

Strategic Plan

Wyoming Landscape Conservation Initiative

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Version 1.0

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List of Commonly Used Acronyms

CT - Coordination Team
BLM - Bureau of Land Management
EC - Executive Committee
FWS - United States Fish and Wildlife Service
MOU - Memorandum of Understanding
NEPA - National Environmental Policy Act
NRCS - Natural Resources Conservation Service
RFP - Request for Proposals
SMIP - Science and Management Integration Plan
STAC - Science and Technical Advisory Committee
USFS - United States Forest Service
USGS - United States Geological Survey
WGFD - Wyoming Game and Fish Department
WLCI - Wyoming Landscape Conservation Initiative

Executive Summary

The Wyoming Landscape Conservation Initiative (WLCI) was announced in February 2007 as a long-term, science-based effort to conserve and enhance fish and wildlife habitats while facilitating responsible development through local collaboration and partnerships. The collaborative effort represented by the WLCI is unique as it provides a means to address multiple concerns at a scale that considers all activities on the landscape, incorporates multiple needs in project implementation, and can leverage resources that might not be available for single agency projects. This large-scale program encompasses all land ownerships in Wyoming west of the Continental Divide and south of Teton County, and includes the Great Divide Basin. Sagebrush, mountain shrub, aspen, riparian, and aquatic communities are the focus of work within this area. The partnership formally includes the Bureau of Land Management, U.S. Geological Survey, U.S. Fish and Wildlife Service, U.S. Forest Service, Wyoming Department of Agriculture, Wyoming Game and Fish Department, six county commissions, and eight conservation districts. WLCI efforts include scientific assessment of wildlife resources and anticipated development impacts in southwest Wyoming, implementation of strategic actions to conserve fish and wildlife, monitoring of conservation actions to provide information for future work, and improving communication and sharing of data and information. The vision for WLCI work is to incorporate scientific information into decision making and develop processes that have local-level ownership.

This Strategic Plan describes the goals and objectives of the WLCI and the strategies needed to successfully accomplish a science-based, landscape-scale initiative. This plan identifies the relationship with other documents and processes associated with the operation of the WLCI, such as the integration of science with management decisions, data management and sharing, and communication. The plan builds from the WLCI mission to implement 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, while facilitating responsible development through local collaboration and partnerships. Six goals were developed for the WLCI:

- Goal 1: Manage, conserve, restore, or enhance the sagebrush, mountain shrub, aspen, riparian, and aquatic focus communities to ensure sustainability of fish and wildlife populations in the WLCI area.
- Goal 2: Support opportunities for sustainable agriculture.
- Goal 3: Improve the understanding of ecological processes across southwest Wyoming.
- Goal 4: Synthesize information and facilitate communication to inform and encourage responsible development and sustain healthy landscapes.
- Goal 5: Ensure effective relationships exist among partners, stakeholders, and the public through internal and external partnerships.
- Goal 6: Provide mechanisms to ensure effective data and information exchange.

Background

Southwest Wyoming offers world-class energy and wildlife resources and provides an excellent opportunity for developing new approaches to landscape conservation. The Bureau of Land Management (BLM), U.S. Fish and Wildlife Service (FWS), Wyoming Game and Fish Department (WGFD), U.S. Forest Service (FS), U.S. Geological Survey (USGS), Wyoming Department of Agriculture, and southwest Wyoming conservation districts and county commissions are forging ahead with the Wyoming Landscape Conservation Initiative (WLCI). This initiative is a long-term, science-based, collaborative effort to ensure Wyoming's wildlife and crucial habitats are fully considered and addressed in the face of increasing land use pressures. The mission of the WLCI is to implement 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, while facilitating responsible development through local collaboration and partnerships.

To meet these challenges, land and wildlife managers established the WLCI to plan at a landscape scale, implement habitat improvements that benefit the life history requirements of target species, and monitor species and habitat in concert with the on-and offsite mitigation and reclamation efforts required of the oil and gas industry. This initiative will ensure coordination among various agency efforts to leverage personnel and funding to prevent the overall loss of quantity and quality of habitat.

This strategic plan builds on the guidance that the WLCI (WLCI MOU 2008) is not intended as an alternative or substitute for reclamation and mitigation actions required for industry, or as a replacement for existing efforts occurring within the geographical area of this program (e.g., local sage-grouse working groups, Wyoming Range Interagency Habitat Initiative, etc.). Rather, development and implementation of this WLCI Strategic Plan, supported by the WLCI's Science Strategies Plan, Science and Management Integration Plan, Operation Plan, and Communication Plan will complement and enhance existing efforts, (e.g., Wyoming Basin Ecoregional Assessment, Western Association of Fish and Wildlife Agencies' (WAFWA) Greater Sage-grouse and Sagebrush Habitats Conservation Strategy, National Monitoring Strategy). The relationship of the various WLCI documents is shown in Figure 1.

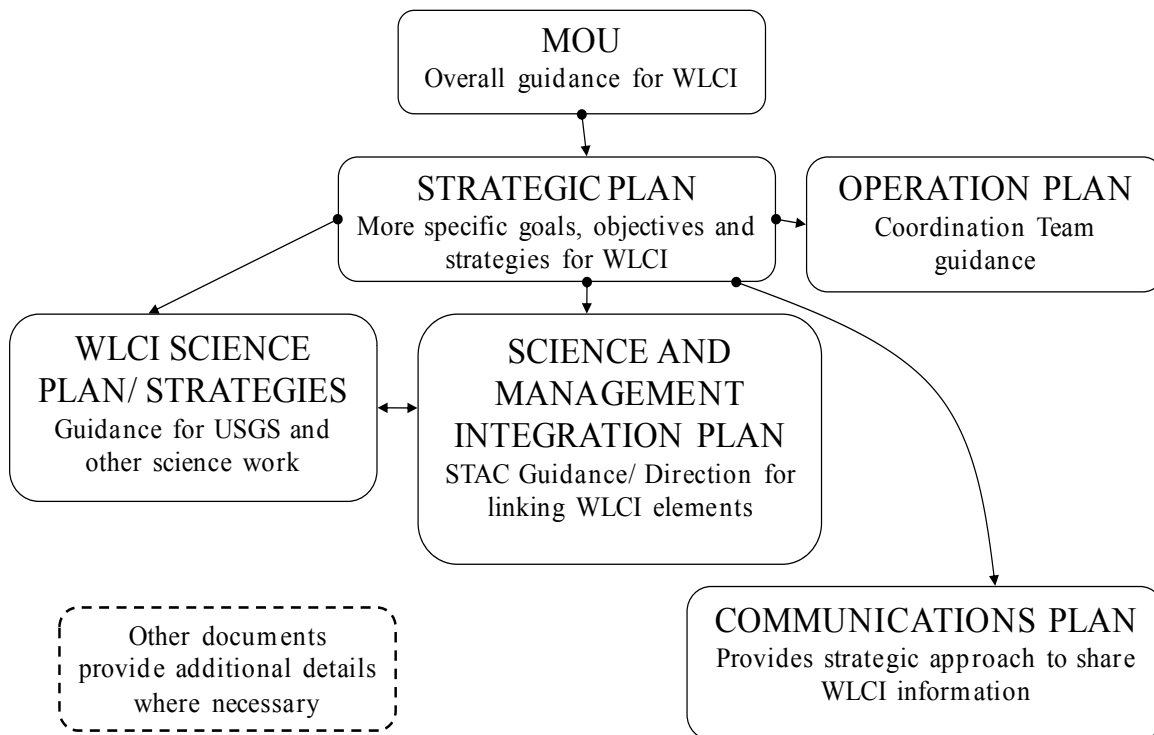


Figure 1. Purpose and Relationship of WLCI Documents.

The purpose of this document is to articulate the goals of the WLCI. The document includes objectives and strategies that support the goals as well as the process and structure for addressing implementation. Additionally, this document provides sufficient background information for individuals wanting to know about the overall approach of the WLCI.

The WLCI has several teams and committees (See Figure 2) to accomplish the overall WLCI mission. General communication channels among these various groups are shown in Figure 3.

- An Executive Committee composed of government executives and elected officials provides the guidance and decision-making authority for the WLCI.
- An interagency Coordination Team based in Rock Springs manages the daily operations of the initiative and maintains regular contact with partners at the field level.
- The Coordination Team works with the Support Subcommittee, composed of representatives of agencies in the WLCI area, to develop conservation actions and work with local communities, private landowners and others.
- The USGS has a Science Team that develops and conducts the majority of the science work for the WLCI.
- The interagency Science and Technical Advisory Committee provides guidance for research needs of the WLCI and integrates science into WLCI projects.
- The WLCI Monitoring Team provides technical expertise and oversight for monitoring activities associated with WLCI short-term local and long-term landscape-scale projects.
- The Data and Information Management Team shares the information gathered and generated through the WLCI and assembles resources and tools that assist with information management and data analysis.

- The Communication Team shares the message about WLCI work and provides outreach for the initiative.
- Local Project Development Teams are tasked with working at the local level to cooperatively identify resource needs and develop strategies to meet landscape level issues.

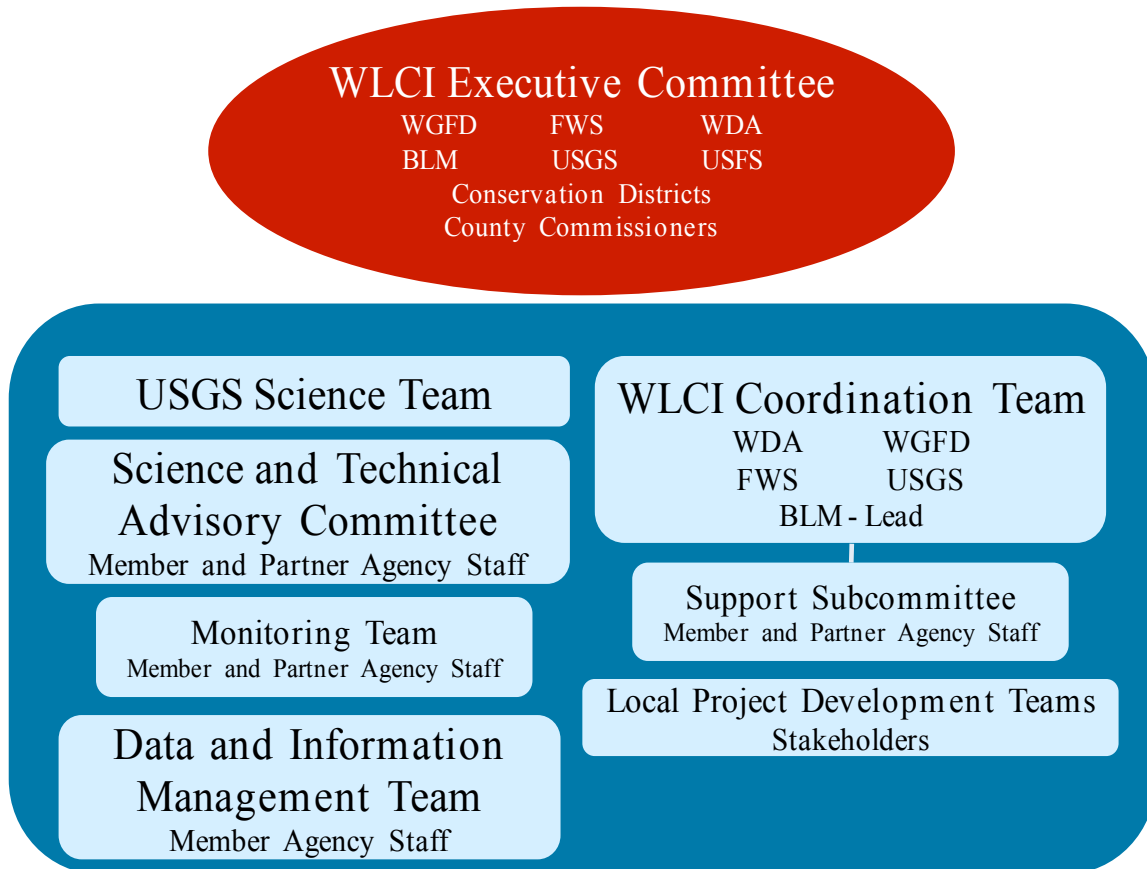


Figure 2. WLCI Committees and Teams.

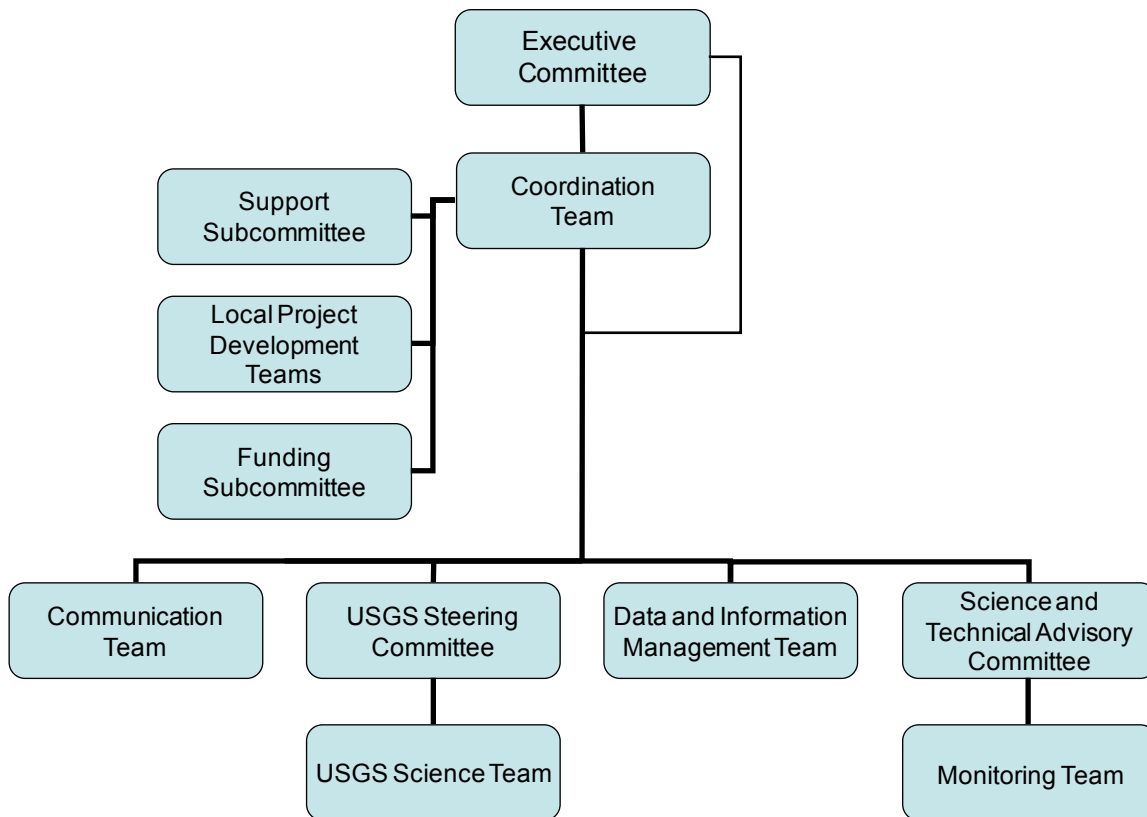


Figure 3. Communication Channels Among WLCI Committees and Teams.

Each organization that participates in the WLCI has unique responsibilities. The mission of each organization guides its role in the WLCI.

- Bureau of Land Management - The BLM administers approximately 8 million of the 15 million acres in the WLCI area. The BLM works with partners to implement on-the-ground actions that will enhance habitats. The BLM also monitors projects to ensure they meet the stated purposes. The agency houses the Coordination Team and is represented on the Executive Committee, Coordination Team, Science and Technical Advisory Committee, Monitoring Team, Data and Information Management Team, Communication Team and Support Subcommittee.
- U.S. Geological Survey - The USGS provides integrated science and methodology to support the WLCI initiative and advances scientific knowledge and information for informed decision-making by all WLCI partners. The agency provides research in the WLCI area and monitors at the landscape scale. The USGS leads the science effort with the WLCI Science Team and is involved in the Executive Committee, Coordination Team, Science and Technical Advisory Committee, Monitoring Team, Data and Information Management Team and Communication Team.
- U.S. Fish and Wildlife Service - The FWS has tools for private landowners to develop conservation measures for wildlife, plants, and habitats on non-federal lands. The FWS also provides assurances to the landowner for engaging in such efforts, which apply if a species is listed under the Endangered Species Act. On-the-ground work on private lands

- occurs through the FWS Partners for Fish and Wildlife Program. Additionally, the FWS expedites reviews required by the Endangered Species Act to ensure timely project completion. The FWS is included in the Executive Committee, Coordination Team, Science and Technical Advisory Committee, Monitoring Team, Data and Information Management Team, Communication Team and Support Subcommittee.
- Wyoming Game and Fish Department - The WGFD manages over 250 wildlife species in the WLCI area. By working with private landowners, partnering agencies and other interested groups, the WGFD conducts planning and implementation to put actions on the ground that conserve habitat and improve land management. The WGFD also inventories and monitors wildlife and fish species in the WLCI area and provides this information to help direct prioritization of conservation actions. The WGFD is represented on the Executive Committee, Coordination Team, Science and Technical Advisory Committee, Monitoring Team, Data and Information Management Team, Communication Team and Support Subcommittee.
 - Wyoming Department of Agriculture - The WDA acts as a liaison between the WLCI and the agriculture community for project planning and provides assistance and technical support. The WDA is represented on the Executive Committee, Coordination Team, Science and Technical Advisory Committee, Monitoring Team, and Communication Team.
 - Southwest Wyoming County Commissions - The Southwest Wyoming County Commissions provide local representation and direction to the WLCI. A county commissioner is included in the Executive Committee and participates with the Support Subcommittee.
 - Southwest Wyoming Conservation Districts - The Southwest Wyoming Conservation Districts provide local representation to the WLCI and help with technical expertise and project development at the ground level. A representative from the area's eight conservation districts sits on the Executive Committee and participates with the Support Subcommittee.
 - U.S. Forest Service -The FS administers 2.3 million acres of the 15 million acres in the WLCI area. The FS works with partners to implement on-the-ground actions that enhance habitats and monitors projects to ensure they meet their purpose. The FS is represented on the Executive Committee, Science and Technical Advisory Committee, Monitoring Team, Communication Team and Support Subcommittee.
 - National Park Service -The NPS provides technical assistance to the WLCI effort, including representation on the Science and Technical Advisory Committee, Monitoring Team, and Support Subcommittee.
 - Natural Resources Conservation Service - The NRCS provides assistance with project planning and technical support to the initiative. The agency is represented on the Support Subcommittee.
 - Bureau of Reclamation - The BOR provides assistance with project planning and technical support to the initiative. The agency is represented on the Support Subcommittee.
 - University of Wyoming - The University of Wyoming is represented on the Data and Information Management Team and participates with research in the WLCI area.
 - Other Supporters - Additional support is received from other agencies and groups for project planning and technical support. Some of these supporters include the Wyoming Department of Environmental Quality, Jonah Interagency Mitigation and Reclamation Office, Wyoming State Land Board, and private landowners.

WLCI Goals, Objectives and Strategies

Below are the goals developed to meet the mission of the WLCI. This section also provides additional information about the need for each goal and outlines the respective objectives and strategies for each specific goal. The objectives and strategies are specific to each goal and provide the additional information and guidance necessary to meet these goals. These goals and objectives support and conform to the overall WLCI mission to implement a long-term, science-based effort to conserve and enhance fish and wildlife habitats, while facilitating responsible development through local collaboration and partnerships.

- Goal 1: Manage, conserve, restore, or enhance the sagebrush, mountain shrub, aspen, riparian, and aquatic focus communities to ensure sustainability of fish and wildlife populations in the WLCI area.
- Goal 2: Support opportunities for sustainable agriculture.
- Goal 3: Improve the understanding of ecological processes across southwest Wyoming.
- Goal 4: Synthesize information and facilitate communication to inform and encourage responsible development and sustain healthy landscapes.
- Goal 5: Ensure effective relationships exist among partners, stakeholders, and the public through internal and external partnerships.
- Goal 6: Provide mechanisms to ensure effective data and information exchange.

Goal 1

Manage, conserve, restore, or enhance the sagebrush, mountain shrub, aspen, riparian, and aquatic focus communities to ensure sustainability of fish and wildlife populations in the WLCI area.

The five communities selected for attention in the WLCI area are critically important to wildlife, agricultural success, and the open spaces that are unique to southwest Wyoming. Proper ecosystem function is important in each of these habitat types to provide healthy landscapes across the broad initiative area. Each community possesses its own special traits.

The broad expanses of sagebrush communities in the West support various sagebrush obligate species, but they have been reduced in many places through ecological changes and human development (e.g., housing, agriculture, resource extraction). Wyoming is fortunate to have one of the last remaining strongholds of the sagebrush community, but efforts are needed to ensure the “sea of sagebrush” early settlers described remains intact and healthy in the WLCI area.

Aspen communities produce copious amounts of forage and cover for wildlife and livestock and provide diversity to the landscape. However, forest and range management practices such as fire suppression have reduced aspen regeneration. Treatment of aspen stands within the WLCI area will be needed at a large scale to ensure maintenance of this community.

The mountain shrub community is also highly productive. Key species using this habitat type are neotropical birds and mule deer. Stakeholders will need to organize enhancement projects that create plentiful forage, improve vegetative health, and maintain the integrity of migration corridors across ecotones.

Riparian areas are among the most productive communities in southwest Wyoming and support a wide variety of plant and animal species. Much of this community is under private ownership, especially the mid-elevation riparian areas. The WLCI will work to include private landowners in landscape level projects across southwest Wyoming.

Aquatic communities in the arid climate of southwest Wyoming include various unique fish assemblages. Past management has altered flow regimes, connectivity, and water quality of some streams and rivers. These systems need to be restored through coordinated efforts across the WLCI area.

Collectively, these five communities comprise the majority of the area in southwest Wyoming. In many instances, life requirements of a particular species depend on the connectivity and proper function of all of these communities. The long-term viability of these communities and associated wildlife resources is dependent upon the ability of this initiative to tactically create an atmosphere of cooperation between land managers, private landowners, industry, and interested publics not previously attained for landscape level conservation.

Objective 1: Identify high priority areas.

Strategies:

- i) Review and evaluate USGS and other local and regional assessments. Create summaries to condense information from ecological assessments (i.e., SAGEMAP). Work with the WLCI Data and Information Management Team to catalog assessments and summaries in a format accessible by WLCI teams and local land managers. Glean significant GIS data and add to existing metadata.
- ii) Priority areas identified with cooperation of partners and stakeholders. Through communications with the WLCI Support Subcommittee, Local Project Development Teams, Executive Committee and public meetings, gather and collate data pertaining to the highest priority landscapes in southwest Wyoming. Information such as the WGFD 2008 regional ranked wildlife priority areas will strongly influence the initial WLCI priority areas. Also included will be priority areas for the livestock industry, oil and gas operations, timber resources, cultural resources and recreational use. Initial priorities will be fragmented habitats, invasive species, and water quality and quantity.
- iii) Priority migration corridors identified with cooperation of partners and stakeholders. Information will be added to data structure created by WLCI Data and Information Management Team to identify migration corridors for wildlife in southwest Wyoming. A large quantity of data already resides in the WGFD data servers. The Coordination Team will work with the Support Subcommittee and Local Project Development Teams, and Upper Green River Valley Land Trust to rank migration route priorities utilizing data from identified priority areas and criteria generated recognizing potential threats to migration corridors.
- iv) Incorporate priority species. The processes of prioritizing priority areas and migration corridors by the WLCI at a landscape level will be inclusive of the needs of many priority species. However, the WLCI Coordination Team, working with the Support Subcommittee and Local Project Development Teams, will ensure that

identified priority species are accounted for in the priority area and migration corridor assessments.

- v) Evaluation of threats and conditions. Annually, the WLCI Coordination Team will present a report of the threats and conditions to the public and the Executive Committee. Utilizing data provided to the Data and Information Management Team from current research, monitoring, project completion reports and stakeholder input, the Coordination Team and STAC will assess the annual shift in the condition of priority areas and the effects of threats to the health of these landscapes.
- vi) Collate information identified in i-v above and provide this information to the local project development teams to assist in project development.

Objective 2: Restore and protect important areas and habitats

Strategies:

- i) Candidate Conservation Agreements with Assurances (CCAAs). Private landowners can voluntarily participate in the FWS program to protect at-risk species. Through WLCI support, the FWS will develop CCAAs that will protect habitats and species on private lands while providing an assurance to landowners that future requirements for conservation will not change, even if target species are listed under the Endangered Species Act. Each CCAA may be unique for the situation of each individual landowner, or an overarching CCAA may be developed for larger areas.
- ii) Conservation easements, conservation leases or habitat leases. The WLCI Coordination Team will build relationships with NRCS, land trusts, and non-governmental organizations to ensure that conservation measures fitting the identified communities, priority areas, and migration corridors are included in the project selection process. Building relationships with landowners within priority areas and securing conservation easements will be a very effective method to protect keys areas in southwest Wyoming from the threats of development.
- iii) Adaptive Management. Adaptive Management will be a cornerstone of the WLCI. Feedback loops built into every project and process of the WLCI will ensure that the initiative is meeting the needs of the public and the resource (See Figure 4).

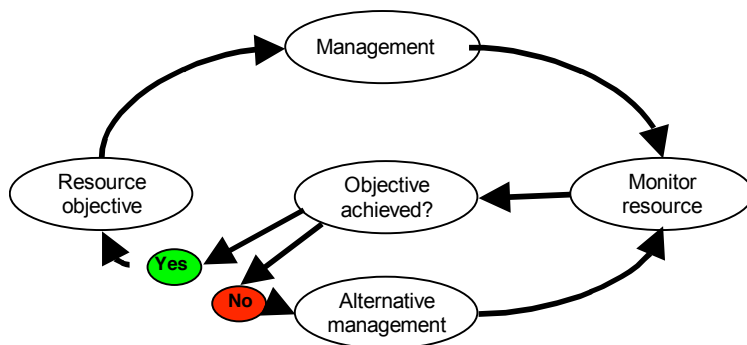


Figure 4. Illustration of the adaptive management cycle (Elzinga and others, 2001)

- iv) Facilitate best management practices for implementing conservation actions. The Coordination Team, with assistance from the STAC and the Support Subcommittee, will work diligently to remain updated on the latest techniques to execute and monitor landscape-level habitat enhancement methods. This will be accomplished by reading and reviewing pertinent scientific journals, attending resource management workshops, maintaining open lines of communication with the STAC, and

- maintaining the WLCI resource database. Additionally, the Coordination Team will endeavor through documentation, workshops, and communication to standardize land management activities across the agencies operating in the WLCI area.
- v) Local partners. Through Local Project Development Teams, partners will help identify and prioritize needs and issues within the WLCI area.
 - vi) Habitat enhancement. In some habitats incremental changes can provide improved ecological function and benefit targeted species. WLCI habitat enhancements will be based upon the best available science and generally consist of relatively small-scale projects that work to achieve these incremental changes. Habitat enhancements will be completed strategically so that either individually or collectively the enhancements will lead to the desired ecological changes at the landscape scale. Adaptive management will allow for learning and improving the effectiveness of these enhancements over time.
 - vii) Establish criteria for project selection and funding. The WLCI priorities established with the data supplied by the USGS comprehensive assessment, along with the WLCI Science Plan, will be primary instruments for creating project criteria and rankings. Ranking processes will also include project readiness and availability of partner funding. Additionally, ground-level involvement will occur through the Local Project Development Teams. This will serve to ensure that identified conservation actions are science driven, feasible, necessary, and locally acceptable.
 - viii) Work with partners and interested parties to promote opportunities for conservation actions within priority areas and priority species habitats. Provide opportunity for partner agencies, the public, and non-agency partners to continually review the accomplishments and benefits of WLCI projects and activities. Through Coordination Team annual review processes work with partners to develop methods for reviewing and modifying proposed conservation actions as necessary.

Objective 3: Develop and maintain partnerships to effectively support conservation strategies.

Strategies:

- i) Develop and maintain external partnerships and actively cultivate partnerships within local communities, private industry and non-governmental organizations. Pursue communications and meetings with partners, open Executive Team meetings, newsletters, workshops, and luncheons. Encourage external partners to participate in the process of developing projects and joining with the WLCI to financially support the projects. Build the resources and trust among participating organizations to successfully share information about the WLCI and encourage additional involvement.
- ii) Create working relationships with stakeholders and key constituencies. Develop plans and agreements that promote working relationships on a landscape scale;
 - Identify funding, staffing, and organizational plans available to provide support to implement this effort and identify additional needs;
 - Utilize the Science Plan to identify existing and additional information required for fish and wildlife habitat enhancement, species monitoring and conservation work. This plan will also outline how information/data gaps will be addressed, including new techniques to ensure successful reclamation;
 - Provide an Information Management Plan to facilitate data and information exchange within and amongst all partners; and
 - Implement a Communication Plan to share information with interested parties.
- iii) Outreach and Education. Develop opportunities for outreach and education that provide information about the WLCI and helps improve involvement.

Objective 4: Select conservation actions that are cost-effective within the parameters of the conservation objectives and priority areas of WLCI.

Strategies:

- i) Leverage funds with in-kind donations.
- ii) Include project readiness as a factor in screening prioritization process.
- iii) Follow the guidance for ranking and prioritization of conservation work to ensure that it fits with science and makes sense at a landscape scale given identified priorities.

Goal 2

Support opportunities for sustainable agriculture.

Sustainable agriculture and associated “working landscapes” provide many benefits to wildlife and people. Working farms and ranches not only provide water, cover, and feed for wildlife, but economically viable agricultural operations are resistant to permanent land conversions that exclude the majority of wildlife species and disrupt ecosystem function.

Objective 1: Form working partnerships with entities such as the NRCS, Conservation Districts, Local County Workgroups and private landowners.

Strategies:

- i) Attend Conservation District meetings, Local Workgroup meetings, and field tours.
- ii) Work with the NRCS to use their programs in combination with WLCI work to best meet the needs of producers looking to improve their operations for wildlife and livestock production.
- iii) Leverage funding through participation with various agricultural and habitat programs.
- iv) Communicate the advantages of working with the professionals at NRCS to landowners who may not have had much exposure to available government programs.
- v) Maintain WLCI contact with private landowners through the Local Project Development Teams and personal communication.

Objective 2: Promote management of agricultural operations as enterprise units across multiple landownerships.

Strategies:

- i) Coordination Team works closely with BLM, USFS, NRCS, and private landowners to implement management plans that consider the needs of the operation in a manner not restricted by political boundaries. Allotment Management Plans and other planning efforts will need a great degree of coordination.

Objective 3: Identify priority concerns and issues important to the agricultural industry.

Strategies:

- i) Engage members of the agricultural community to understand issues related to natural resources.
- ii) Provide information about the WLCI to agricultural organizations or agencies serving the agricultural community.

Objective 4: Communicate and educate the public about the contributions of the agricultural industry to landscape health.

Strategies:

- i) Provide information about the WLCI and agricultural industry interactions to media outlets serving the agricultural community and general public when appropriate.
- ii) Initiate other forms of community outreach utilizing the resources of the WLCI.

Objective 5: Promote functional habitat and associated open spaces.

Strategies:

- i) Consider conservation easements, habitat leases or conservation leases as tools, where appropriate, to keep agricultural operations on private lands. Work within the Local Project Development Teams to gather landowner input and project ideas.
- ii) Work closely with the local Conservation Districts, NRCS, and the University of Wyoming to provide information and resources, as appropriate, to implement agricultural management actions that are sustainable, profitable and supportive of WLCI conservation objectives.
- iii) Examine legal mechanisms that can provide assurances for continued livestock operations into the future. This can include work on public lands to determine whether assurances can be provided for grazing allotments if conservation actions occur. This can also include Candidate Conservation Agreements with Assurances on private lands (possibly in conjunction with similar approaches on federal lands).
- iv) Use adaptive management and the latest scientific information to develop innovative approaches to grazing that provide sustainable operations on the landscape while maintaining or enhancing healthy habitats.
- v) Incorporate social, economic, and ecological contributions of agricultural landscapes into the comprehensive assessment and recognize importance of private agricultural lands for supporting wildlife resources on landscape scale.

Goal 3

Improve the understanding of ecological processes across southwest Wyoming.

A good understanding of the ecological processes in southwest Wyoming is essential to meeting the mission of the WLCI and ensuring that management decisions can be driven by sound science. The ecosystem in the WLCI area is understood basically, but the ecosystem is complex, so it requires additional effort to understand it more fully. The power to make decisions that compliment and enhance that system is magnified when the scientific information is increased and refined. Providing a scientific framework to better understand the ecosystem, will address a host of questions about the landscape. Processes developed to answer questions about the ecosystem would be incorporated into the development of conservation actions (on-the-ground work). Information gathered on past actions needs to be compiled to determine the current status of the ecosystem. Monitoring protocols are needed so that a common “language” can be spoken among various researchers and managers.

Objective 1: Create a basis for ecological understanding by developing a science framework to evaluate cumulative effects of development and conservation actions across southwest Wyoming. These steps essentially are provided in the USGS Science Strategic Plan.

Strategies:

- i) Identify key drivers of change.

- ii) Identify the condition and distribution of key wildlife species, habitat, and species habitat requirements.
- iii) Evaluate wildlife and livestock responses to development.
- iv) Identify the effectiveness of restoration, reclamation, mitigation, and conservation actions.
- v) Develop a data clearinghouse and information management framework.
- vi) Incorporate adaptive management into WLCI scientific research to ensure that lessons learned from research, conservation actions, and monitoring lead to improved management plans and actions.

Objective 2: Integrate current and past monitoring and research.

Strategies:

- i) Conduct a literature review to gather information about research and models applicable to WLCI work.
- ii) Compile data in an accessible form.
- iii) Hold periodic workshops to review research and identify data gaps in scientific knowledge.
- iv) Use existing scientific information to guide design of conservation actions and future scientific research.
- v) Use habitat and species models to demonstrate how the system components likely function.
- vi) Provide information to land managers about the effects of development on habitat that could be used in land use planning and project development.

Objective 3: Develop compatible monitoring protocols for conservation actions.

Strategies:

- i) Ensure new monitoring data are consistent with WLCI data management.
- ii) Ensure monitoring data are suitable for the adaptive management process(es).
- iii) Ensure performance measures can be created from monitoring data.
- iv) Continue to evaluate conceptual modeling, sensitivity testing, and application ecological indicators.
- v) Conduct validation modeling.
- vi) Utilize and maintain USGS monitoring protocol database

Objective 4: Design and implement conservation actions that can be monitored to provide information about ecological processes in the WLCI area.

Strategies:

- i) Identify and integrate monitoring indicators and processes during development of conservation actions.
- ii) Integrate science activities and conservation actions that will address questions about ecosystem function.
- iii) Follow through with proposed monitoring and submit the results into the body of scientific information to inform the adaptive management process.

Objective 5: Provide funding for scientific research that will improve understanding of ecological processes in the WLCI area.

- i) Allocate appropriated funds for USGS WLCI research. USGS will allocate these funds and consider input from the WLCI Science and Technical Advisory Committee on the priorities for proposed research.

- ii) Seek additional funding and partnering for scientific research through industry, private groups, or appropriate grants.
- iii) Request ideas and provide funding for landscape-scale scientific research that can be conducted in the WLCI area.

Goal 4

Synthesize information and facilitate communication to inform and encourage responsible development and sustain healthy landscapes.

The mission of the WLCI acknowledges that there is a place in southwest Wyoming for wildlife, industry, ranching, recreation, and other resource uses. However, to provide sustainability for these various uses, a balance is needed for social, environmental and economic interests. Partnerships in southwest Wyoming will be valuable to address the various desires and interests across the landscape.

Objective 1: Develop and maintain partnerships to effectively support conservation.

Strategies:

- i) Attend and participate in meetings hosted by partners and potential partners. At these meetings, share information about the WLCI and seek common ground.
- ii) Hold discussions with key stakeholders about common interests in creating sustainability in southwest Wyoming.
- iii) Look for opportunities to leverage funding and support for conservation actions by participating in projects that already have some level of funding.
- iv) Develop Candidate Conservation Agreements with Assurances to address at-risk species and private lands issues.
- v) Encourage communication among groups with diverse interests.
- vi) Gather information about past conservation actions from partners and other stakeholders to inform future management as part of the adaptive management cycle.
- vii) Formalize a process, with involvement of partners and the public, to develop projects that meet conservation objectives.

Objective 2: Facilitate responsible development.

Strategies:

- i) Share and recommend established Best Management Practices for use during development, reclamation, and offsite conservation enhancements.
- ii) Encourage communication with industry to examine specific development needs compared to the needs of wildlife habitat. This can take the form of communication with individual companies or government-industry conferences.
- iii) Encourage innovative approaches to development and mitigation by recognizing outside-the-box approaches that incorporate adaptive management.
- iv) Explore opportunities to use socioeconomic tools such as cost-benefit analysis, contingent value analysis, or quality of life surveys, to help support responsible development.
- v) Identify especially sensitive areas where development needs special restrictions.
- vi) Facilitate sharing of science and information obtained by industry and by the WLCI through various means and participation.

Goal 5

Ensure effective relationships exist among partners, stakeholders, and the public through internal and external outreach.

One of the most essential needs for an effective conservation program is effective relationships among the various groups involved. The WLCI will work with all parties that are interested in helping accomplish the mission of the WLCI and will work to bring together these parties to build on common ground.

Objective 1: Engage the public in the process and activities of the WLCI.

Strategies:

- i) Completion of and regular updates to the Communication Plan.
- ii) Incorporation of volunteers into specified projects.
- iii) Production and distribution of a semi-annual newsletter.
- iv) Completion of annual work progress report.
- v) Promotion of WLCI accomplishments.
- vi) Attend meetings and special events of related conservation efforts.

Objective 2: Engage the partners and stakeholders in the process and activities of the WLCI

Strategies:

- i) Develop Local Project Development Teams that represent ground-level biologists, range conservationists, conservation districts, landowners and other interested stakeholders.
- ii) Project workshops (coordinated Request for Proposals (RFP) process).
- iii) Work closely with Support Subcommittee.
- iv) Provide/attend field tours.
- v) Maintain open communication with ample opportunities to provide feedback.
- vi) Utilize moderators when appropriate to facilitate open sharing of diverse ideas, provide flow to meetings, ensure workshop products are captured, and action items completed.

Objective 3: Develop opportunities for stakeholders to contribute funding.

Strategies:

- i) Agreement with the Wildlife Heritage Foundation to hold and distribute funds that are contributed to the WLCI.
- ii) Leverage existing governmental funding on WLCI projects.
- iii) Solicit funding from grant makers, NGOs, and industry.

Goal 6

Provide mechanisms to ensure effective data and information exchange.

A key challenge with any program is allowing for appropriate sharing of data and information so that efforts are not duplicated unnecessarily and all interested groups can build upon the information gathered by others. To help facilitate this exchange among all parties interested in the WLCI area, mechanisms will be provided to encourage information sharing and to document the work that has been completed.

Objective 1: Develop technical applications to support information exchange.

Strategies:

- i) Develop and use a data and information clearinghouse to support management and implementation of actions and to exchange information between partners.
- ii) Create and maintain a spatially explicit project tracking system to be used to facilitate management and implementation of actions.
- iii) Ensure a data management framework (metadata, quality control, database structure) is developed that supports the compilation and analysis of data by USGS, STAC, CT, and WLCI partners.
- iv) Organize protocols for assembling data into the WLCI clearinghouse from different monitoring sources.
- v) Provide a thorough RFP process.

Objective 2: Share information with groups and individuals involved with the WLCI.**Strategies:**

- i) Conduct public outreach efforts. Regular efforts will be made to reach out to those groups and individuals with potential interest in participating in the WLCI. Various forms of outreach may be used, but should be focused around existing forums (e.g., meetings or events held by an organization). Ideally, each WLCI meeting or workshop would include a communication component to help ensure that information about the WLCI is distributed. Additionally, a newsletter will be produced by the Coordination Team, and the WLCI website will be regularly updated.
- ii) Coordinate with other initiatives. Several other initiatives or efforts have been developed or may be developed in the future to address various issues in the WLCI area. Coordination is necessary so that resources can be leveraged and so that work will be complementary when possible. Participation on committees formed through other initiatives may be an effective approach to facilitating coordination. Where appropriate, scientific data should be shared between the WLCI and other initiatives to improve general understanding of an area and to help with adaptive management. Information sharing should occur both formally and informally (e.g., coordination meetings, informal discussions).
- iii) Communicate proper use of data, data collection, and data sharing. Communication about consistent use of data standards needs to occur with partner agencies, industry, scientific organizations, consultants, and academia. In some cases, "citizen scientists" may be able to help collect data in specific areas (e.g., National Weather Service Cooperative Observer Program), but participants need to clearly understand protocols that should be used. A simple approach for sharing data standards needs to be developed.
- iv) Allow public access to non-sensitive WLCI information. Information about research results, including data sets used for key decisions should be available. As appropriate, workshops should be designed and implemented to present and interpret research results. Additionally, information about projects, including project descriptions, timelines for implementation, rankings, and desired outcomes should be available. Proprietary and sensitive information will need to be appropriately protected by following agency procedures.
- v) Improve interagency communication and information sharing. Part of this strategy may include development of an interagency web portal where information can be posted. Additionally, information may be disseminated through reports, workshops, or other meetings.

Objective 3: Document WLCI successes for accountability.

Strategies:

- i) Share operational procedures that have been established by WLCI.
 - ii) Prepare periodic updates.
 - iii) Provide end of year budget and accomplishment reports.
 - iv) Prepare end of year status report.
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