

# 3 Threats to and Status of Resources



*A grizzly bear roams a streamside in the Rocky Mountain Front.*

This chapter discusses the effects of expanding the Rocky Mountain Front Conservation Area.

## **EFFECTS ON THE BIOLOGICAL ENVIRONMENT**

The expansion of the Rocky Mountain Front CA has a variety of effects on wildlife habitat and water resources.

### ***WILDLIFE HABITAT***

Expanding the Rocky Mountain Front Conservation Area will provide for an increase in conservation protection on up to 125,000 acres of important habitat on private land. This will help maintain the uniqueness of the Rocky Mountain Front and complement conservation efforts of the MFWP, TNC, Boone and Crockett Club, Montana Land Reliance, and other federal and state agencies.

The fact that the Front remains biologically and ecologically intact is a tribute to the area's ranchers and residents, who have long recognized what this unique and important landscape represents for ranching and wildlife. The project aims to ensure habitat for wildlife remains intact in perpetuity and, by doing so, strengthens the ranching heritage of the Rocky Mountain Front.

Conservation easements along the Rocky Mountain Front will help alleviate habitat fragmentation issues. Key biological linkages will facilitate wildlife movement and provide for wildlife habitat requirements. The potential for human-wildlife conflicts will be greatly reduced.

Compatible agricultural practices such as livestock grazing or haying will continue, while sodbusting (breaking of native rangeland) will be prohibited. Easements will maximize the connectivity with other protected grasslands and decrease the negative impacts of habitat fragmentation on grassland birds (Owens and Myers 1972).

### ***WATER RESOURCES***

Water resources on the up to 125,000 acres of additional conservation easements will be protected from increased nonpoint source pollution from residential subdivision, commercial development, and draining of wetlands, all of which are prohibited under the easement project.

The landowner will continue to own and control water rights.

## EFFECTS ON THE SOCIOECONOMIC ENVIRONMENT

Landownership and land use, the value of intact ecosystems, oil and gas explorations and development, wind energy development, public use, and economic effects on the socioeconomic environment are discussed in the following section.

### **LANDOWNERSHIP AND LAND USE**

The expanded easement project will enhance the protection of trust resources through conservation of wildlife habitat, and protection of land from surface disturbance or development.

The project will affect location and distribution, but not rate or density, of human population growth. Ongoing, traditional agricultural uses such as livestock grazing will allow compatible ranching to continue. This project will maintain open space on a large landscape scale, thereby preserving the rural lifestyle of the area.

Preventing subdivision and development could decrease future tax revenues in a defined market area. However, open space could actually provide a net savings to local governments when compared to the revenues generated and costs of services associated with residential development (Haggerty 1996).

Positive effects may occur from increased public wildlife viewing, fishing, and hunting opportunities. Open space also may enhance property values on adjoining lands as people begin to seek out undeveloped lands in the future.

The purchase of an easement will not result in a transfer of land title and, therefore, the property taxes paid by the landowner to the county are not affected. No changes to the tax base are anticipated. The land remains under private ownership.

The easement expansion project will have no effect on tribal jurisdiction or tribal rights because it is outside of reservation land.

### **VALUE OF INTACT ECOSYSTEMS**

Humans influence every ecosystem on earth, leading to impairment of natural ecosystem structure and function (MEA 2005). Converting native land to row crop agriculture, suppressing fire, diverting water flow, increasing nutrient and toxic pollution, altering global precipitation patterns and gas concentration, and homogenizing and lowering global biodiversity are a few of the ways humans have altered ecosystems. North American forests, savannas, and grasslands have experienced substantial losses, whereas woody savanna, shrubland, and desert areas have expanded because of desertification and

woody expansion into grasslands (Wali et al. 2002), inevitably leading to changes in ecosystem function (Dodds et al. 2008).

The MNHP has rated the Front as one of the most significant natural landscapes in the state, a tribute to its intact ecological systems, expansive wetlands, and diverse native fauna and flora, including a concentration of rare species.

Conserving native land cover is an important component of maintaining ecosystem structure and function. Under the expansion project, native forest habitats will remain intact, continuing to provide ecosystem goods and services to landowners and local communities. Ecosystem services include: soil erosion control, water supply, biodiversity, and carbon sequestration. Forested ecoregions (eastern temperate, western mountain, and west coast marine) have less than 5% of native area remaining. The expansion project will help protect valuable ecosystem services (see figure 4). Furthermore, it will prevent the prohibitively high cost of restoration.

### **OIL AND GAS EXPLORATION AND DEVELOPMENT**

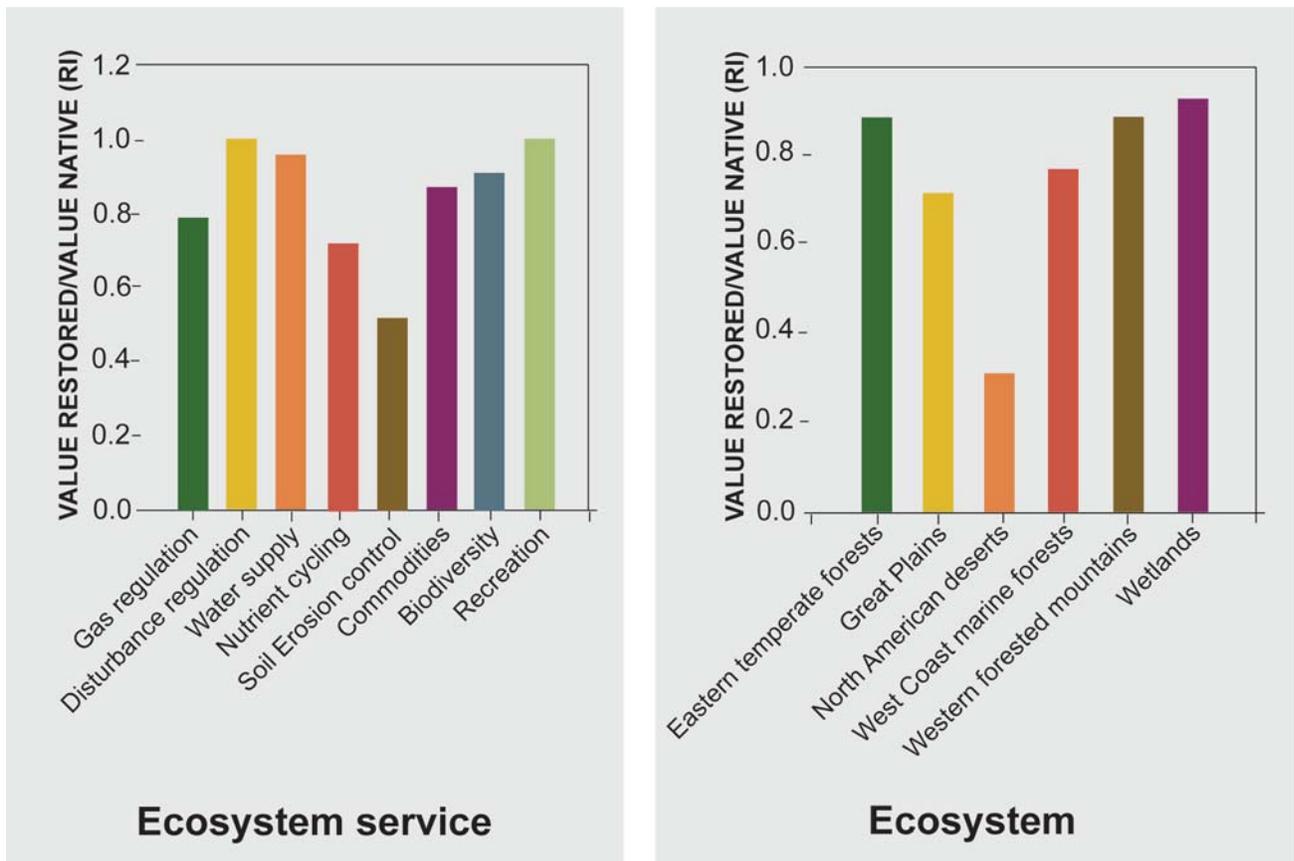
The easement expansion project will not preclude oil and gas exploration or development on private land. Typically, conservation easements do not affect subsurface estates (oil and gas deposits) because the Service only acquires rights associated with surface ownership. In many places where the subsurface estate has been severed from surface ownership, including those in the Rocky Mountain Front, the landowner does not own the subsurface rights; this means that the easement that the Service acquires from the landowner is junior to the subsurface rights.

In instances where a landowner owns both the surface and the subsurface estate, the Service will treat oil and gas development as a permitted use and provide for such development in the easement document. Easements will contain reasonable surface stipulations for such actions as revegetation of disturbed areas, access, and site reclamation.

Easements will not be acquired on federal lands where the BLM administers the oil and gas leasing program. The BLM program is concentrated on public lands, whereas the Service's conservation easements are concentrated on private lands.

### **WIND ENERGY DEVELOPMENT**

Conservation easements purchased from willing sellers on private land will prevent the development of commercial wind resources on those lands. The easement expansion project will enhance the protection of an intact ecosystem through conservation of wildlife habitat and protection from surface disturbance or development of wind



**Figure 4. Relative native and restored benefits of ecosystem goods and services.**

*Note: The relative value, RI, is determined as the ratio of estimated benefits derived from native and restored acreages per year. (Source: Dodds et al. 2008)*

energy infrastructure while providing some financial compensation to landowners through the sale of the easements.

The expansion project will affect only lands on which the Service has acquired a conservation easement. Location and distribution, and sales by willing sellers of wind energy development on adjacent lands without Service conservation easements will not be restricted by the Service. This expansion project will maintain open space on a large landscape scale, thereby preserving the rural lifestyle of the area.

### **PUBLIC USE**

Conservation easements purchased on private tracts will not change the landowner's right to manage public access to their property.

Under the expanded easement project, private landowners will continue to retain full control over their property rights, including allowing or restricting hunting and fishing on their lands. This is different from the MFWP's block management program, where participating landowners are paid to provide hunter access to their private lands.

### **ECONOMIC IMPACTS**

Increases in employment, annual operating expenditures, and easement purchases will contribute to the economic activity that the Benton Lake National Wildlife Refuge Complex generates in the project area. The socioeconomic impact of visitor expenditure is undetermined, as historical public visitor data at conservation areas is not available and visitor increases due to public awareness of conservation activities is difficult to quantify.

According to Service staff, new employment associated with Rocky Mountain Front CA will increase by 1.67 full-time equivalents (FTEs) to a total of 5.97 FTEs. New employee salaries total \$91,518, or an average of approximately \$54,801 per new employee. Assuming employees spend 79 percent of their earnings locally, the direct socioeconomic impacts of increased employment at the Rocky Mountain Front CA is \$72,299 annually.

The direct economic impacts of easement acquisitions are more difficult to attribute as it is less obvious where landowners may spend this income. In the Rocky Mountain Front CA, easements are worth an estimated \$48,875,000.

Approximately \$29,365 in operating expenditures associated with landowner management, employee training, and travel expenses will be added. These funds are spent on local goods and services and therefore directly impact the economy in the study area. Table 1 presents a summary of annual operating costs and salaries associated with the economic impacts.

**Table 1. Summary of annual operating costs and salaries associated with the economic impacts in the Rocky Mountain Front Conservation Area expansion.**

	<i>Current Impacts</i>	<i>Conservation Area Expansion Impacts</i>
Salaries	\$119,981	\$192,280
Operations	\$ 3,076	\$ 32,441
Total Impacts	\$123,057	\$224,721
Increase above baseline	\$101,664	

As shown above, the total direct economic impacts related to the Rocky Mountain Front CA expansion is estimated at \$224,721, an increase of \$101,664 above baseline impacts.

## UNAVOIDABLE ADVERSE IMPACTS

No direct or indirect unavoidable adverse impacts to the environment will result from the easement expansion project, and it will not result in unavoidable adverse impacts on the physical or biological environment. The expansion of the conservation area boundary will not, by itself, affect any aspect of landownership or values.

## IRREVERSIBLE AND IRRETRIEVABLE COMMITMENTS OF RESOURCES

There will not be any irreversible or irretrievable commitments of resources associated with expanding the conservation easement project, as lands will only be acquired as funding is available. Once easements are acquired, irreversible and irretrievable commitments of funds to protect these lands (such as expenditure for fuel and staff for monitoring) will exist.

## SHORT-TERM USE VERSUS LONG-TERM PRODUCTIVITY

The conservation easement expansion project will maintain the long term biological productivity of the grassland, riparian, forest, and tundra ecosystems; including the increased protection of endangered and threatened species and the protection of biological diversity by preserving a large, intact, functioning

system. The nation will gain the protection of species dependent on these habitats for future generations of Americans.

## CUMULATIVE IMPACTS

Cumulative impacts are defined by National Environmental Policy Act (NEPA) policy as the impacts on the environment which result from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (federal or non-federal) or person undertakes such other actions (40 CFR § 1508.7).

This section describes the cumulative impacts that may result from the combination of expected actions of the expansion project, together with other biological and socioeconomic conditions, events, and developments.

## PAST ACTIONS

The project area lies adjacent to and includes a large complex of federal, state, and private conservation lands that serve as anchors or core areas for numerous trust species. These include the 1.5 million-acre Bob Marshall Wilderness Complex; three state wildlife management areas (Sun River, Ear Mountain, and Blackleaf wildlife management areas totaling 34,000 acres); The Nature Conservancy's Pine Butte Swamp Preserve (13,000 acres); two Bureau of Land Management areas of critical environmental concern (11,500 acres); two Bureau of Reclamation resource management areas (formerly Pishkun and Willow Creek national wildlife refuges totaling 9,000 acres); and the Boone and Crockett Club's Theodore Roosevelt Memorial Ranch (6,055 acres). In addition, nearly 100,000 acres of private land are already protected with perpetual conservation easements held by TNC and the Montana Land Reliance.

The Service has been acquiring conservation easements on properties with significant wetland habitat under the SWAP. To date, over 21,000 acres have been protected through the Migratory Bird Conservation Fund. LWCF will continue to be used to target acquisition of easements on properties that do not meet the wetland requirements of the SWAP.

## PRESENT ACTIONS

Within the CoCE, areas that were not suitable for homesteading and settlement were designated as federal lands. Settlers selected the milder, more fertile valleys. These areas are currently under the greatest developmental pressure. Because of these threats and pressures, the Service has defined three project areas within the CoCE to concentrate strategic acquisition to (1) maintain

biological diversity related to wildlife values; (2) link together existing protected areas; (3) preserve existing wildlife corridors; and (4) protect the large, intact, functioning ecosystem, while maintaining the rural character and agricultural lifestyle of western Montana. The Land and Water Conservation Fund and potential conservation partners will provide funding for these efforts. Table 2 shows the acquisition acreage, type of acquisition tool, focal species, and key partners for each of the three project areas, Blackfoot Valley Conservation Area expansion, Rocky Mountain Front Conservation Area expansion, and Swan Valley Conservation Area.

**Economic Effects of Present Actions**

Combining the effects of Service employment (\$228,177) and operations (\$22,123), the total baseline economic activity generated by the conservation areas in the twelve-county region is approximately \$250,300 annually.

Implementation of all three conservation areas (two expansions, one new area), as described in Table 2, will increase total operational expenditures by \$64,423. A total of 5.01 new FTE employees will be hired at a combined salary of \$274,554. Assuming

**Table 2. Summary of U.S. Fish and Wildlife Service projects for the Crown of the Continent ecosystem.**

<i>Project Area</i>	<i>Proposed Project Area</i>	<i>Potential New Acreage</i>	<i>Type of Acquisition Tool</i>	<i>Focal Species</i>	<i>Key Partners</i>
Rocky Mountain Front Conservation Area expansion	Expand existing area from 527,000 acres to 918,000 acres	125,000 acres	Conservation easement	Grizzly bear, migratory birds, long-billed curlew, Sprague’s pipit, McCown’s longspur	Private landowners, The Nature Conservancy, The Conservation Fund, Richard King Mellon Foundation
Blackfoot Valley Conservation Area expansion	Expand existing area from 165,000 acres to 824,024 acres	80,000 acres	Conservation easement	Grizzly bear, Canada lynx, bull trout, westslope cutthroat trout, migratory birds	Private landowners, The Blackfoot Challenge, The Nature Conservancy, Trout Unlimited
Swan Valley Conservation Area	New proposed area of 187,400 acres	11,000 acres	Conservation easement and limited fee title (less than 1,000 acres)	Grizzly bear, Canada lynx, bull trout, migratory birds: Lewis’ woodpecker, black tern, trumpeter swan, olive-sided flycatcher	Private landowners, The Nature Conservancy, Trust for Public Lands, Swan Valley Ecosystem Center, Plum Creek Timber Company, Vital Ground, Trout Unlimited, Northwest Connections



USFWS

*McCown’s longspur.*

79 percent of salaries are spent within the impact region, there will be an additional \$216,897 in direct economic impacts to the study area. The increased operational (\$64,423) and employment (\$216,897) expenditures added to baseline direct economic activity (\$250,300) yields a total direct economic impact of \$531,620 annually, which is an increase of \$281,320 from current baseline impacts.

**Other Present Actions by the Service**

In the past 5 years, TNC has provided \$2.1 million in private funding to the Service’s easement program within the project area. In addition, this partnership recently expanded to include The Conservation Fund and the Richard King Mellon Foundation, both of whom have committed to provide an additional \$15 million dollars in private funding for the purchase of conservation easements along the Front.

The Partners for Fish and Wildlife (PFW) Program continues to develop strong partnerships with private landowners along the Front through the implementation of habitat restoration and management projects on private lands. Strong partnerships have also developed with a variety of agencies and organizations jointly involved to accomplish similar objectives through restoration and protection projects. Habitat restoration efforts currently focus on wetlands, streams, native grasslands, and riparian areas. Typical projects include wetland restoration, riparian corridor enhancement (revegetation), instream restoration, and the development of grazing systems to rejuvenate native grasslands.

Several grant programs administered by the Division of Ecological Services are available to tribes, states, and individual private landowners, for projects that benefit federally listed, proposed, or candidate species. The Front provides an opportunity for the Service to collaborate with many public and private partners to conserve endangered species.

Conservation easements will protect and maintain the integrity of the Front's unique complex of wetland, grassland, and riparian habitats and their diverse complement of fish, wildlife, and plants. These easements will also provide a vital link or protected habitat corridor between the existing protected "biological anchors" including three state wildlife management areas, Pine Butte Swamp Preserve, Theodore Roosevelt Memorial Ranch, Bureau of Reclamation Resource Management Areas, the adjacent Lewis and Clark National Forest, Bob Marshall Wilderness Area, and Bureau of Land Management Areas of Critical Environmental Concern lands.

The existing easement project will have long term positive impacts on wildlife habitat and will result in the long term conservation of migratory birds, threatened and endangered species, native plants, and the overall biological diversity of the Rocky Mountain Front.

### ***REASONABLY FORESEEABLE FUTURE ACTIONS***

Based on past conservation successes within the Crown of the Continent ecosystem, the Service anticipates nonprofit organizations will continue to promote and secure conservation easements on additional private lands. It is likely that the bulk of the nonprofit work involving conservation easements will be in partnership with the Service's goal of protecting 216,000 additional acres (Rocky Mountain Front CA expansion, Blackfoot Valley CA expansion, and Swan Valley CA) within the Crown of the Continent ecosystem.

### **Lewis and Clark County Open Space Bond**

Lewis and Clark County has established an open space bond with over \$5,000,000 dedicated to protecting private lands while keeping it in private ownership and on the tax rolls. Future partnerships to protect private land and their associated fish and wildlife resources are expected to occur with the Service under this initiative.

### **Coalition to Protect the Rocky Mountain Front**

On September 16, 2009, The Coalition to Protect the Rocky Mountain Front unveiled a draft plan proposing a new comprehensive approach for managing public lands along the Rocky Mountain Front. The proposal, termed the Rocky Mountain Front Heritage Act, was developed through 3 years of meetings and negotiations with ranchers, sportsmen, private landowners, weed experts, and conservation groups. It encompasses roughly 400,000 acres of public land south of Birch Creek/Swift Reservoir.

The Rocky Mountain Front Heritage Act is a Montana-made proposal that would give local communities and land managers more tools to control the spread of noxious weeds. The coalition goals are to create legislative options that could buffer ranchers and wildlife from the impacts of noxious weeds, safeguard traditional access to renowned hunting and fishing areas, and help protect a way of life. The grassroots proposal will eventually include congressional direction and tools to help control noxious weeds, create a unique landscape protection designation for the majority of the public lands called a "Conservation Management Area," as well as make common-sense additions to the Bob Marshall Wilderness complex. The noxious weed management area includes 434,237 acres; the conservation management area includes 218,327 acres; and the wilderness additions include 85,910 acres. This conservation initiative will further advance conservation along the Rocky Mountain Front (Coalition to Protect the Rocky Mountain Front 2009).

### **The Conservation Fund—Rocky Mountain Front Initiative**

The Conservation Fund is partnering with TNC, the Service, and the state of Montana on a 5-year effort to protect 220,000 acres of wildlife habitat along the Rocky Mountain Front. The goal is to maintain the area's ranching heritage. In its first year, four projects protected 21,274 acres of critical migratory corridors for grizzly bears and other species. The Conservation Fund is planning future conservation protection for an additional 198,726 acres over the next 4 years (Conservation Fund 2010).