

# 4 Project Implementation

This chapter provides a general description of the operations and management of the Blackfoot Valley CA project area.

## LAND PROTECTION OPTIONS

Two alternatives were considered for the environmental assessment, no-action and the chosen alternative, acquiring conservation easements in the Blackfoot Valley to expand the conservation area.

## ACTION AND OBJECTIVES

The analysis and documentation was prepared by a combination of field and regional Service staff, along with partners (see appendix D). After completion and publication of an environmental assessment and after conducting a public comment period, the proposed alternative of acquiring additional conservation easements was chosen. The project was found to have no significant impacts on the quality of the environment, thus a finding of no significant impact (FONSI) has been completed and signed (see appendix E). Appendix F is the environmental action statement, appendix G is the environmental compliance certificate, and appendix H is the section 7 biological evaluation. Director's approval memorandums are appendix I.

The Service will expand the existing boundary of the Blackfoot Valley Conservation Area from 165,000 acres to 824,024 acres. Up to 80,000 acres of conservation easements will be acquired under this project. No fee-title acquisition will be considered as part of this project. The Service has standard conservation easement agreements that have been used successfully in other easement conservation areas of the United States. With appropriate modifications, the Service will use similar language and terms, and will develop a standard document for the conservation easements to minimize confusion, facilitate enforcement, and provide the necessary level of protection for the resources.

The easement project relies on voluntary involvement by landowners. The project does not involve fee-title acquisitions. Landowner management practices such as grazing will continue on the land included in the easement contract. All land within an easement remains in private ownership and, therefore, property tax and grassland management activities such as invasive plant and tree control, grazing, and burning will remain the

responsibility of the landowner. Public access, including hunting, also remains under the control of the landowner.

The easement project will be managed by staff located at the Benton Lake National Wildlife Refuge Complex. The Service staff will be responsible for monitoring and administering all easements on private land. Monitoring will consist of annually reviewing land status in meetings with the landowners or land managers to ensure that the stipulations of the conservation easement are being met. The Service's role is to monitor the purchased easements to ensure that landowners comply with the easement agreement so that the property does not undergo subdivision, commercial or industrial development, or conversion of native habitat. Photo documentation will be used at the time the easements are established as part of a documentation of baseline conditions.

Conservation easements are the most cost-effective, politically acceptable means to ensure protection of critical habitats that occur within the project area. Although habitat protection through fee-title acquisition is preferable in some locations, it is not required and is not preferable to conservation easements in the Blackfoot Valley region. Fee-title acquisition will triple or quadruple the cost of land acquisition in addition to adding significant increases in long-term management and operational costs for the Service. The Service views a strong and vibrant rural lifestyle, of which ranching is the dominant land use, as one of the key components to ensure habitat integrity and wildlife resource protection. The Service views conservation easements as a viable means to protect wildlife values on a landscape-scale.

## ACQUISITION ALTERNATIVES

The Service will acquire conservation easements principally by using funds appropriated under the Land and Water Conservation Act, which derives funds from royalties paid for by offshore oil and gas leasing. Such funds are intended for land and water conservation projects. These funds are not derived from general taxes. Funding is subject to annual appropriations by Congress for specific acquisition projects.

Funding from other sources may also be used within the project area. Management activities associated with easements may be funded through

other sources, such as TNC, PFW, and other private and public partners. The Service will also consider accepting voluntary donations for easements.

## STRATEGIC HABITAT CONSERVATION

Strategic habitat conservation (SHC) involves an ongoing cycle of biological planning, conservation design, conservation delivery, outcome-based monitoring, and assumption-based research. SHC uses science to focus conservation in the right places (USFWS 2008).

In 2004, the U.S. Fish and Wildlife Partners for Fish and Wildlife program led a statewide, strategic habitat conservation planning effort for focusing work in Montana. The state was divided into three broad geographic regions based on similar habitat types. Within each region, priority federal trust species and guilds were identified. The Montana Habitat and Population Evaluation Team office then assisted with gathering and creating spatially explicit models and data sets for priority trust resources. In addition, the scientific-based planning efforts of partner agencies and conservation

organizations were incorporated. These include the “Strategic Habitat Conservation Report” prepared by the National Ecological Assessment Team, the “Upper Missouri/Yellowstone/Upper Columbia River Ecosystem Team Focus Area Plan,” the “Montana Partners Program 1999 Focus Area Plan,” “Montana’s Comprehensive Fish and Wildlife Conservation Strategy Plan,” and The Nature Conservancy of Montana’s “Statewide Conservation Plan.” Seven stakeholder meetings were held to gather input from other partners to identify focus areas, and to develop an appropriate conservation strategy. The “2007 Montana Step-down Strategic Plan” identified geographic focus areas, habitat accomplishment targets, and benefit to federal trust species. The comprehensive process ultimately produced ten conservation focus areas for Montana. The Blackfoot Valley CA is within these identified focus areas.

The preparation of this project area land protection plan addresses the four key elements of SHC (1) planning, (2) design, (3) delivery, and (4) monitoring and research (see figure 5).

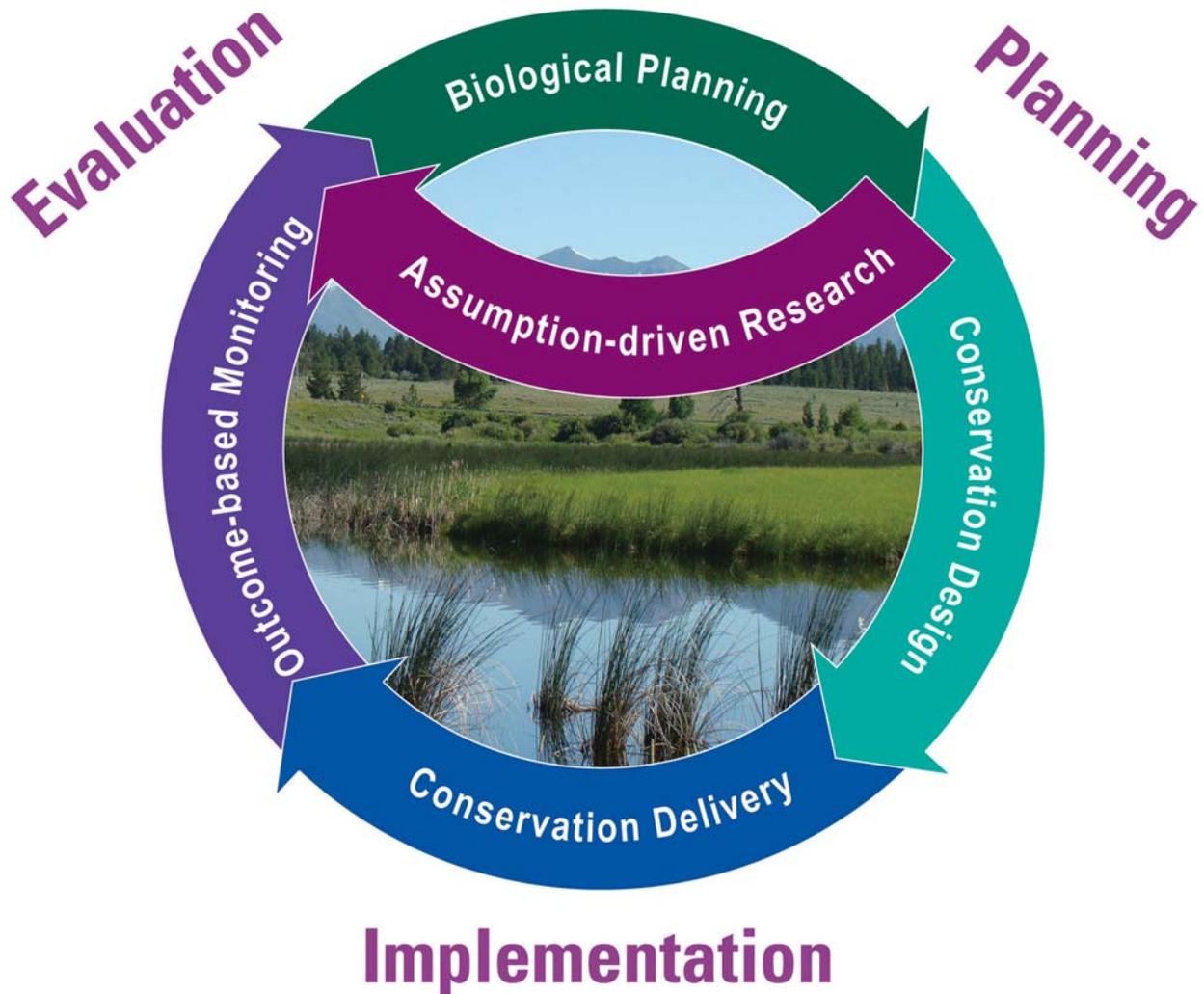


Figure 5. The basic strategic habitat conservation cycle.

## BIOLOGICAL PLANNING

According to the Montana Natural Heritage Program database (MTNHP 2009a) there are forty-one animal species of concern in the Blackfoot River watershed. These include invertebrates, birds, fish, mammals, reptiles, and amphibians. Federally listed animal species found in the Blackfoot River watershed include the threatened bull trout, grizzly bear, Canada lynx, and the endangered gray wolf.

### Focal Species

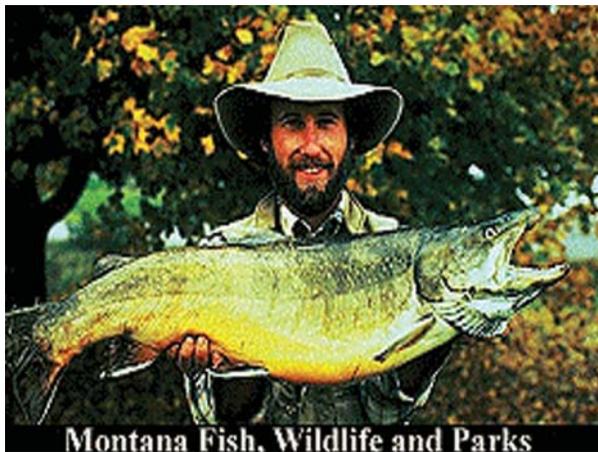
In order to strategically conserve habitat within the Blackfoot Valley, the Service chose to focus on the grizzly bear, bull trout, and Canada lynx. These species were chosen because they are federal trust resources, they represent the variety of key habitats and capture the needs of several other species in the Blackfoot Valley, and there is sufficient information about them to develop a land protection plan.

### Population Objectives

Because each of the focal species for the Blackfoot Valley is protected under the Endangered Species Act, specific mission-based population objectives have been defined that correspond to the species' recovery.

### Bull Trout

The Blackfoot River core area lies within the Clark Fork RU. For the Blackfoot River core area, the total adult bull trout abundance, distributed among local populations, must exceed 1,000 fish, and adult bull trout abundance must exceed 2,500 (USFWS 2002). Trend criteria will be met when the overall bull trout population in the Clark Fork RU is accepted, under contemporary standards of the time, as stable or increasing, based on at least 10 years of monitoring data.



*Bull trout.*

### Grizzly Bear

The Blackfoot Valley lies within the NCDE recovery zone. The Grizzly Bear Recovery Plan (USFWS 1993) specifies multiple thresholds that must be maintained before the grizzly bear population in the NCDE can be considered recovered. The threshold for the NCDE is ten females with cubs inside Glacier National Park (GNP) and twelve females with cubs outside GNP, over a running 6-year average, both inside the recovery zone and within a 10-mile area immediately surrounding the recovery zone, excluding Canada. Twenty-one of twenty-three bear management units (BMUs) occupied by females with young form a running 6-year sum of verified sightings and evidence, with no two adjacent BMUs unoccupied; and known human-caused mortality not to exceed 4 percent of the population estimate, based on the most recent 3-year sum of females with cubs. Furthermore, recovery cannot be achieved without occupancy in the Mission Mountains portion of the ecosystem.

### Canada Lynx

Several preliminary objectives have been identified in the lynx recovery effort. The one most relevant to the Blackfoot Valley CA is ensuring that sufficient habitat is available to accommodate the long-term persistence of immigration and emigration between each core area and adjacent populations in Canada or secondary areas in the United States (USFWS 2005).

### Limiting Factors

For wide-ranging species, such as grizzly bears, unplanned development leads to loss of habitat connectivity within the project area and, on a larger scale, between the CoCE and other historical or potential ranges. Riparian zones, for example, provide excellent habitat and cover for bears moving throughout the watersheds, but they are also among the most desired locations for building (USFS 2003). An increase in development also leads to more frequent conflicts between bears and people due in large part to the increased presence of bear attractants. Human garbage, dog food, and bird seed can condition and habituate bears, leading to more interactions and conflicts with people. These factors can lead to human-caused grizzly bear mortality, which in turn results in a decrease in grizzly bear reproduction and a loss of population and genetic viability. More than 17% of the NCDE is private land and an estimated 71% of bear-human conflicts and bear deaths occur on these private lands (Dr. Christopher Servheen, Grizzly Bear Recovery Coordinator, University of Montana, Missoula, MT; personal interview, 11 June 2008). Minimizing attractants on private lands and limiting subdivision are keys to reducing this threat to grizzly bears.

Canada lynx move between boreal habitats in Canada and the contiguous United States. Immigration of lynx from Canada plays a vital role in sustaining lynx in the contiguous United States (McKelvey et al. 2000). It is essential that landscape connectivity between lynx habitats and populations in Canada and the contiguous United States be maintained. Lynx movements may be negatively influenced by high traffic volume roads that bisect suitable habitat (USFWS 2005).

Ultimately, unmanaged growth and residential sprawl may be one of the biggest threats to the recovery of bull trout in the Clark Fork RU as well. The entire RU holds many of the attributes that increasingly attract people seeking relief from the urban environment. Human population growth in western Montana and northern Idaho has accelerated. The way in which this growth is managed, and our ability to limit the impacts of growth, in particular on bull trout spawning and rearing streams, is pivotal to the success of bull trout recovery effort (USFWS 2002).

Increasing human populations have a direct impact on all of the other categories of risk that affect bull trout. Both legal and illegal angling (poaching) have direct impacts on bull trout populations, despite the implementation of restrictive fishing regulations and strong educational efforts. The problem of illegal take of bull trout is intensified in stream corridors where roads provide access to highly visible (and therefore vulnerable) spawning stocks (USFWS 2002).

### Key Habitats for Protection

The USGS estimates that at least forty bears are present during all or part of the year in the watershed. In recent years, grizzly bear activity has

increased in the watershed. Based on collared bear locations, the eastern portion of the Blackfoot Valley, in particular, appears to be an important habitat link for grizzly bears that are recolonizing historic ranges to the south (James J. Jonkel, Montana Bear Manager, region 2, USFWS; personal interview, 10 May 2010). Maintaining habitat connectivity provides grizzly bears access to breeding, shelter, and foraging habitat which is critical for maintaining sustainable subpopulations within the southern portion of the NCDE.

Extensive population surveys and focused field research conducted since the mid-1990s indicates that the Blackfoot Valley watershed contains the most critical, currently unprotected lynx habitat in the contiguous United States. The majority of this vulnerable habitat is in the Blackfoot Valley's Clearwater watershed and is managed by Plum Creek Timber Company. Although a significant portion of this privately-managed lynx habitat will be conserved as part of the Montana Legacy Project in 2010 and 2011, tens of thousands of acres of critical lynx habitat remain vulnerable to conversion and development in the Clearwater watershed.

Dr. John Squires and others with the USFS Rocky Mountain Research Station began intensive Canada lynx field research in the Blackfoot Valley in 1997. This work is ongoing and represents the most comprehensive lynx research project ever conducted in the contiguous United States. Researchers worked to develop a Resource Selection Function surface that will help predict lynx habitat suitability and use across western Montana where lynx were thought to have occurred historically. Relocation data from 129 individual lynx and sixty-four known 80% kernel home ranges were compared to 1,000 similar kernels randomly located throughout the



USFWS

*Subdivision development impacts habitat connectivity.*

species' Montana range. Researchers then analyzed topographic, climactic, vegetative, and spectral imagery data to develop a spatial model predicting lynx occurrence. Lynx were fitted with conventional and global positioning system (GPS) collars in the Blackfoot Valley between 1997 and 2009. The resulting relocation data align closely with the predictive habitat model and highlight those lands in the watershed important for lynx conservation and recovery.

The most important and vulnerable lynx habitat in the watershed occurs in the northwest Blackfoot Valley's Clearwater drainage. These lands are important for the long-term viability of lynx in western Montana and their conservation will help ensure habitat connectivity between the Crown of the Continent ecosystem and the Mission Mountains and Rattlesnake federal and tribal wilderness complexes.

For bull trout, critical habitat has been designated and explicitly mapped in each RU. Critical habitats are those stream reaches and lakes deemed essential to the conservation of the species (USFWS 2002). To identify those habitats within each RU essential to the conservation of bull trout, the Service used the four biological indicators derived from the 2002 bull trout draft recovery plan (USFWS 2002) and seven newly developed "guiding principles."

The four biological indicators are distribution, abundance, trend, and connectivity. The seven guiding principles are conserve opportunity for diverse life-history expression, conserve opportunity for genetic diversity, ensure bull trout are distributed across representative habitats, ensure sufficient connectivity among populations, ensure sufficient habitat to support population viability (for example abundance, trend indices), consider threats (for example climate change), and ensure sufficient redundancy in conserving population units.

## **CONSERVATION DESIGN**

The design stage of the SHC process involves assessment of the current state of the system, formulation of habitat objectives, and determination of priority areas.

### **Current State of the System**

In recent years, the mortality threshold for grizzly bear recovery in the NCDE has been exceeded, but the significance of these numbers cannot be evaluated until there is accurate information on population size. Through the use of genetic analysis on collected hair samples, researchers were able to determine that an estimated 765 grizzly bears make their home in the Northern Continental Divide. Of those 765, researchers estimate 470 bears are females. Female bears were also found throughout

the entire study area, indicating a good reproductive potential for the species. Analysis of hair samples has allowed researchers to determine the genetic health of the grizzly bear population. Although overall genetic variation indicates a healthy population, it is only one piece of the puzzle that managers need for the recovery of grizzlies in the NCDE to be successful (Kendall et al. 2009).

Within the watershed, bull trout densities are very low in the upper Blackfoot River, but increase downstream of the North Fork. Streams that appear to be particularly important for the spawning of migratory bull trout include Monture Creek, the North Fork Blackfoot River, Copper Creek, Gold Creek, Dunham Creek, Morrell Creek, the West Fork Clearwater River, and the East Fork Clearwater River. Bull trout spawner abundance is indexed by the number of identifiable female bull trout nesting areas (redds). Data indicate that Monture Creek has an upward trend from ten redds in 1989 to an average of fifty-one redds in subsequent years (Pierce et al. 2008). The North Fork also shows an upward trend from eight redds in 1989 to an average of fifty-eight redds between 1989 and 2008. The Copper Creek drainage (including Snowbank Creek) has experienced a resurgence of bull trout redds—from eighteen in 2003 to 117 in 2008—since the 2003 Snow Talon Fire. The total number of redds counted in these three streams (Monture Creek, North Fork, and Copper Creek) increased from thirty-nine in 1989 to 217 in 2000. With the onset of drought, bull trout redd counts then declined to 147 in 2008. These changes are attributed to protective regulations first enacted in 1990, restoration actions in spawning streams during the 1990s, and a period of sustained drought between 2000 and the present (Pierce et al. 2008).

### **Formulation of Habitat Objectives**

There are currently approximately 365,000 acres of unprotected private land and 75,000 acres of commercial timber company land in the Blackfoot Valley CA. With the current levels of development and fragmentation within Blackfoot Valley, bull trout populations appear to be increasing while the pressure of human-cause mortality on grizzly bears for the NCDE population is higher than acceptable for recovery. Conservation easements provide an opportunity to prevent further development and fragmentation that might reduce or reverse the positive trends in bull trout populations or increase human-grizzly interactions, putting further negative pressure on the NCDE population. Given that conserving all remaining private land with easements to prevent additional development is not a reasonable or desired goal, especially around the existing population centers of Lincoln, Helmville, Ovando, Seeley Lake, Greenough, Potomac, and Bonner, the Service has set a goal to protect up to 80,000 additional acres of existing private lands. Long-term

monitoring of grizzly bears, lynx, and bull trout will be conducted and the goal of up to 80,000 acres will be periodically reevaluated.

### **Priority Areas**

The Service is proposing to expand the Blackfoot Valley CA by purchasing conservation easements to reduce future impacts of development and habitat fragmentation. Typically, the Service will purchase an easement for the entire ownership of a landowner, and therefore the priorities for the Blackfoot Valley Conservation Area Land Protection Plan are based on the best available data on existing private ownerships. The Service generally focuses on parcels greater than 160 acres, however, parcels less than 160 acres may be considered if unique biological values exist. Also, buffer areas will be maintained around communities to provide rural communities with the ability to meet their community development goals and objectives.

Given the models and habitat objectives, three priority areas have been developed (see figure 6). Areas where easements are expected to have the greatest benefit to grizzly bears, lynx, and bull trout have been designated as Priority 1. Priority 1 also includes areas where it appears feasible to link easements to create corridors across the valley. Priority 2 is a high priority for lynx and bull trout, but somewhat less important for grizzly bears. Priority 3 includes critical habitat for bull trout, but lower priority habitat for grizzly bears and lynx. These priority areas will be regularly re-evaluated, and may be adjusted as additional quantifiable data on the habitat needs and limiting factors for focal species in the Blackfoot Valley become available. The "Monitoring and Research" section below provides further details on this feedback loop.

### **CONSERVATION DELIVERY**

Habitat protection will occur through the purchase of conservation easements. It is the long-established policy of the Service to acquire minimum interest in land from willing sellers to achieve habitat acquisition goals.

The acquisition authority for the project is the Fish and Wildlife Act of 1956 (16 U.S.C. 742 a-742j). The federal money used to acquire conservation easements from the Land and Water Conservation Fund are derived primarily from oil and gas leases on the outer continental shelf, motorboat fuel tax revenues, and sale of surplus federal property. There could be additional funds to acquire lands, waters, or interest therein for fish and wildlife conservation purposes through congressional appropriations, the Migratory Bird Conservation Fund, the North American Waterfowl Conservation Act funds, and donations from nonprofit organizations.

The basic considerations in acquiring an easement interest in private land are the biological significance of the area, existing and anticipated threats to wildlife resources, landowner interest in the project, and the size of the parcel. The purchase of conservation easements will occur with willing sellers only and will be subject to available funding.

### **MONITORING AND RESEARCH**

As the Blackfoot Valley CA project develops and conservation easements are purchased, grizzly bears, lynx, and bull trout will continue to be monitored. The U.S. Fish and Wildlife Service, Montana Fish, Wildlife and Parks, and the USGS all have active grizzly bear monitoring and research projects. MFWP, in particular, is focused on developing a science-based population monitoring program that provides the information necessary to successfully manage bears in western Montana (Dood et al. 2006).

Specifically, MFWP will monitor a representative sample of twenty-five or more adult females in the NCDE to establish population trends, and use verified sightings to document changes in bear distribution and linkage areas used, especially by female bears. MFWP will monitor mortality, including timing and causes, and gather survivorship data in cooperation with other agencies. In addition, results from the 2004 USGS NCDE Grizzly Bear DNA project (USGS 2004) will assist MFWP with bear population size estimation, distribution, and population trends which will provide additional information for focusing acquisition efforts.

The state of Montana began development of a bull trout restoration plan in 1993. The final plan, published in June 2000, sets goals, objectives and criteria for restoration; outlines actions to meet those criteria; and establishes a structure to monitor implementation and evaluate effectiveness of the plan (MBTRT 2000). One of the stated goals of the plan is to develop and implement a statistically valid population monitoring program. This monitoring program will be an effective tool to assess the status of bull trout in the Blackfoot Valley CA.

Grizzly bears and bull trout have been identified as focal species for the Great Northern Landscape Conservation Cooperative (GNLCC)(see figure 7). The GNLCC was established, in part, to foster cooperation between agencies and support monitoring and research where there are common interests. Continual evaluation of grizzly bear, bull trout, and lynx population trends and habitat use will be used to refine conservation efforts on the ground within the GNLCC. Ongoing efforts within the GNLCC will help provide information on population trends and habitat use for these science-based decisions.

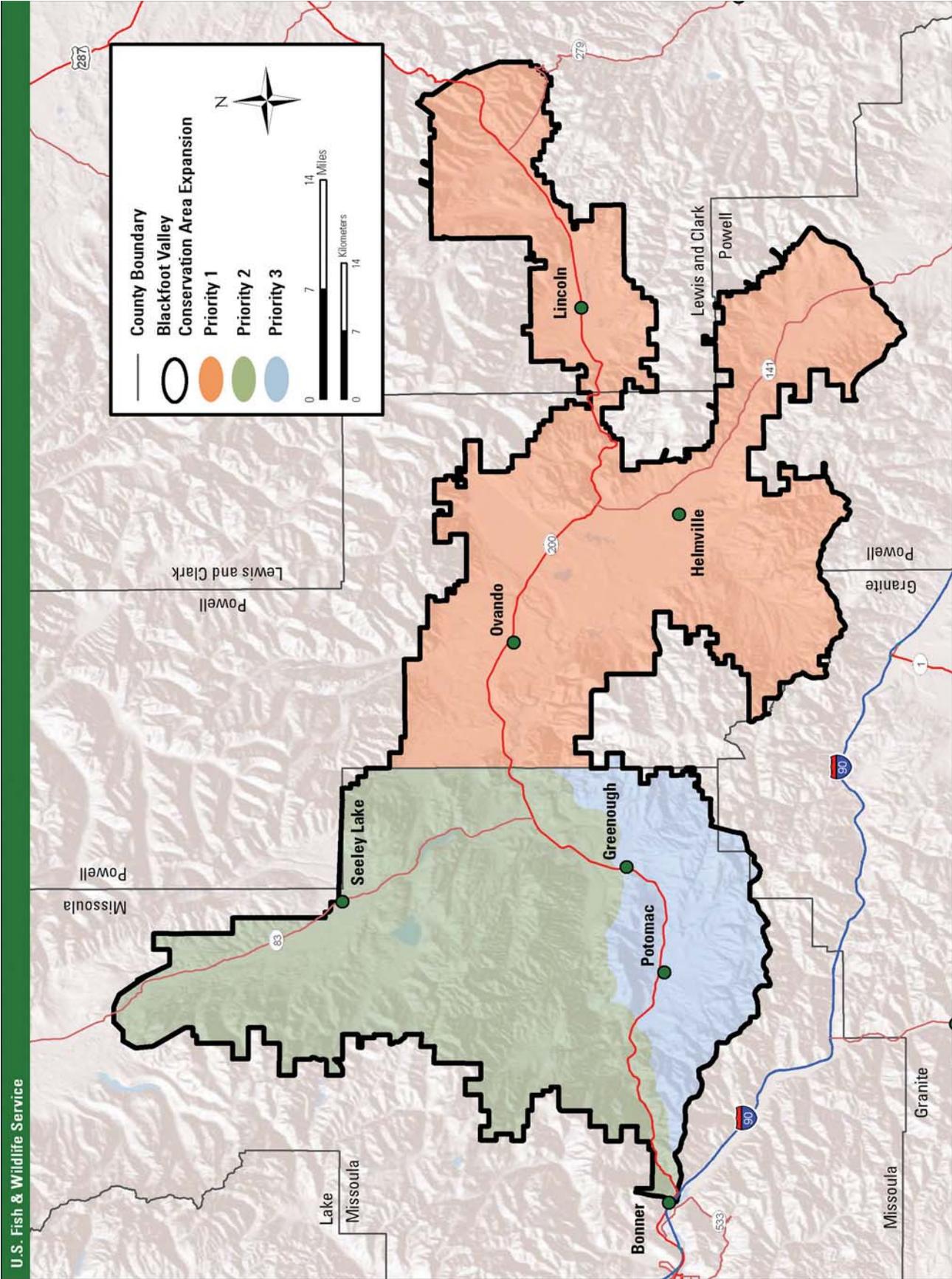


Figure 6. Blackfoot Valley project area priorities.



**Figure 7. Great Northern Landscape Conservation Cooperative with Blackfoot Valley Conservation Area expansion.**

## LANDSCAPE CONSERVATION COOPERATIVES

Strategic habitat conservation is a means of applying adaptive management across large landscapes. Landscape conservation cooperatives will facilitate strategic habitat conservation.

The Blackfoot Valley CA lies within the U.S. Fish and Wildlife Service's Great Northern Landscape Conservation Cooperative. GNLCC includes the mountain and transitional habitats in regions of Wyoming, Montana, Idaho, and the upper Green River basin in southern Wyoming and small parts of Colorado and Utah, and portions of the Interior Columbia Plateau reaching into Oregon and Washington westward to the Cascade Mountains. The GNLCC also includes the international landscapes of the interior British Columbia and Alberta, Canada, and covers the entirety of the northern Rocky Mountains and mid-continent lowlands of the interior northwest.

The GNLCC has identified priority species including: bull trout, grizzly bear, Lewis's woodpecker, trumpeter swan, westslope cutthroat trout, Arctic grayling, wolverine, willow flycatcher, sage grouse, burrowing owl, and Columbia spotted frog. Eight of these priority species exist within the project area.

The GNLCC works with a variety of science partners including many of which are also supporters of the proposed easement program. The protection of the Blackfoot Valley, through a conservation easement program, will significantly contribute to the conservation of GNLCC priority habitats and the federal trust species identified above.

As the GNLCC continues to develop, an overarching priority will be to serve as a convening body, bringing together partners to address existing and future issues related to climate change and landscape scale conservation. The Service will work with existing partnerships within the Blackfoot Valley to further refine priorities and leverage resources for acquisition.

## COORDINATION

Public involvement was initiated for the proposed expansion of the conservation easement project in the Blackfoot Valley Conservation Area in May 2010. A media contact list was compiled and news releases and factsheets were developed and distributed to media outlets, local organizations, elected officials, and interested parties. The news releases and factsheets described the proposed expansion of the conservation easement project, and announced an open house to gather input from the public.

Personal outreach efforts were made with county commissioners and other persons of interest.

Scoping was conducted during a public open house, on May 19, 2010; 7-9 p.m. at the Ovando School, 108 Birch Street, in Ovando, Montana. The purpose of scoping was to seek input from the public regarding the proposed expansion of the conservation easement project, and to identify the issues that needed to be addressed in the planning process. Fifteen people attended the open house. Five individuals, two agencies, and two organizations provided comments during the scoping period. Comments identified biological, social, and economic concerns regarding the proposed expansion of the conservation easement project. The issues raised and comments received helped the planning team to develop the alternatives presented in the draft EA and LPP. Key issues are described in Chapter 1 of the draft EA and LPP, under “Issues Identified and Selected for Analysis.”

The EA and draft LPP was issued on July 26, 2010. Public comments were solicited until August 25. Six written comments were received during the comment period. Those detailed comments and their responses are included in appendix J.

## **CONTAMINANTS AND HAZARDOUS MATERIALS**

Fieldwork for pre acquisition contaminant surveys will be conducted, on a tract-by-tract basis, prior to the purchase of any land interest. Any suspected problems or contaminants requiring additional surveys will be referred to a contaminants specialist located in the Service’s Ecological Services office in Helena, Montana.

## **NATIONAL ENVIRONMENTAL POLICY ACT**

As a federal agency, the Service must comply with provisions of the National Environmental Policy Act. An environmental assessment is required under the act to evaluate reasonable alternatives that will meet stated objectives, and to assess the possible impacts to the human environment. The draft EA, published in July 2010, served as the basis for determining whether implementation of the project will constitute a major federal action significantly affecting the quality of the human environment.

## **DISTRIBUTION AND AVAILABILITY**

Copies of the land protection plan were sent to federal and state legislative delegations, tribes, agencies, landowners, private groups, and other interested individuals.

Additional copies of the document are available from the following offices and websites.

U.S. Fish and Wildlife Service  
Benton Lake National Wildlife Refuge Complex  
922 Bootlegger Trail  
Great Falls, MT 59404-6133  
406 / 727 7400  
<http://www.fws.gov/bentonlake>

and

U.S. Fish and Wildlife Service  
Region 6, Division of Refuge Planning  
P.O. Box 25486–DFC  
Denver, Colorado 80225  
303 / 236 4378  
303 / 236 4792 fax  
<http://mountain-prairie.fws.gov/planning/lpp.htm>