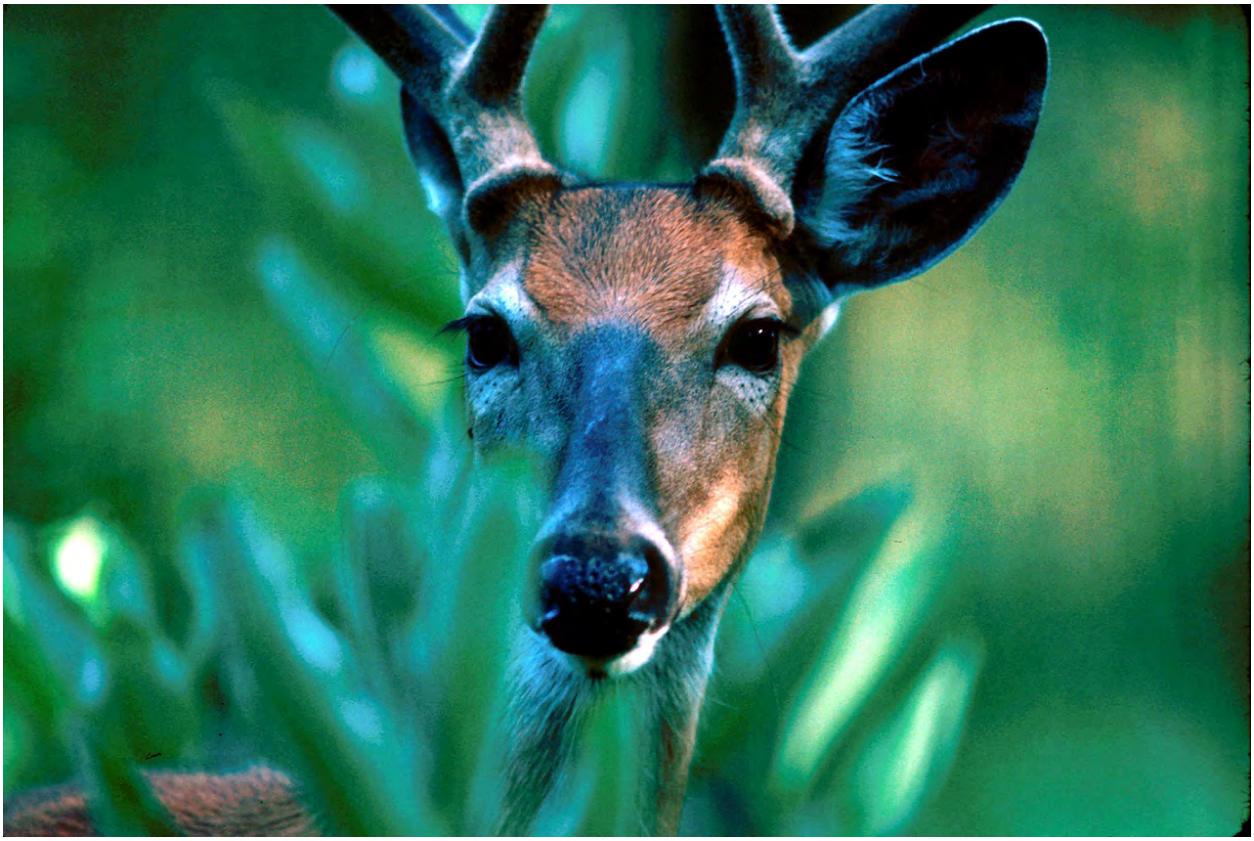
Red River
Wildlife Management Area



Management Plan
2014

Clearwater Region

Red River
Wildlife Management Area

2014 – 2023 Management Plan
December 2014

Idaho Department of Fish and Game
Clearwater Region
3316 16th Street
Lewiston, Idaho 83501

Prepared By:
Clay Hayes
Regional Habitat Biologist

Table of Contents

List of Tables

List of Figures

Executive Summary

Idaho Department of Fish and Game (Department) manages 32 Wildlife Management Areas (WMAs). Researchers from the University of Idaho and The Nature Conservancy evaluated the value of Idaho's WMAs to wildlife. They found the WMA network, created to support game species, "also conserves the full range of Idaho's wildlife and other ecological features" (Karl et al. 2005). Surveys and monitoring work conducted by Department biologists on Clearwater Region WMAs confirms their value to big game, nongame, and many at-risk species identified in Idaho's State Wildlife Action Plan. In many cases, WMAs provide the principal habitat for at-risk species in the Clearwater Region.

Wildlife Management Areas often abut other protected lands such as National Forests, Bureau of Land Management lands, or private lands protected by conservation easement. Due to the wildlife-focused management, WMAs often serve as highly productive core areas of the landscapes in which they exist. Management of these areas involves a combination of restoring and maintaining important natural habitats to contribute to landscape-level habitat function (such as sage-steppe and slough wetlands), and creating hyper-productive habitats (food plots, impounded wetlands) to enhance the carrying capacity for selected wildlife species.

Wildlife Management Area management plans strive to present management that upholds these values. They may also be bounded by legislative mandates, Department species plans, the State Wildlife Action Plan, national wildlife conservation strategies and plans (federal and non-government organizations), and especially the Department's own strategic plan, *The Compass*. Goals, objectives, and strategies have been developed to be as consistent as possible with all these documents and to capture the broader conservation already provided by WMAs and to ensure that these values are protected and enhanced.

The Department's Clearwater Region manages two WMAs that collectively comprise nearly 125,000 acres of public land. The focus of WMA management is to maintain highly functional wildlife habitat and provide wildlife-based recreation. Red River WMA, in Idaho County, comprises 314 acres and serves as critical spring and calving habitat for elk (*Cervus elphasis*) and spawning habitat for Chinook salmon (*Oncorhynchus tshawytscha*). Craig Mountain WMA, in Nez Perce and Lewis counties, comprises 124,224 acres of public land south of Lewiston Idaho, between the Snake and Salmon rivers, and provides critical habitat for many game, nongame, and at-risk species.

Examples of at-risk species partially dependent on the region's WMAs include northern leopard frog, anadromous fish, bighorn sheep, and mountain quail, etc.

All regional WMAs are funded through a combination of hunting license dollars, appropriations from federal excise taxes derived from the sale of ammunition, and funding provided by the Bonneville Power Administration to mitigate habitat loss from construction of various dams within the region and the Columbia River system. Hunters pay a large portion of the management tab, and they are rewarded with habitat management areas that sustain many of the

region's big game herds and provide consistent upland game bird production and hunting opportunities. Non-hunters, who value the varied benefits provided by the Clearwater Region's WMAs, also benefit from the broad ranging conservation values associated with Department WMAs.

The 314 acre Red River WMA (RRWMA) is situated south of Elk City, along the Red River in Idaho County. The property was purchased in 1993 for the following reasons: 1) The meadow provides calving habitat for up to 50 cow elk each year, and 100-200 elk use the meadow for foraging during spring green up. Protection and enhancement of this elk habitat helps to fulfill the Department goals concerning big game management; 2) The Red River runs through the property and contains spawning habitat for spring Chinook salmon; and 3) A large ranch house is located on the property and can be used as a meeting facility, work cabin, and center for environmental education. These three primary reasons for purchasing the property helped to guide development of the management direction identified within this plan.

The RRWMA provides a unique opportunity for wildlife-based education and viewing. In the spring calving season, elk can be viewed from both the ranch house and viewing platform on the east side of the meadow providing an excellent watchable wildlife opportunity. Additionally, the Department annually sponsors youth educational activities centered around Chinook spawning in late summer. A public use survey conducted in 2012 indicated wildlife viewing and being outside as major drivers in RRWMA use. Although these two activities were very popular on the WMA, hunting was most often cited as the primary reason for visiting the WMA. See Appendix IV for a public use summary.

This document provides direction in the form of Priorities, Conservation Targets, Management Direction, and Public Use. The Priorities for RRWMA were determined through a combination of public and staff input (Appendix IV), and Department statewide priorities identified in "*The Compass.*" A draft version of the RRWMA Management Priorities, Management Directions, Performance Targets, and Strategies was offered for public inspection and comment in March 2013. No additional comments were received.

Conservation Targets, a sub-set of species and communities, were selected to represent the biodiversity of RRWMA for management and conservation; while still reflecting the management priorities of RRWMA.

This plan will serve as a guide for current and future managers in planning where to direct efforts and resources for maximum wildlife benefit, public enjoyment, and efficient operation. As new information and technology becomes available, and as more property is acquired, strategies may be modified to most effectively reach the goals and objectives in this plan. All goals, objectives, and strategies are dependent on adequate funding, personnel, and public support.

Introduction

This management plan is designed to provide broad guidance for the long-term management of Red River Wildlife Management Area (RRWMA). It replaces an earlier management plan written in 1999 and this updated plan was completed during 2012 and 2013 with extensive public input. This plan is tiered off other Department plans and policies summarized below:

- State Wildlife Action Plan (2005)
- Statewide management plans for:
  - waterfowl (1991)
  - upland game (1991)
  - mule deer (2010)
  - white-tailed deer (2005)
  - elk (2014)
  - moose (1991)
  - furbearer (1991)
- Statewide big game depredation management plan (1988)
- Conservation Plan for the Greater Sage-grouse in Idaho (2006)
- Policy for Avian and Mammalian Predation Management (2000)

Department Mission

All wildlife, including all wild animals, wild birds, and fish, within the state of Idaho, is hereby declared to be the property of the state of Idaho. It shall be preserved, protected, perpetuated, and managed. It shall be only captured or taken at such times or places, under such conditions, or by such means, or in such manner, as will preserve, protect, and perpetuate such wildlife, and provide for the citizens of this state and, as by law permitted to others, continued supplies of such wildlife for hunting, fishing and trapping (Idaho Code Section 36-103).

Department Strategic Goals

The Department's 2005 Strategic Plan, *The Compass,* is the primary guiding document for all other Department plans and outlines four goals for the Department:

- Fish, Wildlife and Habitat: Sustain Idaho's fish and wildlife and the habitats upon which they depend.
- Fish and Wildlife Recreation: Meet the demand for fish and wildlife recreation.
- Working With Others: Improve public understanding of and involvement in fish and wildlife management.
- Management Support: Enhance the capacity of the Department to manage fish and wildlife and serve the public.

The 2014 Wildlife Management Area (WMA) plans describe the management direction for each of the 32 WMAs the Department manages to help accomplish these goals. The specific *Compass* objectives and strategies relevant to WMAs are included in Appendix I.

Statewide WMA Vision

Our WMAs are managed to provide and showcase important habitat for all wildlife and to offer high-quality, wildlife-based public recreation.

Red River WMA Vision

To protect and enhance fish and wildlife populations and their habitats, to mitigate for habitat losses associated with the development and operation of the Federal hydroelectric system in the Columbia River Basin, to provide for compatible recreational uses, and to provide a setting for natural resource education and research.

Modification of Plan

This plan provides broad, long-term management direction for RRWMA. It will be evaluated at least every five years to determine if adjustments are needed. The plan will be modified as needed to accommodate changing conditions and goals and to incorporate available advancements in management knowledge and techniques.

Other Considerations

All strategies proposed in this plan are bound by the contractual agreements between cooperating agencies, the mission of RRWMA, and all applicable Department species management plans and policies. Issues and strategies that are inconsistent with the mission were not considered. In addition, the implementation of all strategies will be subject to available funding, personnel, and safety considerations.

Area Description and Current Status

Red River WMA consists of 314 acres located approximately 15 miles southeast of Elk City, Idaho. The RRWMA is adjacent to the Nez Perce National Forest on the east and west, private cattle ranch on the north, and mixed ownership private property on the south that is grazed by cattle and horses. The RRWMA has 290 acres of mountain meadow, 20 acres of lodgepole pine (*Pinus contorta* var. *latifolia*), and 4 acres of quaking aspen (*Populus tremuloides*). Before the Department acquired ownership, the ranch was grazed by cattle since the early 1900s. The drier areas in the meadow provided one cutting of grass hay annually. Timber has been harvested on the private and U.S. Forest Service (USFS) lands surrounding the lower Red River Meadows for the past 30 years. The Frank Church River of No Return Wilderness Area and the Gospel Hump Wilderness Area are within a 45-minute drive of the WMA. Five miles upriver, the Department operates a spawning facility for Chinook salmon.

Average annual precipitation ranges from 30 to 40 inches per year, with snow contributing greater than 50 percent of the total. Snow accumulation is heavy, averaging from one to four feet in the meadow during the winter months.

Upper soil layers are deep, 24 to 60 inches, and typically include sandy, silt, and clay loams that overlie coarser gravel substrata (USFS Nez Perce National Forest 1988). Results of soil tests of the meadow area, conducted by the University of Idaho Analytical Sciences Laboratory and the Acme Analytical Laboratory, Vancouver, British Columbia, indicate that lower Red River Meadow soil fertility levels are adequate for riparian plant growth and that phytotoxic heavy metal concentrations (a possible legacy of historic mining in the watershed) are not present, based on total elemental analysis.

Physical improvements on the RRWMA consist mainly of buildings and fences. Buildings on the area consist of a large ranch house, a three-car garage, an apartment, a machine shed with horse stalls and a wood shop, one log cabin for storage, and one hay shed. Prior to 2012, there was also a caretaker house located south of the main ranch house. This has since been removed. Cedar rail fences surround the main buildings. There are five miles of four-strand barbed wire fence surrounding the property. The barbed wire fences along the north and south boundaries, where grazing pressure exists, are functional. The east and west boundary fences serve primarily to delineate the property boundary and to prevent motor vehicles from entering RRWMA. Before 1997, the water supply system for the ranch house and the caretaker house consisted of surface water collected into a holding tank on USFS property in Loon Creek. The water was gravity fed to both houses through PVC pipe and was not filtered. The Department drilled a well and holding tank to provide safe drinking water. The gravity fed system is still operable if needed. There are currently no roads or man-made trails on the area.

Water rights existed at the time of purchase for domestic use, grazing, and haying operations. In order to satisfy agreements and requirements stated in Chapter One, water rights for the RRWMA should be used to benefit fish and wildlife whenever possible. Additional information on inure, water rights, and land acquisition can be found in Appendix IX.

Natural Resources

There exists a high potential for restoring and protecting a wide variety of fish and wildlife resources (Appendix VII) on RRWMA. The Red River flows through the property and, since restoration of the stream channel, is used heavily as spawning habitat for Chinook salmon (Figure 1). The river also provides habitat for steelhead (*Oncorhynchus mykiss*), westslope cutthroat (*Oncorhynchus clarkii lewisi*) and bull trout (*Salvelinus confluentus*). Elk (*Cervus elaphus*), moose (*Alces alces*), and white-tailed deer (*Odocoileus virginianus*) graze in the meadow and utilize adjacent timbered edges for calving and fawning areas. From late-March to late-May, up to 200 elk can be seen in the meadow on the RRWMA. In late-May and early-June, as many as 50 elk cows use the meadow and surrounding timber for calving. A history of overgrazing and dredge mining in the entire meadow system of Red River has resulted in the loss of the willow/shrub component within the stream's riparian area. Woody riparian vegetation is vital for shading the stream channel and maintaining low stream temperatures for fish, maintaining bank stability, and providing habitat for bird species.

Numerous old oxbows and wet meadows on the RRWMA attract resident and migratory birds. Canada geese (*Branta canadensis*) and mallards (*Anus platyrhynchos*) nest in the meadow, and a variety of birds such as blue herons (*Ardea herodias*), various shorebirds, sandhill cranes (*Grus canadensis*), bald eagles (*Haliaeetus leucocephalus*), and osprey (*Pandion haliaetus*) migrate through the area. Northern goshawks (*Accipiter gentilis*) have been sighted along the timbered edges.

Three federally threatened species – wild steelhead trout, Chinook salmon, and bull trout – occur on RRWMA. Westslope cutthroat trout, which also occurs on RRWMA, is listed as a federal sensitive species. Red River WMA is within the proposed Experimental Area for the grizzly bear (*Ursus arctos*). No grizzly bear sightings have been made for several decades on RRWMA. The northern goshawk, a federal sensitive species, has been sighted on the WMA. Although no Pacific lamprey (*Lampetra tridentata*) have been observed on the WMA in recent years, the Red River historically provided important habitat for the species, which is federally endangered.

Several rare plants potentially occur on the WMA, but only one, Idaho barren strawberry (*Waldsteinia idahoensis*), has been documented. Along with Idaho barren strawberry, Pacific onion (*Allium validum*), plumed clover (*Trifolium plumosum*), and least moonwort (*Botrychium simplex*) occur in meadow habitats in the area, and could occur within the RRWMA. Case's corydalis (*Corydalis caseana* ssp. *hastata*) and candystick (*Allotropa virgata*) may occur in the forest bordering the meadow. No rare plant surveys have been completed on the WMA, therefore, limited information exists concerning these plants on RRWMA.

There are several small stands of lodgepole pine and quaking aspen located throughout RRWMA. Historically, ponderosa pine (*Pinus ponderosa*) was found on the area, especially along the eastern boundary. In the early 1900s, the major riparian shrub species were a variety of willows, including Booth's willow (*Salix boothi*), Geyer's willow (*Salix geyeriana*), and Drummond's willow (*Salix drummondii*). Dusky willow (*Salix melanopsis*) is believed to have been the most predominant species found on sand and gravel bars located near the edge of the

river. Other native shrubs that contributed to the diversity and structure of the woody vegetation included mountain alder (*Alnus incana*), red-osier dogwood (*Cornus sericea*), whiplash willow (*Salix lasiandra* ssp. *caudata*), black hawthorn (*Crataegus douglasii*), and black twinberry (*Lonicera involucrata*).

The many native grasses and sedges persisting today were certainly part of the original vegetation, but their original diversity and extent have been altered by the agricultural practices and the hydrologic changes that have occurred. Common native plants in wet meadows include a variety of sedges (especially *Carex aquatilis*, *C. nebrascensis*, *C. utriculata*), Baltic rush (*Juncus balticus*), panicled bulrush (*Scirpus microcarpus*), aster species (*Symphyotrichum* spp.), and lupine species (*Lupinus* spp.). Oatgrass (*Danthonia intermedia* and *D. californica*) are frequent native grasses in drier, mesic meadow habitat. Because the mesic and upland meadows were used for hay production, a high percentage of exotic grass species are present including redtop bentgrass (*Argrostis alba*), timothy (*Phleum pratense*), and Kentucky bluegrass (*Poa pratensis*). Common herbaceous plants growing on the drier meadow soils include a variety of mesic species such as Oregon yampah (*Perideridia oregana*), sheep sorrel (*Rumex acetosella*), Scotch bluebell (*Campanula rotundifolia*), prairie smoke (*Geum triflorum*), and yarrow (*Achillea millifolium*) (Brunsfeld et al.1996). Common camas (*Camassia quamash*), a plant having cultural significance to the Nez Perce Tribe (NPT), grows throughout the meadow and has increased in abundance since livestock grazing was excluded in 1994.

Several noxious and /or invasive weed species are established on RRWMA. Noxious weeds reduce the ability to maintain desirable native and non-native plant species and reduce the quality of habitat and productivity of many valuable wildlife species. The current management strategy will be to eliminate or control all noxious weeds on RRWMA. Because RRWMA is only 314 acres, elimination or control of noxious weeds will depend, in part, on land management activities of adjacent landowners. Spotted knapweed (*Centaurea stoebe*) is currently uncontrolled on all lands surrounding RRWMA. This weed is beginning to establish on disturbed sites and sparsely vegetated areas throughout the meadow complex. The main avenues of encroachment are wind-blown seed from the road right-of-way along Highway 14 and seed transported down the river onto RRWMA from both private and USFS lands upstream. Canada (*Cirsium arvense*) and bull thistle (*Cirsium vulgare*) are also present on the property. Although not listed as noxious, reed canarygrass (*Phalaris arundinacea*) is becoming a significant component of meadow and streambank plant communities (Appendix VI). Long-term monitoring data shows an upward trend in reed canarygrass and this aggressive species threatens diversity in many areas of the meadow.

Public Use

The RRWMA provides opportunities for hunting, fishing, and wildlife viewing. In a 2013 survey, nearly half of the respondents named either hunting or scouting as their primary purpose for visiting the WMA. Wildlife viewing and ATV riding also ranked high. As there are no ATV trails on the WMA, this use was along the Red River Road which runs along the eastern boundary of the WMA. A detailed summery of public use can be found in Appendix IV.

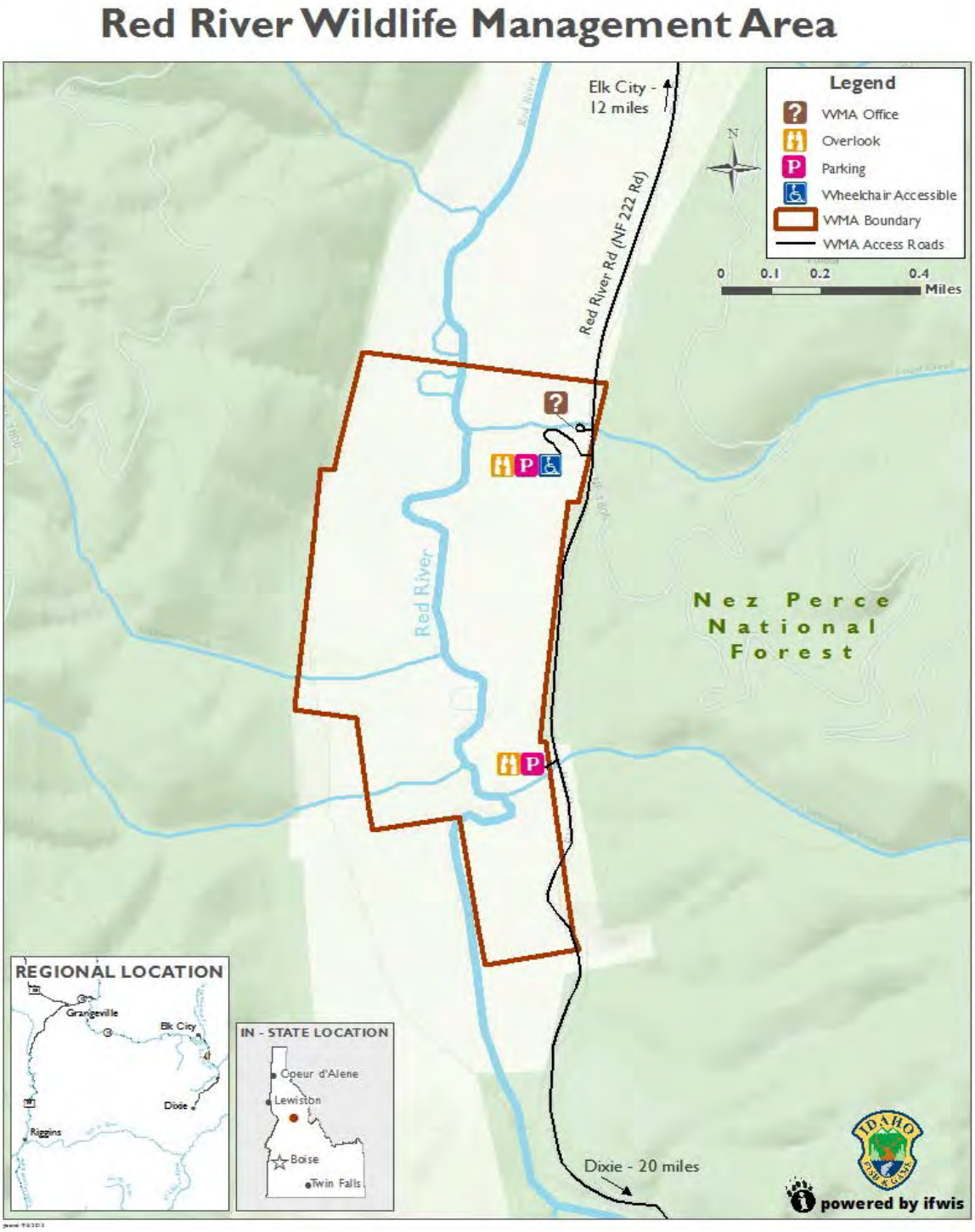


Figure 1. Map of Red River Wildlife Management Area.

Management Issues

This list of issues was developed after extensive public input as described in Appendix IV. Two general groups provided input, RRWMA users and neighboring landowners. Department policy direction, consultation with Department staff, and RRWMA staff management experience also helped shape the list of current issues. The issues identified were grouped, based on similarity, into three general categories, Habitat Management, Wildlife Management, and Public Use Management. Each issue is summarized and some potential management options discussed.

In general, there was broad public support for all the goals in the previous RRWMA plan but, when asked to rank the previous goals for RRWMA, respondents agreed that maintaining high quality habitat for elk and other wildlife should be the highest priority. This was followed closely by maintaining opportunities to hunt and fish. There was also strong support for continuing the process of involving the public in the decision making process. Although still ranking as desirable, maintaining scenic quality and implementing the education management plan ranked lowest when all goals were prioritized. The online survey showed that hunting and/or scouting was the single most popular activity on the WMA with 24% of the respondents naming that activity as the primary reason for visiting RRWMA. See Appendix IV for a more detailed record of public input.

Habitat Management Issues

1. **Providing high quality habitat for elk and other wildlife should remain the highest priority for RRWMA (Identified by the public and Department).**

   Discussion: The ability to provide high quality spring/summer habitat for elk was one of the primary reasons for the acquisition of the RRWMA. Public scoping also indicated that this was the highest priority among RRWMA users. We will continue to utilize various techniques to ensure highly palatable early spring forage for calving elk, and seek to minimize disturbance during the critical calving periods. These strategies are identified in the Management Program Table beginning on page 38.

2. **A robust riparian shrub community should be an important component of the RRWMA habitat (Identified by the public and Department).**

   Discussion: The restoration of a diverse riparian shrub corridor is one of the most important issues facing long-term success of the Lower Red River Meadow Restoration Project (LRRMRP, Appendix II). Riparian shrubs provide critical habitat for a variety of game and Species of Greatest Conservation Need (SGCN), as well as stabilize stream banks, provide shade for fish, and supply instream woody debris important for fish and aquatic insects. Past monitoring identified browsing by big game as the primary limiting factor in the restoration of a functional and diverse riparian shrub corridor. To address this, we will continue to implement and evaluate techniques designed to deter browsing and increase shrub survival and growth.

3. **Invasive species are a problem on RRWMA (Identified by the public and Department).**

   Discussion: Invasive species, including but not limited to noxious weeds, impact wildlife habitat and have the ability to severely degrade ecosystem function on RRWMA. There are several noxious weeds present on the WMA, but monitoring efforts identified reed canarygrass as the primary cause in the decline of native plant community. This aggressive grass forms dense monocultures and severely diminishes habitat quality for a number of wildlife species. Monitoring the distribution of invasive species, and evaluating control measures will be important in maintaining long-term functionality and meeting the primary goals of RRWMA.

Wildlife Management Issues

1. **Predator populations are too high on and around Red River WMA (Identified by the public).**

   Discussion: Although not specific to the RRWMA, the single most commonly cited issue identified during public scoping was the presence of wolves in the area surrounding RRWMA. Lowering wolf numbers was represented in 20% of the comments received. The topic of wolf management is beyond the scope of this document, but the RRWMA and surrounding federal lands are, at the time of writing, open to both wolf hunting and trapping and subject to season and harvest regulations identified in the Department big game regulations. In addition, each big game species, including the apex predatory species (i.e., wolf, black bear, and mountain lion), have species-specific management plans that address predation management. The Department also has the "Policy for Avian and Mammalian Predation Management" that describes the Department's policy on predation management and the process utilized to develop predation management plans for specific areas. Future predator management activities on the WMA will continue to be consistent with Department species plans and policies.

2. **Increase elk populations on and around RRWMA (Identified by the public).**

   Discussion: Out of 35 total comments, 20% provided suggestions on big game populations, primarily elk. Providing high quality elk calving habitat is a primary objective for RRWMA. This plan identifies actions to benefit elk, not only on the WMA and within the meadow complex, but the entire Red River watershed and beyond. Maintaining positive working relationships with adjacent landowners and the USFS will be critical to effectively managing elk habitat across the landscape.

Public Use Management Issues

1. **Public access needs to be available but consistent with WMA goals (Identified by the public and Department).**

   Discussion: Twenty five percent of the comments were concerned with access, in one form or another. One of the most important issues to any public area is access management. Use of an area by people utilizing foot traffic, horses, motorized vehicles, cross country skis, mountain bikes, etc. can have a significant impact upon other recreational uses and upon fish and wildlife populations. There are no current man-made roads or trails on RRWMA. Currently, the Department is managing under the access management guidelines in Appendix VIII that provide for control of access so that fish and wildlife goals can be met.

2. **RRWMA should be used as a center for Natural Resource Education (Identified by the Department).**

   Discussion: Although educational activities ranked lowest among WMA users, RRWMA provides a unique opportunity to provide a center for natural resource education for the surrounding communities. An education management plan, which includes curriculum for grades K-5, has already been developed. Since, at the time of writing, there is no funding base to support the implementation of this education plan, external funding will be needed to support this use.

3. **Not enough information, or signage, on RRWMA (Identified by the public).**

   Discussion: Several comments indicated that they would like to see more information on property boundaries, uses, and wildlife. As a center for natural resource education, RRWMA has several interpretive signs, and a platform for wildlife viewing. Public information is especially important at the two access points into the WMA. We will continue to develop educational opportunities and interpretive signs as funding become available.

Red River WMA Management Program

The Department is responsible for the conservation, protection, perpetuation, and management of all wildlife, fish, and plants in Idaho. Wildlife Management Areas enable the Department to directly affect habitat to maximize suitability for species in key areas and are an integral component in the Department's approach to fulfill its mandate in Idaho Code. Management to restore and maintain important natural habitats and create hyper-productive habitats that enhance carrying capacity for selected wildlife species remain key strategies on RRWMA. However, the most pervasive threats to WMA ecological integrity, such as noxious weeds, rural residential/commercial development, increased water diversion, and conflicting land uses on public lands, typically come from outside the WMA's boundary. Therefore, WMA managers must recognize and create opportunities to collaborate with adjacent landowners, expanding our collective conservation efforts for WMA-dependent wildlife.

We propose that an effective way to enable a broader influence over the future of RRWMA is through the use of Conservation Targets to guide management. Conservation Targets could be either a focal species or a habitat-type that benefits numerous species. According to Noss et al. (1999), focal species are those used by resource managers to determine the appropriate size and configuration of conservation areas. Conservation of species within landscapes used for other enterprises such as forestry, recreation, agriculture, grazing, and commercial development requires managers to determine the composition, quantity, and configuration of landscape elements required to meet the needs of the species present (Lambeck 1997). Since it is impractical to identify key landscape elements for all species dependent on RRWMA, a carefully selected suite of Conservation Targets can help provide for the conservation needs of many species. Additionally, identifying landscape-scale Conservation Targets across ownership boundaries helps address wildlife-related issues on RRWMA and creates a platform for conservation partnerships on the surrounding landscape.

The following six-step process was used to create the RRWMA management program described in this plan. Each of these steps is described in detail on the ensuing pages.

1) Summary of Management Priorities
2) Focal Species Assessment
3) Selection of Conservation Targets
4) Viability Assessment of Selected Conservation Targets
5) Spatial Delineation of Conservation Target Landscapes
6) Creation of Management Program Table

Summary of Management Priorities

Red River WMA, like many other WMAs, was created for a specific purpose and therefore has inherent management priorities agreed upon during the acquisition of the WMA. Red River WMA was created to mitigate for fisheries and wildlife habitat losses, particularly big game and anadromous fish habitat losses, associated with the Columbia River dam system. There are

several sideboards, discussed below, that must be taken into consideration when determining management priorities for RRWMA.

Agreements and Requirements

As a condition of accepting a contribution of $287,000 from the Bonneville Power Administration (BPA) toward acquisition, the State of Idaho and the Department assumed special responsibilities relating to management of the RRWMA. These responsibilities were defined and agreed to in the Memorandum of Interagency Agreement (February 1994) between BPA and the Department. This agreement specifically states:

The purpose of the agreement was to: *further BPA's goals of protecting, mitigating, and enhancing the fish and wildlife resources of the Columbia River Basin and the Department's objectives of preserving and perpetuating the fish and wildlife resources of the State of Idaho that contribute to the Columbia River. To meet those compatible objectives, the agreement facilitates and enables the permanent acquisition of the Ranch by the Department in order to improve and enhance fish and wildlife habitat and populations on the RRWMA* and *also providing benefits to adjacent property.*

As stated in the Memorandum of Interagency Agreement, the Department has an obligation, as representative of the State of Idaho, to meet the following requirements or objectives in the management of RRWMA:

1. To manage with objectives of preserving and perpetuating the fish and wildlife resources of the State of Idaho that contribute to the Columbia River.
2. To specify the primary use of the ranch shall be fish and wildlife habitat and that no other use shall detract from that purpose.
3. To ensure benefits to fish and wildlife will accrue through instream and riparian restoration and stewardship, which will allow for long-term habitat improvement and protection into perpetuity." To help fulfill the agreement, the Department entered into a cooperative stream restoration project with BPA and Idaho County Soil and Water Conservation District (ICSWCD) which formed the basis for the Lower Red River Meadow Restoration Project Environmental Assessment (BPA 1996). The Environmental Assessment (EA) was prepared in order to meet the requirement for the National Environmental Policy Act of 1969. The EA does not obligate the Department; however, it does provide purpose, justification, and background for the stream restoration project and explains why instream and riparian restoration are important to the South Fork of the Clearwater River ecosystem.
4. To comply with all state and federal laws, including seeking and maintaining required permits for storage, disposal, or treatment of hazardous substances. To respond promptly and in accordance with environmental laws to any release of hazardous substances.

Other Requirements in Regard to Purchase

Rocky Mountain Elk Foundation (RMEF) gave $100,000 toward purchase of the RRWMA. In return, the Department agreed to protect and enhance elk habitat and explore opportunities for elk viewing sites.

Trout Unlimited obtained a $100,000 grant towards the purchase of RRWMA. In return, the Department agreed to explore opportunities for enhancing fish habitat on the area.

Red River WMA Management Priorities (listed in order of priority):

1. Big Game Habitat
2. Fish Habitat
3. Special Status Species Habitat
4. Wildlife-based Recreation and Education

Focal Species Assessment

This section of the RRWMA Plan is an assessment of various fish and wildlife species on RRWMA and adjacent lands in order to identify Conservation Targets to guide management. Table 1 evaluates taxa that are either flagship species (Groves 2003) and/or at-risk species identified by the Department in the Idaho Comprehensive Wildlife Conservation Strategy (IDFG 2005) and key federal agencies.

Flagship species are popular, charismatic species that serve as symbols and catalysts to motivate conservation awareness, support, and action (Heywood 1995). Flagship species often represent a landscape or ecosystem (e.g., riparian or riverine system), a threat (e.g., habitat loss or climate change), organization (e.g., state government or non-government organization) or geographic region (e.g., protected area, Department Region or state; Veríssimo et al. 2009). Both ungulate big game and native salmonids are examples of groups that fit the criteria as both focal and flagship species. In addition, they are culturally and economically important groups in Idaho and represent foundational priorities for establishment of the RRWMA. Therefore, elk and Chinook salmon are important flagship species considered in the WMA assessment.

A principal limitation of the flagship species concept is that by focusing limited management resources on culturally and economically important species, more vulnerable species may receive less or no attention (Simberloff 1998). To overcome this limitation we are explicitly considering a wide variety of at-risk species (Groves 2003); yielding a more comprehensive assessment that includes culturally and economically important species (e.g., Chinook salmon and elk) along with formally-designated conservation priorities (e.g., Idaho giant salamander and steelhead). Categories of at-risk vertebrate species considered in this assessment are: 1) species designated as Idaho SGCN; 2) species designated as Sensitive by Region 1 (Northern Region) of the USFS; and 3) species designated as Sensitive by the Idaho State Office of the Bureau of Land Management (BLM).

The Idaho SGCN list was developed as part of the Idaho Comprehensive Wildlife Conservation Strategy (IDFG 2005). The Idaho Comprehensive Wildlife Conservation Strategy document is now referred to as the State Wildlife Action Plan (SWAP). Idaho's SWAP serves to coordinate the efforts of all partners working toward conservation of wildlife and wildlife habitats across the state and serves as Idaho's seminal document identifying species at-risk.

Although the Idaho SWAP SGCN includes most of the special status species identified by land management agencies in Idaho, some species not listed as SGCN are considered priorities by other agencies. The Red River meadow complex is a mosaic of land ownerships including private lands, USFS, and lands managed by the Department. The USFS is a key partner in this landscape as their management actions directly influence ecological function on RRWMA. To maximize coordination, communication, and partnership opportunity, we include both USFS and BLM Sensitive Species in our biodiversity assessment.

United States Forest Service Sensitive Species are animal species identified by the Northern Regional Forester for which population viability is a concern, as evidenced by significant current or predicted downward trends in population numbers or significant current or predicted downward trends in habitat capability that would reduce a species' existing distribution. The Forest Service Manual (FSM 2670.22) directs the development of sensitive species lists. This designation applies only on USFS–administered lands.

Bureau of Land Management Sensitive Species are designated by State Directors in cooperation with the State fish and wildlife agency (BLM manual 6840). The Idaho State BLM Office updated these designations in 2003. The sensitive species designation is normally used for species that occur on BLM public lands and for which BLM has the capability to significantly affect the conservation status of the species through management.

The Intermountain West Joint Venture (IWJV) also maintains a list of priority species. The IWJV has identified 40 priority species from which to base conservation planning.

Information on species status, occurrence, beneficial management/conservation actions, and threats were derived through consultation with Department staff, occurrence records in the Department's Idaho Fish and Wildlife Information System database, consultation with various BLM and USFS species lists, and species summaries provided in the Idaho SWAP.

Suitability of assessed species as a focal species were estimated by Clearwater Regional Habitat and Diversity staff based on descriptions in Groves (2003) and U.S. Fish and Wildlife Service (USFWS 2005). Potentially suitable focal species may include species with one or more of the following five characteristics*:*

- *Species with high conservation need*
- *Species or habitats that are representative of a broader group of species sharing the same or similar conservation needs*
- *Species with a high level of current program effort*
- *Species with potential to stimulate partnerships*

- *Species with a high likelihood that factors affecting status can realistically be addressed* (USFWS 2005)

The following table was generated by first querying all special status, or flagship, species known to occur within 25 miles of RRWMA. We then evaluated each species to determine if they occur, or are likely to occur, on the WMA. On average, if a species didn't occur, or was not likely to occur on the RRWMA, it was not included.

Table 1. Status of priority species on the Red River WMA and their potential suitability as a conservation target for management.

Species	Status Designation(s)	Occurrence Context in Red River WMA Landscape	Threats	Beneficial Management and Conservation Actions	Suitability as a Focal Species for Red River WMA
Mammals					
Elk (*Cervus elaphus*)	Flagship	Red River WMA, and other portions of the meadow complex, provides important calving and spring foraging areas for elk from Department game management units 15. The surrounding forest service land provides summer habitat.	Conflicts with agricultural producers including the potential for brucellosis transmission and depredations. Rural residential development in the Red River meadow complex; habitat succession and loss of early successional habitat on surrounding public lands; human disturbance during primary calving season.	Protect spring calving grounds from disturbance; manage portions of the WMA for early spring forage; work collaboratively with USFS to maintain healthy and diverse forests to include a broad range of successional stages; provide technical assistance to private landowners to reduce the likelihood of brucellosis transmission, expand tolerance and available habitat on private lands; work collaboratively with NPT and other organizations to pursue conservation easements and restoration opportunities on private property.	***Potentially Suitable as a focal species.*** Elk are a foundational priority for the creation of the WMA. They are wide ranging and their habitat needs overlap a wide range of species. They are a large, charismatic species with a high potential to stimulate partnership, and there is a high level of current program effort directed toward elk habitat.
White-tailed deer (*Odocoileus virginianus*)	Flagship	Red River WMA, and other portions of the meadow complex, provides important fawning and spring foraging areas for White-tailed deer from Department game management units 15. The surrounding forest service land provides summer habitat.	Rural residential development in the Red River meadow complex; habitat succession and loss of early successional habitat on surrounding public lands; human disturbance during primary fawning season.	Protect spring fawning grounds from disturbance; manage portions of the WMA for early spring forage; work collaboratively with USFS to maintain healthy and diverse forests to include a broad range of successional stages; work collaboratively with NPT and other organizations to pursue conservation easements and restoration opportunities on private property.	***Potentially Suitable as a focal species.*** White-tailed deer are a priority for the WMA. They are a large, charismatic species with a high potential to stimulate partnership, and there is a high level of current program effort directed toward them. Management for this species will be covered by selecting **Riparian Habitat,** and **Elk** as conservation targets.
Moose (*Alces alces*)	Flagship	Moose occur in unknown numbers throughout the greater Red River landscape.	Loss and degradation of riparian habitat; rural residential development in the Red River meadow complex.	Support management that increases high quality riparian habitat on the landscape; work collaboratively with NPT and other organizations to pursue conservation easements and restoration opportunities on private property; provide technical assistance to private landowners to expand tolerance and available habitat on private lands; contribute to Department regional disease monitoring efforts in the greater Red River landscape.	***Unsuitable as a focal species.*** Occurrence context on Red River WMA does not reflect main threats to the population. Low numbers and occurrence on the WMA limits potential feedback to managers.
Red-tailed chipmunk (*Neotamias ruficaudus*)	SGCN	Infrequent observations, distribution poorly documented, nearest observation 13 miles from WMA but potentially occurs much closed or on WMA. Requires both mature forest (for rest sites) and regenerating forest (for foraging)	Forest succession resulting in homogeneous habitat. This species requires structural and spatial diversity, as well as both late and early seral habitat.	Collaborate with USFS to ensure structural diversity in managed forests. Prescribed fires, variable retention timber harvest, and other management actions that maintain a juxtaposition of seral stages may be necessary to sustain populations. Limiting disturbances that result in a homogeneous environment may also help protect the species.	***Unsuitable as a focal species.*** Occurrence context on Red River WMA does not reflect main threats to the population. Also, limited occurrence on RRWMA limits potential management feedback.

Species	Status Designation(s)	Occurrence Context in Red River WMA Landscape	Threats	Beneficial Management and Conservation Actions	Suitability as a Focal Species for Red River WMA
Bat Guild					
California myotis (*Myotis californicus*)	SGCN; BLM Type 4	Occurs in vicinity of WMA, habitat association are poorly know but appear varied. Roost in mines, caves, buildings and bridges, loose bark of snags. Probably forages in WMA meadow	The distribution of this species in the state is incompletely documented, and few data indicate habitat needs. Mine reclamation is a threat to roosting habitat in some areas. Timber harvest practices that remove large diameter snags could be detrimental to maternity colonies and local populations (Brigham et al. 1997).	Surveys are needed throughout the state, particularly in areas where species composition is unknown and a knowledge of the bat fauna would have implications for resource management decisions.	***Unsuitable as a focal species.*** Occurrence context on Red River WMA does not reflect main threats to the population. Also, limited occurrence on RRWMA limits potential management feedback.
Long-eared myotis (*Myotis evotis*)	BLM Type 5	Distribution poorly documented, occurs in vicinity of WMA, habitat association are poorly know but appear varied. Roost in mines, caves, buildings and bridges, loose bark of snags. Probably forages in WMA meadow	Little is known on the management benefits for this species.	Due to the lack of good information on their immediate distribution in the management area little is known on the management benefits for this species.	***Unsuitable as a focal species.*** Occurrence context on Red River WMA does not reflect main threats to the population. Also, limited occurrence on RRWMA limits potential management feedback.
Long-legged myotis (*Myotis volans*)	BLM Type 5	Distribution poorly documented, occurs in vicinity of WMA, habitat association are poorly know but appear varied. Roost in mines, caves, buildings and bridges, loose bark of snags. Probably forages in WMA meadow	Little is known on the management benefits for this species.	Due to the lack of good information on their immediate distribution in the management area little is known on the management benefits for this species.	***Unsuitable as a focal species.*** Occurrence context on Red River WMA does not reflect main threats to the population. Also, limited occurrence on RRWMA limits potential management feedback.
Yuma myotis (*Myotis yumanensis*)	BLM Type5	Observations rare in area, nearest documented occurrence 24 miles from WMA, but distribution of species is poorly known, forages consistently near open water. Strongly attracted to riparian areas, less so to Ponderosa Pine forests	Little is known on the management benefits for this species.	Due to the lack of good information on their immediate distribution in the management area little is known on the management benefits for this species.	***Unsuitable as a focal species.*** Occurrence context on Red River WMA does not reflect main threats to the population. Also, limited occurrence on RRWMA limits potential management feedback.
Birds					
Great gray owl (*Strix nebulosa*)	Sensitive; BLM Type5	Occurs in vicinity of WMA, nests in broken top snags and forages along edges of meadows.	Timber harvest strategies that reduce availability of large diameter snags in close proximity to meadow foraging areas.	Collaboration with USFS to ensure retention of large diameter snags for nesting in close proximity to meadow foraging habitat.	***Unsuitable as a focal species.*** Nomadic ecology makes population monitoring difficult. Limited information on distribution in the project area. Unknown distribution limits potential management feedback
American three-toed woodpecker (*Picoides dorsalis*)	SGCN; Sensitive	Occurs regularly in vicinity of WMA, associated with coniferous forests, particularly spruce. Also associated with dead/decaying trees from insect outbreaks, disease, and fire.	Fragmentation and habitat loss are the main issues of concern for this species. Since American three-toed woodpeckers rely on dead and decaying trees for both nesting and foraging, they are extremely susceptible to forestry management practices that reduce these trees in the landscape. The removal of dead and decaying trees may occur for a variety of reasons (i.e., salvage logging, fire suppression logging), and these activities have likely negatively influenced populations in recent years (Leonard 2001). Additionally, logging rotations that do not allow old growth forests to develop have likely been detrimental to this species (Hoyt	Management activities that retain large patches of dead and decaying trees for nesting and foraging are necessary for this species. Goggans et al. (1988) suggest retention of 214 ha (579 ac) per pair in old growth mixed conifer forests. Because relatively little is known about the demography of American three-toed woodpeckers in different habitats, a landscape that provides suitable habitat for this species might be a matrix of old growth forests mixed with forests undergoing disturbances (i.e., fire). As more information becomes available concerning the demographics of this species in different	***Unsuitable as a focal species.*** Occurrence context on Red River WMA does not reflect main threats to the population. Also, limited occurrence on RRWMA limits potential management feedback.

Species	Status Designation(s)	Occurrence Context in Red River WMA Landscape	Threats	Beneficial Management and Conservation Actions	Suitability as a Focal Species for Red River WMA
			and Hannon 2002).	habitats, the optimal landscape matrix which is undergoing management can be adjusted accordingly.	
Sandhill crane (*Grus canadensis*)	SGCN; IWJV	Sandhill cranes in RRWMA and vicinity are part of the Rocky Mountain Population (RMP). Breeding status is unknown but pairs have been observed in the Red River meadow complex during the breeding season.	Greatest threat to RMP cranes id loss of migration-staging habitat. However, Loss and degradation of wetland/riparian breeding habitat is also an issue..	Pursue conservation easements and grassland/wetland restoration projects within the Red River meadow complex. Document breeding locations on the WMA, including nesting brooding locations.	***Unsuitable as a focal species.*** Occurrence context on Red River WMA does not reflect main threats to the population. Also, limited occurrence on RRWMA limits potential management feedback.
Bald eagle (*Haliaeetus leucocephalus*)	ESA Delisted; USFS Sensitive; BLM Type 1	Occurs on WMA during migration, during anadromous fish runs, and irregularly by nonbreeding individuals. Nearest known nest is >30 miles away. Populations in region are growing and WMA represents potential habitat.	Perhaps the greatest threat to birds in Idaho is disturbance during the nesting period from activities such as forestry (e.g., timber harvest operations), human recreation (e.g., hiking, boating, off–road vehicles, hunting), and construction projects (e.g., home–site development in forested areas overlooking lakes and other large bodies of water (Buehler 2000)	Maintain large snags for perching and nesting. Disturbance around nest sites should be minimized or avoided altogether, especially during late–winter/early–spring when eagles are initiating territory establishment and breeding activities.	***Unsuitable as a focal species.*** Occurrence context on Red River WMA does not reflect main threats to the population. Also, limited occurrence on RRWMA limits potential management feedback.
Boreal owl (*Aegolius funereus*)	SGCN; Sensitive; BLM Type5	Regularly occurs in boreal and subalpine habitats around WMA, probably regularly forages along edges of WMA meadow	Primary threat to this species is timber harvest (e.g., clear-cutting), which often eliminates large-diameter snags and live trees used for nesting, reduces primary prey populations, and removes forest structure needed for foraging and roosting (Hayward 1997).	Collaborate with USFS to ensure structural diversity in managed forests. Management should involve retention of large-diameter snags, protection and restoration of aspen, and retention of subnivean structural features important to the small mammal prey base.	***Unsuitable as a focal species.*** Occurrence context on Red River WMA does not reflect main threats to the population. Also, limited occurrence on RRWMA limits potential management feedback.
Northern pygmy-owl (*Glaucidium gnoma*)	BLM Type5	Observation rare in vicinity of WMA, nearest 12 miles away, but probably occurs much closer or on WMA	Maintaining a mosaic of age classes in forest cover will likely benefit this species.	Due to the lack of good information on their immediate distribution in the management area little is known on the management benefits for this species.	***Unsuitable as a focal species.*** Occurrence context on Red River WMA does not reflect main threats to the population. Also, limited occurrence on RRWMA limits potential management feedback.
Wilson's phalarope (*Phalaropus tricolor*)	SGCN; IWJV	Occurs occasionally on the WMA, Migratory stopover	The greatest threat to Wilson's phalaropes, and shorebirds in general, in the Intermountain West is loss of high quality fresh water habitat (Oring et al. 2000).	Burning (Eldridge 1992) and mowing (Kantrud 1981) may improve upland nesting habitat for this species. Grazing may potentially improve nesting habitat, however cattle should not be present in the area during the breeding season (Dechant et al. 2003). Because Wilson's phalaropes move to deeper, more permanent wetlands in dry years, and likely discover new habitats quickly (Colwell and Jehl 1994), wetland complexes that include both seasonal and semi-permanent wetlands should be protected and/or restored (Dechant et al. 2003). Breeding areas should not be disturbed (i.e., mowed, burned, grazed) during the breeding season (late April through late July; Dechant et al. 2003).	***Unsuitable as a focal species.*** Also, limited occurrence on RRWMA limits potential management feedback . Limited information on distribution in the project area.

Species	Status Designation(s)	Occurrence Context in Red River WMA Landscape	Threats	Beneficial Management and Conservation Actions	Suitability as a Focal Species for Red River WMA
Merlin (*Falco columbarius*)	SGCN	One historic record near Elk City. No evidence of breeding in area of WMA, probably passes through during migration	Threats to Merlin, such as losses of nesting sites and prey species, as well as the effects of foreign DDT use, occur out of the WMA area of influence.	There are currently too few breeding merlins in Idaho to implement habitat management activities designed specifically to benefit this species; and wintering numbers are sufficiently stable to suggest that few local problems exist	***Unsuitable as a focal species.*** Occurrence context on Red River WMA does not reflect main threats to the population. Also, limited occurrence on RRWMA limits potential management feedback.
Fish					
Westslope cutthroat trout (*Oncorhynchus clarkii lewisi*)	USFS Sensitive; BLM Type2 Sensitive; SGCN	The Red River WMA provides rearing habitat for cutthroat trout. Limited spawning may also occur in this area.	Loss and degradation of riparian habitat; rural residential development; and stream channelization in the Red River meadow complex.	Actions that create a fully functioning wetland system will be beneficial to cutthroat trout. These actions should create a system where the stream flows regularly flood its banks, the stream is allowed to shift course across the meadow, and stable vegetation is maintained with a woody component that will provide shade and overhead cover, help maintain cooler water temperatures, create stable stream banks and facilitate the formation of pools.	***Potentially Suitable as a focal species.*** Cutthroat share similar conservation needs with other Salmonids in the WMA landscape. Suitability as a focal species could be enhanced by including cutthroat in a salmonid guild in management planning.
Chinook salmon (*Oncorhynchus tshawytscha*)	Flagship	The Red River WMA provides spawning and rearing habitat for Chinook salmon	Loss and degradation of riparian habitat; rural residential development; and stream channelization in the Red River meadow complex.	Actions that create a fully functioning wetland system will be beneficial to Chinook salmon. These actions should create a system where the stream flows regularly flood its banks, the stream is allowed to shift course across the meadow, and stable vegetation is maintained with a woody component that will provide shade and overhead cover, help maintain cooler water temperatures, create stable stream banks and facilitate the formation of pools.	***Potentially Suitable as a focal umbrella species.*** Chinook Salmon have a high conservation need and are representative of a group of species sharing similar conservation needs. They have a high level of current Department program effort and are a species with potential to stimulate partnerships. The species is a foundational priority for the creation of the WMA. Suitability as a focal species could be enhanced by including Chinook in a salmonid guild in management planning.
Steelhead (*Oncorhynchus mykiss*)	ESA Listed; USFS Sensitive BLM Type 2 Sensitive, SGCN	The Red River WMA provides rearing habitat for steelhead. Limited spawning may also occur in this area.	Loss and degradation of riparian habitat; rural residential development; and stream channelization in the Red River meadow complex.	Actions that create a fully functioning wetland system will be beneficial to steelhead. These actions should create a system where the stream flows regularly flood its banks, the stream is allowed to shift course across the meadow, and stable vegetation is maintained with a woody component that will provide shade and overhead cover, help maintain cooler water temperatures, create stable stream banks and facilitate the formation of pools.	***Potentially Suitable as a focal species.*** Steelhead share similar conservation needs with other Salmonids in the WMA landscape. Suitability as a focal species could be enhanced by including steelhead in a salmonid guild in management planning.
Bull trout (*Salvelinus confluentus*)	ESA Threatened; USFS Threatened BLM Sensitive, SGCN	Bull trout occasionally use the Red River WMA as a migratory corridor. Limited rearing may occur when water temperatures are suitable.	Loss and degradation of riparian habitat; rural residential development; and stream channelization in the Red River meadow complex.	Actions that create a fully functioning wetland system will be beneficial to bull trout. These actions should create a system where the stream flows regularly flood its banks, the stream is allowed to shift course across the meadow, and stable vegetation is maintained with a woody component that will provide shade and overhead cover, help maintain cooler water temperatures, create	***Unsuitable as a focal species.*** Occurrence context on Red River WMA does not reflect main threats to the population. Also, limited occurrence on RRWMA limits potential management feedback. . Limited information on distribution in the project area.

Species	Status Designation(s)	Occurrence Context in Red River WMA Landscape	Threats	Beneficial Management and Conservation Actions	Suitability as a Focal Species for Red River WMA
				stable stream banks and facilitate the formation of pools.	
Pacific lamprey (*Lampetra tridentata*)	USFS Sensitive; BLM Type 2 Sensitive; SGCN	Lamprey may occur infrequently at this site as either a migratory corridor or for rearing purposes.	Loss and degradation of riparian habitat; rural residential development; and stream channelization in the Red River meadow complex.	Actions that create a fully functioning wetland system will be beneficial to lamprey. These actions should create a system where the stream flows regularly flood its banks, the stream is allowed to shift course across the meadow, and stable vegetation is maintained with a woody component that will provide shade and overhead cover, help maintain cooler water temperatures, create stable stream banks and facilitate the formation of pools.	***Unsuitable as a focal species.*** Occurrence context on Red River WMA does not reflect main threats to the population. Also, limited occurrence on RRWMA limits potential management feedback. . Limited information on distribution in the project area.
Amphibians					
Idaho giant salamander (*Dicamptodon aterrimus*)	SGCN; BLM Type3	Regularly occurring and widely distributed around WMA. Associated with stable, highly structured streams. Suitable habitat on WMA probably reduced by historic dredge mining	Past simplification of riparian community has limited suitable habitat for this species. Overbrowsing by ungulates inhibits recovery or native shrub community. Logging operations can decrease available cover, increase sedimentation, and affect bank undercutting necessary for successful breeding (Parker 1991).	Increase cover, and structural diversity within riparian corridor. Promote healthy riparian corridor including undercut stream banks and other structure at the terrestrial–aquatic interface which serve as oviposition sites (Nussbaum 1969). Survey RRWMA for abundance and distribution.	***Potentially suitable as a focal species.*** Idaho Giant Salamander requires a structurally diverse, healthy riparian community which represents a broad group of species habitat needs. Information on its occurrence within the context of the WMA, however, is limited. As a member of the riparian dependent community, management for this species will be covered by selecting **Riparian Habitat** as a conservation target.
Northern leopard frog (*Rana pipiens*)	SGCN; BLM Type2	Historic, rare observations around WMA, most recent being early 90's and ~4 miles away. Pond breeder. Chyrid fungus a threat to populations which are generally thought be to be in decline	As with most amphibians, the loss and degradation of wetland and riparian habitat is thought to be the most prevalent threat to populations. Urban and agriculturaldevelopment, pollution from agricultural runoff, mining and mineral processing, water withdrawal and diversion, and livestock wastes and trampling of habitat are the most pervasive stressors to wetland systems. Introduced competitors and predators, such as bullfrogs and sport fishes, can cause amphibian population declines and losses. Disease is also a concern, particularly the chytrid fungus, *Batrachochytrium dendrobatidis.*	Wetland protection and/or restoration of degraded sites is beneficial; a comprehensive understanding of population status is needed.	***Unsuitable as a focal species.*** Occurrence context on Red River WMA does not reflect main threats to the population. Also, limited occurrence on RRWMA limits potential management feedback. As a member of the riparian dependent community, management for this species will be covered by selecting **Riparian Habitat** as a conservation target.
Western toad (*Bufo boreas*)	Sensitive; Sensitive; BLM Type3	Observations rare in area, nearest 17 miles from WMA. Breeds in ponds. Chytrid fungus a threat to populations	Chytrid fungus, *Batrachochytrium dendrobatidis*, is the primary threat to western toad populations throughout the Southern Rocky Mountains. This is compounded by habitat alteration around wetlands and human-facilitated expansion of natural and introduced predators. Habitat fragmentation isolates breeding populations, which increases the effects of these widespread threats and the risk associated	Managing disease, cataloging and monitoring population status, delineating important habitat, and protecting delineated habitat, and identifying and protecting current breeding sites from habitat degradation (Keinath and McGee 2005).	***Unsuitable as a focal species.*** Occurrence context on Red River WMA does not reflect main threats to the population. Also, limited occurrence on RRWMA limits potential management feedback.

Species	Status Designation(s)	Occurrence Context in Red River WMA Landscape	Threats	Beneficial Management and Conservation Actions	Suitability as a Focal Species for Red River WMA
			with other threats, such as local changes in water quality, timber harvest, livestock grazing, fire, and toxic chemicals (Keinath and McGee 2005).		
Columbia spotted frog (*Rana luteiventris*)	Sensitive	Occurs on WMA, widespread in Region. Breeds in ponds. Chyrid fungus potential threat to populations	As with most amphibians, the loss and degradation of wetland and riparian habitat is thought to be the most prevalent threat to populations. Urban and agriculturaldevelopment, pollution from agricultural runoff, mining and mineral processing, water withdrawal and diversion, and livestock wastes and trampling of habitat are the most pervasive stressors to wetland systems. Introduced competitors and predators, such as bullfrogs and sport fishes, can cause amphibian population declines and losses. Disease is also a concern, particularly the chytrid fungus, Batrachochytrium dendrobatidis.	Wetland protection and/or restoration of degraded sites is beneficial.	***Unsuitable as a focal species.*** Occurrence context on Red River WMA does not reflect main threats to the population. Also, limited occurrence on RRWMA limits potential management feedback. As a member of the riparian dependent community, management for this species will be covered by selecting **Riparian Habitat** as a conservation target.
Gastropods					
Fir pinwheel (*Radiodiscus abietum*)	SGCN	Distribution poorly documented, nearest occurrence ~17mi from WMA but potential occurs much closer or on WMA. Species inhabits rocky sites in Douglas-fir forests	According to Frest and Johannes (1997), much of the habitat has been lost to logging, grazing, roads, and forest fires. The remaining site has also been logged and individuals were only found in a small rocky area that had not been entirely clear-cut (Frest 1999).	Surveys are needed throughout the known range of this species, particularly in and near historically occupied sites, to determine the current status of this species in the state.	***Unsuitable as a focal species.*** Occurrence context on Red River WMA does not reflect main threats to the population. Also, limited occurrence on RRWMA limits potential management feedback.
Pale jumping-slug (*Hemphillia camelus*)	SGCN	Regional endemic to Idaho, distribution poorly documented, nearest observation to WMA is 9 miles but potentially occurs much closed or on WMA. Associated with closed canopy Ponderosa Pine and Douglas Fir forest adjacent to streams.	Logging, grazing, forest fires, and roads have encroached on much of the historically occupied habitat. Pollution and surface disturbance associated with mining is also prevalent within the occupied range. This species is thought to be sensitive to disturbance (Frest 1999).	Surveys are needed throughout the historical range to ascertain current population status and habitat condition and to identify site-specific threats and conservation measures.	***Unsuitable as a focal species.*** Occurrence context on Red River WMA does not reflect main threats to the population. Also, limited occurrence on RRWMA limits potential management feedback.
Western pearlshell (*Margaritifera falcata*)	SGCN Sensitive	Knowledge of distribution very poor, associated with cold, clear streams with fast current and coarse substrate. Fisheries records report extensive mussel beds in Elk City area, but species not identified but suspected to be M. falcata. Probably occurred on WMA historically, but most likely extirpated by dredge mine	Populations are sensitive to changes in water quality; livestock, agricultural runoff, housing or industrial development, and mining are potential causes of degraded water quality. Small dam construction and extensive diversions may also impact aquatic habitats. The loss of appropriate host fish populations is also a threat (Frest 1999).	Research is necessary to determine current distribution, population sizes, and population trends throughout the state.	***Unsuitable as a focal species.*** Occurrence context on Red River WMA does not reflect main threats to the population. Also, limited occurrence on RRWMA limits potential management feedback.
Selway forestsnail (*Allogona lombardii*)	SGCN	Regional endemic to Idaho, distribution poorly documented, nearest observation to WMA is 15 miles, but potentially occurs much closer or on WMA. Inhabits mixed coniferous forests at low to mid elevations that are well-shaded, moist and	Lack of information on population numbers, range, habitat status, and conservation measures suggest that research should be an initial step in the conservation of this species	Research is necessary to determine current distribution, population sizes, and population trends throughout the state.	***Unsuitable as a focal species.*** Occurrence context on Red River WMA does not reflect main threats to the population. Also, limited occurrence on RRWMA limits potential management feedback.

Species	Status Designation(s)	Occurrence Context in Red River WMA Landscape	Threats	Beneficial Management and Conservation Actions	Suitability as a Focal Species for Red River WMA
		often long streams			
Sheathed slug (*Zacoleus idahoensis*)	SGCN	Distribution poorly documented, nearest observation 15 miles from WMA but potentially occurs much closer or on WMA. Inhabits mixed coniferous forests with moist microclimates	Lack of information on population numbers, range, habitat status, and conservation measures suggest that research should be an initial step in the conservation of this species	Research is necessary to determine current distribution, population sizes, and population trends throughout the state.	***Unsuitable as a focal species.*** Occurrence context on Red River WMA does not reflect main threats to the population. Also, limited occurrence on RRWMA limits potential management feedback.
Smoky taildropper (*Prophysaon humile*)	SGCN	Distribution poorly documented, nearest observation to WMA is 9 miles but potentially occurs much closer or on WMA. Inhabits low to mid-elevation mesic pine and spruce forests with moist microclimate, often near water	Lack of information on population numbers, range, habitat status, and conservation measures suggest that research should be an initial step in the conservation of this species.	Research is necessary to determine current distribution, population sizes, and population trends throughout the state.	***Unsuitable as a focal species.*** Occurrence context on Red River WMA does not reflect main threats to the population. Also, limited occurrence on RRWMA limits potential management feedback.
Western ridged mussel (*Gonidea angulata*)	SGCN	Knowledge of distribution very poor. Fisheries records report extensive mussel beds in Elk City area, but species not identified.	Habitat loss is the primary threat to populations; the western ridged mussel is a cold-water filter feeder and is fairly sensitive to heavy nutrient enhancement and high levels of pollution. Threats also include mining, particularly gravel and hydraulic gold mining, in some parts of the range. Change to the distribution and abundance of host fishes is also a potential threat (Taylor 1981, Frest 1999).	Patterns of distribution and abundance are poorly known, and additional surveys are needed throughout the state. Efforts are needed to identify and prioritize conservation of important populations. Coordinate with fisheries snorkel survey crew to record observations.	***Unsuitable as a focal species.*** Occurrence context on Red River WMA does not reflect main threats to the population. Also, limited occurrence on RRWMA limits potential management feedback. Since this species depends on cold, clean water, threats could be address by managing for a salmonid guild.

Selection of Conservation Targets

The biodiversity of RRWMA is represented by numerous vertebrates, invertebrates, plants, and ecological communities. It is impractical to evaluate and plan for the conservation of all these elements. Therefore, Conservation Targets, a sub-set of species and communities, were selected to represent the biodiversity of RRWMA for management and conservation; while still reflecting the management priorities of RRWMA.

Conservation Targets for the RRWMA Management Plan were selected from species ranked as potentially suitable focal species in Table 1. Plants are not included in this assessment due to practical considerations including lack of data and funding. Conservation Targets could also include habitats that effectively represent suites of the flagship and special status species evaluated in Table 1, regardless of their potential suitability as a focal species. A final consideration in the selection of Conservation Targets was the best professional judgment of the Clearwater Regional Habitat Manager and RRWMA staff. Effective Conservation Targets cannot be selected based solely on species assessments. They must reflect regional threats, priorities, existing conservation partnerships, and the limitations of RRWMA personnel and funding.

The Conservation Targets selected to guide management on RRWMA (corresponding RRWMA Priority in parentheses) are:

1. Elk (Big Game Habitat)
2. Native Salmonids (Fish Habitat)
3. Riparian/Meadow Habitat – hereafter Riparian Habitat (Special Status Species Habitat)

Elk

Elk were selected as a Conservation Target to represent spring and early summer Big Game Habitat on RRWMA because:

- Elk are a flagship species and are one of the primary foundational priorities for the creation of RRWMA.
- Elk rely on a broad array of habitat components including riparian habitat, live streams, mountain shrub, grasslands, and security within the RRWMA landscape. Therefore, efforts to sustain elk herds by conserving these varied habitat components will benefit a wide range of other species.
- Elk are sensitive to disturbance and management actions to protect elk during the calving season will also protect a wide variety of nesting birds.

Native Salmonids/Chinook Spawning

Salmonids were selected as a Conservation Target to represent Fish Habitat on RRWMA because:

- Salmonids, primarily Chinook salmon, are a foundational priority for the creation of RRWMA.
- This group fulfills all criteria for suitability as a focal species.
- There has been research conducted on RRWMA that provides landscape-specific information on species ecology.
- Redd locations within Red River are well documented, providing useful spatial information for planning.
- By delineating redds and estimating likely important spawning and rearing habitat, we can develop a useful map that serves to identify a crucial landscape and guide offsite activities that will help sustain the integrity of RRWMA into the future.
- This group's need for cold, clean water and spawning substrate is particularly valuable as a surrogate for other native aquatic species.

Riparian/Meadow Habitat

Riparian habitat was selected as a Conservation Target to represent Special Status Species Habitat on RRWMA because:

- Seventy-two percent of the species evaluated in Table 1 will benefit from efforts to protect and restore riparian habitat. Riparian protection and restoration is the primary recommended beneficial management and conservation action for 31% of the species evaluated.
- Riparian habitat extent can be mapped and monitored on RRWMA and the adjacent landscape.
- Riparian habitat restoration reaches can also be tracked spatially by RRWMA staff.
- Given the high species value of riparian habitat—particularly of priority species such as elk, salmonids, amphibians, birds, etc.—riparian restoration partnerships are very achievable.

Coverage Assessment of Selected Conservation Targets

We define an effective Conservation Target as one providing meaningful conservation benefits for multiple species that share similar habitat requirements or life history traits. They are useful for directing limited management resources and maximizing conservation effort. One measure of effectiveness is to assess the number of species that a Conservation Target benefits (or covers) within the management landscape.

Regional Habitat and Diversity staff worked together to complete the coverage assessment table (Table 2). We evaluated each of the Conservation Targets to determine which species from Table 1 would benefit from management activities focused on that target. Evaluations are based on knowledge of species habitat requirements, occurrence within the management landscape, and the scope of current and planned management actions. The assessment considered only those habitat features or needs relevant to the species as it occurs on the management landscape. Our results indicate that the selected Conservation Targets on RRWMA provide substantial, but

variable habitat benefits for an array of assessed species. We found that management efforts directed towards maintaining or enhancing riparian habitat will provide conservation benefits for 24 of the 32 assessed species while those actions targeting salmonids, although important, will benefit only 11 other species.

We also evaluated which species or guilds would receive little or no tangible benefit from management actions for specific Conservation Targets; these are designated “conservation needs.” We identified conservation needs for several species or guilds and determined that further data will be useful to inform the next WMA planning process. Recent studies suggest the conservation needs of some of these species (e.g., the Myotis guild) are increasing dramatically. A prudent management strategy is to consider a landscape where these species may be prioritized for management in the future. Broad strategies for addressing these management needs are identified in the following Management Program Table (pages 38-41), but typically include collection of additional baseline data.

Table 2. Analysis of Conservation Target coverage and identification of conservation needs.

	Conservation Targets[a]			
Species Assessed in Table 1	**Riparian/ Meadow Habitat**	**Salmonids**	**Elk (spring/early summer)**	**Conservation Need**
Idaho giant salamander (*Dicamptodon aterrimus*)	X	X		
Elk (*Cervus elaphus*)	P	P	X	
White-tailed deer (*Odocoileus virginianus*)	P		P	
Westslope cutthroat trout (*Oncorhynchus clarkii lewisi*)	P	X		
Chinook salmon (*Oncorhynchus tshawytscha*)	P	X		
Steelhead (*Oncorhynchus mykiss*)	P	X		
Great gray owl (*Strix nebulosa*)	P		P	
Northern leopard frog (*Rana pipiens*)	X			
Western toad (*Bufo boreas*)	P			
Red-tailed chipmunk (*Neotamias ruficaudus*)			P	
American three-toed woodpecker (*Picoides dorsalis*)	P	P	P	
Sandhill crane (*Grus canadensis*)	P		P	
Western ridged mussel (*Gonidea angulata*)		X		
Bald eagle (*Haliaeetus leucocephalus*)	P	P	P	
Boreal owl (*Aegolius funereus*)	P		P	
California myotis (*Myotis californicus*)	P		P	Yes
Columbia spotted frog (*Rana luteiventris*)	X	P		
Long-eared myotis (*Myotis evotis*)	P			Yes
Long-legged myotis (*Myotis volans*)	P			Yes
Northern pygmy-owl (*Glaucidium gnoma*)	P			Yes
Yuma myotis (*Myotis yumanensis*)	P			Yes
Bull trout (*Salvelinus confluentus*)	P	P		
Wilson's phalarope (*Phalaropus tricolor*)	P		P	
Moose (Alces alces)	P		P	
Fir pinwheel (*Radiodiscus abietum*)			P	Yes
Pale jumping-slug (*Hemphillia camelus*)			P	Yes
Western pearlshell (*Margaritifera falcata*)			P	Yes
Merlin (*Falco columbarius*)	P		P	
Selway forestsnail (*Allogona lombardii*)			P	Yes
Sheathed slug (*Zacoleus idahoensis*)			P	Yes
Smoky taildropper (*Prophysaon humile*)			P	Yes
Pacific lamprey (*Lampetra tridentata*)	P	P		

[a] Entries marked with "X" indicate that the majority or all habitat needs for an assessed species within the management landscape are being met by management actions benefitting the Conservation Target. Entries marked with "P" indicate only a portion of the species habitat needs are being met by management actions for the Conservation Target. Conservation voids exist where target-specific management actions provide little or no tangible habitat benefit for an assessed species. Blank cells under conservation targets may indicate a conservation void or where dissimilar habitat needs preclude conservation benefits.

Spatial Delineation of Conservation Target Landscapes

Each of the focal species, or groups, selected as Conservation Targets for RRWMA also utilize habitats off of RRWMA to meet their annual needs. In the case of the Riparian Habitat Conservation Target, the species that will benefit from improved riparian habitats also range off of RRWMA. Therefore, it is crucial that we actively participate in habitat conservation efforts within the landscape, beyond the borders of the WMA, if we are to maintain the integrity of the WMA itself.

This section describes the methods used to define spatial landscapes for each of our RRWMA Conservation Targets. We used the best data available (i.e., Chinook redd locations, species ecology data from the scientific literature, and local knowledge) to construct these Conservation Target-specific landscapes. These landscapes are then utilized in the Management Program Table (pages 38-41) to identify Conservation Target-specific Management Directions, Performance Targets, and Strategies for both RRWMA and the landscape.

For the purposes of RRWMA, many of the conservation specific landscapes overlap or, in some cases, are the same spatial extent. For example, the riparian/meadow complex is used to define the landscape for both that Conservation Target, and portions of the Chinook and elk landscapes. Therefore, the figures beginning on page 35 may represent multiple conservation targets.

Salmonids/Chinook Spawning Landscape

The Salmonids/Chinook landscape (Figure 2) is defined at two levels. First we delineated the Red River watershed at the HUC5 level to capture the area of influence for water quality with Red River. We then utilized redd locations collected during the 2012 field season to delineate important spawning areas within Red River. These locations depict currently used stream reaches but may not fully capture all potential spawning areas within the system. One of the most important issues identified for Chinook habitat management was a lack of woody cover within the meadow portions of the stream corridor. In order to address these concerns, we buffered these stream sections to include all areas within 50 meters of the stream. This landscape also includes all portions of the meadow complex where promoting natural flood regime/stream flow and other issues are important. The Management Programs Table identifies actions which could, over the long term, increase habitat suitability and distribution of spawning habitat within the Red River system.

Riparian/Meadow Landscape

The riparian/meadow landscape (Figure 2) was delineated at a scale of 1:24000 utilizing both satellite imagery and digital shaded relief models to identify the Red River floodplain and adjacent meadow system within the HUC5 watershed.

Elk Landscape

Red River WMA lies within Game Management Unit (GMU) 15. Department actions, such as season changes, and USFS management activities within GMU 15 will affect elk numbers within the meadow complex and on RRWMA. Likewise, management activities on the WMA and adjacent lands will likely affect elk numbers within the unit. Because management on RRWMA is likely to influence resident elk to a greater extent, we have defined two landscapes. Unit 15 (Figure 3), and the much smaller HUC5 Red River watershed (Figure 4). Management activities within this watershed will presumably have a greater impact on elk using the RRWMA than activities in other portions of Unit 15.

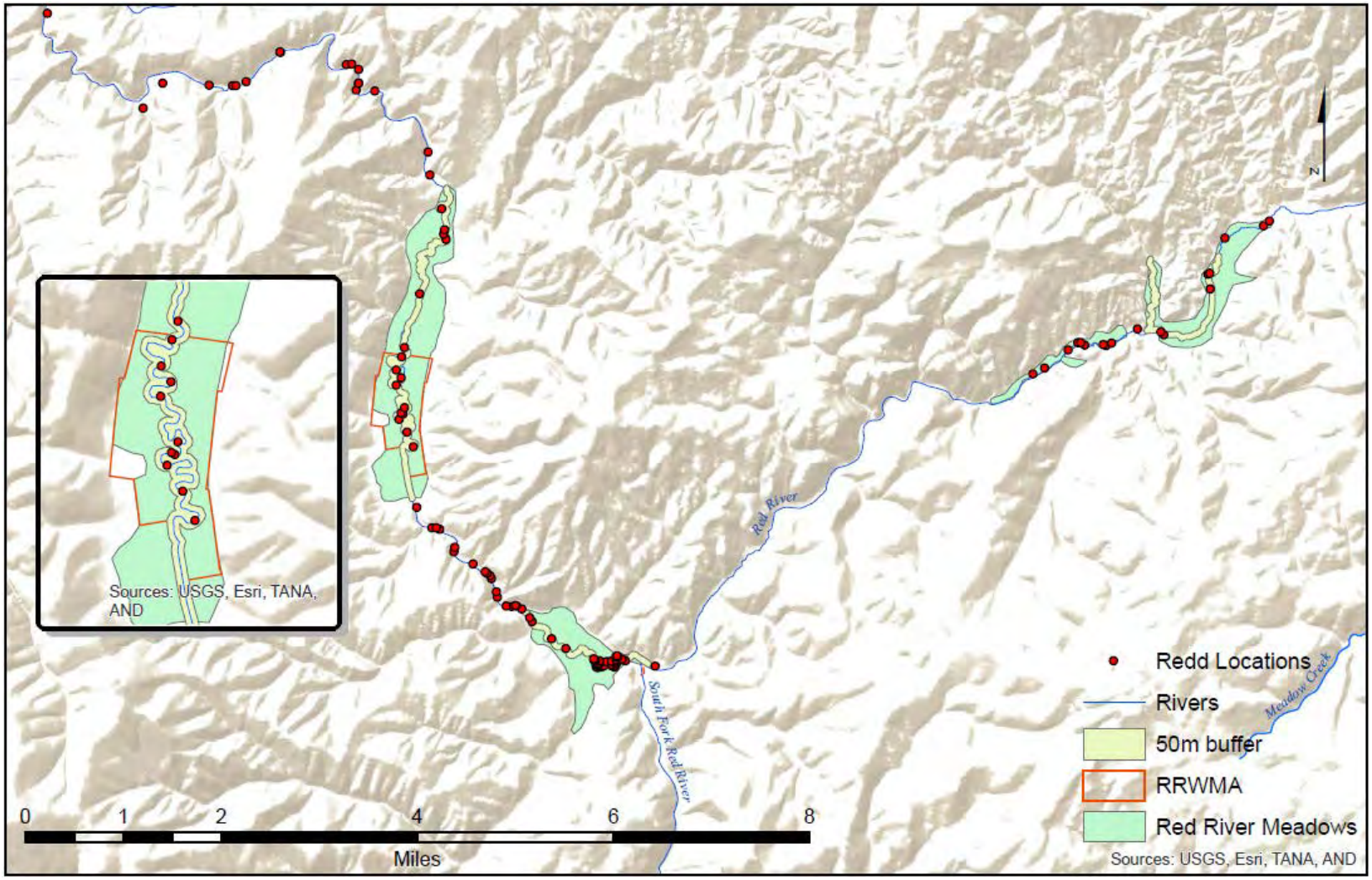


Figure 2. Red River WMA Salmonids/Chinook Spawning Landscape depicting the typical redd locations within the Red River system. This also displays the Riparian/Meadow Landscape, and a 50 m riparian buffer where lack of woody cover may be contributing to limiting habitat suitability for salmonids.

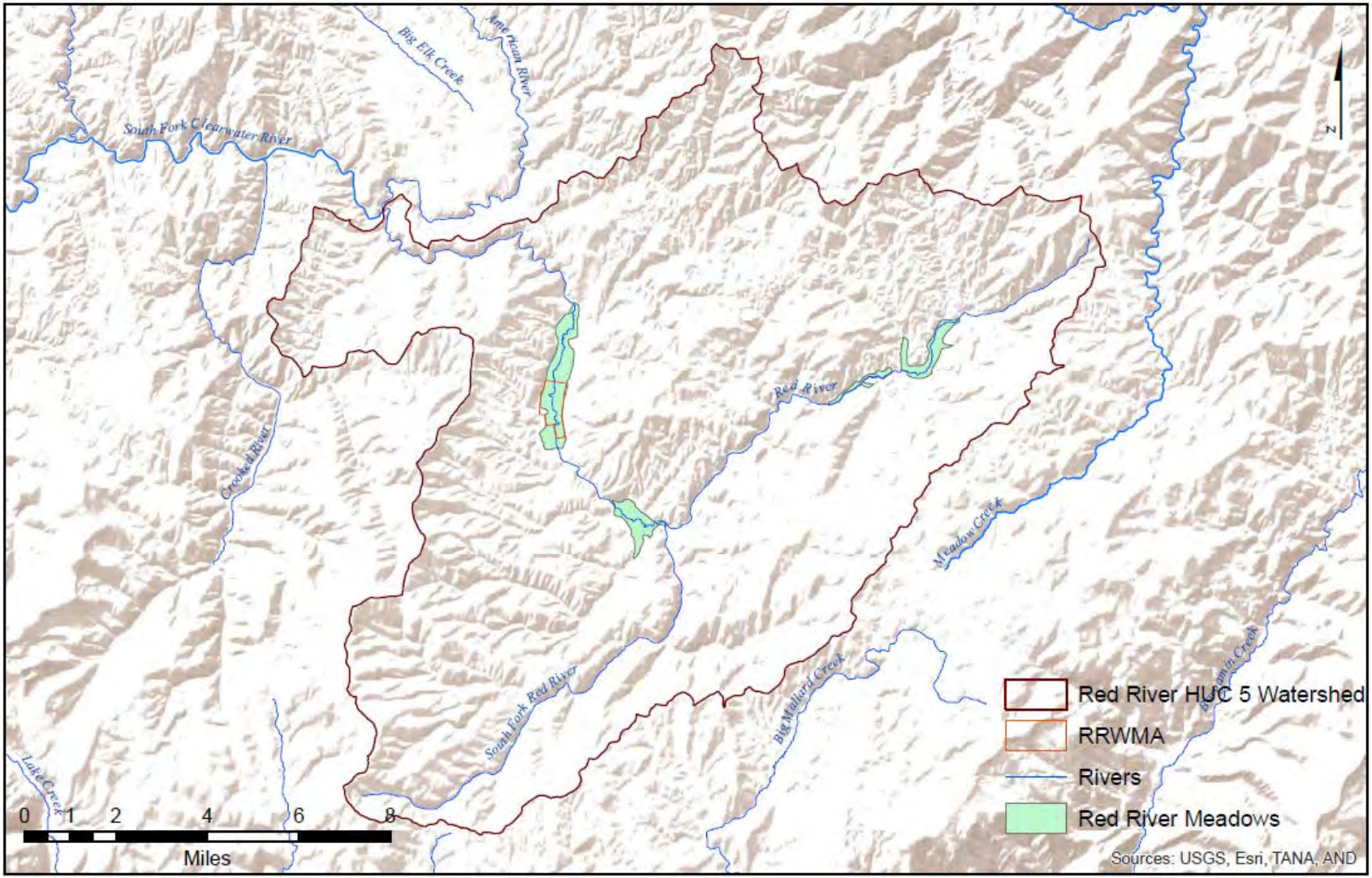


Figure 3. Red River HUC 5 watershed depicting both the area of greatest influence for elk utilizing Red River WMA, and the watershed which impacts water quality for salmonids within the Red River.

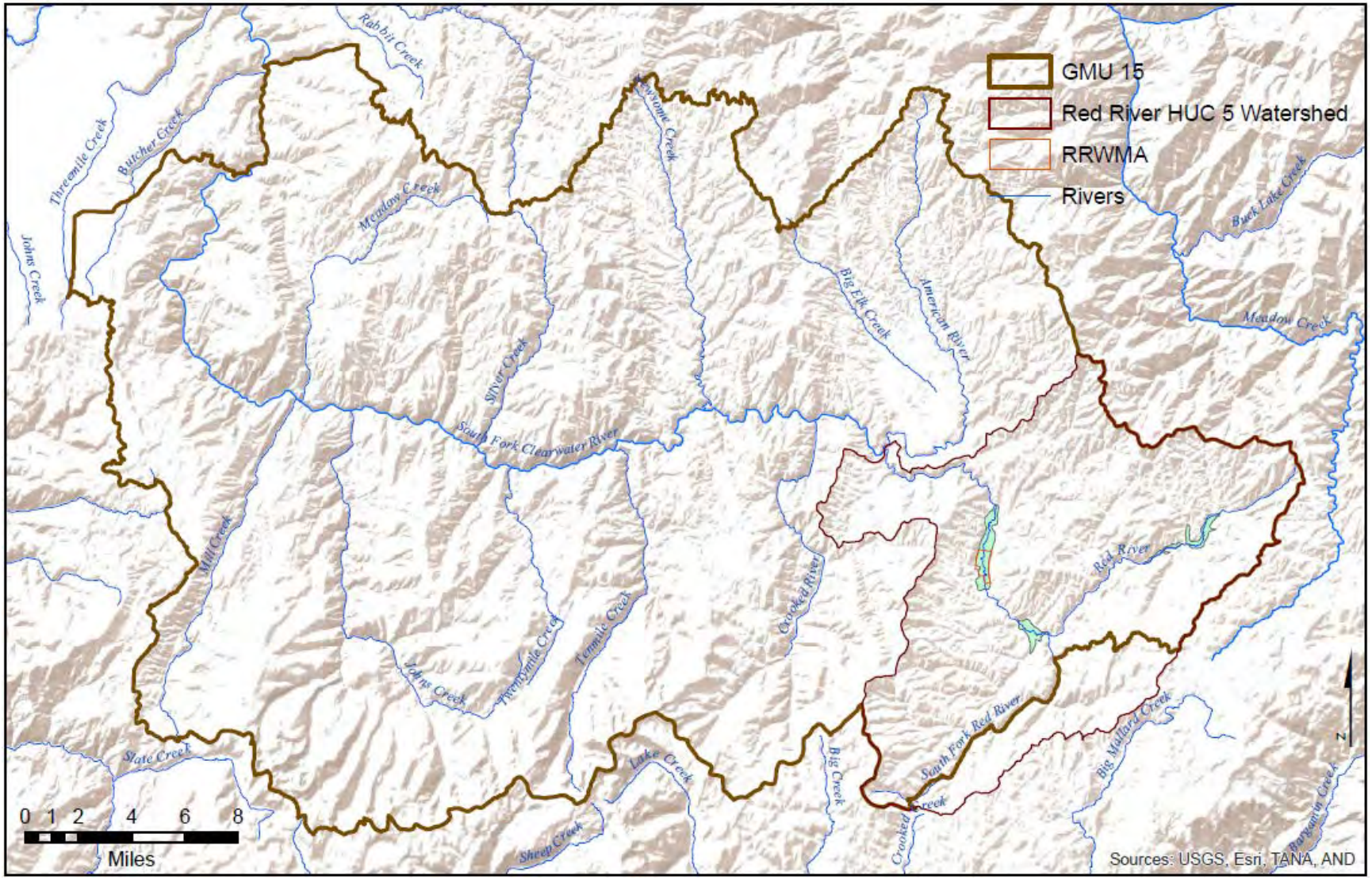


Figure 4. Greater elk landscape showing GMU 15, the scale at which Department manages elk numbers.

Red River WMA Management Program Table

The following table outlines the Management Directions, Performance Targets, Strategies, and Outcome Metrics RRWMA staff will use to manage for the Conservation Targets selected (page 29) to represent each RRWMA Priority (page 19) at both the RRWMA and Conservation Target-specific landscape scale. The Compass Objective column links the Management Directions in this table to the objectives of the Department's strategic plan, "*The Compass*" (Appendix I).

WMA Priority: Spring/Summer Big Game Habitat					
Conservation Target: Elk					
Scope	**Management Direction**	**Performance Target**	**Strategy**	**Metric**	**Compass Objective (Appendix I)**
RRWMA	Maintain or improve vegetation to provide elk forage during high elk use periods	Treat approximately 40 acres of dry/mesic meadow for early spring green-up on annual basis.	Utilize prescribed fire, fertilization, haying, or mechanical disturbance on at least 40 acres of meadow each year to improve forage nutrients and palatability	Acres treated for early green-up of elk forage	A, B, C, E, F, H
	Maintain low disturbance to calving and fawning areas	Manage human access during high ungulate use periods (April 1 – June 15)	Implement access management plan (Appendix VIII)	Violations detected	
			Minimize administrative use during meadow closure		
			Postpone haying until August 1, and other activities until after June 15		
	Increase hiding cover within riparian corridor.	Increase riparian and greenline shrub cover by 5% over 10 years.	Utilize enclosures, browse deterrents, and /or other techniques to decrease ungulate browse pressure on existing shrub plantations	Percent shrub cover	
			Supplement shrub/tree plantings when and where appropriate to increase shrub cover over time.		
			Repeat greenline and riparian transect surveys and analysis every 3-5 years		
		Maintain current area covered by lodgepole and aspen	Utilize enclosures, browse deterrents, and /or other techniques to decrease ungulate browse pressure on aspen suckers.	% of area by cover type	
Elk Landscape (Figures 2 & 3)	Ensure long-term suitability of the meadow complex for calving and early summer elk habitat.	Work with local landowners and agencies to enhance at least 40 acres within the meadow complex within 10 years.	Work with other agencies, NPT, and private lands owners to pursue conservation easements and restoration on private lands within the Red River Meadow Complex	Acres enhanced	
			Maintain existing, and develop new, working relationships with other agencies and private land owners within the landscape.		
			Provide input on forest service projects that have the potential to influence big game habitat		
	Work collaboratively with USFS on elk management issues within GMU 15, with special emphasis within the Red River Watershed	Work closely with the USFS on at least one landscape level forest restoration project within the next 10 years.	Offer assistance on USFS interdisciplinary teams tasked with designing landscape level projects that could potentially impact elk habitat within unit 15. This may include timber harvest, prescribed fire, travel planning, etc.	Projects undertaken and/or commented on.	
			Provide comments to USFS in forestry related projects within the Red River watershed.		

WMA Priority: Fish Habitat					
Conservation Target: Native Salmonids					
Scope	**Management Direction**	**Performance Target**	**Strategy**	**Metric**	**Compass Objective (Appendix I)**
RRWMA	Improve long-term habitat suitability for anadromous and resident native fish on RRWMA	Increase coverage of woody vegetation and promote a diverse plant community within the riparian zone to provide cover and shade for fish, nutrients and substrate for aquatic insects, stable stream banks, and instream woody debris. Increase riparian and greenline shrub cover by 5%, with at least 25% survivability of planted species, over 10 years.	Utilize enclosures, browse deterrents, and /or other techniques to decrease ungulate browse pressure on existing and supplemental shrub plantations along river corridor.	% shrub cover & survival	A, B, C, E, F
			Supplement shrub/tree plantings when and where appropriate to increase shrub cover over time.		
			Repeat greenline and riparian transect surveys and analysis results every 3-5 years to inform adaptive management decisions.		
			Inventory and map invasive species, and use integrated pest management to reduce invasive species		
			Work with adjacent landowners to maintain fences along private property boundaries where livestock are present.		
		With fisheries staff in the lead, develop an assessment and monitoring plan to increase our understanding in stream salmonid habitat by 2018.	Work cooperatively with Department fisheries staffs to repeat past fish and habitat surveys that were designed to evaluate the effectiveness of the lower Red River Meadow Restoration Project on the Department Red River WMA. (presented in Lower Red River Meadow Restoration Project Effectiveness monitoring report)	Plan developed	
Salmonids/ Chinook Spawning Landscape (Figure 2)	Maintain or improve long-term habitat suitability for anadromous and resident native fish within riparian/meadow habitat.	Pursue opportunities to work cooperatively with partners to conserve or enhance at least 1000 ft of stream on private land containing spawning habitat.	Work with private land owners, the NPT, and other organizations to pursue conservation easements on private property within Chinook spawning reaches of Red River.	Ft. conserved	
		Work collaboratively to restore natural hydrology and woody cover within riparian corridor on at least 40 acres of private land by 2018.	Work with land owners, land managers, and other partners to identify and implement restoration projects which improve surface flows, natural hydrology, and woody riparian cover within the landscape.	Acres restored	
		With fisheries staff in the lead, develop an assessment and monitoring plan to monitor fisheries within Red River by 2018.	Work cooperatively with Department fisheries staff to design and implement monitoring project to assess fisheries trends in abundance.	Plan developed	
	Work collaboratively with USFS on salmonid habitat conservation and restoration projects within the landscape	Work with USFS to restore or enhance natural hydrology and woody cover within riparian corridor on at least 1000 feet of stream within next 5 years.	Work with USFS to identify and implement restoration projects which improve surface flows, natural hydrology, and woody riparian cover within the landscape.	Ft. restored or enhanced	
			Provide comments on USFS projects within the Red River watershed that have the potential to impact salmonid habitat quality within Red River. May include forestry, travel management, mining applications, etc.		

WMA Priority: Special Status Species Habitat					
Conservation Target: Riparian/Wet Meadow Habitat					
Scope	**Management Direction**	**Performance Target**	**Strategy**	**Metric**	**Compass Objective (Appendix I)**
RRWMA	Provide riparian/meadow habitat in good to excellent ecological condition (as measured by Floristic Quality metrics) to benefit a wide range of fish and wildlife species	Protect intact riparian habitats and continue riparian habitat improvement projects where appropriate. Increase riparian and greenline shrub cover by 5%, with at least 25% survivability of planted species, over 10 years.	Utilize physical or chemical weed barriers to decrease herbaceous competition within shrub plantations	% shrub cover & survival	A, B, C, E, F
			Supplement shrub plantings when and where appropriate to increase shrub cover over time		
			Utilize enclosures, browse deterrents, and /or other techniques to decrease ungulate browse pressure on existing shrub plantations.		

WMA Priority: Special Status Species Habitat					
Conservation Target: Riparian/Wet Meadow Habitat					
Scope	**Management Direction**	**Performance Target**	**Strategy**	**Metric**	**Compass Objective (Appendix I)**
RRWMA	Provide riparian/meadow habitat in good to excellent ecological condition (as measured by Floristic Quality metrics) to benefit a wide range of fish and wildlife species		Inventory and map invasive species, and use integrated pest management to reduce invasive species		A, B, C, E, F
		Maintain and/or increase floristic quality of meadow vegetation in greenline and riparian areas. In 10 years, increase native species richness by 10%, decrease noxious/invasive weed cover by 25%, decrease % of flora comprised of non-native species by 10%)	Inventory and map invasive species, including reed canarygrass	Create and maintain GIS database of these attributes	
			Experiment with different control techniques and use integrated pest management to reduce aggressive nonnative species such as reed canarygrass	% native vs. non-native cover, composition of vegetation	
		Increase our knowledge of riparian condition and function to improve riparian habitat management	Repeat greenline and riparian transect surveys and analysis results every 3-5 years to inform adaptive management decisions	Completed and analyzed survey	
			Create spatial database of riparian condition and vegetation composition	Create and maintain GIS database of these attributes	
Riparian/ Meadow Landscape (Figure 2)	Provide high quality riparian habitat to benefit a wide range of fish and wildlife species	Restore or enhance at least 40 acres of riparian habitat within 10 years.	Develop partnerships that includes agencies, organizations, and landowners that focuses on riparian habitat quality within the landscape	Acres enhanced	
			Work with land owners, land managers, and other partners to identify and pursue restoration projects which improve riparian function, including woody cover, within the lower Red River meadow complex.		

WMA Priority: Wildlife-based Recreation and Education					
Scope	**Management Direction**	**Performance Target**	**Strategy**	**Metric**	**Compass Objective (Appendix I)**
RRWMA	Provide opportunity for consumptive and non-consumptive wildlife-based recreation	Maintain hunting and fishing access and opportunities	Provide recreational hunting and fishing opportunities consistent with the RRWMA mission	Access/opportunities maintained	F, G, H, I, J, K, M, N
		Develop at least on additional interpretive site on the WMA by 2018	Maintain the wildlife viewing platform	Sites developed	
			Explore grant opportunities for the development of additional interpretive signs and wildlife viewing opportunities		
		Annually maintain facilities and signage to facilitate recreation and education	Provide improved maps, informational signage, and boundary markers	Facilities maintained	
	Provide a meeting place for natural resource oriented and community based user groups	Provide a meeting place for natural resource oriented and community based user groups annually	Work with user groups to provide a meeting place for natural resource oriented and community based user groups	Use days	
	Increase public awareness of wildlife resources and wildlife and habitat management.	With I&E staff in the lead, increase use of RRWMA for natural resource education. Develop at least one new annual educational activity by 2018	Work with interested parties, I&E staff, and local schools to promote natural resource based education	Educational opportunities developed	
			Work with other agencies, organizations, and local community to address funding issues facing the use of RRWMA as a center for natural resource education		
			Develop additional information (video or print) for distribution that highlights education at RRWMA		

WMA Priority: Wildlife-based Recreation and Education					
Scope	**Management Direction**	**Performance Target**	**Strategy**	**Metric**	**Compass Objective (Appendix I)**
RRWMA	Increase public awareness of wildlife resources and wildlife and habitat management.	With I&E staff in the lead, increase use of RRWMA for natural resource education. Develop at least one new annual educational activity by 2018	Work with I&E staff, local schools, and other interested individuals to develop educational opportunities such as specialized workshops (Project WILD) and other natural resource related education.	Educational opportunities developed and/or projects accomplished	F, G, H, I, J, K, M, N
			Work with the I&E staff to develop and provide opportunities to utilize volunteers and/or the master naturalist program for projects ranging from shrub plantings to bird trend counts.		

WMA Priority: Information Gaps					
Scope	**Management Direction**	**Performance Target**	**Strategy**	**Metric**	**Compass Objective (Appendix I)**
RRWMA	With Wildlife Diversity staff in the lead, develop strategies to address gaps identified in the viability assessment	Develop monitoring plan to survey species occurrence/distribution for amphibians, mollusks, bat guild, and rare plants.	Work with Wildlife Diversity Program staff to develop monitoring plan for these groups.	Plan Completed	E, F, G, H, J, K, M
		Implement monitoring plan	Survey WMA and analyze results to document species occurrence and distribution.	Completed survey and analysis	

Monitoring

Monitoring and reporting are critical for tracking accomplishment of performance targets identified in the WMA Management Program Table. Monitoring can be separated into three categories: compliance monitoring, biological monitoring and public use monitoring.

Compliance Monitoring

Compliance monitoring documents the completion of regular management tasks that are essential to WMA operations. These include but are not limited to:

- Maintaining WMA facilities and access sites
- Maintaining infrastructure at ponds and wetlands
- Providing technical assistance to local agency staff and private landowners
- Maintaining public access sites

Compliance monitoring will be reported annually at work plan meetings between regional and headquarters staff.

Biological Monitoring

Wildlife Management Areas across the state have a range of established biological monitoring programs and needs. Additional monitoring needs may have been identified during development of the RRWMA Management Program Table. Biological monitoring includes wildlife, vegetation, and habitat monitoring. It may also include assessing the effectiveness of management and restoration activities. Monitoring may occur at multiple spatial and temporal scales, depending on objectives.

Currently, RRWMA monitors habitat, habitat treatments, breeding bird trends, and weed infestations. In Table 3, future monitoring needs associated with performance targets and strategies identified in the RRWMA Management Program Table are summarized. The goal is to measure success or effectiveness of strategies that are implemented to reach performance targets. A detailed monitoring plan including specific techniques will be completed for RRWMA by December 31, 2014.

In 2010, the Department initiated a statewide, long-term habitat monitoring program for all WMAs. The goal of the program is to collect quantitative and comparable baseline data to monitor habitat change on all WMAs due to management actions or other causes. The baseline data collected will be specific to each WMA, based on the habitat types present and its unique management issues. Baseline data typically includes:

- Distribution and extent of cover types, including mapping of vegetation cover types
- Vegetation structure, composition, and condition

- Presence or abundance of noxious weeds and other invasive plants
- Riparian and wetland condition and function assessment
- Photo points

To date, this program has collected baseline data on five WMAs, with surveys of all 32 WMAs expected to be completed by 2019. This is a long-term program and will be repeated starting in 2020.

Public Use Monitoring

Wildlife Management Areas use public surveys and monitoring tools (e.g., traffic counters) to evaluate public satisfaction and use patterns as well as identify issues of concern. In some areas, hunter check stations monitor hunter success and satisfaction. These survey data help managers determine whether they are meeting the goals for RRWMA.

Red River WMA monitored public use intensively during 2012 and 2013 using personal contact surveys and internet surveys. Further in-depth public use monitoring will occur again in approximately three to five years. Please see Appendix IV for a summary of that monitoring effort.

Reporting

Red River WMA will produce a five-year report on implementation of this plan in 2019, including a summary of accomplishments and progress towards meeting performance targets. During the five-year review, RRWMA staff will determine whether modifications to the plan are needed to meet performance targets, to accommodate changing conditions and priorities, or to incorporate advancements in management knowledge and techniques.

Table 3. Biological monitoring for Red River WMA, 2014-2023.

Performance Target	Survey Type	Survey Frequency
Manage approximately 40 acres of meadow for early spring green-up on annual basis.	Ocular estimate	Annually after treatment
Manage human access during high ungulate use periods (Apr 1 – Jun 15)	spring patrols	Bi-weekly
Increase riparian and greenline shrub cover by 5% over 10 years (covers multiple targets)	Vegetation (riparian/greenline) transects as appropriate (including Floristic Quality metrics)/photo points	Before project and twice after project within five years, again in 10 years
Maintain or increase native vegetation in greenline and riparian areas.	Vegetation (riparian/greenline) transects as appropriate (including Floristic Quality metrics)/photo points	Twice within 10 years
Maintain current % lodgepole and aspen	Updated GIS map of cover types	Once within 10 years
Develop strategies to address gaps identified in the viability assessment	Species occurrence and distribution surveys as appropriate	Frequency will be determined by species needs.

Current & Past Monitoring

Most of the monitoring that is, and has been, done on RRWMA is associated with the restoration activities begun in June 1996. During restoration, short-term monitoring efforts – designed to evaluate work after each completed phase – have been documented in the 1997-2000 Implementation Monitoring Report (LRK Communications et al. 2003).

Effectiveness monitoring, designed to measure progress toward the goals of the LRRMRP, was begun with the collection of post restoration baseline data in 2000 and 2001. The initial post-restoration analysis of the LRRMRP's accomplishments can be found in the 1997-2001 Effectiveness Monitoring Report (LRK Communications et al. 2003). This report examines six effectiveness parameters, comprised of 17 physical and biological performance indicators. Effectiveness parameters include channel structural response, hydrologic response, riparian condition response, fish habitat response, fish population response, and wildlife habitat response. Klein et al. 2007 presents "the initial results of a long-term monitoring program for the LRRMRP." Unfortunately, a long-term funding source for the continuation of monitoring was never acquired. Of these six parameters, only fish populations, in the form of redd counts, have been monitored annually since project completion. For the purposes of this document, we will include only brief descriptions of the wildlife and habitat monitoring efforts that will continue under the Department, and refer readers to the above reports for more information on methodology, results, and other past monitoring efforts associated with the LRRMRP. Additional fisheries monitoring reports can be found in the annual ISS Brood Year Collaborator Report available on the Department website. The following excerpts from the 1997-2001 Effectiveness Monitoring Report (LRK Communications et al. 2003) describe long term wildlife and habitat monitoring efforts on RRWMA.

Riparian and Greenline Plant Community Composition

Twenty paired greenline and riparian transects are permanently established in Phases I – IV (Figure 5). Greenline transects (100 m x 2 m) are located adjacent and parallel to the stream following the natural line of vegetation along the channel. Riparian transects (100 m x 2 m) are located perpendicular to the stream channel, beginning at the midpoint of the greenline transect and extending out into the riparian corridor. Ocular estimates of community dominance are recorded as a function of vegetative cover. Community types are defined as either a single dominant (i.e., herbaceous community type) or dominant/subdominant combination (i.e., tree/shrub or shrub/herbaceous community type)." These surveys were replicated in 2013. Results can be found under "surveys" in Appendix VI. In order to detect shifts in plant community composition, including native versus non-native vegetation, these surveys should be replicated and analyzed at 5-10 year intervals. The Department is currently developing habitat monitoring protocols for Department lands statewide which will include, in part, riparian and greenline transects where appropriate. Once this effort is complete, those protocols will be adopted for RRWMA habitats.

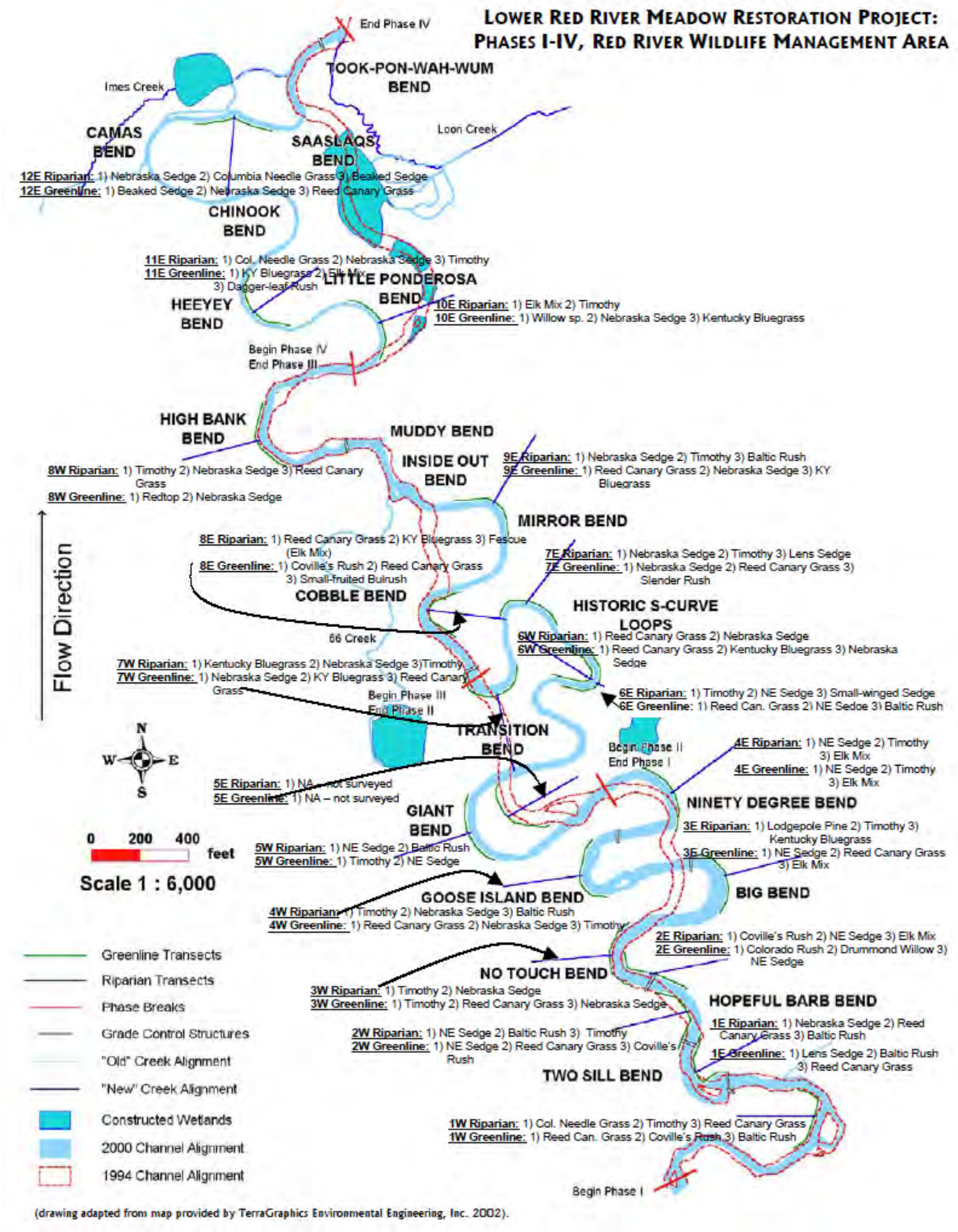


Figure 5. Locations of the 20 paired riparian/greenline transects and the three species or plant communities occupying the largest area within each transect in 2003, Phase I-IV, LRRMRP.

Bird Populations and Densities

"The bird survey is conducted annually in mid-June. A line transect is established that runs parallel to the Red River at a distance of 50 meters (164 feet), covering all four phases of the Lower Red River Restoration Project on the RRWMA. In a few areas due to the shape of the channel meanders, the transect is located further than 50 meters (164 ft.) from the edge of the channel to avoid doubling back across the transect. Eleven points, approximately 250 to 300 meters (820 to 984 ft.) apart are staked along the transect (Figure 6). The observer stops at each point for 10 minutes and counts and identifies all birds seen or heard in a strip 100 meters (328 ft.) wide as well as those seen or heard while walking from point to point. Locations are plotted on a site map; numbers and species are recorded on a field form. Species types and numbers counted are tabulated. Bird species are identified according to names and descriptions from Peterson (1998) and National Geographic Society (1987)." In order to detect changes in bird species diversity, these surveys should be replicated every year, and analyzed every three years. The results of past surveys can be seen in Appendix VII.

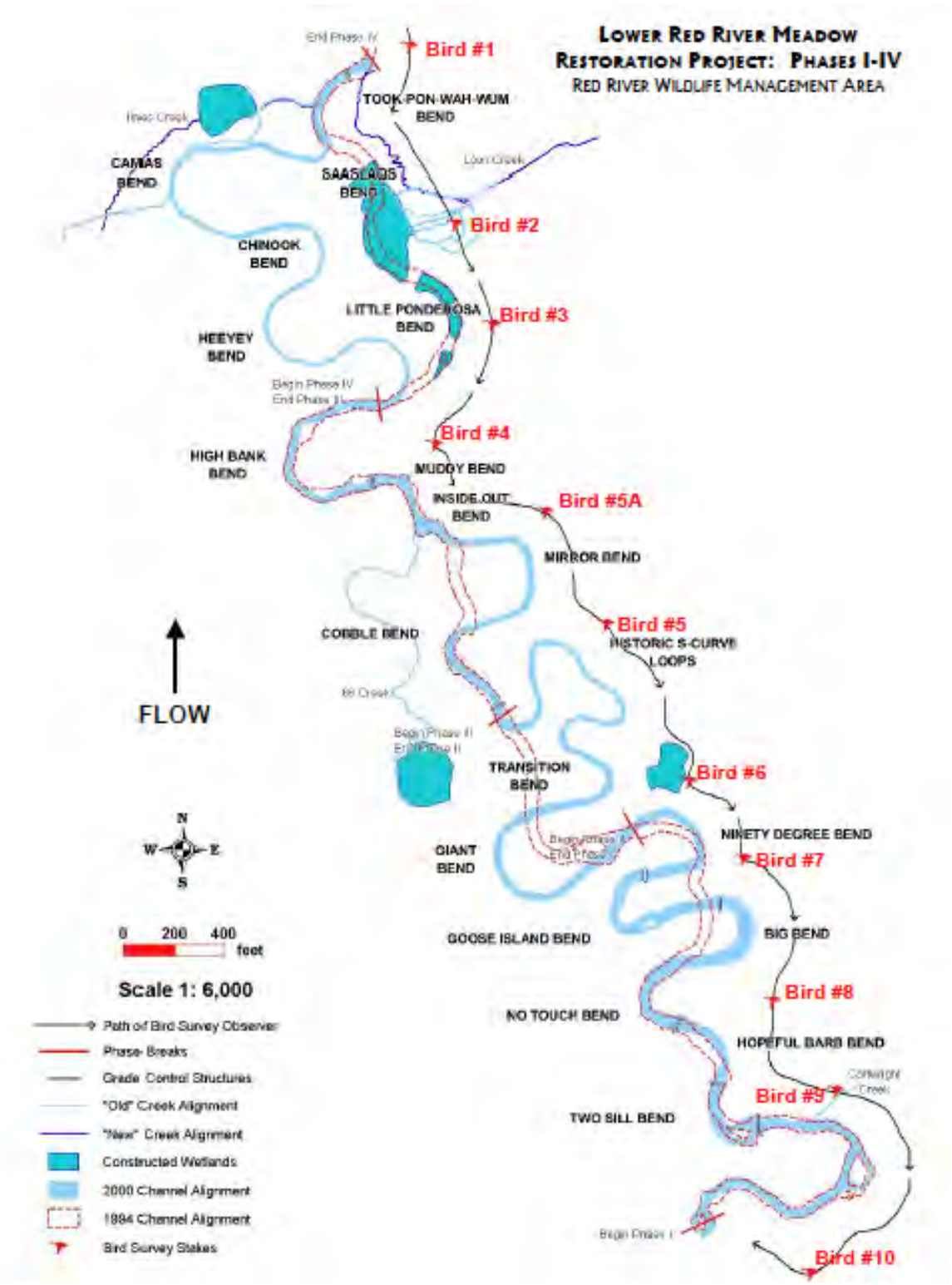


Figure 6. Location of transect and bird survey points.

Photo Points

In addition to the effectiveness monitoring described above, several series of photo points, designed to visually track changes in both habitat and stream channel configuration, have been developed. Figure 7 shows the locations of photo points (coordinates given below) associated with the stream restoration. These points were taken in 2000, 2009, and 2013. Additional photo points exist on the RRWMA, but are not shown on the map below. For the purposes of this document, and to visually track changes in the riparian community, these were selected.

Photo point	Lat	Long
7.1	45.74417	-115.39545
7.2	45.74413	-115.39547
7.3	45.74471	-115.39354
7.4	45.74514	-115.39453
7.5	45.74525	-115.39559
7.6	45.74573	-115.39437
7.7	45.74613	-115.39538
7.8	45.74418	-115.39338
7.9	45.74604	-115.39738
7. 10	45.74661	-115.39575
7.11	45.74733	-115.39496
7.11.5	45.74761	-115.39577
7.12	45.74839	-115.39528
7.13	45.74775	-115.39625
7.14	45.74863	-115.39684
7.15	45.74872	-115.39714
7.16	45.74979	-115.3971
7.17	45.74953	-115.39535
Hopeful Bend PP	45.74372	-115.3948

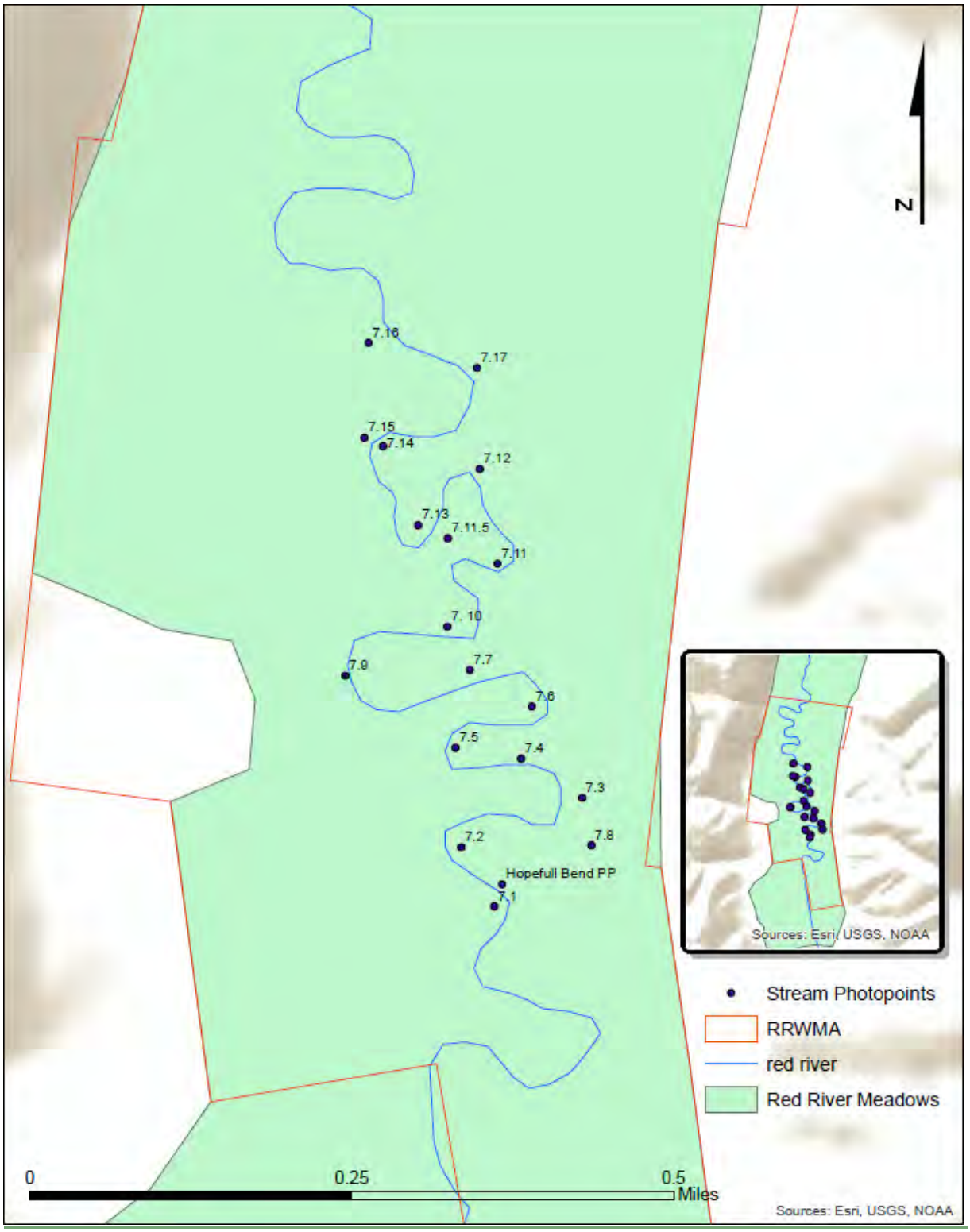


Figure 7. Location of stream photo points.

References

Bonneville Power Administration. 1996. Lower Red River Meadow Restoration Project Environmental Assessment. DOE No. 1027. Bonneville Power Administration. Portland, Oregon.

Bonneville Power Administration and Idaho Department of Fish and Game. 1994. Memorandum of Interagency Agreement for the Acquisition and Management of Property Deeded to the Idaho Department. of Fish and Game, State of Idaho within Idaho County, Idaho. Boise, Idaho.

Brigham, R. M., M. J. Vonhof, R. M. R. Barclay, and J. C. Gwilliam. 1997. Roosting behavior and roost–site preference of forest–dwelling California bats (*Myotis californicus*). Journal of Mammalogy, 78:1231–1239.

Brunsfeld, S. J., D. G. Dawes, S. McGeehan, and D. G. Ogle. 1996. An Analysis of the Riparian Vegetation Options at Red River. Report to Pocket Water, Inc., Idaho Dept. of Fish and Game, Bonneville Power Administration, and Idaho County Soil and Water Conservation District. University of Idaho, Moscow.

Buehler, D. A. 2000. Bald Eagle (*Haliaeetus leucocephalus*). In The Birds of North America, No. 506 (A. Poole and F. Gill, eds.). The Birds of North America, Inc., Philadelphia, Pennsylvania.

Colwell, M. A., and J. R. Jehl, Jr. 1994. Wilson's Phalarope (*Phalaropus tricolor*). No. 83 in The Birds of North America (A. Poole and F. Gill, eds.). Philadelphia. The Academy of Natural Sciences; Washington, D.C.: The American Ornithologists' Union.

Dechant, J. A., D. H. Johnson, L. D. Igl, C. M. Goldade, A. L. Zimmerman and B. R. Euliss. 2003. Effects of management practices on grassland birds: Wilson's Phalarope. Northern Prairie Wildlife Research Center, Jamestown, ND. Northern Prairie Wildlife Research Center Online. http://www.npwrc.usgs.gov/resource/literatr/grasbird/wiph/wiph.htm (Version 12DEC2003).

Eldridge, J. 1992. Management of habitat for breeding and migrating shorebirds in the Midwest. U.S. Fish and Wildlife Service Leaflet 13.2.14.

Frest, T. J. 1999. A review of the land and freshwater mollusks of Idaho. Final report prepared for Idaho Conservation Data Center, Idaho Department of Fish and Game, Boise.

Frest, T. J., and E. J. Johannes. 1997. Land snail survey of the lower Salmon River drainage, Idaho. Idaho Bureau of Land Management Technical Bulletin 97–18.

Goggans, R., R. D. Dixon, and L. C. Seminara. 1988. Habitat use by Three–toed and Black–backed woodpeckers. Oregon Dept. Fish Wildlife Nongame Rep. 87–3–02.

Groves, C. 2003. Drafting a Conservation Blueprint: A Practitioner's Guide to Planning for Biodiversity. Island Press, Washington, D.C.

Hayward, G. D. 1997. Forest management and conservation of boreal owls in North America. Journal of Raptor Research 31:114–124.

Heywood, V. H. 1995. Global biodiversity assessment. Cambridge University Press, Cambridge.

Hoyt, J. S., and S. J. Hannon. 2002. Habitat associations of black–backed and American Three–toed Woodpeckers in the boreal forest of Alberta. Canadian Journal of Forestry Research 32:1881–1888.

Idaho Department of Fish and Game. 1999. Red River Wildlife Management Area Long-range Management Plan. Idaho Department of Fish and Game, Boise.

Idaho Department of Fish and Game. 2005. Idaho Comprehensive Wildlife Conservation Strategy. Idaho Conservation Data Center, Idaho Department of Fish and Game, Boise. https://fishandgame.idaho.gov/public/wildlife/cwcs/ [Accessed March 3, 2014].

Kantrud, H. A. 1981. Grazing intensity effects on the breeding avifauna of North Dakota native grasslands. Canadian Field–Naturalist 95:404–417.

Karl, J. W., J. M. Scott, and E. Strand. 2005. An assessment of Idaho's wildlife management areas for the protection of wildlife. Natural Areas Journal 25:36-45.

Keinath, D., and M. McGee. 2005. Boreal Toad (*Bufo boreas boreas*): a technical conservation assessment. USDA Forest Service, Rocky Mountain Region. Available: http://www.fs.fed.us/r2/projects/scp/assessments/borealtoad.pdf [Accessed March 11, 2014].

Klein, L., S. Clayton, R. Alldredge, and P. Goodwin. 2007. Long-Term Monitoring and Evaluation of the Lower Red River Meadow Restoration Project, Idaho, USA. Restoration Ecology Vol. 15, No. 2, pp. 223-239.

Lambeck, R. J. 1997. Focal species: A multi-species umbrella for nature conservation. Conservation Biology 11:849–856.

Leonard, D. L., Jr. 2001. Three–toed Woodpecker (*Picoides tridactylus*). In The Birds of North America, No. 588 (A. Poole and F. Gill, eds.). The Birds of North America, Inc., Philadelphia, Pennsylvania.

LRK Communications, TerraGraphics Environmental Engineering, Inc., University of Idaho, and Wildlife Habitat Institute. 2003. Lower Red River Meadow Restoration Project: 1997-2001 Effectiveness Monitoring Report. Unpublished report submitted to Bonneville Power Administration, Red River Technical Advisory Committee, and Idaho County Soil and Water Conservation District.

National Geographic Society. 1987. Field guide to the birds of North America. 2nd ed. National Geographic Society. Washington D.C.

Noss, R. F., E. Dinerstein, B. Gilbert, M. Gilpin, B. J. Miller, J. Terborgh, and S. Trombulak. 1999. Core areas: where nature begins. *In* J. Terborgh and M. Soule, eds., Continental Conservation: Scientific Foundations of Regional Reserve Networks, pp. 92-128. Washington D.C.: Island Press.

Nussbaum, R. A. 1969. Nests and eggs of the Pacific giant salamander *Dicamptodon ensatus* (Eschscholtz). Herpetologica 25:257–262.

Oring, L. W., L. Neel, and K. E. Oring. 2000. Intermountain West regional shorebird plan, version 1.0. Regional report of the U.S. Shorebird Conservation Plan. Manomet Center for Conservation Sciences, Manomet, Massachusetts.

Parker, M. S. 1991. Relationship between cover availability and larval Pacific giant salamander density. Journal of Herpetology 25:355–357.

Peterson, R. T. 1998. A field guide to western birds. Houghlin Mifflin Co. Boston, Massachusetts.

Simberloff, D. 1998. Flagships, umbrellas, and keystones: Is single-species management passé in the landscape era? Biological Conservation 83:247-257.

Taylor, D. W. 1981. Freshwater mollusks of California: a distributional checklist. California Fish and Game 67(3):140–163.

U.S. Fish and Wildlife Service. 2005. The U.S. Fish and Wildlife Service's Focal Species Strategy for Migratory Birds Measuring success in bird conservation. http://www.fws.gov/migratorybirds/CurrentBirdIssues/Management/FocalSpecies/The%20Focal%20Species%20Fact%20Sheet%20and%20Table.pdf [Accessed December 6, 2012].

U.S. Forest Service, Nez Perce National Forest. 1988. Nez Perce National Forest Soil Survey. Grangeville, Idaho.

Veríssimo, D., I. Fraser, R. Bristol., J. Groombridge, and D. MacMillan. 2009. Birds as tourism flagship species: A case study on tropical islands. Animal Conservation 12:549-558.

Appendices

I. THE COMPASS – THE DEPARTMENT'S STRATEGIC PLAN

In 2006, the Department completed a strategic plan—*The Compass*—based on public input and legislative mandates. It continues to guide the Department in 2014 and is the primary guiding document for all other Department plans developed since 2006. The following table presents the goals, objectives, and strategies from *The Compass* that are most relevant to WMA management. *Compass* objectives are lettered on the left side for reference in the Management Program Table.

The Compass
GOAL—Fish, Wildlife, and Habitat
A. Objective – Maintain or improve game populations to meet the demand for hunting, fishing, and trapping.
B. Objective – Ensure the long-term survival of native fish, wildlife, and plants.
C. Objective – Increase the capacity of habitat to support fish and wildlife.
D. Objective – Eliminate the impacts of fish and wildlife diseases on fish and wildlife populations, livestock, and humans.
GOAL—Fish and Wildlife Recreation
E. Objective – Maintain a diversity of fishing, hunting, and trapping opportunities.
F. Objective – Sustain fish and wildlife recreation on public lands.
G. Objective – Maintain broad public support for fish and wildlife recreation and management.
H. Objective – Increase opportunities for wildlife viewing and appreciation.
I. Objective – Increase the variety and distribution of access to private land for fish and wildlife recreation.
GOAL—Working With Others
J. Objective – Improve citizen involvement in the decision-making process.
K. Objective – Increase public knowledge and understanding of Idaho's fish and wildlife.
GOAL—Management Support
L. Objective – Attract and retain a diverse and professional workforce.
M. Objective – Provide equipment and facilities for excellent customer service and management effectiveness.
N. Objective – Improve funding to meet legal mandates and public expectations.

II. HISTORY

The 314-acre Little Ponderosa Ranch near Red River, Idaho, was purchased in September 1993 and renamed the Red River Wildlife Management Area (RRWMA) (Figures 1 and 2). The former owner, Donald Wilkerson of Reno, Nevada, offered to sell the property to the Department so that it would be preserved in a natural state, the area's fish and wildlife resources be protected, and the property remain undeveloped for recreational home sites.

The purchase was made possible by a donation of $100,000 from the RMEF, a grant of $100,000 obtained by TU from the National Fish and Wildlife Foundation, and mitigation funds of $287,000 from BPA. The RMEF was interested in elk habitat protection and conservation education. Trout Unlimited's grant was sponsored by the BLM as part of the "Bring Back the Natives" program jointly run by the BLM and the USFS to restore species to their native habitats. Trout Unlimited was interested in restoration of Chinook salmon spawning areas and enhancing fisheries habitat within the Red River drainage. Bonneville Power Administration funding was associated with mitigation efforts concerning fish and wildlife habitat losses within the Columbia River Basin.

Lower Red River Meadow Restoration Project (LRRMRP)

Since the early part of the 20th century, human activities on various geographic scales have had an accumulative impact on the ecology of the Lower Red River Meadow. Construction of reservoirs and hydroelectric dams in the Snake and Columbia River systems downstream has inhibited the migration of anadromous fish species. On a watershed scale, logging, mining, and road-building practices have altered the hydrology, sediment delivery, and water quality characteristics of the Red River. On a local scale, the river channel has been straightened and native riparian vegetation eliminated due to dredge mining or in an attempt to reduce flooding and maximize grazing area throughout the meadow.

Although the meadow systems encompass a relatively small portion of the Red River watershed, their river reaches contain a disproportionately high amount of aquatic potential within the South Fork Clearwater subbasin and are high priorities for restoration activities (USFS Nez Perce National Forest 1988).

The Lower Red River Meadow Restoration Project began in 1993 with the collaborative purchase of the Little Ponderosa Ranch, one of the four properties in the lower meadow. Funding collaborators included the BPA, the Department, RMEF, TU, and the National Fish and Wildlife Foundation. This 314-acre parcel was then deeded over to the Department in an Interagency Memorandum of Agreement (BPA and IDFG 1994) to manage for habitat restoration and fish and wildlife benefits as the RRWMA. The USFS was instrumental in writing the initial funding proposal to BPA for the restoration work.

The LRRMRP spanned 10 years. After the initial two years of pre-restoration data collecting, designing, and planning, the implementation phases began in 1996 on the RRWMA. Restoration of the 1.5 miles of stream on this property was divided into four phases with the intent of

completing one phase per year, beginning on the upstream end of the property (Phase I) and finishing on the downstream end (Phase IV). The channel work in Phase IV was completed in 2000. The riparian plantings associated with the original project were completed the following year (additional plantings continued through 2006). Monitoring and evaluation began in 1997 and continued through 2004. Post-restoration activities in years 2001 through 2004 included performing on-site field reviews, collecting monitoring data, analyzing and reporting monitoring results, negotiating conservation easement options with adjacent private property owners, maintaining existing infrastructure, planning for and employing revegetation enhancement and protection strategies, and satisfying administrative tasks and obligations.

Public Outreach and Education

- In 1996 – with additional funding from the Idaho Fish and Wildlife Foundation, RMEF, and Charles DeVlieg Foundation – we contracted to have an education management plan developed for RRWMA. The plan is very ambitious and, to date, no outside funding has become available for implementation. We have, however, been able to achieve some of the goals outlined in the plan, as well as additional outreach and education activities listed below.
- Received additional funding from RMEF for taxidermy mounts for the ranch house.
- In 2005 we received a grant from the BLM which partially funded the construction of a wildlife viewing platform near the old school house.
- In 1999 we received partial funding from BLM to develop and install interpretive signs.
- Schoolhouse restoration.
- We have completed several key upgrades to the facilities needed to implement the education management plan (see Facilities below).

Habitat Management (in addition to the primary restoration)

- The neighbor, Earl Johnson, hayed a portion of the meadow from 2000 to 2008. We entered into a three-year haying contract again in 2011. Haying removes excess thatch, allowing for early green up in spring when elk are most actively using the meadow.
- In 2010 we constructed one large permanent exclosure to allow for aspen recruitment on the west side of the river. We also used dead lodgepole pine to construct Lincoln log style exclosures that will decay over time.
- In 2012, RMEF volunteers installed weed mat around shrubs to reduce competition. We followed up this effort by constructing log exclosures to reduce ungulate browse pressure.
- A series of photo points were established after the LRRMRP to visually track changes over time. The photo points have been re-photographed several times since completion of the final phase of restoration. Last replicated in 2013.
- In 2013 riparian and greenline community composition surveys, described in the monitoring sections on page 45, were replicated. Results can be seen in Appendix VI.
- Invasive weeds have been controlled annually.

Facilities

- During the original restoration, an apartment was constructed in the machine shed to serve as an office and temporary housing. Since then, it has been used primarily as temporary housing for fisheries technicians.
- The water system was upgraded from a combination spring box/cistern to a drilled well.
- Since acquisition, the facilities have been painted and maintained as needed. The house was last painted in 2012.
- New cedar fence installed in 2012

Managers (past and present)

Jim White (1993 – 2000)
Regional Wildlife Habitat Manager
208-799-5010

Miles Benker (2000 – 2010)
Regional Wildlife Biologist
208-769-1414

Clay Hayes (2010 – Present)
Regional Wildlife Biologist
208-799-5010

III. MANAGEMENT REQUIREMENTS AND AUTHORITIES

Direction from the Commission and Director

The Idaho Fish and Game Commission (Commission) has established and approved general policies for the management of Idaho's wildlife resources in the *Idaho Fish and Game Policy Plan 1990-2005: A Vision for the Future* (1991). Below are sections of the policy plan pertinent to the management of Department lands.

Management - *Fish and wildlife habitat and populations will be preserved, protected, perpetuated and managed for their intrinsic and ecological values, as well as their direct benefit to man. Protection and restoration of wildlife habitat will continue to be a top priority in the management program.*

Cooperation - *The Department will advocate land management practices that protect, restore and enhance fish and wildlife habitat, especially habitats such as wetlands and riparian areas that benefit a wide variety of fish and wildlife species.*

The Department has a responsibility, where opportunities exist, to manage lands it controls for the benefit of wildlife and to provide for wildlife-based recreational opportunities. The Department strives to provide excellent public service and healthy sustainable wildlife populations through partnerships and sharing. The Director of the Department has developed a WMA Planning Process. This plan follows that process to ensure that all stakeholder issues and concerns are addressed in the plan. In addition, the Director has requested that all species and habitat planning efforts by the Department be ecosystem-based. Accordingly, this plan examines habitat conditions in both the short and long-term context (at both fine and broad landscape scales). It also identifies opportunities to manage and restore habitats through practices designed to reduce short and long-term risks to species and their habitats on RRWMA and surrounding lands.

Broad-scale ecosystem management information has been incorporated into this plan, including that collected under provisions of the Interior Columbia Basin Ecosystem Management Project, to help provide management direction for the RRWMA. The stream restoration project funded by BPA and administered by ICSWCD has provided detailed information on both the project and landscape levels. The Department will continue to use input provided in partnership with other land managers and interested parties within the South Fork of the Clearwater River, such as the BLM, the USFS, the University of Idaho (U of I), the ICSWCD, the NPT, and local citizens, to encourage this landscape approach to land management.

Other Requirements in Regard to Funding

Currently, the majority of annual operating funding for RRWMA is derived from the Department's license sales and USFWS Federal Aid funds. Each funding source includes some special requirements as noted below:

USFWS Federal Aid funds must be used for restoration, conservation, and enhancement for wild birds and wild mammals, and the provision for public use of and benefits from these resources (Federal Aid Handbook).

The Department's general license funds must be used to help meet the mission and policies of the Commission as stated in *Idaho Code* 36-103(b). This code section states, *"All wildlife, including all wild animals, wild birds, and fish, within the state of Idaho, is hereby declared to be the property of the state of Idaho. It shall be preserved, protected, perpetuated, and managed."* For purposes of this plan, both license funds and USFWS Federal Aid funds will be used for general operating costs of the RRWMA. General license funds will also be used to provide fee-in-lieu-of-tax (FILT) payments, fire protection payments, enforcement, and conservation education for the RRWMA.

Federal and State Law Requirements

Federal and state funds, including those derived from the BPA, USFWS Federal Aid Program, and the Department's license sales, have been used in part to purchase and/or manage the RRWMA lands. As outlined under the "Agreements and Requirements" section, management of the WMA is directly affected by requirements of the 1980 Northwest Electric Power Planning and Conservation Act and the National Environmental Policy Act of 1969.

Other federal and state laws also affect management of the RRWMA. The Department has responsibility under provisions of the Endangered Species Act to ensure that management actions protect threatened and endangered species, and responsibility under the Clean Water Act to ensure that water quality standards and guidelines are in place on RRWMA lands and waters.

Under the National Historic Preservation Act, the Department must ensure that historic properties are protected on the RRWMA. The Idaho Noxious Weed Law under *Idaho Code* 22-2405 requires all landowners to eradicate noxious weeds on their lands, except in special management zones. The counties are required to enforce the law and the State of Idaho is required to ensure the counties do so.

Consistent with Idaho Codes 38-101 and 38-111, and through a cooperative agreement with the Idaho Department of Lands, the Department is required to pay a fee for fire protection on all forest and some rangeland acreage it owns, and for residences in forest areas. Fees are submitted annually based on the number of qualified acres and residences owned by the Department.

The Department is required by Idaho Code 63-602A to pay a fee in lieu of taxes for lands that are owned by the Department and meet certain code requirements. These fees are submitted annually to affected counties based on the number of qualifying acres and agricultural tax rates.

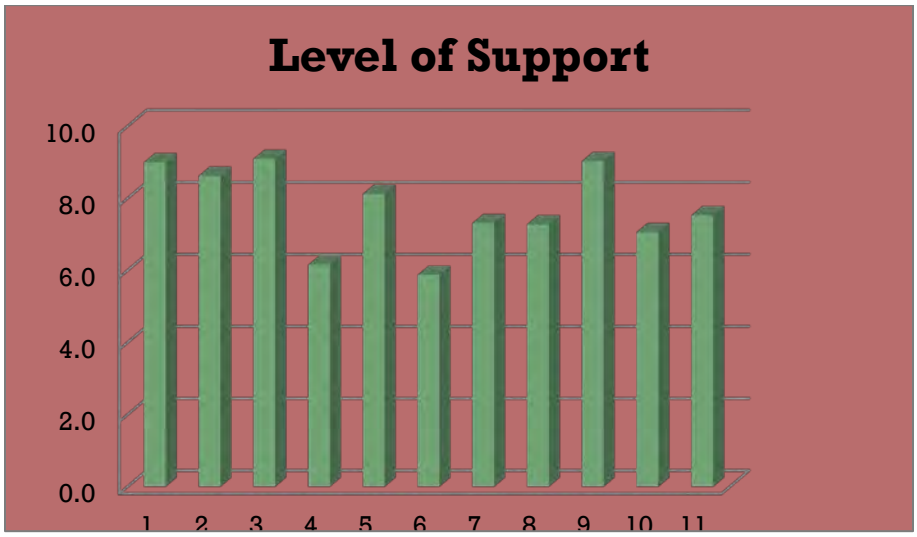
IV. PUBLIC INPUT & USE SUMMARY

Beginning in the spring of 2012, the Department launched a web-based survey soliciting public comments on WMAs statewide. Concurrently, surveys specific to RRWMA were made available at big game scoping meetings in Lewiston, Grangeville, Orofino, and Moscow. Surveys were also available at the regional office throughout 2012. In July of 2012, a meeting specific to the plan revision was held at the Lewiston office to inform interested parties of the opportunity to comment on the plan. This opportunity was also discussed at several sportsmen's breakfasts in 2012 and 2013. Although not aimed at gathering comments for a plan revision, a significant number of comments were obtained through a visitor sign-in and comment sheet located at the wildlife viewing platform at RRWMA. Presentations were also given to several user groups and the Lewis-Clark chamber of commerce. Additional public scoping was solicited through mailings to other interested parties and adjacent private landowners.

We received 21 online surveys specific to Red River and 16 paper surveys (either from public meetings, mail, or comment box at RRWMA). Sixty-nine people signed the visitor sheet at the wildlife viewing platform since spring of 2010. The following is a summary of all public input.

Support for Goals in the 1999 Long-range Management Plan (IDFG 1999)

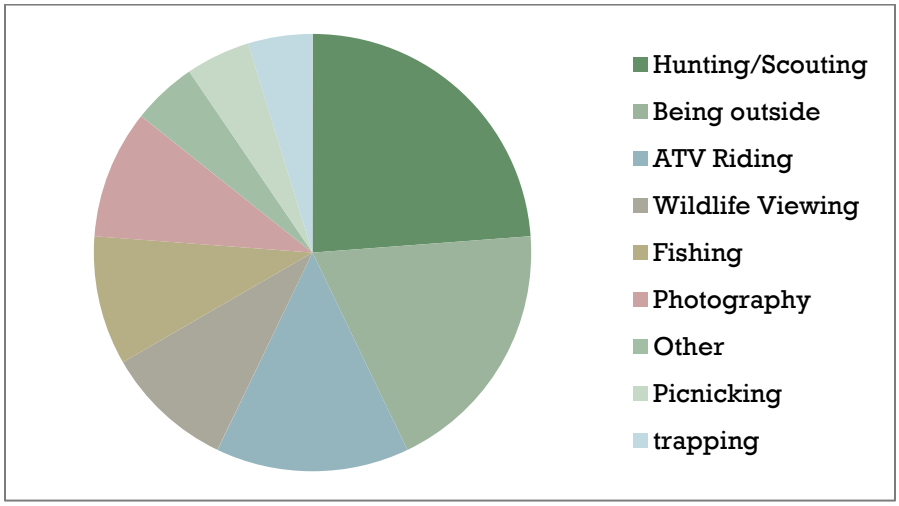
1. Maintain or enhance wildlife species and their habitats.
2. Enhance fisheries habitat in Red River.
3. Maintain or enhance elk calving and rearing habitat along with spring/summer habitat for white-tailed deer and moose.
4. Maintain or enhance scenic quality.
5. Continue to seek input from local citizens, sportsmen, and state and federal agencies regarding management of RRWMA.
6. Implement the RRWMA Education Management Plan or similar programs as funding becomes available.
7. Continue to allow use of the ranch house and other facilities for environmental education programs initiated by interested schools, youth groups, and organizations.
8. Continue to allow natural resource agencies and organizations, sportsman's groups, and the local community the opportunity to use the ranch house for meetings and training sessions when it does not conflict with primary wildlife, fisheries, and education goals of RRWMA.
9. Continue to provide opportunities to hunt, fish, and trap on the RRWMA that are compatible with fish and wildlife management goals.
10. Provide opportunities for the public to gain an appreciation for the natural environment and a greater understanding of the Department's mission through coordination and development of interpretive and volunteer projects on the RRWMA and surrounding lands.
11. Provide a pamphlet to WMA users explaining recreational opportunities, property boundaries, conditions of use, and seasonal closures benefiting fish and wildlife.



Level of public support for previous goals.

Online Survey Results

The chart below shows the relative proportion of WMA users that cited the listed activity as their primary reason for visiting RRWMA



Relative proportion of public use by activity.

When asked to rate their satisfaction with their visits, 19% reported that they were unsatisfied, 14% were neutral, 38% were satisfied, and 29% were very satisfied. When asked if they would return to RRWMA, 10% responded very unlikely, 14% were neutral, 57% were likely, and 19% were very likely.

The following comments come directly from the online survey.

Suggestions for making visit better

- I feel like I'm on someone else's property when I am at the Red River WMA, it's not really an inviting place
- Maybe focus more on educational trails and handicap access
- keep it like it is
- Better access / Better fishing
- Transplant elk back into the area
- Increase wolf harvest quotas and seasons
- More game
- Take out the late hunt for elk and deer
- Have more elk and less wolves in the area
- More wolf management

Suggested goals

- Discontinue cow elk tags, discontinue cow moose tags, reduce wolf numbers to 150 any way possible.
- Public should realize these areas are funded through hunting and fishing related activities. Without these activities, these areas would not exist.
- List quality of hunting by species for example: I love dove hunting but can't find much info about doves on any units.
- First, you have to get a handle on the wolf issue and their effect on the elk and moose populations. As I know you are already aware, non-resident and resident hunters alike are now going to Colorado, Utah, New Mexico, and Arizona...instead of hunting in Idaho, Montana, and Wyoming. This action is detrimental to the local economy, which in turn affects our spending to enhance wildlife habitat.
- Limit the non-traditional uses. Give priority to hunters and fisherman.
- Reduce hunting pressure on late hunts for elk and deer in the back country
- Charge access fees for everyone since most of these were acquired with mitigation funds (not license funds) and need to be maintained by everyone who uses them.
- List wolves as the varmints they are, also less mountain lions. Control the predators.

V. 1999-2013 ACCOMPLISHMENTS

Since the RRWMA plan was revised in 1999, these accomplishments have occurred.

Goal: Manage the area to maintain and/or enhance quality wildlife, fisheries, scenic values, and overall biodiversity through ecosystem-based management.

Objective: Maintain or enhance wildlife species and their habitats.

Accomplishments:

- Improved spring big game forage through annual sharecrop haying agreement
- Planted additional shrubs
- Constructed additional enclosures to protect shrubs from over browsing
- Implemented access management plan
- Maintained tall grass uplands for waterfowl nesting
- Monitored habit changes through photo points
- Inventoried and treated noxious weeds annually
- Cooperated with Idaho County to control weeds along state Hwy 14 that boarders the RRWMA

Objective: Enhance fisheries habitat in Red River.

Accomplishments:

- Increased riparian habitat by planting additional shrubs
- Provided a base of operations for regional fisheries personnel while conducting snorkel surveys, Chinook redd counts, and population monitoring.

Objective: Maintain or enhance scenic quality.

Accomplishments:

- Maintained historic buildings
- Replaced old pole fence with cedar rail

Objective: Continue to seek input from local citizens, sportsmen, and state and federal agencies regarding management of RRWMA.

Accomplishments:

- Maintained comment box at wildlife viewing platform
- Maintained good working relations with adjacent landowners

Goal: Provide a setting for natural resource-oriented educational, research, and study opportunities through cooperative efforts with federal, state, and private groups or individuals.

Objective: Implement the RRWMA Education Management Plan or similar programs as funding becomes available.

Accomplishments:

- Provided facility for the continued monitoring of the river restoration project by U of I faculty
- Provided facility for fisheries-oriented educational activities for regional students

Goal: Provide a meeting facility for natural resource-oriented agencies and organizations, and the local community.

Objective: Continue to allow natural resource agencies and organizations, sportsman's groups, and the local community the opportunity to use the ranch house for meetings and training sessions when it does not conflict with primary wildlife, fisheries, and educational activities.

Accomplishment:

- Allowed annual use of the facilities by local community groups and natural resource-oriented organizations.

Goal: Promote continued use of RRWMA for recreational purposes consistent with wildlife, fisheries, and educational goals.

Objective: Continue to provide opportunities to hunt, fish, and trap on the RRWMA that are compatible with fish and wildlife management goals.

Accomplishment:

- Provided opportunities to hunt, fish and trap

Objective: Provide opportunities for the public to gain an appreciation for the natural environment and a greater understanding of the Department's mission through coordination and development of interpretive and volunteer projects on and around RRWMA.

Accomplishments:

- Built wildlife viewing platform
- Developed interpretive signs

VI. VEGETATION

The following vegetation types and acres are on RRWMA:

Vegetation Type	Number of Acres	Percent of Total
Mountain meadow	290	93%
Lodgepole Pine	20	6%
Aspen	4	1%

Species List

(*Selected Common Species; additional information available at www.idfg.idaho.gov*)

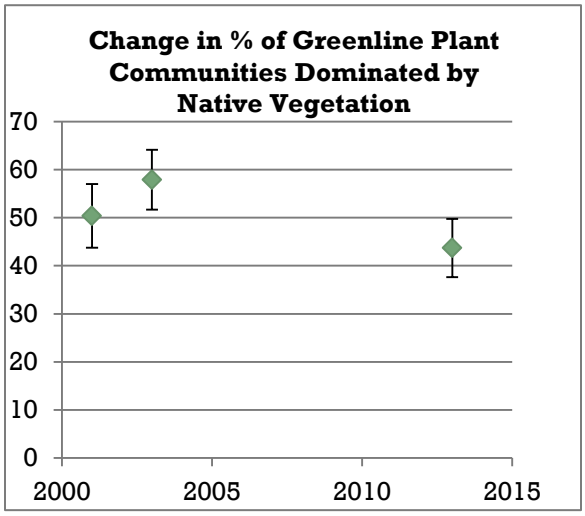
Herbaceous
Serviceberry *Amelanchier alnifolia*
Lens sedge *Carex lenticularis*
Small-winged sedge *Carex microptera*
Beaked sedge *Carex utriculata*
Jointed rush *Juncus articulates*
Baltic rush *Juncus balticus*
Colorado rush *Juncus confusus*
Coville's rush *Juncus covillei*
Common rush *Juncus effusus*
Dagger-leaf rush *Juncus ensifolius*
Small-fruited bulrush *Scirpus microcarpus*

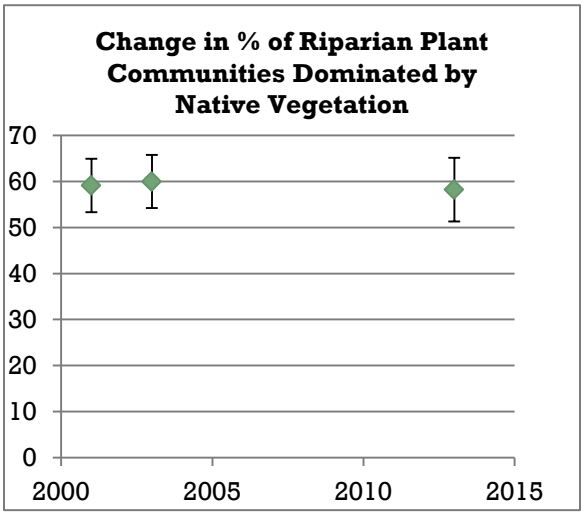
Trees
Lodgepole pine *Pinus contorta*
Quaking aspen *Populus tremuloides*

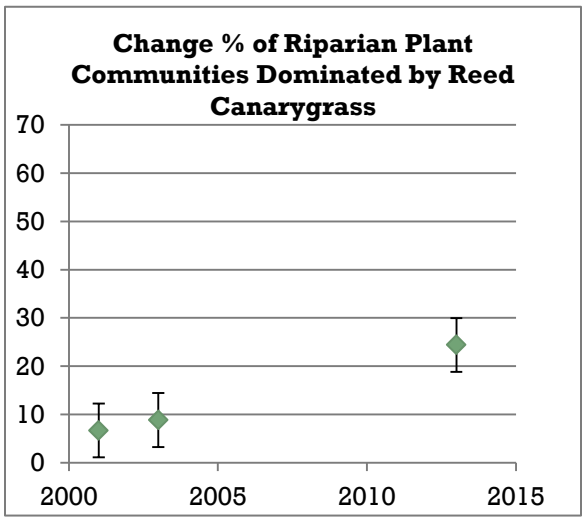
Shrubs
Thinleaf alder *Alnus incana*
Red-osier dogwood *Cornus stolonifera*
Douglas hawthorn *Crataegus douglasii*
Drummond willow *Salix drummondiana*
Sandbar willow *Salix exigua*
Geyer willow *Salix geyeraniana*
Pacific willow *Salix lasiandra*

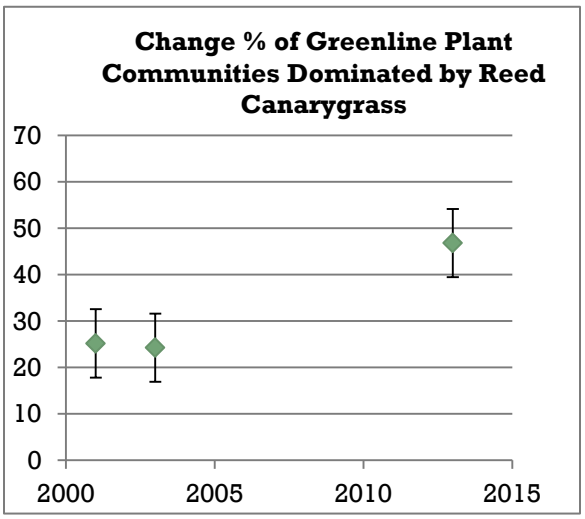
Surveys

Results from 2013 greenline and riparian surveys showed small decreases in percentages of native plant communities. However, results indicated that there are large, statistically significant increases in reed canarygrass (*Phalaris arundinacea*), especially within the greenline transects. Previous data shows small, insignificant increases in reed canarygrass in surveys conducted in 2001 and 2003, followed by 15% and 22% increases from 2003 to 2013 in riparian and greenline transects, respectively. The increase of reed canarygrass suggest that plant communities, especially in the greenline area, are at risk of shifting from native dominated plant community of forbs, sedges, and desired grasses to a monoculture of reed canarygrass.









VII. WILDLIFE AND FISH SPECIES LIST

(*Selected Common Species; additional information available at www.idfg.idaho.gov*)

Common Name	**Scientific Name**	**Common Name**	**Scientific Name**
Mammals		***Amphibians***	
Coyote	*Canis latrans*	Western Toad	*Anaxyrus boreas*
Gray Wolf	*Canis lupus*	Columbia Spotted Frog	*Rana luteiventris*
Elk	*Cervus elaphus*		
Porcupine	*Erethizon dorsatum*	***Reptiles***	
Otter	*Lontra canadensis*	Rubber Boa	*Charina bottae*
Bobcat	*Lynx rufus*	Racer	*Coluber constrictor*
Striped Skunk	*Mephitis mephitis*	Western Skink	*Eumeces skiltonianus*
Montane Meadow Mouse	*Microtus* sp.	Western Terrestrial Garter Snake	*Thamnophis elegans*
Mink	*Mustela vison*	Common Garter Snake	*Thamnophis sirtalis*
Bats (various species)	*Myotis* spp.		
Bushy-tailed Wood Rat	*Neotoma cinerea*	***Fish***	
White-tailed Deer	*Odocoileus virginianus*	Dace	*Catostomus* sp.
Deer Mouse	*Peromyscus maniculatus*	Sucker	*Cottus* sp.
Raccoon	*Procyon lotor*	Westslope Cutthroat Trout	*Oncorhynchus clarkii lewisi*
Mountain Lion	*Puma concolor*	Steelhead	*Oncorhynchus mykiss*
Shrew (various species)	*Sorex* sp.	Chinook Salmon	*Oncorhynchus tshawytscha*
Mountain Cottontail	*Sylvilagus nuttallii*	Mountain Whitefish	*Prosopium williamsoni*
Red Squirrel	*Tamiasciurus hudsonicus*	Sculpin	*Rhinichthys* sp.
American Badger	*Taxidea taxus*	Brook Trout	*Salvelinus fontinalis*
Northern Pocket Gopher	*Thomomys talpoides*		
Columbian Ground Squirrel	*Urocitellus columbianus*		
Black Bear	*Ursus americanus*		

Bird species, and number of individuals, encountered during the line transect survey conducted every June from 1996 – 2006, and again in 2013.

Common Name	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2013	Total
Savannah Sparrow	4	14	16	16	13	12	11	12	5	1	1	9	114
Brewer's Blackbird	4	1	2	11	10		11	11	11	8	15	12	96
Red-winged Blackbird	4	20	11	19	2	5	2	10	7	4		7	91
Wilson's Snipe	3	10	5	8	3	10	13	5	4	5	6	7	79
Spotted Sandpiper	7	4	7	7	6	8	8	4	3	4	4	3	65
Tree Swallow	4	8	2			9	4	1	4	1	5	6	44
American Robin	5	2	2	1	4	3	9	5	4			4	39
Mallard	3	2	7	6		11		2	1		1	1	34
Canada Goose		1				8	1	7	2	1	10	4	34
Cliff Swallow			1	9	6		4	3		6	1	2	32
Violet Green Swallow			1	3	2	9	3	9		1	1	2	31
Killdeer									30				30
European Starling				1	2	3	3	2	3	2	2	5	23
N. Rough-winged Swallow	1	3		1	3	2	3	1	1	3	2	1	21
Northern Flicker	9	2	2		1	2					2		18
Common Merganser				2		3	2		3	3		4	17
Western Meadowlark			2	1	4	5			1		2		15
Evening Grosbeak		1	1	1		1	1		1	1		5	12
Bobolink		3		2	1	4	1						11
Green-winged Teal		1	3	4		1	1						10
Lincoln's Sparrow	3	1				1	2				2		9
Chipping Sparrow	2	1	1		2				2				8
Common Raven	2		1			2	2					2	7
Pine Siskin									7				7
Unknown songbird												7	7
American Kestrel							4			2		6	6
Belted Kingfisher	1	1					2				1		5
American Avocet			1		3	1							5
Barn Swallow						4							4
Blue-winged Teal								4					4
Cinnamon Teal						3					1		4
Hairy Woodpecker						4							4
Ruby Crown Kinglet						2	2						4
Sora							1	1			2		4
Unknown duck			1	1	1				1				4
Black-capped Chickadee							1			1	2		4
Gray Jay												4	4
Mountain Bluebird												4	4
Song Sparrow												4	4
Yellow-rumped Warbler						1		2				1	3
Dark-eyed Junco			1			2							3

Common Name	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2013	Total
Eastern Kingbird			1								2		3
Osprey			2			1							3
Unknown shorebird						1	1	1				1	3
Warbling Vireo												3	3
Willow Flycatcher								2				1	2
Wilson's Phalarope						1					1		2
Yellow-bellied sapsucker					1						1		2
Bufflehead						1		1					2
Cedar Waxwing							1	1					2
Golden-crowned Kinglet							1				1		2
Great Blue Heron						1		1				2	2
Lesser Yellowlegs								2					2
Red-naped sapsucker												2	2
Red-breasted Nuthatch								1					1
Spotted Towhee						1							1
Three-toed Woodpecker							1						1
Yellow-headed Blackbird					1								1
Red-tailed Hawk			1										1
Vaux's Swift									1				1
Mountain Chickadee										1		1	1
Swainson's Thrush								1					1
Dusky Flycatcher		1											1
Brown-headed Cowbird								1					1
Olive-sided Flycatcher											1		1
Bald eagle												1	1
Unknown Swallow												1	1
Number of Individuals	37	30	37	39	37	95	58	50	64	25	43	112	
Number of Species	11	15	19	14	15	30	24	22	16	13	22	30	

Additional birds noted, but not encountered within transects

Bank Swallow *Riparia riparia*
MacGillivray's Warbler *Geothlypis tolmiei*
Mourning Dove *Zenaida macroura*
Nighthawk *Chordeiles minor*
Northern Shoveler *Anas clypeata*
Yellow Warbler *Setophaga petechia*
Sandhill Crane *Grus canadensis*
Dark-eyed Junco *Junco hyemalis*
Ruby-crowned Kinglet *Regulus calendula*
Townsend's Warbler *Setophaga townsendi*
Turkey Vulture *Cathartes aura*
Warbling Vireo *Vireo gilvus*
Western Flycatcher *Empidonax difficilis*
White-crowned Sparrow *Zonotrichia leucophrys*

VIII. OTHER PROGRAMS

Access Program

There exists a high potential for restoration of high mountain meadow and riparian habitats on RRWMA. Past land management practices have degraded these habitats to the point that the riparian component of the vegetation is approximately 10% of what it was in the late 1800s. The original meadow vegetation has been replaced by vigorous non-native grasses as a result of cattle grazing and hay production. It is not the Department's intention to return to late-1800 conditions; however, it is desirable to create an environment for establishing a more diverse vegetative community throughout RRWMA. From 100-200 elk use the meadow during spring green up and elk calving time (Mar-Jun). The Department wishes to protect this valuable calving area and watchable wildlife experience along with other important fisheries and wildlife resources on RRWMA. There currently are no man-made roads or trails on the area. For these reasons, the following access policy has been adopted.

- Year-long restriction on motorized vehicles. Motorized access will be allowed only on designated roads inside the wooden pole fence area surrounding the main buildings.
- Total restriction of public access, and limited administrative access, on the RRWMA meadow from April 1 - June 15, to minimize disturbance to calving grounds and to enhance wildlife viewing opportunities.
- All administrative access throughout the year will be coordinated through the managing Department Regional Wildlife Biologist. Motorized administrative access is allowed under certain conditions; however, non-motorized access for work crews is encouraged.

Haying & Grazing Program

Managed haying and/or grazing can be an effective and cost efficient means of accomplishing vegetative management goals outlined in the RRWMA long range management plan. Spring elk use on the area is dependent on the availability of succulent green grass which is important for calving elk. Properly managed haying or grazing in late summer (after nesting season) or early fall can remove excessive thatch and promote ideal conditions for early green-up of grasses when elk most need them. In addition to promoting early green-up, managed grazing can help create the structural diversity important to many birds that occur on the area.

If and when grazing is needed on RRWMA, it will be conducted in accordance with Department Policy NO. FW-17.00. Appropriate stocking rates and AUM's will be determined by available forage. In order to minimize negative impacts of livestock on wildlife use of the area, grazing will occur after the calving and primary nesting seasons (August 1) and before onset of big game hunting season (August 31). The number of AUMs, livestock, and length of grazing season will be closely monitored to ensure that the objectives and goals of the treatment are met.

Goals:

- Manage meadow vegetation in a more productive state.
- Increase forage palatability for spring elk use.
- Increase structural diversity of meadow habitat.
- Alleviate elk use problems on adjacent private lands.

Justifications:

- Late summer/fall grazing removes excess thatch and promotes earlier green-up the following spring, thereby increasing forage quality for elk and deer.
- Low thatch, low stubble height, meadow habitat is important for several bird species that frequent RRWMA including killdeer and Canada geese.
- Managed grazing on RRWMA is a potentially useful tool for keeping elk on the management area. This has the duel benefits of increasing opportunities for wildlife viewing and reducing problems with elk on adjacent private lands.
- Managed grazing is a low-cost, high gain alternative to other vegetation management techniques such as mowing.

Pasture Use Agreement

The housing policy states that written approval must be obtained in order for Department personnel to keep livestock on Department property. In the past, the Red River District Conservation Officer has been allowed to pasture up to three horses or mules on RRWMA between April 15 and November 1 each year.

The officer will keep his/her stock in the lower pasture that previous Red River officers have used. This is the only area the officer will allow their stock to use without prior written permission from the managing Regional Wildlife Biologist. Only stock personally owned by the officer will be allowed in this pasture. No Department funds will be used to maintain the pasture. The officer agrees to "moderately graze" the pasture. The officer and Regional Wildlife Biologist will both be responsible for monitoring use so the pasture is not an eyesore, there is no negative impact to the resource, and use does not interfere with management goals and activities on RRWMA. Any overgrazing of this pasture will result in loss of grazing rights. It should be noted that this pasture cannot support three head of stock during the entire use period and alternate pasture should be obtained.

According to policy, anyone keeping or using stock on Department lands must assume full responsibility for any problems or damage their animals might cause.

Ranch House Fee Schedule

Users	***Day Use***	***Overnight Use***
Agencies/Organizations	$30	$10/person
Teachers/Educators	$30	$10/person
Students	Free	$1/person
Department & Volunteers	Free	Free

- Overnight use fee is in addition to day use fee.
- Not required to pay day use for second day if checked out by 10 AM.
- Payment of fee is optional. However, we are asking for a donation in the amount listed above. If people wish to pay more, that's great!
- Make checks payable to Idaho Department of Fish and Game. Somewhere on the check indicate that it is a donation for maintenance of RRWMA facilities.

IX. LAND ACQUISITIONS AND AGREEMENTS

Land Acquisitions				
Year	**Funds Used**	**Segment**	**Acres**	**Acquired From**
1993	IDFG, BPA, TU, RMEF	WMA	314	Donald Wilkerson
		Total WMA	314	

Water Rights				
Year	**Claim**	**Type**	**Dates of Use**	**CFS**
1912	A82-10236	Stock water	06/01 – 10/15	0.090
		Stock water	01/01 – 12/31	0.020
		Irrigation	06/15 – 08/15	0.400
1912	A82-10237	Domestic	01/01 – 12/31	0.080
Total	0.590cfs from Loon Creek, Cartwright Creek, Sixty-six Creek, and Red River			

X. INFRASTRUCTURE

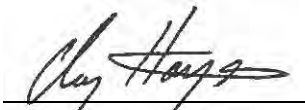
Type	Maintenance Funding	Description
House	IDFG/Donations	Ranch house
Out building	IDFG/Donations	3 car garage with woodshop
Out building	IDFG/Donations	Old log structure SE of ranch house
Out building	IDFG/Donations	Red River School house. Log structure
Out building	IDFG/Donations	Large machine shed with horse stalls
Out building	IDFG/Donations	Wildlife viewing platform
Apartment	IDFG/ISS	Lower apartment
Fence	IDFG/Donations	Cedar rail fence around building complex
Fence	IDFG/Donations	Barbed wire fencing around WMA
Road	IDFG/Donations	Driveway to viewing platform and apartment
Access	IDFG/Donations	Cartwright parking area

RED RIVER

WILDLIFE MANAGEMENT AREA PLAN

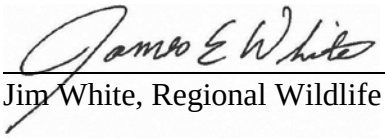
Approval

Submitted by:

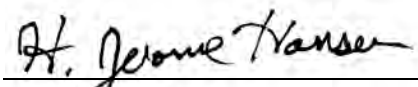


Clay Hayes, Regional Habitat Biologist

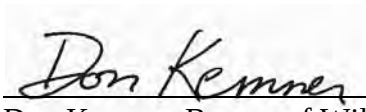
Reviewed by:



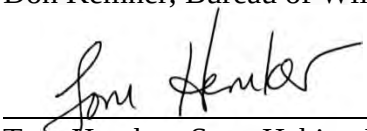
Jim White, Regional Wildlife Habitat Manager



Jerome Hansen, Regional Supervisor

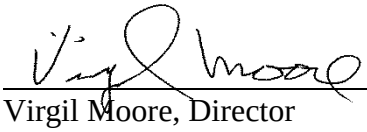


Don Kemner, Bureau of Wildlife



Tom Hemker, State Habitat Manager

Approved by:



Virgil Moore, Director