6 Draft Land Protection Plan

The land protection plan (LPP) provides a general description of the operations and management of the expanded Rocky Mountain Front Conservation Area, as outlined in alternative B, the proposed alternative, of the Rocky Mountain Front CA expansion environmental assessment. The U.S. Fish and Wildlife Service developed this LPP during the planning process to provide local landowners, governmental agencies, and the interested public with a general understanding of the anticipated management approaches for the proposed easement program. The purpose of the LPP is to present a broad overview of the Service's proposed management approach to wildlife and associated habitats, public uses, interagency coordination, public outreach and other operational needs.

PROJECT DESCRIPTION

The Rocky Mountain Front Conservation Area was approved as a unit of the National Wildlife Refuge System in 2005 and is a landscape conservation strategy to protect a unique, highly diverse and largely unfragmented ecosystem in north central Montana. The Front encompasses the massive ecotone formed by the intersection of the western edge of the Northern Great Plains and the Rocky Mountains. Mid-grass prairie, foothills prairie, montane forest, and alpine tundra occur in close juxtaposition, resulting in high species and community diversity.

The expansion encompasses a project area totaling approximately 918,000 acres along the eastern edge of the Crown of the Continent ecosystem and is centered 65 miles northwest of Great Falls, Montana. Lying in the shadow of the rugged Continental Divide, Bob Marshall Wilderness Area and Lewis and Clark National Forest marks its western boundary. The 1.5 million-acre Blackfeet Indian Reservation borders the project to the north and the eastern boundary is dictated by the distribution of fescue grasslands and critical riparian areas. The southern boundary falls approximately along the watershed of the south fork of the Dearborn River. The Service plans to expand the authorized acquisition goal by an additional 125,000 acres, resulting in the approval to acquire conservation easements on up to 295,000 acres of private land within the expanded project boundary.

STRATEGIC HABITAT CONSERVATION

Strategic Habitat Conservation (SHC) is a means of applying adaptive management across large landscapes. 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 Service 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 (HAPET) 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 (NEAT); 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 develop and 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, including the Rocky Mountain Front Conservation Area.

The preparation of this project area land protection plan addresses the four key elements of SHC: planning, design, delivery, and monitoring and research (see figure 6).

Biological Planning

Among conservation biologists, the Front is ranked in the top 1 percent of wildlife habitat remaining in the United States (The Nature Conservancy 1999).

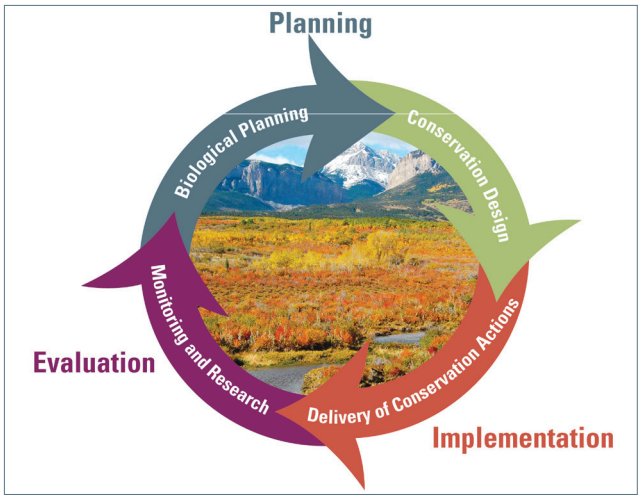


Figure 6. The elements of strategic habitat conservation.

Virtually every wildlife species found in this area upon the arrival of Lewis and Clark in 1806, with the exception of free ranging bison, remains today in relatively stable or increasing numbers. In addition, it is the only remaining area in the continental United States with a complete, intact assemblage of large mammalian carnivores, including the grizzly bear, gray wolf, wolverine, pine martin, and Canada lynx.

Three federally listed mammals would benefit from the proposed habitat protection. A stable population of grizzly bears occurs throughout the area. Gray wolves have migrated back into the Front from the Canadian Rockies and several packs have established home ranges west of the project boundary in Bob Marshall Wilderness. The Front also supports one of the largest populations of Canada lynx in the lower 48 states.

Riparian areas, wetland and large expanses of native prairie provide important habitats for migratory birds. There are approximately 240 species of birds that use the Front including species of concern such as the harlequin duck, trumpeter swan, ferruginous hawks, peregrine falcons, chestnut-collared longspurs, Sprague's pipits and long-billed curlews.

Focal Species

In order to strategically conserve habitat along the Front, the Service chose the grizzly bear as a key focal species. Focusing on grizzly bears is likely to capture the habitat needs of several of the other key trust species. The Service is currently studying how waterfowl use wetland and upland habitat along the Front, and when that study is complete it will be added to the grizzly bear information to update the conservation strategy.

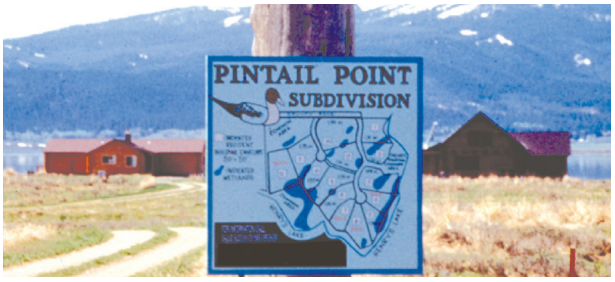
Population Objectives for Grizzly Bear

The Rocky Mountain Front CA is part of the Northern Continental Divide Ecosystem 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. For the NCDE, ten females with cubs inside Glacier National Park 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.

Limiting Factors

Increasing urbanization causing increased fragmentation of habitat from housing developments and associated road development is a major threat to the Rocky Mountain Front and the entire CoCE. 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 historic 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 sites (Lolo National Forest 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 loss of population and genetic



USFWS

Subdivision development impacts habitat connectivity.

viability. More than 17% of the NCDE is private land and as 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 in person, 11 June 2008). Minimizing attractants on private lands and limiting subdivision are keys to reducing this threat to grizzly bears.

Key Habitats for Protection

In order to identify which habitats along the Front are highest priority for grizzly bears, the Service used a model developed specifically for the eastern side of the NCDE recovery zone by a multi-agency working group. The NCDE model uses logistic regression in calculating seasonal resource selections functions for grizzly bear habitat (Mace et al. 1999). The model considers several characteristics of habitat, disturbance/human activity and telemetry locations of grizzly bears.

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).

Formulation of Habitat Objectives

Currently, there are approximately 600,000 acres of unencumbered private land in the proposed Rocky Mountain Front CA. With the current levels of development and fragmentation along the Front, grizzly bear populations appear stable; however, the pressure of human-cause mortality on grizzly bears is higher than acceptable for recovery across the NCDE. How much more fragmentation or development could occur without affecting population stability or significantly effect grizzly bear mortality is unknown. Given that conserving all of the remaining private land with easements to prevent additional development is not a reasonable or desired goal, especially around the existing population centers of Augusta, Choteau, Dupuyer, and Bynum, the Service has set a goal to protect 295,000 acres of existing private lands. Long-term monitoring of grizzly bears will be conducted and the goal of 295,000 acres will be periodically re-evaluated.

Buffer areas will be maintained around communities to provide rural communities the ability to meet their community development goals and objectives.

Priority Areas

The Service is proposing to expand the Rocky Mountain Front 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, therefore the priorities for the Rocky Mountain Front CA Land Protection Plan are based on the best available data on existing private ownerships.

The Service and its partners recognize that there is tremendous opportunity to expand existing blocks of conservation lands within the project area. This includes state or federal fee-title ownership and private lands already under conservation easement. This also includes conservation-oriented, nongovernmental organization ownership such as The Nature Conservancy, and the Boone and Crockett Club.

The project area has been split into three priority zones (figure 7) for acquiring conservation easements using the following criteria:

- biological significance to grizzly bears (as umbrella species for other species)
- connectivity to other protected lands

Priority 1 includes areas within the project with the highest quality grizzly bear habitat and the greatest opportunity for connectivity. The eastern boundary was based generally on the eastern edge of the NCDE grizzly model. Key anchors, which can be expanded upon to increase connectivity, are the state wildlife management areas, TNC lands, Lewis and Clark National Forest, Boone and Crockett lands, and private lands with existing conservation easements.

Priority 2 includes other important grizzly bear habitat and some opportunities for connectivity. It also includes areas where other funding sources are available to purchase conservation easements.

Priority 3 includes the remaining areas within the project area. This zone is part of the Front ecoregion, and contains large continuous blocks of native prairie. Priority 3 also includes the opportunity to protect

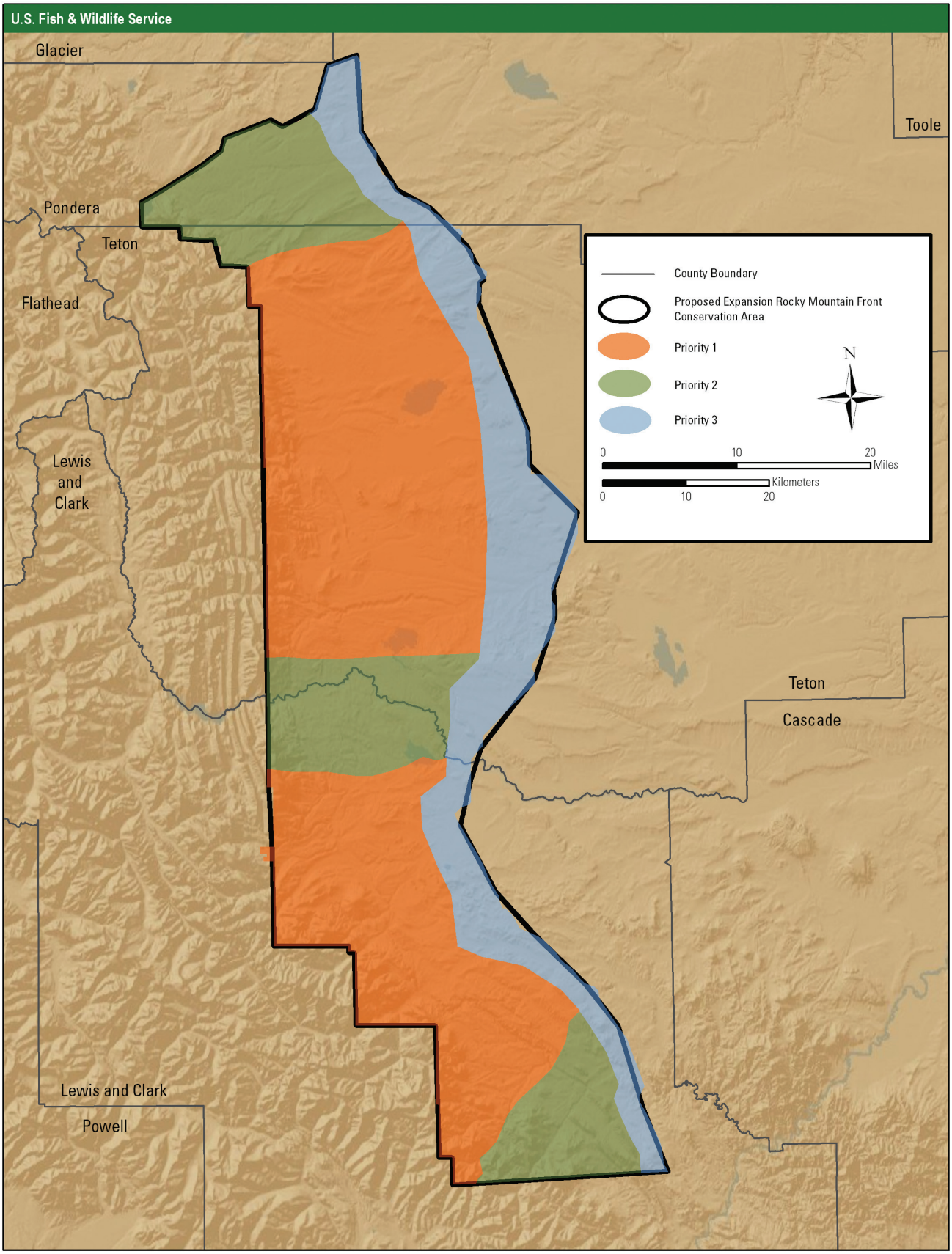


Figure 7. Rocky Mountain Front Conservation Area expansion priorities.

important riparian corridors for grizzlies across the entire project area.

These priority areas will be regularly reevaluated and may change as data on the habitat needs and limiting factors for focal species in the Rocky Mountain Front CA become available. The Monitoring and Research section that follows provides further details on this feedback loop.

Conservation Delivery

On approval of a project expansion, habitat protection would 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.

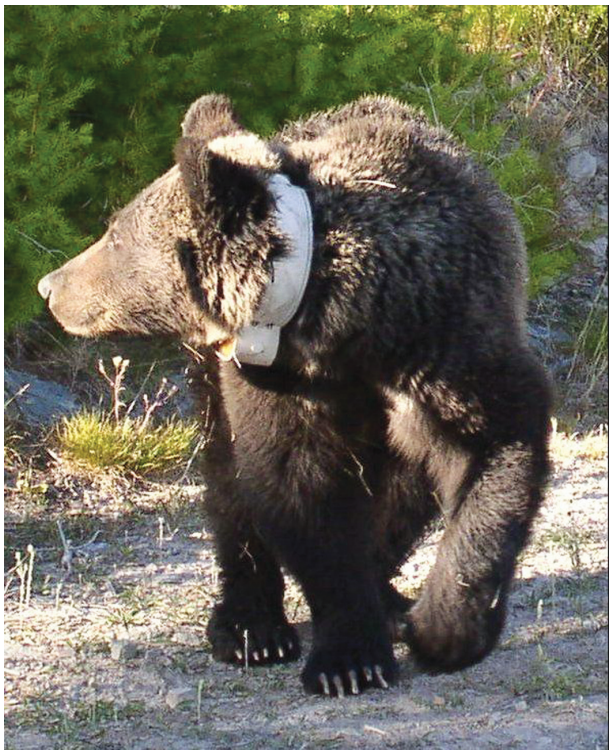
The acquisition authority for the proposed action is the Fish and Wildlife Act of 1956 (16 U.S.C. 742 a-742j). The federal money used to acquire conservation easements from the Land and Water Conservation Fund are derived primarily from oil and gas leases on the outer continental shelf, motorboat fuel 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 non profit 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, and landowner interest in the program and size of the parcel. The purchase of conservation easements would occur with willing sellers only and be subject to available funding.

Monitoring and Research

As the Rocky Mountain Front Conservation Area project develops and conservation easements are purchased, grizzly bears will continued to be monitored. The U.S. Fish and Wildlife Service, Montana Fish, Wildlife and Parks and U.S. Geological Survey (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, MFWP will 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 will assist MFWP with bear population size estimation, distribution, and population trends (USGS 2004).

Grizzly bears and bull trout have been identified as a focal species for the Great Northern Landscape Conservation Cooperative. 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 population trends and habitat use will be used to evaluate and refine conservation efforts on the ground within the GNLCC.



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Collared grizzly bear movement data is used to assess populations.

COORDINATION

The proposed expansion of the Rocky Mountain Front Conservation Area has been discussed with landowners, conservation organizations, government officials, and other interested groups and individuals. The proposal and associated EA address the protection of native habitats, primarily through acquisition of conservation easements by the Service under the direction of the National Wildlife Refuge System.

An open house public meeting was held in Choteau, Montana on May 17, 2010. Public comments were taken to identify issues to be analyzed for the proposed project.

Approximately twenty-nine landowners, citizens, and elected representatives attended and most expressed positive support for the project.

In addition, the Service's field staff has contacted local government officials, other public agencies, sportsman and woman groups, and conservation groups, all of which have expressed an interest in and a desire to protect the Front from the pressures brought about by rural subdivision.

SOCIAL AND CULTURAL CONSIDERATIONS

The economy of the Front is primarily agrarian and cattle ranches dominate the private lands within the project area. Ownerships are relatively large in size (2,000 to 25,000 acre blocks) which helps maintain this intact landscape.

The human population is sparse and towns are widely scattered. Private lands are used for hunting, with elk-hunting season bringing the most people to the Front. A seasonal influx of tourists is attracted to the Front for opportunities to bird watch, mountain-bike, horseback ride, backpack, camp, canoe, fish, and view archeological and paleontological resources.

Choteau and Augusta are 'gateway' communities for recreational activities on the Lewis and Clark National Forest, Bob Marshall and Scapegoat wildernesses, and Glacier National Park.

Historically, residents and county governments have been concerned about the amount of taxes paid to the counties when land protection programs such as this occur. Because this project is a conservation easement program, the land enrolled does not change hands and taxes paid to the counties by the landowner are not affected.

Over the short-term, money paid by the Service for a conservation easement becomes another source of income for the landowner, with a portion of those dollars likely to be spent locally in the region. In addition, development of rural landscapes often leads to increased demand for services and higher costs to rural counties. These costs likely would not be incurred if the rural landscape were to remain intact.

In addition, the use of conservation easements precludes the necessity for county zoning within the program area. Proximity of protected lands also tends to enhance the property value of adjoining lands.

The ranchers' livelihood depends on natural resources (grass, water, and open space). The key to protecting the Front lies primarily in sustaining the current pattern of ranching and low-density use. The easement program is not expected to cause any significant changes to the socioeconomic climate along the Front, but rather, would help sustain the current condition.