponsored by the NPS, GNLCC and the Greater Yellowstone Coordinating Committee, synthesizes scientific information on ecological response to climate change in the Rocky Mountains and Upper Columbia Basin.



This Roadmap will help the USFS move beyond short-term initiatives to longer term investments in the future of America's forests and grasslands.

How to get involved

- Contact a [Steering Committee](#) member from your organization.
- Contact a member of the GNLCC Staff or [Advisory Team](#).
- Submit items for the Winter newsletter by email to [Leslie Allen](#) or [Suzanna Carrithers](#). Deadline is December 15.

GNLCC Staff

Yvette Converse
Acting Coordinator
(406) 994-9903
Yvette_Converse@fws.gov

Tom Olliff
NPS Landscape Coordinator
(406) 994-7920
Tom_Olliff@nps.gov

Rick Sojda
Science Coordinator
(406) 994-1820
sojda@usgs.gov

Visit us on the Web: <http://nrmcs.usgs.gov/gnlcc>