

**PUMPKIN CREEK RANCH  
LAND EXCHANGE MTM-89845**

**BUREAU OF LAND MANAGEMENT  
MILES CITY FIELD OFFICE**

**ENVIRONMENTAL ASSESSMENT  
MT-020-2005-353**

**UNITED STATES**  
**DEPARTMENT OF THE INTERIOR**  
**BUREAU OF LAND MANAGEMENT**  
**ENVIRONMENTAL ASSESSMENT REVIEW**

<b>OFFICE/AREA:</b> Miles City Field Office	<b>EA#:</b> MT-020-2005-353
	<b>DATE POSTED:</b> July 14, 2005
<b>NAME:</b> Pumpkin Creek Ranch Land Exchange	<b>DATE DUE:</b> February 10, 2006
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<b>LOCATION:</b> Custer, Carter and Powder River Counties, MT	

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**ENVIRONMENTAL ASSESSMENT**  
**Pumpkin Creek Ranch Land Exchange**  
**MT-020-2005-353**  
**Bureau of Land Management**  
**Miles City Field Office**  
**111 Garryowen Road**  
**Miles City, Montana 59301**  
**July 14, 2005**

**1.0. INTRODUCTION**

**1.1 Purpose of and Need for the Proposed Action:**

The Bureau of Land Management (BLM) Miles City Field Office (MCFO) has an opportunity, with the assistance of The Conservation Fund (TCF), to consolidate ownership in an area located 15 miles south of Miles City. The BLM would acquire the private lands known as the Pumpkin Creek Ranch through an assembled land exchange which would involve disposing of smaller isolated parcels of federal land to TCF. TCF would in turn sell those lands to the grazing permittee and/or adjacent landowners. The purpose of the land exchange would be to:

1. Consolidate BLM land holdings within the Pumpkin Creek Ranch, which when acquired would offer a multitude of benefits to public land management opportunities. It would facilitate the BLM's involvement in the conservation of the Evergreen Shrubland/Perennial Graminoid Eco-Region by creating a large landscape with many habitat types; enhance management of the area for multiple use objectives and resources including livestock grazing, wildlife, rangeland and riparian, fuels/forest initiatives, Special Status Species and water (Pumpkin Creek is a perennial stream). It would also provide the public with hunting, recreational, and environmental education opportunities near Miles City.
2. Dispose of federal land that, for the most part, has limited or no access and is difficult to manage because of the small size and/or intermingled nature of the tracts with non-federal lands owned by numerous private parties. Disposal of the public land parcels would improve administrative efficiency and reduce BLM's costs to manage those parcels. Several grazing allotments could be eliminated and therefore, would no longer require administration by the BLM. There would be an increase in management flexibility and reduced user conflicts between federal land uses and private property, such as preventing trespass on private lands and providing access to federal lands.

TCF has found willing buyers to acquire the isolated tracts of federal land after it obtains them through the exchange. A feasibility report was prepared and approved on February 7, 2005. An Agreement to Initiate a Land Exchange was entered into by TCF and the BLM on March 28, 2005. The lands were segregated from operation under the public lands laws and mineral laws for a five-year period beginning June 24, 2004.

The purpose of this environmental assessment is to analyze the proposed land exchange opportunity within the Miles City Field Office. This analysis is warranted in order to ensure a public interest determination can be supported by evaluating the resources on the disposal side of the exchange compared to the resources on the acquisition side of the exchange.

## **1.2 Public Scoping:**

A Notice of Exchange Proposal (NOEP) was signed on October 4, 2005, identifying all the lands involved in the exchange. The NOEP was published once a week for four consecutive weeks in the Miles City Star and Ekalaka Eagle, beginning on October 7, 2005. Appendix 1 contains the distribution list for the NOEP. Fourteen comment letters were received in response to the publication of the NOEP. The primary concerns and/or suggestions were as follows: (1) four letters from individuals supporting the proposed exchange and the opportunity for access to a large block of public land, the opportunity for more efficient management of the public and private lands, and economic benefits to the area from additional people coming to the area to use the block of public land; (2) one letter from a special interest group supporting the proposed exchange and the opportunity to dispose of isolated parcels and provide the public with access to a large block of federal land and additional access to State lands; (3) one letter from MT Fish Wildlife and Parks applauding the efforts to consummate the proposed exchange and providing public access but suggesting that the larger tracts of accessible public land be retained; (4) five letters from adjoining landowners to the Pumpkin Creek Ranch most of which support disposing of the small parcels and creating a larger block of public land, but concerned about the proposed management of the Pumpkin Creek Ranch when and if it is acquired; (5) one letter from an adjoining landowner to one of the scattered federal parcels supporting the tract going to private ownership; (6) one letter from a Tribal Historic Preservation Office requesting information about the existence of cultural resources found within the tracts of land to be exchanged; (7) one letter from a special interest group concerned about adequate protections for both sage-grouse and sharp-tailed grouse. Responses to these comments are contained within Appendix 2.

## **1.3 Conformance With Land Use Plan:**

This land exchange proposal lies within the area covered by the Record of Decision (ROD) for the Powder River Resource Area (PRRA) Resource Management Plan/Environmental Impact Statement (RMP/EIS), approved March 15, 1985, and is in conformance with this plan. The federal lands can be disposed of by exchange (page 3 of the Record of Decision and page 42 of the PRRA RMP); the private lands can be acquired based on meeting criteria identified in Appendix G on page 335 of the RMP. Most of the non-federal lands are in a retention area according to the Powder River Resource Area RMP. The proposed acquisition is in conformance with the "Supplement to State Director Guidance for Resource Management Planning in Montana and the Dakotas" for "Land Pattern Review and Adjustment" (1984) and for "Access" (1989).

## **1.4 Relationship to Statutes, Regulations, or other Plans:**

The disposal of Federal lands and interest in lands in exchange for the acquisition of non-federal lands and interest in lands is authorized under the authority of Sections 102, 205, 206, and 207 of the Federal Land Policy and Management Act of October 21, 1976 (FLPMA, 90 Stat. 2743; 43 USC 1701, 1715, 1716, and 1717) and the Federal Land Exchange Facilitation Act of August 20, 1988 (FLEFA, 102 Stat. 1087). Implementing regulations are found at Title 43 Code of Federal Regulations (CFR) 2200.

Per Section 205(c) of FLPMA, "If such acquired lands or interests in lands are located within the exterior boundaries of a grazing district established pursuant to the first section of the Act of June 28, 1934 (48 Stat. 1269, as amended; 43 U.S.C. 315) (commonly know as the "Taylor Grazing Act"), they shall become a part of that district." The affected lands are within the exterior boundaries of such a grazing district and will be part of that grazing district.

## **1.5 Decision to Be Made:**

Upon completion of the environmental analysis and appropriate documentation, appraisals, and all other supporting studies and requirements, the decision to be made by the authorized officer is whether the proposed Pumpkin Creek Ranch Land Exchange proposal is in the public interest and in compliance with applicable laws and regulations so as to approve or not approve the exchange proposal.

## **2.0 PROPOSED ACTION AND ALTERNATIVES**

### **2.1 Proposed Action:**

The proposed action (Preferred Alternative) is for The Conservation Fund (TCF) to facilitate an assembled land exchange in which the acquisition of non-federal lands and the disposal of federal lands would be on an equal value basis. Within this land exchange the BLM would acquire from TCF, 25 parcels consisting of approximately 14,038 acres of non-federal lands as described in Table 1 of Appendix 3 and as shown on the map which is attached in Appendix 4. This acquisition would include the surface estate, the private minerals to the extent that TCF owns them, all improvements, 31 water rights, access, and all other rights. This acquisition would create a block of federal land consisting of approximately 20,578 acres (19,498 acres within the ranch boundary and 1,080 acres of adjacent federal land which would become accessible). Approximately 1,920 acres of State land would also become accessible to the public. The two tracts of land (farmsteads) with buildings on the Pumpkin Creek Ranch would not be acquired by the BLM in the exchange. These tracts are an estimated 67.07 acres in the S $\frac{1}{2}$ NE $\frac{1}{4}$  and NE $\frac{1}{4}$ SE $\frac{1}{4}$ , Section 2, T. 5 N., R. 48 E., lying East of Highway 59 next to the private lands in Tract O-2 and an estimated 29.01 acres in the NE $\frac{1}{4}$ NW $\frac{1}{4}$ , Section 8, T. 5 N., R. 48 E., lying East of the Tongue River Road next to the private lands in Tract O-3.

In order to accomplish the acquisition of the non-federal lands, the BLM will consider the disposal of 100 parcels of federal land which comprise 20,210.53 acres, and are described in Table 2 of Appendix 3 and in the parcel sheets in Appendix 7, and are shown on the map which

is attached in Appendix 4. These lands consist of 14,665.83 acres in Custer County, 5,468.94 acres in Carter County, and 75.76 acres in Powder River County. It is estimated that approximately 18,700 acres of the identified federal lands would be needed to complete the proposed land exchange. A pool of federal land is required because some tracts may not be exchanged due to resource and/or other concerns.

These disposals would include the surface estate, all improvements, and water rights. The federal minerals would be retained on these proposed parcels considered for disposal, as there are mineral values (oil and gas and/or coal) under many of the federal tracts which would make it extremely difficult to establish a fair market value, and many of the tracts have adjacent federal minerals under private surface.

The likely foreseeable use of the newly created block of federal lands will be addressed within a comprehensive multiple use management plan, which will be initiated following the completion of the land exchange. The plan may address wildlife, recreation, riparian, and grazing management in accordance with the resource management plan. Environmental education opportunities could also be considered. This plan will be analyzed within a separate environmental assessment and be in accordance with all applicable laws and regulations.

Under the Proposed Action TCF would seek potential interested parties to be designated recipients of the federal land, by first offering the land to the grazing permittee and/or base property owner, then the adjoining land owners, and then the general public (only if legal access exists). The majority of the lands proposed for disposal would be acquired by the adjacent landowners, most of whom are the current livestock grazing permittee. It is likely these lands would be incorporated into the operations of the landowners. Excluding parcels H2 and 89S19, it is foreseeable the primary use of the disposal parcels would be as a forage base for livestock grazing. A portion of parcel H2 is farmed and it is foreseeable the farming would continue on this tract. Parcel 89S19 could possibly be subdivided along with other adjoining private lands.

Existing state and county roads and utility lines on the acquired non-federal lands would be documented by rights-of-way. Existing range improvements on these lands would be documented on cooperative agreements and project files would be established for them.

The federal lands would be conveyed subject to existing grazing permits, unless waived by the grazing permittee. Such permitted grazing shall be valid for a period of two years from the date the permittees receive notification of the disposal of the federal lands. Grazing permits would be adjusted upon closing. Range improvement projects of record on the federal lands would be turned over to the new landowners and the project files would be closed. Patents would include reservations for Ditches and Canals and minerals and would be issued subject to existing rights such as oil and gas leases and possibly rights-of-way. TCF would attempt to have existing rights-of-way converted to private easements to become effective upon closing. Right-of-way files would be adjusted to reflect the action taken. The 2920 agricultural permit on Tract H2 would be terminated prior to issuance of the patent. Lands with floodplains and wet lands would be conveyed with the appropriate patent restrictions. Tract H2 would be conveyed with a patent restriction to provide protection for the existing Bald Eagle nest. Existing Special Recreation Permits would be adjusted or closed as appropriate.

## **2.2 No Action Alternative:**

Under this alternative, the land exchange would not be consummated. The Federal lands would remain in public ownership, but could be considered for future disposal actions (sale or exchange). It is likely that suitable tracts would still be used for exchange purposes, either within the Field Office boundary or statewide. This alternative would result in loss of an opportunity to acquire a block of land approximately 15 miles south of Miles City and dispose of isolated tracts of federal land. There is a high probability the non-federal lands would be sold to private interests.

## **2.3 Alternatives Eliminated from Further Detailed Study:**

1. Direct Purchase: This alternative would require BLM to secure funding to purchase the land. This was not feasible since funding is not readily available nor could it be obtained through the budget process to timely meet the needs of the private landowners. Further, local county officials, the Montana Congressional delegation, and some special interest groups support a no net gain of federal land in the state.

2. Acquisition of a Conservation Easement: This alternative would also require BLM to secure funding to purchase an easement. This was not desirable since funding is not readily available nor could it be obtained through the budget process to timely meet the needs of the private land owners. The private land owners do not want to retain their land and would sell it before accepting an easement.

3. Land Sale: This alternative was not desirable to BLM because it would not accomplish the immediate need to acquire the offered non-federal lands and protect the resource values they provide. Most of the federal land parcels do not contain characteristics that might attract or receive favorable attention under competitive interest and bidding through land sale consideration.

## **3.0 AFFECTED ENVIRONMENT**

The following critical elements of the human environment are not affected by the proposed action and will not be addressed further in this document:

- Wilderness
- Areas of Critical Environmental Concern
- Air Quality
- Prime and Unique Farmlands
- Wild and Scenic Rivers

The following non-critical resources will not be impacted by this proposed action, therefore they will not be analyzed in detail by this Environmental Assessment: Soils, Hydrology, Fire/Fuels, and Wild Horses and Burros.

The environmental analysis write-up that follows reflects the sum of the resources and uses for the 14,038 acres of offered non-federal land and the selected 20,210.53 acres of federal land parcels. Parcel Information Sheets containing specific resource and land use information for each of the selected federal parcels can be found in Appendix 7.

### **3.1 NON-FEDERAL LANDS:**

The offered non-federal lands (Pumpkin Creek Ranch) are described in Table 1 of Appendix 3. They are located in Custer County approximately 15 miles south of Miles City, Montana. The ranch comprises a checkerboard pattern, encompassing approximately 5,460 acres of BLM administered lands, 1,280 acres of State Land, and 560 acres of private lease (which surround another 40 acres of federal land) within the ranch. The main portion of the private lands is located between State Highway 59/312 (Broadus Highway) and the Secondary Road 332 (Tongue River Road). The terrain varies from undulating bottoms along Pumpkin Creek to open and rolling country in the northern portion. The central portion is open and rolling with some steeper ridges and broken hills and badlands. The south central area is the rougher portion of the ranch. Some of the ridges are used as natural barriers. Many soil types are present throughout the lands. The majority of the land is rangeland. The average rainfall is 12 inches with a growing season of 138 to 158 days based upon National Weather Service records for the station located at Miles City, Montana.

**3.1(a) Access:** Access is available to the Pumpkin Creek Ranch via Secondary Road 332 (Tongue River Road) and State Highway 59/312 (Broadus Highway). There are a number of two-track trails within the ranch, some of which cross other BLM and State lands, which are primarily used for the ranch operations. There is an easement covering a road crossing adjoining private land which accesses the Pumpkin Creek Ranch, from the Tongue River Road, that could be transferred to the BLM if necessary.

**3.1(b) Vegetative Resources:** The majority (13,298 acres) of the offered non-federal lands can be described as having a native upland type of plant community. The upland community consists of grasses and shrubs with a small tree component. The major grass species include western wheatgrass, prairie junegrass, blue gramma, needleandthread, green needlegrass, buffalograss, and bluebunch wheatgrass. The shrub and shrub-like components are dominated by fringed sage, big sagebrush, silver sagebrush, and greasewood. Older, scattered cottonwood trees are located in the Pumpkin Creek drainage. Differences in dominant species vary with soil type, aspect and topography.

There is also 330 acres of hayland, 288 acres of dry cropland, and 122 acres of tame pasture on the ranch. The hayland and dry cropland acres are located along the benches of Pumpkin Creek. The hayland consists of alfalfa, alfalfa/grass mixes, and grass hay. The dry cropland has produced winter wheat. The tame pasture is located along Pratt Creek. The tame pasture was old cropland that was planted back to grass for grazing. Tame pasture production is affected by prairie dogs.

**3.1(c) Wetland/Riparian Areas:** There is approximately 9.2 stream miles of riparian and wetland habitats associated with Pumpkin Creek, a perennial stream. A stream survey completed

in the summer of 2005 (8/8-8/11) found that the riparian shrub/tree species present on Pumpkin Creek include cottonwood, sandbar willow, snowberry, peachleaf willow, rose, green ash, choke cherry, and box elder. The survey indicated that there is a diverse shrub/tree composition, but low population levels. All four reaches are rated functioning at risk, three of the reaches have an upward trend and one reach has a trend that is not apparent. The potential for high quality habitats exist, due to the fact that Pumpkin Creek is a perennial stream and has water available to riparian species throughout the growing season.

**3.1(d) Rangeland Resources:** The offered non-federal lands are part of a working ranch operation. The livestock operation runs approximately 500 cow/calf pairs. The 14,038 acres of private land lie within the Rogers Allotment (BLM Allotment Number 10509). The private lands comprise approximately 68% of the total lands within the allotment and provide approximately 3,022 AUMs (source Natural Resources Conservation Service) or approximately 75% of the AUMs within the allotment. In addition, there are 212 AUMs (5% of total AUMs) available from the 1,280 acres (6% of total acres) of State lands associated with these non-federal lands. According the Pumpkin Creek Ranch BLM grazing file there are 805 AUMs (20% of total AUMs) allotted to the 5,460 acres (26% of total acres) of federal land within the Rogers Allotment, this excludes the 40 acres of federal land which is surrounded by a private lease.

Livestock water has been developed and includes approximately 12 miles of pipeline, about 17 reservoirs and pits, and 11 wells including two which are not currently used (source October 2004, Appraisal completed by Luther Appraisal Services and August 10, 2004, Phase I Environmental Site Assessment completed by Maximum Technologies on the Pumpkin Creek Ranch, and MT DNRC Water Rights homepage). Many miles of three to four strand fences on steel and wood also exist on these lands.

**3.1(e) Water Resources/Water Rights/Floodplains:** The water resources considered are water sources of value on the non-federal acreage. This includes the wells and reservoirs mentioned above and Pumpkin Creek, a perennial stream. There are four intermittent streams (Dry Creek, Pratt Creek, Bridge Creek, and Horse Creek) on the ranch which provide seasonal water.

Water rights associated with the non-federal lands are as follows: a) 10 wells which have a 13.44 Ac. Ft. (acre foot) stock water right and one well with a 5.45 Ac. Ft. stock water right for a total of 139.85 Ac. Ft. associated with the wells; b) five water rights for irrigation purposes which total 1,504.50 cfs (cubic feet per second); c) nine stock water rights for reservoirs totaling 3,630 cfs and one stock water right direct from source for 450 cfs for a total of 4,080 cfs; d) five stock water rights for two reservoirs, one diversion dam, and two direct from source totaling 715.20 Ac.Ft. – for a total of 855.05 Ac. Ft. and 5,584.50 cfs. In addition, there are 2 wells which have a 14.33 Ac Ft. and 6.72 Ac. Ft., stock water right, respectively (for a total of 21.05 Ac. Ft. for wells) and 3 water rights for irrigation purposes which total 259.5 cfs which would be prorated between the non-federal lands to be acquired by the BLM and the lands to remain private in association with the buildings. The water rights which cover these resources and are listed in Table 3 of Appendix 3.

The following five non-federal parcels, or portions of them, are situated within the 100-year floodplain of Pumpkin Creek per NRCS Soil Mapping Data:

- **O-1** – S $\frac{1}{2}$ NW $\frac{1}{4}$ , SE $\frac{1}{4}$ , N $\frac{1}{2}$ SW $\frac{1}{4}$ , Section 1, T. 5 N., R. 48 E., floodplain of Pumpkin Creek;
- **O-2** – S $\frac{1}{2}$ NE $\frac{1}{4}$ , NE $\frac{1}{4}$ SE $\frac{1}{4}$ , Section 2, T. 5 N., R. 48 E., floodplain of Pumpkin Creek;
- **O-18** - SW $\frac{1}{4}$ , Section 6, T. 5 N., R. 48 E., floodplain of Pumpkin Creek;
- **O-19** - N $\frac{1}{2}$ NW $\frac{1}{4}$ , NE $\frac{1}{4}$ , NE $\frac{1}{4}$ SE $\frac{1}{4}$ , Section 7, T. 5 N., R. 48 E., floodplain of Pumpkin Creek;
- **O-20** - NE $\frac{1}{4}$ NW $\frac{1}{4}$ , W $\frac{1}{2}$ NE $\frac{1}{4}$ , NW $\frac{1}{4}$ SE $\frac{1}{4}$ , SE $\frac{1}{4}$ SE $\frac{1}{4}$ , Section 17, T. 5 N., R. 48 E., floodplain of Pumpkin Creek.

### **3.1(f) Wildlife & Fisheries/Aquatics:**

**Wildlife:** A wide variety of wildlife species and habitats exist in the non-federal lands. Mule deer, white-tailed deer, pronghorn antelope, and numerous non-game wildlife species, including migratory bird species, inhabit the area. The big game species, primarily mule deer and pronghorn antelope, utilize the area yearlong and no known crucial winter ranges are known to exist.

**Fisheries/Aquatics:** The main stream associated within the non-federal lands is Pumpkin Creek, a perennial stream. The BLM would be acquiring approximately 9.2 miles of stream. According to Montana Department of Fish, Wildlife and Parks (FWP) past surveys (<http://maps2.nris.state.mt.us>), the following fish species exist within the area: black bullhead, channel catfish, common carp, fathead minnow, flathead chub, goldeye, lake chub, longnose dace, mountain sucker, pumpkinseed, river carpsucker, sauger, stonecat, western silvery minnow, plains minnow, white crappie, and white sucker. Amphibian/aquatic dependent reptiles which have the potential to exist in the project area include: tiger salamander, Northern leopard frog, Great Plains toad, western chorus frog, woodhouse toad, Plains spadefoot, snapping turtle, and painted turtle (Werner, J.K. et al. 2004). Aquatic invertebrates are also found in the project area.

The BLM surveyed the above 9.2 miles of stream on Pumpkin Creek in the summer of 2005 (8/8 – 8/11). The stream was surveyed for fish, macroinvertebrates, amphibians (general observations), riparian and instream habitat, and water quality. The following text describes the existing condition from the results of this survey:

**Fish, Invertebrates and Amphibians/Reptiles:** A total of twelve fish species were found (8 of which were native). These included goldeye, river carpsucker (max. of 2-3 lbs), channel catfish (max. of 5 lbs), western silvery minnow, fathead minnow, carp, sand shiner, green sunfish, white sucker, black bullhead, flathead chub, and yellow bullhead. Macroinvertebrates were collected, but the analysis is incomplete at this time. Amphibians/reptiles observed include: spiny softshell turtle, common gartersnake, woodhouse toad, leopard frog, Plains gartersnake, and gopher snake. Other species observed included 3-5 inch freshwater mussels, beaver and muskrat. Based on the BLM survey and the above information from FWP and Werner et al. (2004), the following fish species are considered game fish: sauger and channel catfish.

**Habitat Inventory:** The stream is pool/glide dominated stream with perennial pools and intermittent riffles. Large woody debris is almost nonexistent. Stream canopy cover averaged 0-25%. The stream substrate was dominated by silt/clay with a subdominant substrate of gravel. Streambanks were moderately stable and stream incisement has occurred on most of Pumpkin Creek. This incisement was excessive in Reach 3.

Most of the above habitat information is similar to other prairie streams within the area. However, incisement (predominately in reach 3), lack of canopy cover, and some of the substrate dominated by silt/clay could be influenced by actions that have occurred within this land parcel and the Pumpkin Creek Watershed.

**Water Quality:** Conductivity (Umhos/cm) ranged from 1560 Umhos/cm to 2950 Umhos/cm. Stream temperatures ranged from 68 degrees F to 74 degrees F. The pH was 8.0 – 8.5 and the total alkalinity was 8-12 grains/gallon. Total dissolved solids ranged from 776 mg/l to 1507 mg/l. Based on the above information, water quality within Pumpkin Creek is similar to many other prairie streams within Eastern Montana. However, there is approximately a 1000 Umhos/cm conductivity decrease from reach 2 to reach 1 (total dissolved solids is also very different). The reason for this phenomenon is unknown and should be studied further.

**Actions and natural environmental conditions that have contributed to existing habitat and populations of aquatic species:** Current and past management actions and natural conditions have affected Pumpkin Creek. Current and past management within the non-federal land include: (1) a blown out culvert; (2) agriculture; (3) livestock grazing; (4) a residential area associated with outbuildings and feeding area; (5) road sluffing; (6) road encroachment; (7) garbage dump; (8) spreader dikes, (9) two fords, and (10) three watering troughs in close vicinity to the stream. Many of these activities also occur upstream of the project area.

Natural environmental conditions have affected the existing condition. Drought conditions have persisted for the past several years. Stream flows fluctuate with large differences in streamflows related to precipitation. Local geology and soil composition also influence water quality, streamflows, and erosion. Local geology and soil composition can influence the above parameters through erosion potential, stream runoff, stream substrate, total dissolved solids, salinity, etc.

### **3.1(g) T&E Species:**

**Wildlife:** Approximately 2,823 acres, on 5 parcels, of the non-federal lands provide bald eagle habitat. A new bald eagle (Federally threatened) nest was found and first recorded on parcel O-20 on 1/12/06 by a BLM biologist. Two adult bald eagles were perched in the nest. On 1/25/06 the nest was checked again and both adults were seen building the nest. This nest will be monitored for egg laying/incubation this spring. Bald eagles also migrate through the area in the

spring, fall and winter. No other threatened or endangered species are known to inhabit the non-federal lands.

**Fisheries/Aquatic Species:** There are no T&E aquatic species located within the non-federal lands. Endangered pallid sturgeon are located approximately 30 miles downstream within the Yellowstone River.

**Plants:** There are no federally listed threatened and endangered plant species known to occur in lands administered by the Miles City Field Office. On the Pumpkin Creek Ranch, there is potential habitat for Ute lady's tresses (*Spiranthes diluvialis*), a threatened species. However throughout Montana, potential habitat for this species is widespread, but actual occurrences are rare. The likelihood of an occurrence on this property is remote.

### **3.1(h) Special Status Species:**

**Wildlife:** Black-tailed prairie dogs, a BLM Sensitive Species exist throughout the subject non-federal lands. Approximately 18 black-tailed prairie dog towns are known to exist which make up a complex approximately 1,500 acres in size. The complex size is estimated by existing data from the Natural Heritage Program Database, professional judgement and other sources. It should be noted that black-tailed prairie dog town numbers/acreages fluctuate based on factors such as weather, plague, urbanization, recreational shooting and other factors. Numerous other BLM Sensitive Species inhabit the area which include Burrowing owl, Red-headed woodpecker, Loggerhead shrike, Brewers sparrow, Bairds sparrow, Sprague's Pipit, Prairie falcon, and Ferruginous hawk, Golden eagle and Greater sage-grouse. One sage-grouse strutting ground exists on parcel O-16. It was checked for activity in 2003 and is considered an active ground. No crucial winter ranges for sage-grouse are known to occur in the subject area. Additional Birds of Conservation Concern, as identified by the US Fish and Wildlife Service, which are present on the non-federal lands include the Short-eared owl, Long-billed curlew, Upland sandpiper and Northern harrier.

**Fisheries/Aquatic Species:** Based on the BLM survey and the above information from FWP and Werner et al. (2004), the following aquatic species are BLM sensitive species that are known or have the potential to exist within the non-federal lands. These include: sauger, Northern leopard frog, Great Plains toad, Plains spadefoot, snapping turtle, and spiny softshell turtle.

**Plants:** There are no BLM Sensitive or Watch Species known to occur on the Pumpkin Creek Ranch. Field visits by BLM personnel did not result in documentation of any special status plant species. However, bractless blazingstar (*Mentzelia nuda*), variegated-bract blazingstar (*Mentzelia montana*) and persistent sepal yellowcress (*Rorippa calycina*) are plant Species of Special Concern (SSC) that are known to exist in Custer County and potential habitat for these species exists within the Pumpkin Creek Ranch Properties.

**3.1(i) Cultural/Paleo Resources:** Limited cultural resource work has occurred in and around the offered lands. The inventories have not located cultural resources. Historic sites are likely to occur in the offered lands. Previous cultural resource inventories along the Highway 59 corridor

in Custer County (Smith 1975, Peterson and Fandrich 1998) have shown that most of the prehistoric sites are small lithic scatters. Both historic and prehistoric sites would be expected in the offered lands. Prehistoric sites would be predominately lithic scatters (places where chipped stones tools were made, maintained, and replaced). Historic sites would consist of range improvement projects and homestead remains over 50 years of age. This would include an unrecorded homestead site in the SE¼ of Section 28, T. 5 N., R. 48 E.

**3.1(j) Native American Religious Concerns:** The Native American Tribes in the area were sent certified copies of the Notice of Exchange Proposal (the mailing list can be found in Appendix 1). One letter was received from a Tribal Historic Preservation Office regarding the notice, requesting information about the existence of cultural resources found within the tracts of land to be exchanged. BLM sent a response to the Tribe on 4/6/07 with a comment period ending on 4/20/07. To date BLM has not heard from the Tribe. No other tribal requests have been received throughout BLM's outreach efforts.

**3.1(k) Mineral Resources:** Table 1 of Appendix 3 contains specific descriptions of each of the non-federal tracts, including if the minerals are federal or non-federal. Currently, 877.98 acres are all federal minerals and 40.05 acres are federal coal. The remaining minerals are private with an undivided 50% of the minerals being retained in previous transactions on approximately 3,910 acres.

The Mineral Report which was prepared by David Coppock on January 30, 2006, can be found in the casefile (MTM-89845), the following summarizes the report:

Leaseables - Mineral occurrence and development potential is centered primarily on the potential for the occurrence of oil, gas, and coal resources. All of the tracts have occurrence potential for oil and gas, and those tracts underlain by the Tertiary Fort Union Formation have the potential for coal occurrence. The non-federal lands lie within two townships nearby, and to the south of, the confluence of the Tongue River and Pumpkin Creek. They are underlain by the Lebo and Tullock members of the Tertiary Fort Union Formation. Although coal occurs in the Tullock and Lebo Members, the beds here are thin, dirty, and discontinuous. Coal deposits here are not considered to be of economic importance. Oil and gas occurrence and development potential is considered moderate.

Locatables - None known.

Saleables - To a lesser degree, mineral materials resources may occur on the tracts in the form of scoria (baked or fused rock) or minor alluvial deposits. Scoria occurs in minor deposits over small areas of some of the parcels. No minerals are considered to be of economic importance.

**3.1(l) Recreation Resources/VRM:**

**Recreation:** Recreational use of the non-federal land is at the discretion of the landowners. The main use would be occasional bird and big game hunting. Mule deer and antelope would be the primary big game species hunted within the area. Prairie dog shooting may be a recreational activity within the area, as a number of prairie dog towns thrive within the area.

**VRM:** The non-federal land is within a Class III VRM area. The Class III management objective is to partially retain the existing character of the landscape. Development may not dominate the landscape.

**3.1(m) Use Authorizations/Encumbrances/Unauthorized Use:** Encumbrances on the non-federal lands as listed in Schedule B – Section 2 of the updated Commitment for Title Insurance issued by First American Title Insurance Company, numbered 18724 can be found in Appendix 6. There are several Bargain and Sale Deeds, Right-of-Way Deeds, and Easement Deeds listed for State Highway 59/312 (Broadus Highway) and an easement and right-of-way listed for the Tongue River Road (secondary road 332). There are also two Right-of-Way Easements listed for Range Telephone Cooperative in the area of the main ranch headquarters. There are also powerlines on the non-federal land which belong to Tongue River Electric Cooperative which provide service to the buildings and to some wells; and probably a Range Telephone Cooperative telephone line providing service to the house on the Tongue River Road. Existing range improvements include pipelines, reservoirs, pits, wells and fences. Water rights on the non-federal lands are described in 3.1(e) and are listed in Table 3 of Appendix 3.

**3.1(n) Existing and Potential Land Uses:** This has been a working ranch, some of the land has been farmed. The ranch was listed for sale until TCF acquired an option on it. Future use would continue with the present uses, however there is always potential that the lands could be subdivided and sold for rural residential development.

**3.1(o) Socio-Economic/Environmental Justice:** Approximately 500 cow/calf pairs graze on the non-federal lands. The number of AUMs of grazing on this land is estimated to be 3,022 AUMs.

Average tax revenue from average grazing land in Custer County is estimated at \$.76 per acre. (Source: personal conversation with Lee Zuelke, Appraiser for MT Dept. of Revenue, 2/10/06, based on average grazing land in MT 2.8-3.79 AUMs/ac assessed value of \$46.23 x 3.14 % (taxable percent) x 0.525 (assumed Mill levy) = \$.76/acre.)

**3.1(p) Forest Resources:** There are some scattered cottonwood trees on Pumpkin Creek. There are a very few scattered Ponderosa Pine and Juniper in the area. There are no commercial value timber stands on the property.

**3.1(q) Invasive, Non-Native Species:** The only known noxious weed that is currently within the private holdings is Canada thistle (*Cirsium arvense*), but is not in quantities to be considered infestations or sources for problem weed areas.

**3.1(r) Solid or Hazardous Wastes:** Both parties to the land exchange have indicated in the Agreement to Initiate a Land Exchange that to the best of their knowledge, no known or suspected release, storage or disposal of hazardous substances has occurred on the federal or non-federal lands involved in the exchange. A Phase 1 Environmental Site Assessment was conducted on the non-federal land parcels by Maxim Technologies, Inc. for The Conservation Fund. The report which was prepared on August 10, 2004, indicated that there was no evidence

of potential recognized environmental conditions, as defined in the ASTM standard, identified on the lands to be acquired by the federal government.

A survey was conducted of a dump located in the SW<sup>1</sup>/<sub>4</sub>, Section 1, T. 5 N., R. 48 E., on the Pumpkin Creek Ranch non-federal land (Tract O-1). It is the dump used by the main ranch stead. The dump was located a short distance from the ranch house and was located in the cutbank immediately adjacent to Pumpkin creek. The dump did not contain any hazardous materials. The material in the dump was household and machinery parts. Manure was also present, which, considering the immediate location of Pumpkin creek, was a waste of concern. The current owner plans to remove the dump prior to closing.

### **3.2 FEDERAL LANDS:**

The federal lands being considered for exchange consist of 100 parcels comprising approximately 20,210.53 acres.

Table 2 of Appendix 3 and the parcel sheets in Appendix 7 contain specific descriptions of each of the BLM tracts being analyzed for disposal. They are mostly scattered, isolated parcels located in three southeastern Montana counties (Custer, Carter, and Powder River) and are primarily used for grazing and for hunting when access is available.

**3.2(a) Access:** There are 65 parcels consisting of approximately 13,410 acres which do not have legal public access. There are thirty-five tracts consisting of approximately 6,800 acres which possess legal public access. Access would be limited to many of them due to their size, shape, topography, fences, lack of two-track trails, and difficulty in locating their exact location. The currently accessible federal tracts are intermingled with private lands and it is often difficult to determine their exact location, thereby creating trespass situations onto nearby private lands.

The following nine tracts, and a portion of another, of federal land consisting of 1,033.46 acres have vehicle access via a Montana State Secondary road or County road and most via a two-track trail: CL 3 (portion of), 89S4, 89S5, 89S23, 89S35, 89S37, 89S38, 89S39, 89S71A, and 89S79. The following nine tracts, and a portion of another, of federal land consisting of 1,122.62 acres have vehicle access via a County road, but no two-track trail for further vehicle access: CL2, CL3 (portion of), CL7, 89S46, 89S47, 89S48, 89S49, 89S69, 89S70, and 89S71B. The following six federal tracts consisting of 2,490.60 acres have access via a County road, but access would only be by foot and crawling through the fence [two of the tracts (CF18 and H1 – 800 acres) would have to be accessed where the two sections corners meet on the County road]: CF2, CF7, CF17, CF18, CF20, and H1. Three federal tracts (89S18, 89S19, and 89S20) consisting of 280 acres have access through Forest Service lands, but no vehicle access. Tract 89S23, which was identified above, is also next to Forest Service lands. The District Ranger for the Custer National Forest was consulted about the federal tracts next to the forest, she had no concerns with the possible disposal of these federal tracts. Two federal tracts (CL9 and 89S16) consisting of 800 acres have access through Forest Service land then State land, but no vehicle access. Two federal tracts (89S36 and 89S40) consisting of 920 acres have access, probably vehicle access, by traveling a long way through other BLM lands. Two federal tracts (89S77 and 89S78) consisting of 120 acres have access by traveling a long way through other BLM lands, but no vehicle

access. One federal tract (H2) consisting of 55.97 acres, of which approximately 36 acres which are farmed, has access via the Tongue River, which is a Class I water (navigable river) as defined by the 1985 Montana Stream Access Law.

**3.2(b) Vegetative Resources:** There are approximately 20,174.53 acres of rangeland having a native upland plant community and 36 acres of irrigated farm land. The upland community comprises 15,706.53 acres consisting mainly of grasses and shrubs and 4,468 acres containing upland forest/conifer communities. The major grass species include western wheatgrass, prairie junegrass, blue gramma, needleandthread, green needlegrass, buffalograss, and bluebunch wheatgrass. The shrub and shrub-like species include fringed sage, big sagebrush, silver sagebrush, and greasewood. The upland forest/conifer communities contain ponderosa pine (*pinus ponderosa*) and Rocky Mountain Juniper (*juniperus scopulorum*) stands. Hardwoods existing on a portion of the the federal lands include cottonwood (*populus sp*), green ash (*fraxinus pennsylvanica*), and quaking aspen (*populus tremuloides*). Shrubby tree species include chokecherry, plum and hawthorn. Differences in dominant species vary with soil type, aspect and topography.

**3.2(c) Wetland/Riparian Areas:** There are approximately 1.75 miles of riparian habitat on perennial and intermittent streams with perennial pools on four of the federal tracts. This riparian habitat consists of approximately one-half mile along the Tongue River on Tract H2; one mile along Boxelder Creek on tracts 89S31, 89S34, and 89S37; and one-fourth mile along the Little Missouri River on tract 89S73. The Tongue and the Little Missouri Rivers are perennial streams and Boxelder Creek is an intermittent stream with perennial pools. Riparian areas, instream habitat, and water quality characteristics for the Little Missouri River and Boxelder Creek are most likely similar to many of the prairie streams within Eastern Montana. The Tongue River is a larger prairie stream system that is heavily influenced by the Bighorn Mountains, irrigation, and the Tongue River Reservoir. Therefore, riparian species tend to be in higher densities and instream habitat varies from typical Eastern Montana prairie streams. Instream habitat within the Tongue River varies from typical prairie streams due to a dominant gravel substrate, the presence of trout habitat directly downstream of the dam, lower conductivity, and other habitat parameters.

Riparian and wetland habitats associated with the remaining federal lands are minimal due to the limited acreages of most of the tracts. The majority of these federal parcels are less than 120 acres and consist of habitats associated with ephemeral and intermittent streams. The majority of the habitats within the ephemeral and intermittent streams are pools within a pool channel system where water flows from pool to pool during spring snow melt and after heavy precipitation events. The pools that retain water for at least 30 consecutive days typically have riparian vegetation associated with them; species that may be present include, but are not limited to prairie cordgrass, various species of sedges and rushes and emergent aquatic vegetation.

Habitats associated with existing livestock pits and reservoirs are limited due to fluctuating water levels, which in drought years limits the amount of water available to riparian vegetation. Livestock grazing may also limit the type and amount of riparian vegetation that exist. Some of the existing livestock pits create shallow water wetlands that are dominated by cattails, softstem bulrush, hardstem bulrush and other sedge and rush species.

**3.2(d) Rangeland Resources:** All selected federal lands are within grazing allotments. These lands are part of 30 allotments in 27 grazing casefiles. Total active use on the selected Section 3 federal parcels is 3,680 Animal Unit Months (AUMs). Twenty-four of the casefiles have a total of 2,889 AUMs which are authorized for use by cattle on a yearlong basis. One casefile has 30 AUMs which are authorized for use by sheep on a yearlong basis and 68 AUMs which are authorized for use by cattle on a yearlong basis. One case file has 120 AUMs which are authorized for use by cattle or sheep on a yearlong basis and 40 AUMs which are authorized for use by cattle or sheep on a May 1 to November 30, season of use. One casefile has 310 AUMs which are authorized for use by cattle on a yearlong basis and 223 AUMs which are authorized for use by cattle on a June 1 to October 31, season of use under an Allotment Management Plan (AMP). Twelve of the tracts are within the C&B State Cooperative Grazing District.

Range improvement projects constructed on some of the parcels have been authorized either under cooperative agreements or Section 4 permits. According to the grazing casefiles, authorized range improvement projects include a total of 20 fences, 8 wells, 6 pits/reservoirs, 3 pipelines, 2 weed treatment projects, one land treatment project, and one diversion ditch project.

**3.2(e) Water Resources/Water Rights/Floodplains:** The water resources considered are water sources of value on the federal acreage. This includes the reservoirs, pits, and wells mentioned above and the Tongue River (perennial), a Class I water (navigable river), Little Missouri River (perennial stream), and Box Elder Creek (intermittent stream).

Water rights associated with the federal lands are depicted in Table 4 of Appendix 3 and summarized below.

There are 21 reservoirs and 2 pits on 16 tracts of federal land [PPLU3, CL9, CF2, CF7, CF10, CF14, CF15, CF16, CF18, 89S7, 89S8, 89S15, 89S36, 89S39 (pit), 89S47, and 89S74 (1 pit and 1 reservoir)] in which the water right is split between stock and wildlife. The 23 stock water rights total 27.14 acre feet (AF). Twenty-two of the wildlife water rights total 231.5 AF, one of the wildlife water rights on tract CL9 does not show AF. There is one additional reservoir on tract 89S74 with a stock water right totaling 4 AF. There are eight wells on five tracts of federal land (CF2, CF4, CF10, CF15, and 89S79) with water rights split between stock and wildlife for the wells. The wildlife water rights on the eight wells total 62.45 AF. The stock water right on the well on tract 89S79 is for .56 AF, the other stock water rights do not show AF. There is one additional well on tract CF17 for 4.34 AF for wildlife. There is a stock water right on tract 89S8 for 2.79 AF on a pipeline/tank from a developed spring.

Private individuals hold water rights on 14 of the federal tracts. Nine of these (on tracts CL3, CL5, CL7, CL12, CF22, 89S8, 89S31, 89S42, and 89S45) are for stock direct from the source (creek); no AF are listed. There are two water rights for stock wells, one of which is on tract CF2 for 30 gallons per minute (GPM); the other is for a 100 foot well on tract CLY1, no AF or GPM are shown. One water right which is on tract CF7, is for 12 AF for a stock dam. The other two water rights, which are on tracts 89S43 and 89S74, are for a total of 1,146.5 cubic feet per second (CFS) for water spreaders.

The following four federal parcels, or portions of them, are situated within the 100-year floodplains per NRCS Soil Mapping Data:

- **H2** – Lots 8 and 9, Section 10, T. 2 N., R. 45 E., floodplain of the Tongue River below elevation of 2,680 feet;
- **89S7** – E $\frac{1}{2}$ NE $\frac{1}{4}$ , Section 26, T. 3 N., R. 57 E., floodplain of East Fork O’Fallon Creek below elevation of 3,125 feet;
- **89S37** – SE $\frac{1}{4}$ NE $\frac{1}{4}$ , Section 11, T. 3 S., R. 59 E., floodplain of Boxelder Creek below elevation of 3,240 feet;
- **89S73** – SE $\frac{1}{4}$ SE $\frac{1}{4}$ , Section 21, T. 6 S., R. 62 E., floodplain of Little Missouri River below elevation of 3,245 feet.

### **3.2(f) Wildlife & Fisheries/Aquatics:**

**Wildlife:** A wide variety of wildlife species and habitats exist in the federal lands which include elk, mule deer, white-tailed deer, pronghorn antelope, and numerous non-game wildlife species including migratory bird species. Upland game bird species include wild turkeys, sage-grouse, sharp-tailed grouse, and others. One sharp-tailed grouse strutting grounds is known to exist on Tract CF12 and others exist near some of the parcels. Based on existing data compiled by Montana Fish, Wildlife and Parks and BLM, approximately 120 acres of mule deer, 2,430 acres of pronghorn antelope, and 760 acres of white-tailed deer winter range exist on the federal lands. White-tailed deer and mule deer critical winter range exists on federal tract 89S73 (40 ac.) and critical antelope winter range exists on tract 89S36 (640 ac.). Rocky Mountain elk are currently expanding and yearlong range exists on approximately 12,110 acres, primarily the parcels near the Custer National Forest just east of the Tongue River. Numerous BLM Special Status Species inhabit the subject area which are listed in the appropriate sections below.

**Fisheries/Aquatic Species:** There is approximately one-half mile of the Tongue River on tract H2; one mile of Boxelder Creek on tracts 89S31, 89S34, and 89S37; and one-fourth mile of the Little Missouri River on tract 89S73 for a total of 1.75 miles of perennial and intermittent streams with perennial pools on the federal tracts. The Tongue and the Little Missouri Rivers are perennial streams and Boxelder Creek is an intermittent stream with perennial pools.

According to Montana Department of Fish, Wildlife and Parks (FWP) past surveys (<http://maps2.nris.state.mt.us>), the following fish species exist within the three rivers/streams: black bullhead, channel catfish, common carp, creek chub, fathead minnow, flathead chub, golden shiner, goldeye, green sunfish, lake chub, longnose dace, longnose sucker, northern pike, plains killifish, mountain sucker, pumpkinseed, river carpsucker, rock bass, sauger, sand shiner, shorthead redhorse, smallmouth bass, stonecat, plains minnow, walleye, white sucker, and yellow bullhead. Based on the above information from FWP, the following fish species are considered game fish: sauger, channel catfish, walleye, northern pike, and smallmouth bass. Amphibian/aquatic dependant reptiles that have the potential to exist in the project area include: tiger salamander, Northern leopard frog, Great Plains toad, western chorus frog, woodhouse toad, Plains spadefoot, snapping turtle, spiny softshell and painted turtle (Werner, J.K. et al. 2004). Aquatic invertebrates are also found in the project area.

**Actions and natural environmental conditions that have contributed to existing habitat and populations of aquatic species:** Current and past management actions and natural conditions have affected the Tongue River, Little Missouri River and Boxelder Creek. Current and past management within and upstream of the disposed land parcels include: (1) agriculture/irrigation; (2) livestock grazing; (3) Tongue River dam and Reservoir; (4) existing roads; (5) coal and CBNG development. These actions occur in various degrees throughout the drainage which influences the degree at which aquatic life is affected.

Natural environmental conditions that have affected natural conditions include drought conditions have persisted for the past several years. The stream flows fluctuate with large differences in streamflow related to precipitation. Local geology and soil composition also influence water quality, streamflows, and erosion. Local geology and soil composition can influence the above parameters through erosion potential, stream runoff, stream substrate, total dissolved solids, salinity, etc.

### **3.2(g) T&E Species:**

**Wildlife:** The federal lands (1,508 acres on nine tracts) provide habitat for the bald eagles, a federally threatened species. Bald eagles can utilize the disposal tracts especially during migration periods in the spring, fall, and winter. A bald eagle nest exists on federal parcel H2. The nest is active and produced 2 young eaglets in 2005 and 2 young eaglets in 2004. It has been successful every year since 1992, with at least one bird fledged, with 2 exceptions (active but unknown outcome in 1993 and active but unsuccessful in 2001). No bald eagle nests are known to exist on the other tracts proposed for disposal. Black-footed ferrets, a federally endangered species inhabit prairie dog towns but are not known to exist in the subject tracts. Surveys for Black-footed ferrets have been conducted in Bighorn County, Montana, south of the disposal tracts and no Black-footed ferrets or their sign were observed during the surveys. No other threatened, endangered, or proposed species for listing are known to occur in the federal lands proposed for disposal.

**Fisheries/Aquatic Species:** There are no T&E aquatic species located within the federal lands. Endangered pallid sturgeon are located approximately 70 miles downstream within the Yellowstone River in the Tongue River drainage and even a greater distance downstream from the parcels located within the Little Missouri River drainage.

**Plants:** There are no federally listed threatened or endangered plant species known to occur on lands administered by the Miles City Field Office. There is potential habitat for Ute lady's tresses (*Spiranthes diluvialis*) on exchange parcels H2 and 89S37. However, potential habitat is widespread throughout Montana but actual occurrences are rare. In Montana, the species is only known in the headwaters of the Missouri region. Given, our current understanding of the distribution and habitat requirements of this species, the likelihood of Ute lady's tresses (*Spiranthes diluvialis*) occurring on any of the exchange parcels is remote.

**3.2(h) Special Status Species:**

**Wildlife:** A wide variety of wildlife species inhabit the federal lands including numerous BLM Sensitive Species. Black-tailed prairie dogs, a BLM Sensitive Species exist throughout the subject areas but not on all tracts listed for disposal. Approximately 21 black-tailed prairie dog towns (total estimated acreages=700) are known to exist on or adjacent to the federal lands based on data obtained from wildlife specialists professional judgement and the Montana Natural Heritage Program Database. Numerous other BLM Sensitive Species inhabit the area which includes Burrowing owl, Red-headed woodpecker, Loggerhead shrike, Brewers sparrow, Bairds sparrow, Sprague’s Pipit, Prairie falcon, and Ferruginous hawk, Golden eagle and Greater sage-grouse. No sage-grouse strutting grounds exist on the federal tracts but numerous parcels are within 2 miles of strutting grounds. No crucial winter ranges for sage-grouse are known to occur in the subject area. Additional Birds of Conservation Concern, as identified by the US Fish and Wildlife Service, which are present on the federal lands, include the Short-eared owl, Long-billed curlew, Upland sandpiper and Northern harrier.

**Fisheries/Aquatic Species:** Based on the above information in section 3.2(f), from FWP and Werner et al. (2004), the following aquatic species are BLM sensitive species that are known or have the potential to exist within the federal lands. These include: sauger, Northern leopard frog, Great Plains toad, Plains spadefoot, snapping turtle, and spiny softshell turtle.

**Plants:** There are no populations of plant Species of Special Concern documented on any of the federal parcels. However, there have been no plant surveys conducted by the Montana Natural Heritage Program and there has been limited field data gathered by BLM personnel regarding the occurrence of special status plant species on these parcels. The following parcels have a likelihood of containing special status plant species. They are in the vicinity (5 miles or less) of known locations of special status plant species and contain habitats suitable to support these species.

<b>Parcel i.d.</b>	<b>Species of Special Concern</b>
89S17	broadbeard beardtongue ( <i>Penstemon angustifolius</i> ), prairie phlox ( <i>Phlox anticola</i> )
89S18	broadbeard beardtongue ( <i>Penstemon angustifolius</i> ), prairie phlox ( <i>Phlox anticola</i> )
89S19	broadbeard beardtongue ( <i>Penstemon angustifolius</i> ), prairie phlox ( <i>Phlox anticola</i> )
89S20	broadbeard beardtongue ( <i>Penstemon angustifolius</i> ), prairie phlox ( <i>Phlox anticola</i> )
89S69	slimleaf milkweed ( <i>Asclepias stenophylla</i> ), double twinpod ( <i>Physaria brassicoides</i> )
89S70	slimleaf milkweed ( <i>Asclepias stenophylla</i> ), double twinpod ( <i>Physaria brassicoides</i> )
89S71	slimleaf milkweed ( <i>Asclepias stenophylla</i> ), double twinpod ( <i>Physaria brassicoides</i> )
89S36	broadbeard beardtongue ( <i>Penstemon angustifolius</i> )
89S37	broadbeard beardtongue ( <i>Penstemon angustifolius</i> )

89S38	broadbeard beardtongue ( <i>Penstemon angustifolius</i> )
89S40	broadbeard beardtongue ( <i>Penstemon angustifolius</i> )
89S2*	Schweinitz's flatsedge ( <i>Cyperus schweinitzii</i> ), slimleaf milkweed ( <i>Asclepias stenophylla</i> ), prairie phlox ( <i>Phlox andicola</i> ), broadbeard beardtongue ( <i>Penstemon angustifolius</i> )
89S9*	Schweinitz's flatsedge ( <i>Cyperus schweinitzii</i> ), slimleaf milkweed ( <i>Asclepias stenophylla</i> ), prairie phlox ( <i>Phlox andicola</i> ), broadbeard beardtongue ( <i>Penstemon angustifolius</i> )
89S5*	Schweinitz's flatsedge ( <i>Cyperus schweinitzii</i> ), slimleaf milkweed ( <i>Asclepias stenophylla</i> ), prairie phlox ( <i>Phlox andicola</i> ), broadbeard beardtongue ( <i>Penstemon angustifolius</i> )
89S10*	Schweinitz's flatsedge ( <i>Cyperus schweinitzii</i> ), slimleaf milkweed ( <i>Asclepias stenophylla</i> ), prairie phlox ( <i>Phlox andicola</i> ), broadbeard beardtongue ( <i>Penstemon angustifolius</i> )
89S11*	Schweinitz's flatsedge ( <i>Cyperus schweinitzii</i> ), slimleaf milkweed ( <i>Asclepias stenophylla</i> ), prairie phlox ( <i>Phlox andicola</i> ), broadbeard beardtongue ( <i>Penstemon angustifolius</i> )
89S13*	Schweinitz's flatsedge ( <i>Cyperus schweinitzii</i> ), slimleaf milkweed ( <i>Asclepias stenophylla</i> ), prairie phlox ( <i>Phlox andicola</i> ), broadbeard beardtongue ( <i>Penstemon angustifolius</i> )

\*The degree of likelihood these parcels contain occurrences of these listed species is dependent upon the presence or extent sandy inclusions or sandy blowouts which is not known.

**3.2(i) Cultural/Paleo Resources:** BLM defines cultural resources as definite locations of human activity, occupation, or use identifiable through field inventory, historical documentation, or oral evidence. The primary method for identifying cultural resources is through field inventory of those parcels proposed for exchange. BLM records indicate that for the parcels selected for exchange cultural resource inventory has gone on since 1989. BLM cultural resource records indicate that approximately 24,282.80 acres of land identified for possible exchange during the Pumpkin Creek project in Carter, Custer, and Powder River Counties have been inventoried for cultural resources. During the course of the project approximately 4,072.27 acres of the inventoried lands were dropped from the exchange leaving 20,210.53 acres.

The inventories have located or observed 120 cultural resource sites and two vertebrate paleontological localities. Approximately 95 sites were recorded in the portion of the Pumpkin Creek Exchange in southwest Custer County by contractors for BLM and the Conservation Fund. BLM recorded six additional cultural sites in inventory of small exchange parcels in Carter and Custer Counties in 2006. The remaining 19 sites were located in Carter County and elsewhere in Custer County in 1989 and reevaluated during the late 1990's. BLM reviewed and evaluated the previously reported sites in 2005 and 2006. BLM recommended 18 of the sites in Custer County as eligible for listing on the National Register of Historic Places. Three sites in Carter County require further work to determine National Register eligibility. This would be done prior to the sites leaving federal ownership. The remaining sites in Carter and Custer Counties were either found not to be sites, not on federal lands, or were determined to be not eligible for listing on the National Register of Historic Places.

The results of cultural resource investigations are summarized in a report entitled “*A Summary of the Cultural Resource Investigations For the Pumpkin Creek Land Exchange 1989-2006*” prepared by BLM Archaeologists Douglas A. Melton and William S. Hubbell. This report was prepared since the total exchange involves a considerable number of small reports (over 50) and several large multi-volume reports for the 2005 and 2006 investigations. The Montana State Historic Preservation Office (SHPO) concurred with BLM’s determination of eligibility and effect on November 09, 2006.

The two paleontological localities are not considered significant. One was not relocated during a re-inventory of the parcel in Carter County and one consisted of isolated turtle scutes and a crocodile tooth in Custer County (see the BLM report referenced above for additional details).

One of the 18 sites in Custer County which was identified as eligible has been recommended for retention. The other 17 sites are recommended for mitigation under a programmatic memorandum of agreement to be developed by the BLM and the Montana SHPO and accepted by the Advisory Council on Historic Preservation. The three sites in Carter County would also be mitigated if determined to be eligible.

**3.2(j) Native American Religious Concerns:** The Native American Tribes in the area were sent certified copies of the Notice of Exchange Proposal (the mailing list can be found in Appendix 1 of the EA). One letter was received from a Tribal Historic Preservation Office regarding the notice, requesting information about the existence of cultural resources found within the tracts of land to be exchanged. BLM sent a response to the Tribe on 4/6/07 with a comment period ending on 4/20/07. To date BLM has not heard from the Tribe. No other tribal requests have been received throughout BLM’s outreach efforts.

**3.2(k) Mineral Resources:** The Mineral Report was prepared by David Coppock on January 30, 2006, can be found in the casefile (MTM-89845). The mineral status is summarized as follows:

Leaseables - Mineral occurrence and development potential is centered primarily on the potential for the occurrence of oil, gas, and coal resources. All of the tracts have occurrence potential for oil and gas, and those tracts underlain by the Tertiary Fort Union Formation have the potential for coal occurrence. There are ten oil and gas leases on eighteen of the federal tracts (CL3, CL10, CL13, 89S31-89S33, 89S35-89S38, 89S40, 89S41, 89S69-89S71B, 89S77, 89S78). Tracts CL2 through CL9, located within T. 1 N., R. 45 E., and Tracts CL11 through CL13, CLY1, and CLY2, located in T. 1 N., R. 46 and 47 E., in Custer County, are within an area of high development potential for coal resources and also have high development potential for oil and gas. These tracts are within the Beaver Creek-Liscom Creek Known Coal Leasing Area (KCLA). The remaining federal tracts have a moderate occurrence and development potential for oil and gas and moderate to low for coal resources.

Locatables – None known. There are no mining claims of record.

Saleables - Some of the tracts have occurrence moderate to low potential for scoria (baked or fused rock) resources or minor alluvial deposits.

### **3.2(l) Recreation Resources/VRM:**

**Recreation:** The federal lands are considered to provide dispersed recreational opportunities, primarily big game hunting. No specific visitor use data is available, but overall use of the public land is considered to be low and limited due to their size, shape, topography, and access constraints. Special recreation permits have been issued on some of the lands for guiding and outfitting. Some dispersed recreation may occur, with the permission of the adjoining landowner, on the approximately 13,410 acres which do not have legal public access.

Thirty-five parcels consisting of approximately 6,800 scattered acres of federal land as described in 3.2(a) possess legal public access. Access would be limited to many of them due to their size, shape, topography, fences, lack of two-track trails, and difficulty in locating their exact location. They can presently be used for most of the recreational pursuits that would occur on the lands acquired through this exchange, but are probably mostly used for hunting. Private land parcels adjoining the accessible federal parcels often receive trespass use, primarily during the hunting season, associated with public use of the federal lands.

Tract H2 lies adjacent to the Tongue River approximately 60 miles upstream from the confluence of the Tongue River with the Yellowstone River. As one of only four BLM parcels along the Tongue River between the mouth and Ashland, Montana, it possesses recreational value for public use for floaters of the Tongue River; however, the tract which consists of 55.97 acres, currently has 36.26 acres under an agricultural permit, with 19.71 acres remaining undisturbed. Tracts CL9, 89S16, 89S18, 89S19, 89S20, and 89S23, abut the Custer National Forest on the Ashland or Sioux Ranger Districts either directly or in association with an adjacent parcel of State land, but have no vehicle access available. These parcels possess elk habitat which draws sportsmen to this part of southeastern Montana.

**VRM:** The majority of the federal lands are within a Class III viewshed, with the exception of those along state highways, the Tongue River, and those adjacent to the Custer National Forest, which could be Class II. It is estimated there are 19 tracts consisting of approximately 4,300 acres which could be Class II, leaving 81 tracts consisting of approximately 15,911 acres, which would be considered Class III. The Class III management objective is to partially retain the existing character of the landscape. Development may not dominate the landscape. The class II management objective is to retain the existing character of the landscape. Development may be seen, but should not attract the attention of the casual observer.

**3.2(m) Use Authorizations/Encumbrances/Unauthorized Use:** Known valid existing rights (other than water rights) on the federal lands are identified in Table 2 of Appendix 3. Water rights on the federal lands are listed in Table 4 of Appendix 3 and summarized in section 3.2(e). Twenty-eight of the 100 federal tracts have rights-of-way on them. The rights-of-way consist of two reservoir rights-of-way on two tracts (89S43 and 89S44), two telephone rights-of-way on eight tracts (CL2, CL3, CF17, CF20, H1, 89S4, 89S23, 89S49), four powerline rights-of-way on 14 tracts (CF2, CF4, CF5, CF9, CF11, CF14, CF15, CL2, CL7, CL10, 89S14, 89S18, 89S39, 89S79), nine county road rights-of-way on twelve tracts (CF17, CF20, CL2, CL3, CL7, 89S4,

89S5, 89S23, 89S35, 89S49, 89S71A, 89S39, 89S79), four highway rights-of-way on seven tracts (CF2, CF7, CF17, CF18, H1, 89S49), one private road right-of-way on one tract (89S19), and one gas pipeline right-of-way on one tract (CL10). One federal tract (H2) has a 2920 agricultural permit for farming on it which expires on March 31, 2008. There are six oil and gas leases on seven of the federal tracts (CL3, CL10, CL13, 89S40, 89S41, 89S77, 89S78). All federal tracts are leased for grazing.

Due to the intermingled land ownership patterns and public land boundaries not always being marked, some of the federal parcels foster trespass onto the adjoining private land by the public desiring to locate and use the public lands.

There are no LU lands involved in the exchange proposal. BLM cleaned up an old dump site containing household trash on tract 89S79 in May of 2006. There are no withdrawals or classifications and no other known unauthorized uses on the federal tracts.

**3.2(n) Existing and Potential Land Uses:** The federal tracts contain native rangeland providing habitat for wildlife and are currently used for grazing and dispersed recreational opportunities including hunting when legal public access is available. A few federal tracts currently are under active Special Recreation Permits for Outfitting and Guiding. One federal tract (H2) consisting of 55.97 acres is being farmed under the authorization of a 2920 agricultural permit which covers 36.26 acres. Present uses of the federal lands are not expected to change.

**3.2(o) Socio-Economic/Environmental Justice:** The current level of livestock grazing on BLM lands considered for disposal is 3,680 AUMs in 30 allotments. Annual revenues to the federal government amount to \$5,740. On this land 12.5 percent of annual revenues (\$717.60) from Section 3 grazing fees are distributed to the state and counties. The estimated annual average cost to the BLM to administer livestock grazing is an estimated \$2,600 per permit (BLM, cost of livestock grazing per allotment/permit for 2005). Total estimated annual costs of administering 27 grazing permits are \$70,200.

An estimated 2,235 acres of the federal lands have commercial timber. The estimated value of commercial timber on BLM lands is approximately \$274,000 (personal conversation with Ray Smith). This does not include the value of posts/poles and other miscellaneous forest products that exist on the public lands.

There are no known mineral development proposals on the public lands.

Estimated average PILT payments per acre for FY2006 were \$1.41 (Custer Co.) and \$0.20 (Carter and Powder River Counties). (Source: Payment in Lieu of Taxes National Summary, 2006).

**3.2(p) Forest Resources:** A timber cruise was completed on the federal lands in Custer County by Ray Smith, BLM Forester, in August 2005. There are no current timber sales.

**Custer County/Powder River County Forest Lands:** The table below summarizes the timber volumes and timber type on each of the federal parcels in Custer and Powder River counties.

Approximately 2,020 acres contain commercial timber stands of ponderosa pine. Total merchantable volume for these stands is approximately 1,630,000 net board feet. An additional 2,158 acres of Pine savannah and Juniper woodland have scattered merchantable trees or scattered pre-commercial trees (< 8 dbh). Most federal parcels have existing roads or roads nearby on private lands. No authorized forest management practices have been conducted on any federal lands. The pre-commercial understory component is typically overstocked, suppressed, poor form, and contains diseases such as Western Gall Rust. Approximately 20% of the commercial overstory component is poor form, unmerchantable trees. All stands need a Restoration Thinning treatment to improve Forest Health, stand vigor and remove poor genetic phenotypes.

Most pine stands contain 3 distinct age/diameter classes and are multi-storied stands. A majority of the forestlands contain a juniper understory component. Most trees are less than 150 years old with none more than 200 years old.. Habitat types (site potential) for the Custer County parcels include ponderosa pine/bluestem, ponderosa pine/bluebunch wheatgrass, and ponderosa pine/snowberry.

**Custer and Powder River County Forest Lands**

Parcel	Merchantable Forest Acres	Total MBF Volume	Board Feet Per Acre
CF4	265	70	264
CL1	45	64	1422
CL6	91	105	1154
CL10	117	73	624
CL2	85	138	1624
CF15	185	136	735
CL5	36	61	1694
CF3	266	96	361
CL8	95	162	1705
CL4	42	48	1143
CL12-A	8	13	1625
CF13	103	30	291
CF9	179	58	324
CF11	164	200	1220
CF14	231	254	1100
CF10	42	26	619
CL7-A	12	28	2333
CF5	14	8	571
CF6	5	3	600
CL9	35	57	1629
<b>Total</b>	<b>2020</b>	<b>1630</b>	

**Carter County Forest Lands:** The table below summarizes the timber volumes and timber type on each of the federal parcels in Carter County; roughly 215 acres are commercial with approximately 980,000 board feet. Most pine stands contain 3 distinct age/diameter classes and are multi-storied stands. The federal parcels were not cruised; timber cruise volume per acre from

adjacent lands was extrapolated. Habitat types are the same for the Custer County parcels (above) with the addition of ponderosa pine/chokecherry types in Carter County. Most forested parcels have existing roads or nearby roads on private lands. The exception is parcel 89S20 which has no roads. There are also approximately 75 additional acres of scattered forest on the Carter County tracts.

Pumpkin Creek Land Exchange - Carter County Forest Lands

Parcel	Merchantable Forest Acres	Estimated MBF Volume	Board Feet Per Acre *
89S1	39	178	4561
89S11	4	18	4561
89S18	62	283	4561
89S19	29	132	4561
89S2	3	14	4561
89S20	63	287	4561
89S23	15	68	4561
89S7	0	0	0
89S8	0	0	0
89S9	0	0	0
<b>Total</b>	<b>215</b>	<b>980</b>	

The forestland grand total is 4,468 acres, 2,235 acres of commercial forest and 2,233 acres of scattered forest.

**3.2(q) Invasive, Non-Native Species:** A helicopter survey was completed on most of the federal parcels in Powder River, Custer, and Carter Counties. From the survey, 23 Carter County parcels (89S17, 89S18, 89S19, 89S20, 89S23, 89S36, 89S37, 89S38, 89S39, 89S40, 89S41, 89S42, 89S43, 89S44, 89S45, 89S72, 89S73, 89S74, 89S75, 89S76, 89S77, 89S78, and 89S79) have been identified with noxious weeds present and 17 tracts with noxious weeds potentially or probable on the tracts (89S7, 89S8, 89S9A, 89S9B, 89S10, 89S11, 89S12, 89S13, 89S16, 89S21, 89S22, 89S32, 89S33, 89S34, 89S35, 89S67, 89S68). It is probable that there is spotted knapweed on one Custer County tract (CF17). The number of acres on these tracts is unknown. Weeds were not specifically noted as being present on the remaining lands in Custer and Powder River Counties, but if present, they are not in quantities to be considered infestations or sources for problem weed areas.

**3.2(r) Solid or Hazardous Wastes:** Both parties to the land exchange have indicated in the Agreement to Initiate a Land Exchange that to the best of their knowledge, no known or suspected release, storage or disposal of hazardous substances has occurred on the federal or non-federal lands involved in the exchange. An Environmental Site Assessment was conducted on the federal lands in Custer County (except tract 89S67) by Pam Wall, Realty Specialist, and reviewed by Dex Hight, Physical Scientist (HazMat); the report prepared in August 2005 concluded no findings. The report is on file in the Miles City Field Office. The Environmental Site Assessment was conducted on the federal lands in Carter and Powder River Counties and tract 89S67 in Custer County by Pam Wall, Realty Specialist, in July 2006 and approved in September 2006, there were no findings.

A survey for hazardous material was conducted on a dump reported in Section 32, T. 1 N., R. 59 E., (Parcel 89S79). There was no hazardous material found in the dump. The dump was old and was located in a 25 foot diameter hole located on a flat. All that was present was solid waste in the form of preplastic household materials. The material from the dump was hauled to a permitted landfill in May of 2006.

#### **4.0 ENVIRONMENTAL IMPACTS**

##### **4.1 IMPACTS OF THE PROPOSED ACTION**

In order to assess the environmental impacts of the proposed action and the no action alternative, the following assumptions have been made:

- 1) BLM would consider the disposal of 100 parcels of federal land which comprise 20,210.53 acres (14,665.83 acres in Custer County, 5,468.94 acres in Carter County, and 75.76 acres in Powder River County). Although it is estimated that approximately 18,700 of these acres would be needed for the proposed land exchange, the analysis of environmental impacts is based on all 20,210.53 acres of the public land. Most of the Custer County lands will be used first. The remaining lands have been listed in priority order for use in the exchange as needed; with the tracts with the most resource concerns, such as cultural, wildlife, available access, etc. listed at the end (see Table 2 of Appendix 3). A pool of federal land is required because some tracts may not be exchanged due to resource and/or other concerns.
- 2) All of the private lands, excluding the buildings and a small amount of land around them, would be exchanged.
- 3) It is expected that the highest and best use of the federal parcels proposed to be exchanged is continued grazing use as part of the ranch operations, except for tract H2, of which a portion is being farmed and it is assumed that it would continue to be farmed and tract 89S19 which could be subdivided along with adjacent private land.
- 4) It is expected that the likely foreseeable use of the newly created block of federal lands would be addressed within a comprehensive multiple use management plan, which would be initiated following the completion of the land exchange.

**4.1(a) Access:** If all of the identified lands are exchanged the public would gain access to a net 12,218 acres of federal land. Access would be lost to 6,800 acres of public land on 35 parcels which are currently accessible by State or County roads, or through State or Forest Service lands. Access is limited to many of them due to their size, shape, topography, fences, lack of two-track trails, and difficulty in locating their exact location.

Acquiring the Pumpkin Creek Ranch would provide access to nine tracts (3,900 acres) of current federal land, consolidating ownership into one larger block of federal land consisting of approximately 20,578 acres (19,498 acres within the ranch boundary and 1,080 acres of adjacent federal land) with legal public access. Approximately 1,920 acres of State land would also become accessible to the public. Access to and within the newly created block of public land would be enhanced, especially given the two-track trails throughout the area.

The District Ranger for the Custer National Forest was consulted about the federal tracts next to the forest; she had no concerns with the possible disposal of these federal tracts.

**4.1(b) Vegetative Resources:** If all of the identified lands are exchanged there would be a net loss of approximately 6,200 acres of land under federal ownership/management. No adverse impacts to the vegetative resources are expected to occur with disposal of the federal land parcels since land use is not expected to change. Approximately 20,210 acres of federal land, which have a native upland plant community consisting mainly of grasses and shrubs, would leave federal ownership/management; approximately 4,468 acres of these lands also contain upland forest/conifer communities. Approximately 13,298 acres of non-federal lands, which also have a native upland type of plant community consisting of grasses and shrubs with a small tree component, and 330 acres of hayland, 288 acres of dry crop land and 122 acres of tame pasture, for a total of 14,038 acres, would come into federal ownership/management; which with the current 5,460 federal acres would block up 20,578 acres for enhanced management of resources. BLM Management of this area would focus on the conservation of the Shrubland/Perennial Graminoid Steppe Eco-Region within the Northern Great Plains and would be addressed in the comprehensive multiple use management plan, which would be initiated following the completion of the land exchange.

**4.1(c) Wetland/Riparian Areas:** Approximately 1.75 miles of riparian habitat associated with the federal parcels would be disposed of, but 9.2 miles of riparian and wetland habitats would be acquired for a net gain of 7.45 miles of riparian/wetland habitat coming under federal ownership/management. The federal tracts containing riparian habitat are difficult to manage due to the fact that they are intermingled with mostly deeded lands and their small size and minimal portion to the entire stream segment. The conveyance of these federal tracts is not expected to cause adverse impact to this resource since land use is not expected to change once the exchange is completed.

The potential for high quality habitats exists on the 9.2 miles of Pumpkin Creek since it is a perennial stream and has water available to riparian species throughout the growing season. The land being acquired by the BLM would be arranged in a large contiguous block which would be easier to manage allowing for improved resource conditions and more opportunity for the public to use and enjoy.

**4.1(d) Rangeland Resources:** If all of the lands are exchanged there would be a net loss of 658 Animal Unit Months (AUMs) under federal administration. Since all parcels are proposed to be transferred to the base property owner/current grazing permittee, the loss of the AUMs would not result in an adverse impact to their grazing operations. Livestock grazing is expected to continue on these tracts. There is a potential loss of 3,680 AUMs if all selected Section 3 federal parcels were exchanged. Twenty-five allotments could be eliminated and eighteen permittee/grazing casefiles could be closed, because there would be no federal land remaining to be administered, resulting in reduced administrative costs to the government. The remaining nine grazing files and five allotments could not be closed since there would still be federal lands associated them; grazing permits would be adjusted upon closing. The AMP would continue in operation, it would not be affected other than to change the percent of federal and private lands

for billing purposes. The C&B State Cooperative Grazing District was contacted and they do not have a problem with the possibility of any or all of the 12 federal tracts which are within the Grazing District being included in the proposed exchange. The difference in income to the Bureau would be more than offset by more cost effective management of a larger parcel of federal land as opposed to scattered parcels without access. Range improvement projects of record on the federal parcels would be turned over to the new landowners and the project files would be closed.

The non-federal lands would make approximately 3,022 AUMs available for federal administration in addition to the AUMs from the existing federal parcels within the Rogers Allotment (#10509). These lands would also be managed as Section 3 lands. Existing range improvements on the non-federal lands would be documented and project files would be established for them. Management of the newly created block of federal land would be addressed in a comprehensive multiple use management plan, which would be initiated following the completion of the land exchange.

**4.1(e) Water Resources/Water Rights/Floodplains:** If all identified lands are exchanged there would be a net loss of 27 federal water rights. Land use is not expected to change, therefore, this loss would not create an adverse effect. Water resources associated with reservoirs, pits, wells, and intermittent creek segments would leave federal ownership. The stream segments crossing federal land parcels are only a small portion of the entire drainage which limits BLM's ability to effectively manage the resource. Fifty-eight water rights (27 stockwater and 32 wildlife) consisting of 332.78 Ac. Ft. (34.49 Ac. Ft. for stockwater and 298.29 Ac. Ft. for wildlife) would be transferred with the associated federal lands in accordance with BLM and State regulations. Eight water rights identified on the federal lands do not give an amount for acre feet.

Thirty-one water rights consisting of 855.05 Ac. Ft. and 5,584.50 cfs associated with the wells, reservoirs, and streams on the lands to be acquired would come into federal ownership/management in accordance with BLM and State regulations. There are two wells which have a total of 21.05 Ac. Ft. and three water rights for irrigation purposes which total 259.5 cfs which would be prorated between the non-federal lands to be acquired by the BLM and the lands to remain private in association with the buildings. BLM would continue to use the water rights for the permitted purposes.

Acquiring the private lands with water resources consolidates the area into public ownership and enables BLM to enhance management of the water resources on the newly configured block of public land.

The following five non-federal parcels, or portions of them, are situated within the 100-year floodplain of Pumpkin Creek per NRCS Soil Mapping Data but not require deed restrictions:

- **O-1** – S $\frac{1}{2}$ NW $\frac{1}{4}$ , SE $\frac{1}{4}$ , N $\frac{1}{2}$ SW $\frac{1}{4}$ , Section 1, T. 5 N., R. 48 E., floodplain of Pumpkin Creek;
- **O-2** – S $\frac{1}{2}$ NE $\frac{1}{4}$ , NE $\frac{1}{4}$ SE $\frac{1}{4}$ , Section 2, T. 5 N., R. 48 E., floodplain of Pumpkin Creek;
- **O-18** - SW $\frac{1}{4}$ , Section 6, T. 5 N., R. 48 E., floodplain of Pumpkin Creek;

- **O-19** - N<sup>1</sup>/<sub>2</sub>NW<sup>1</sup>/<sub>4</sub>, NE<sup>1</sup>/<sub>4</sub>, NE<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub>, Section 7, T. 5 N., R. 48 E., floodplain of Pumpkin Creek;
- **O-20** - NE<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub>, W<sup>1</sup>/<sub>2</sub>NE<sup>1</sup>/<sub>4</sub>, NW<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub>, SE<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub>, Section 17, T. 5 N., R. 48 E., floodplain of Pumpkin Creek.

The floodplains on the following public lands would carry with them the patent restrictions identified in Executive Order 11988 such as “The land may not be used for residential buildings; public service installations needing high protection; permanent memorial cemeteries; and similar type use and structures below the 100-year flood level”:

- **H2** – Lots 8 and 9, Section 10, T. 2 N., R. 45 E., floodplain of the Tongue River below elevation of 2,680 feet;
- **89S7** – E<sup>1</sup>/<sub>2</sub>NE<sup>1</sup>/<sub>4</sub>, Section 26, T. 3 N., R. 57 E., floodplain of East Fork O’Fallon Creek below elevation of 3,125 feet;
- **89S37** – SE<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub>, Section 11, T. 3 S., R. 59 E., floodplain of Boxelder Creek below elevation of 3,240 feet;
- **89S73** – SE<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub>, Section 21, T. 6 S., R. 62 E., floodplain of Little Missouri River below elevation of 3,245 feet.

**4.1(f) Wildlife & Fisheries/Aquatics:**

**Wildlife:** The proposed exchange of up to approximately 20,210 acres of federal land for the 14,038 acres of private land could result in a potential net loss of 6,172 acres of general wildlife habitat under BLM management and protection. This loss of habitat is not expected to cause adverse impacts to wildlife species, populations, or habitat since land use is not expected to change once the exchange is completed. No adverse impact is expected to the sharp-tailed grouse strutting ground on parcel CF12 because land use is not expected to exchange. The Record of Decision for Montana/Dakota Standards for Rangeland Health and Guidelines for Livestock Grazing Management includes standards for wildlife habitat and riparian health conditions. Since the allotments are meeting the “standards” and current land use is not expected to change, the lands should maintain the wildlife habitat and riparian standards in the future.

Acquisition of the 14,038 acres would consolidate the BLM administered land into a block of land to enhance management of the wildlife resources. The BLM would gain habitat on Pumpkin Creek which is an important stream and riparian area which is important to numerous wildlife species, especially migratory birds and other game and non-game species. BLM management would ensure that the habitats for numerous wildlife species would remain unaltered/unfragmented and provide optimal habitat conditions for all wildlife species including mule deer, white-tailed deer and pronghorn antelope.

**Fisheries/Aquatics Species:** Although 1.75 miles of fisheries/aquatic habitat would leave federal ownership/management there would be 9.2 miles of fisheries/aquatic habitat on Pumpkin Creek which would come under federal ownership/management; for a net gain of 7.45 miles of fisheries/aquatic habitat under federal ownership/management. The federal tracts are difficult to manage due to the fact that they are intermingled with deeded lands and their small size and minimal portion to the entire river/stream segment. It is assumed that management of the current

federal lands would be similar to present management, therefore it is expected that there would be little to no change in effects to fisheries/aquatic habitat and species.

**4.1(g) T&E Species:** Under the proposed action there would be no effect to bald eagles, their primary prey base, or important habitat from the exchange of lands. There would be no effect on federally listed, proposed or candidate wildlife or plant species.

**Wildlife:** If all of the identified lands are exchanged there will be a net increase of approximately 1,315 acres of bald eagle (a federally threatened species) habitat under federal administration. One active bald eagle nest would leave federal management, with protective patent restrictions, and one active bald eagle nest would come under federal administration. Approximately 1,508 acres, on nine of the federal tracts, proposed for disposal provide habitat for bald eagles. Bald eagles could utilize these tracts, especially during the migration periods in the spring, fall and winter. One active bald eagle nest exists on federal parcel H2 and has produced young eaglets since 1992, with the exception of 2 years (active but unknown outcome in 1993 and active but unsuccessful in 2001). The BLM has a Special Status Species Policy (6840) which includes language pertaining to land exchanges and specifically states that the BLM will “Retain in federal ownership all habitat essential for the survival and recovery of any listed species, including habitat that was used historically, that has retained its potential to sustain listed species, and is deemed to be essential to their survival (BLM Manual 6840).” A biological assessment has been completed for the bald eagles which includes measures which would include the following language to be included in the patent for Tract H2: (NOT SUBJECT TO – SEPARATE PARAGRAPH AT END OF PATENT) “By acceptance of this patent, the patentee agrees for himself, his heirs, assigns, or successors to the following restrictions as to Lots 8 and 9, Section 10, T. 2 N., R. 45 E., for protection of an eagle nest, until such time as the Montana Fish, Wildlife and Parks monitoring determines that no nest on the parcel has been occupied for five consecutive years: 1. The land use will remain substantively the same with agricultural practices continuing where they are currently; 2. The nest tree and associated cottonwood gallery will not be removed or altered in a way by man-caused actions that could inhibit nesting; and 3. The parcel cannot be further developed for commercial or private purposes without first notifying the U.S. Fish and Wildlife Service and Montana Fish, Wildlife and Parks.” The protective measures would minimize impacts to the threatened bald eagle and could become optional if no nest on the parcel has been occupied for five consecutive years and land use is not expected to change therefore there would be no impact to the bald eagle. The US F&W Service has the enforcement authority over the bald eagle.

Approximately 2,823 acres, on 5 parcels, of private lands to be acquired provide bald eagle habitat. A new bald eagle nest was found this winter (2006) by a BLM biologist and the nest will be monitored for nesting activity in the upcoming months. Bald eagles also migrate through the subject area in the spring, fall and winter time periods and the proposed conversion to public lands could potentially improve important habitats, especially Pumpkin Creek which is an important habitat for bald eagles and numerous other species. Impacts to the non-federal lands should be positive as it would allow the BLM to manage the lands in a positive manner as mandated by the Special Status Species Policy.

**Fisheries/Aquatics:** There would be no effect to T&E fisheries/aquatic species, since no habitat is present within the land exchange proposal.

**Plants:** There are no federally listed threatened or endangered plant species known to occur on the federal lands, and land use is not expected to change, therefore there would be no adverse effects to T&E plants or their potential habitat.

**4.1(h) Special Status Species:** *Special Status Species Determination of Impacts:* The proposed action is not expected to cause adverse impacts to special status species, populations, or habitat on the federal lands since the land use is not expected to change. Selection of the preferred alternative would not remove any important or substantial habitat or individuals within the populations, which might lead to the need to list any BLM Designated Sensitive Species under the Endangered Species Act.

**Wildlife:** If all identified lands are exchanged there would be a net increase of approximately 800 acres of black tailed prairie dog (a BLM Sensitive Species) towns under federal management. Approximately 21 black-tailed prairie dog towns are known to exist on an estimated 700 acres of the federal lands. Current use of these federal lands, which mainly consists of livestock grazing, is expected to continue. Management of the federal lands is not expected to change therefore the proposed disposal of these lands is not expected to cause an adverse impact to Special Status Species or BLM Sensitive species.

Approximately 18 black-tailed prairie dog towns are known to exist on approximately 1,500 acres of the non-federal lands. There is the potential to improve habitat for black-tailed prairie dogs and associated species as they would be under federal management and within a large block.

Shooting of prairie dogs is currently not allowed in March, April, or May on federal lands. Once the exchange is completed shooting could be allowed year around on the 700 acres of land leaving federal administration, but shooting would not be allowed in March, April, and May on the 1,500 acres of newly acquired federal lands. Poisoning is currently allowed on federal lands by application and if approved by the BLM; the 700 acres would no longer fall under this requirement, but the acquired 1,500 acres would be subject to obtaining authorization.

There is one sage-grouse strutting ground on the non-federal land in parcel O-16 which would come under federal management and protection. Impacts to other BLM Sensitive Species and US Fish and Wildlife Services' "Birds of Conservation Concern", such as Burrowing owls and numerous other migratory bird species should be positive.

Consolidation of the public lands would allow for management of one large block of land which could potentially improve present habitat conditions, especially in the riparian area which includes Pumpkin Creek.

**Fisheries/Aquatic Species:** It is assumed that current management will continue on the federal lands therefore it is expected that little or no effect would occur to special status species listed in

3.2 (h). The effects would be expected to be positive with BLM management of the acquired lands.

**Plants:** There are no known populations of plant Species of Special Concern documented on any of the federal parcels. Some of the parcels, as identified in 3.2(h), have potential for containing special status plant species. Some federal parcels in north Carter County and the Belltower areas, which contain soils suitable for agricultural development, could possibly have a change of use which could have negative consequences for SSC plants if present. Similarly, 89S37 has moderate potential for farming, but more likely would be used for cutting of native hay which would also have negative consequences for SSC plants if present; however, current land use is not expected to change on the federal lands.

There are no BLM Sensitive or Watch Plant Species known to occur on the non-federal lands. There is potential for the plant Species of Special Concern identified in 3.1(h) to exist on the non-federal lands. Acquisition of the non-federal property could facilitate the restoration of riparian and potential habitat for SSC plant species on the non-federal lands.

**4.1(i) Cultural/Paleo Resources:** The proposed action would impact a total of 17 cultural sites which have been determined eligible for listing on the National Register of Historic Places in Custer County. One other eligible site in Custer County, a prehistoric campsite and historic material scatter, has been recommended for retention. The site would be buffered by an area that would be retained under federal ownership. The proposed exchange would have no effect on the retained site. The 17 other sites in Custer County eligible for listing on the National Register of Historic Places would be directly impacted by exchange out of federal ownership as would three sites in Carter County if they are determined eligible. Further work will be required to determine National Register eligibility on the three Carter County sites; this would be done prior to the sites leaving federal ownership.

BLM and the Montana SHPO have determined that this transfer out of federal ownership would be an Adverse Effect to Historic Properties. Adverse Effects to Historic Properties are defined in the 36 CFR 800.5(a)(1) regulations. Adverse Effects to Historic Properties occur when when an undertaking may alter, directly and indirectly, any characteristic of a historic property that qualify the property for inclusion in the National Register in a manner that would diminish the the integrity of the property's design, setting, materials, workmanship, feeling or association. The regulations at 36 CFR 800.5(a)(2)(vii) cite as an example transfer out of federal ownership or control without adequate and legally enforceable restrictions or conditions to ensure long term preservation of the property's historic significance. Monitoring of site condition without a revision clause is generally thought to be inadequate to address the requirement cited above. In order to address the adverse effects of transfer out of federal ownership, the BLM is proposing a programmatic agreement. The agreement would meet the requirements of 36 CFR 800.6. The agreement would contain a research design and methodology and schedule for completing mitigation. The agreement would also contain provisions for allowing monitoring until the sites have been mitigated. TCF would donate to the BLM a permanent nonexclusive easement to the site to be retained and temporary nonexclusive easement(s) to the other sites until monitoring and mitigation of the sites have been completed. The Montana State Historic Preservation Office

(SHPO) concurred with BLM's determination of eligibility and effect and the proposed use of a programmatic agreement for mitigation on November 09, 2006.

**4.1(j) Native American Religious Concerns:** The Native American Tribes in the area were sent certified copies of the Notice of Exchange Proposal (the mailing list can be found in Appendix 1). One letter was received from a Tribal Historic Preservation Office regarding the notice, requesting information about the existence of cultural resources found within the tracts of land to be exchanged. BLM sent a response to the Tribe on 4/6/07 with a comment period ending on 4/20/07. To date BLM has not heard from the Tribe. However if BLM receives a response from the tribe BLM will address their concerns. No other tribal requests have been received throughout BLM's outreach efforts.

**4.1(k) Mineral Resources:** There are no mineral-related factors which would preclude the proposed exchange. Disposal of the federal parcels would create a split estate situation since the mineral estates would not be exchanged. The private minerals would be conveyed to the BLM, but only to the extent that TCF owns them. This is acceptable to all parties involved. BLM does not expect the split-estate on the acquired lands to cause management problems or concerns in the future given the low probability of occurrence and potential for development of the locatable and saleable minerals. Although there is moderate potential for occurrence and development of oil and gas resources, and low to moderate potential for occurrence and development of coal resources, the exchange of lands is not expected to cause adverse impact to development and management of leaseable minerals. The Leasable Mineral and Surface Interference Report indicates that the exercise of surface rights would not interfere unreasonably with operations under the Mineral Leasing Act.

The federal minerals would be reserved in the patents issued for the federal land parcels, and the patents would be issued subject to the ten oil and gas leases of record on eighteen parcels. The Liscom Creek area tracts (Tracts CL2 through CL9, CL11 through CL13, CLY1, and CLY2) have high development potential for oil, gas, and coal resources. The mineral potential report recommended that these tracts be retained in federal ownership as private ownership would most likely preclude development of coal resources through surface owner non-consent. However, these tracts are not contiguous and would not form a Logical Mining Unit (LMU). Only a few of the federal tracts have legal access, every one of them are adjacent to other tracts with federal coal beneath private surface and tracts with private coal and private surface, therefore, surface owner consent would be required to create a LMU and to be able to mine them, even if the federal surface were retained. Oil and gas leasing could occur if these federal tracts were exchanged.

Of the remaining federal tracts, there are no mineral-related factors which would preclude the proposed exchange of federal and non-federal lands. Both the federal and non-federal parcels are considered to have similar mineral development potential. Leasing or permitting for speculative development could continue on the parcels subsequent to an exchange.

The federal and non-federal lands have occurrence moderate to low potential for scoria resources or minor alluvial deposits. The exchange of lands is not expected to cause adverse impact to development and management of saleable minerals.

#### **4.1(l) Recreation Resources/VRM:**

**Recreation:** If all of the identified lands are exchanged there will be a net increase of approximately 12,218 acres of federal land available for recreational use by the public. Approximately 20,210 acres of federal land would be disposed of, but approximately 14,038 acres of non-federal lands would come into federal ownership/management, which with the current 5,460 federal acres would block up 20,578 acres for enhanced recreation use.

Recreation resources and recreational uses and use patterns would not be greatly affected on the majority of the federal land, 65 parcels consisting of 13,410 acres, because the general public presently cannot access the land, access is controlled by the surrounding land owners. There would be a loss of recreational opportunities, primarily hunting, on 35 tracts of federal lands, consisting of approximately 6,800 acres, which would be disposed of which have legal access. It is often difficult for the general public to be able to determine exactly where the federal lands are, therefore, sometimes resulting in their trespassing onto adjoining private lands. Trespass problems and conflicts on private lands associated with public use of the public land would be greatly reduced. There will be a loss of river-based recreational opportunities on 19.71 acres along the Tongue River with the disposal of parcel H2 (which consists of 55.97 acres but 36.26 are being farmed) which will not be replaced with the acquisition of the non-federal lands. The recreational opportunities and scenic values associated with four timbered tracts, consisting of 320 acres, next to the National Forest lands would be lost.

Acquisition of the non-federal lands would consolidate ownership of public lands and enhance the recreation resources and recreational use and use patterns on the adjoining public lands by ease of access to and within. There is high potential for dispersed recreation opportunities to occur on the newly created block of 20,500 plus acres of federal land, including, but not limited to wildlife viewing, waterfowl and upland bird hunting, hiking, picnicking, photography, big game hunting, camping, horseback riding, cross country skiing, and snowshoeing. There is potential to construct a large reservoir on the newly acquired land which would create additional recreational opportunities such as fishing, ice skating, swimming, canoeing, etc. Prairie dog shooting, which is presently seasonal, could become a popular recreational activity within the acquisition area, as a number of prairie dog towns thrive within the area. Environmental education opportunities would also be available. TCF would assign the access easement to the BLM and attempt to obtain the remainder of the required access.

**VRM:** VRM resources are not likely to be impacted by this exchange because land use is not expected to change. It is estimated that 19 tracts, consisting of approximately 4,300 acres, of federal land which would be considered Class II would be disposed of. Eighty-one tracts, consisting of approximately 15,911 acres, of federal land which would be considered Class III would also be disposed of and 25 tracts, consisting of 14,038 acres, of non-federal land

considered Class III would be acquired, for a net loss of 4,300 acres of Class II and 1,873 acres of Class III federal lands.

**4.1(m) Use Authorizations/Encumbrances/Unauthorized Use:** If all identified lands are exchanged approximately 20,210.53 acres of federal land will be disposed and approximately 14,038 acres of non-federal lands would be acquired, resulting in approximately 6,173 acres less of federally administered land. The federal lands would be conveyed subject to existing grazing permits, unless waived by the grazing permittee. Such permitted grazing shall be valid for a period of two years from the date the permittees receive notification of the disposal of the federal lands. Grazing permits would be adjusted upon closing. Twenty five allotments could be eliminated and eighteen permittee grazing casefiles could be closed, resulting in reduced administrative cost of approximately \$46,800 to the government. The remaining nine grazing files and five allotments could not be closed since there would still be federal lands associated them. Range improvement projects of record on the federal parcels would be turned over to the new landowners and the project files would be closed. Water rights would be conveyed with the federal lands as discussed in part 4.1(e). Patents would include reservations for Ditches and Canals and minerals and would be issued subject to existing rights such as the six oil and gas leases of record on seven of the parcels, and possibly rights-of-way. TCF would attempt to have twenty of the existing rights-of-way on twenty-five tracts converted to private easements to become effective upon closing. One road right-of-way and two reservoir rights-of-way would be relinquished as the right-of-way holders would be the new landowners. Right-of-way files would be adjusted to reflect the action taken. The 2920 agricultural permit on Tract H2 would be terminated prior to issuance of the patent. Lands with floodplains and wet lands would be conveyed with the appropriate patent restrictions. The patent for Tract H2 would contain restrictions to protect the existing Bald Eagle nest. Trespass problems and conflicts on private lands associated with public use of the federal lands would be greatly reduced. The material in the dump on tract 89S79 was hauled to a permitted landfill by the BLM in May of 2006.

Conveyance of the private lands would be subject to existing rights of record. Existing state and county roads and utility lines on the acquired private lands would be documented by rights-of-way. Existing range improvements would be documented and project files would be established for them. Access easements would be acquired by TCF for the BLM where additional access is needed. Water rights would be conveyed with the non-federal lands as discussed in part 4.1(e).

**4.1(n) Existing and Potential Land Uses:** If all identified lands are exchanged approximately 20,210.53 acres of federal land will be disposed and approximately 14,038 acres of non-federal lands would be acquired, resulting in approximately 6,173 acres less of federally administered land. Once conveyed the federal lands would continue to be used for grazing and hunting if allowed by the private land owner and possibly outfitting and guiding. Tract 89S19 could be subdivided with adjoining private lands. Tract H2 would continue to be farmed. Tract H2 would be conveyed with a patent restriction to provide protection for the existing Bald Eagle nest. Tracts H2, 89S7, 89S37, and 89S73, would be conveyed with a patent restriction on 100-year floodplain use. The currently accessible federal tracts are intermingled with private lands and it is often difficult to determine their exact location, thereby creating trespass situations onto nearby private lands; this potential for trespass would be eliminated by the exchange.

The likely foreseeable use of the newly created block of federal lands would be addressed within a comprehensive multiple use management plan, which would be initiated following the completion of the land exchange. The plan may address wildlife, recreation, riparian, and grazing management in accordance with the resource management plan. There would also be opportunities for environmental education areas to be developed on these lands.

**4.1(o) Socio-Economic/Environmental Justice:** The economic impacts (e.g. additional local employment, labor income, public revenues, etc.) associated with the following land uses cannot be determined because use levels are unknown and level of change is unknown: recreation use, timber harvest, and mineral development and production. The assumptions/basis for the economic analysis can be found in Appendix 5.

Livestock grazing on the disposed federal lands would continue because the land would be transferred to base property owners. It is assumed that livestock grazing would also continue on the lands acquired by the BLM. If all identified lands are exchanged the net decrease in grazing would be about 658 federal AUMs. Net change in annual revenues to the federal government from livestock grazing permits could be reduced by an estimated \$1,026; grazing revenues to state and county governments could be reduced by about \$128. Estimated annual administrative costs to the BLM could be reduced by about \$46,800 because 18 grazing permits/case files could be closed. Local employment and labor income associated with reduced livestock grazing would decline by less than one job and by about \$125 respectively (IMPLAN).

Anticipated levels of timber harvest are unknown. Although timber on the disposed public lands does have commercial value; there would be no economic impact if the timber is not sold. The private landowner who would acquire the majority of this land has other private land with commercial timber value and he has chosen not to sell this timber when inquiries were made (Ray Smith, personal conversation).

If all of the identified lands are exchanged the net public revenue from taxes and PILT to Custer County would decline by less than \$500 annually. Total public revenue to Carter County would increase an estimated \$3,100 annually. Total public revenue to Powder River County would increase by less than \$100 (about \$38) annually.

Economic dependency (where one or a few industries dominate the local economy), economic stability (indicated by seasonal unemployment, sporadic population change, fluctuating income growth rates), and economic diversity (indicated by the number of economic sectors in the local economy) would not change.

The Proposed Action would not cause disproportionately high or adverse effects on human health or environmental effects on low-income or minority populations as provided under Environmental Justice considerations. Economic impacts would not be noticed within the local economy.

**4.1(p) Forest Resources:** If all identified lands are exchanged there would be a net decrease of 2,235 acres of commercial forest and 2,233 acres of scattered forest, for a total decrease of 4,468 acres of forested federal land. A majority of BLM forestlands in the Tongue River drainage and

its tributaries would be disposed of. Under the Proposed Action, the former BLM forestlands would probably be managed with a primary emphasis on non-timber resources. The non-federal lands to be acquired have no forested lands.

**4.1(q) Invasive, Non-native Species:** If all identified lands are exchanged, twenty-three parcels of federal land which have been identified as having noxious weeds present and seventeen tracts with noxious weeds potentially or probably present, would be disposed of. The respective new land owners would be responsible for controlling any weeds on their newly acquired lands. There are no known noxious weeds present on the remaining sixty parcels of federal land. The majority of the impacts from the proposed action would be positive. For the most part, BLM will be getting rid of the parcels with noxious weeds and acquiring parcels that are relatively weed free. The only known noxious weed that is currently within the private holdings is Canada thistle (*Cirsium arvense*), but is not in quantities to be considered infestations or sources for problem weed areas. There is always the possibility of other noxious weed species being introduced in the weed free area through hunting and by wildlife, but the proposed action will improve ease in treatment of infestations due to monitoring/treating one large parcel of BLM land instead of numerous small parcels.

**4.1(r) Solid or Hazardous Wastes:** Both parties to the land exchange have indicated in the Agreement to Initiate a Land Exchange that to the best of their knowledge, no known or suspected release, storage or disposal of hazardous substances has occurred on the federal or non-federal lands involved in the exchange. Environmental Site Assessments were conducted on the federal and non-federal lands; the reports indicated that there was no evidence of potential recognized environmental conditions, as defined in the ASTM standard.

There are two locations on the affected lands where there were known ranch dumps. Neither contained hazardous materials.

As a result of the land exchange proposal the dump located on federal land in T. 1 N. R. 59 E., Section 32, (Tract 89S79) has been brought up to the State standard for farm disposal. The material was hauled to a permitted landfill by the BLM in May of 2006.

The dump located in Section 1, T. 5 N., R. 48 E., on Pumpkin Creek Ranch private land (Tract O-1), is located in a cutbank immediately adjacent to Pumpkin Creek. It must be removed to comply with State regulations. The current owner plans to remove the dump prior to closing.

## **4.2 IMPACTS OF THE NO ACTION ALTERNATIVE**

**4.2(a) Access:** The opportunity to provide public access to a large block of federal land, through acquisition of the non-federal lands, near Miles City would not be realized under the “no action” alternative, nor would the opportunity to achieve better management of federal lands and to meet the needs of State and local residents and their economies be realized. Retaining the selected 35 federal tracts with current public access would allow continued public access to those tracts, but it would continue to be difficult for the general public to determine the exact location of the federal lands and trespass problems and conflicts on private lands associated with public use of the public land would continue.

**4.2(b) Vegetative Resources:** No changes to the existing conditions.

**4.2(c) Wetland/Riparian Resources:** The majority of the 1.75 miles of riparian habitat associated with the small isolated tracts of BLM lands which would not be exchanged as described in the proposed action would continue to receive little to no management. This is due to the fact that they are intermingled with private land and they are small tracts which constitute a minimal portion of the entire stream/river segment and management opportunities at this scale of the habitat is very limited and the amount of time and money spent trying to manage them versus habitats with higher potential would not be well spent. The BLM will lose the opportunity to acquire a large contiguous block of land with 9.2 miles of riparian or potential riparian habitat which would be managed for the public good.

**4.2(d) Rangeland Resources:** Grazing use on the public land within the Rogers Allotment (#10509) would continue as at the present. The opportunity for more cost effective rangeland management would be lost. An improved public land pattern would not be realized and the Bureau would continue to be responsible for grazing management on scattered and isolated parcels of federal land with no or minimal legal access.

**4.2(e) Water Resources/Water Rights/Floodplains:** No changes to existing water resources and/or water rights.

**4.2(f) Wildlife & Fisheries/Aquatics:**

**Wildlife:** The scattered parcels of crucial big game winter ranges would continue to be managed by the BLM, to the extent possible. Currently the federal lands in the subject areas meet the Standards for Rangeland Health and Guidelines for Livestock Management with the existing uses occurring on the public lands. It is expected the continuation of retention would maintain the “standards” since there are no foreseeable changes to the management on the public lands.

Federal management and protection of the wildlife habitat on the non-federal lands would be forgone as the consolidation of federal lands would not occur and not allow for potential improved condition of important habitats including Pumpkin Creek.

**Fisheries and Aquatics:** It is assumed that management on federal lands would remain the same. Therefore, it is expected that there would be little to no change in effects to aquatic species. It is also assumed that management of the non-federal lands not acquired would remain the same; there would be little to no change in effects and the opportunity for federal management of the 9.2 miles of Pumpkin Creek would be lost.

**4.2(g) Threatened and Endangered Species:**

**Wildlife:** Overall impacts from the No Action Alternative would be negligible to positive as the one parcel (H2) that the federally threatened bald eagle nests on would remain BLM land and would be subject the Special Status Species Policy which mandates the government to ensure compliance with the Endangered Species Act and to improve the condition of the species and

their habitats. If the subject lands were conveyed to private holdings the parcel is still subject to federal laws but may not get the extent of the protection that is needed.

The No Action Alternative would have a negligible to negative impact to bald eagles, the only federally protected species on the non-federal parcels. The BLM would not manage the parcel on which the bald eagle nest exists nor would the opportunity be provided to improve the overall condition of Pumpkin Creek, an important habitat for the bald eagle and numerous other wildlife species.

**Fisheries/Aquatics:** There would be no effect to T&E fisheries/aquatic species, since no habitat is present.

**Plants:** Since the likelihood of Ute lady's tresses (*Spiranthes diluvialis*) occurring on any of the federal or non-federal tracts is remote, impacts would primarily be to potential habitat. Existing federal tracts would not be impacted. Since land use practices on the Pumpkin Creek Ranch would not greatly be altered due to ownership, and the likelihood of an occurrence is remote, impacts to potential habitat would be negligible under the No Action alternative.

#### **4.2(h) Special Status Species:**

**Wildlife:** Impacts to BLM Sensitive Species habitats on the federal lands would be negligible as the federal land would remain under current practices. The federal lands in the subject areas would continue meet the Standards for Rangeland Health and Guidelines for Livestock Grazing Management which includes standards for upland and riparian health conditions.

Impacts to wildlife habitats and species on the non-federal lands with the No Action Alternative would be negligible to negative as the consolidation of public lands would not occur lessening management of numerous BLM Sensitive Species, particularly the black-tailed prairie dog, burrowing owl and other associated species. Sage-grouse and sagebrush habitats in the proposed action area could be fragmented in the future on private lands, lessening the potential to improve overall habitat conditions. The impacts to all BLM Sensitive Species and US Fish and Wildlife Services' Birds of Conservation Concern, including numerous migratory bird species are somewhat unknown as management of private lands is unknown, but are assumed would continue under current practices.

**Fisheries/Aquatic Species:** It is expected that little or no effects will occur to special status species; the opportunity for federal management of 9.2 miles of Pumpkin Creek would be lost.

**Plants:** A diversity of habitats for a variety of SSC plant species on existing federal parcels would continue to be maintained but, the opportunity to improve and restore upland and riparian habitats which may benefit several SSC plant species within the Pumpkin Creek Ranch would not be realized.

**4.2(i) Cultural/Paleo Resources:** There would be no impact to cultural resources if the no action alternative was selected. BLM would gain an additional total of 14,760.51 acres of new

inventory in Custer, Carter and Powder River Counties. Additionally, 101 previously unrecorded sites would be added to the Montana SHPO and Miles City BLM Cultural Resource databases.

**4.2(j) Native American Religious Concerns:** No new impacts to Native American Religious concerns would occur if the no action alternative is selected. Several of the sites recorded during the inventories of the selected lands are noted as being sensitive to Native Americans (cf. Peterson and Deaver 2002). BLM would ensure other actions would not adversely affect these sites.

**4.2(k) Mineral Resources:** Management of the mineral estates would continue under current practices. There would be no change to the mineral resources. Leasing or permitting for speculative development could continue on the parcels.

**4.2(l) Recreation Resources/VRM:**

**Recreation:** Recreational use on existing BLM lands possessing access will not change. Increased recreational opportunities on the offered non-federal lands would not be attained.

**VRM:** VRM would not be impacted.

**4.2(m) Use Authorizations/Encumbrances/Unauthorized Use:** Use authorizations on the federal land would continue to be managed per regulations.

**4.2(n) Existing and Potential Land Uses:** Existing and potential land uses on the federal lands would remain the same. Uses of the non-federal lands could change if the lands were sold to another party.

**4.2(o) Socio-Economic/Environmental Justice:** The assumptions/basis for the economic analysis can be found in Appendix 5. The estimated annual administrative cost savings in the amount of \$46,800 would not be realized by the BLM, as the projected 18 grazing files would not be closed. The decreased projected net public revenue from taxes and PILT to Custer County (less than \$500) and increase to Carter County (about \$3,100) and Powder River County (about \$38) would not be realized. If land uses on the federal parcels and on the non-federal parcels do not change, no change would be expected in direct, indirect, or total employment; direct, indirect, or total labor income; economic diversity (as indicated by the number of economic sectors); economic dependency (as indicated by the number of dominate industries in the local economy); economic stability (as indicated by season employment, population stability, and constant growth rates).

This alternative would not cause disproportionately high or adverse effects on human health or environmental effects on low-income or minority populations as provided under Environmental Justice considerations.

**4.2(p) Forest Resources:** Under this alternative, BLM would plan to manage the lands involved in this exchange for forest health. Current management involves forest treatments which would react to disturbances such as insect outbreaks, wildfire or fuel build-up.

**4.2(q) Invasive, Non-native Species:** No changes to the existing conditions.

**4.2(r) Solid or Hazardous Wastes:** Taking no action on the identified acreage would mean that Pumpkin creek would continue to be degraded by waste material moving into it from the identified dump on the non-federal lands. The dump on tract 89S79 has been cleaned up as a result of the exchange proposal.

### **4.3 RESIDUAL IMPACTS**

If the exchange is consummated, approximately 14,038 acres of private land would be conveyed into federal ownership and approximately 20,210 acres of federal land would be conveyed into private ownership resulting in approximately 6,172 acres less of federally administered land. The lands leaving public ownership would be subject to county rules and regulations, and conversely, the lands coming into federal ownership would be managed under a proposed comprehensive multiple use management plan, which would be initiated by the BLM following the completion of the land exchange. Since there are no forested lands on the non-federal parcels, the proposed action would result in approximately 4,468 fewer acres of forested federal land. Under the preferred alternative, there would be a potential loss of some federally managed wildlife habitat and vegetation resources; however, the lands would still be used by wildlife, and this loss is offset by the gain of resources including a net increase of 7.45 miles of riparian habitat, dispersed recreation opportunities, and improved access provided by the private land coming into public ownership which consolidates the land into a larger block resulting in enhanced management of resources and public use. The federal lands with floodplains and a Bald Eagle nest would be protected by patent restrictions. The Bald Eagle nest and habitat on private lands coming into federal ownership would be further protected by BLM administration. The two dumps on the subject lands (one on federal and one on non-federal) would be cleaned up as a result of processing this exchange, in fact the one on federal land was cleaned up in May, 2006, as a result of the exchange proposal. Managing a larger block of federal land within one grazing allotment would be more cost effective than managing scattered federal allotments with limited access. The 20,210 acres of federal land potentially going into private ownership would provide tax income to the counties which would more than offset the loss in PILT in Carter and Powder River counties, however, Custer County would see a net loss. Net public revenue from taxes and PILT to Custer County would decrease by less than \$500 annually and total public revenue to Carter County would increase by about \$3,100 annually and total public revenue to Powder River County would increase by about \$38 annually. The BLM would realize an estimated annual savings of \$46,800 in administrative costs by closing 18 grazing casefiles. There would be a decrease of 4,506 acres of forested federal lands in Custer County as a result of this exchange. TCF would donate to the BLM a permanent non-exclusive easement to the cultural site which is proposed to be retained and temporary non-exclusive easement(s) to the other sites until monitoring and mitigation of the sites have been completed.

#### **4.4 CUMULATIVE IMPACTS**

If the exchange is consummated, the patented federal parcels would likely continue to be used for grazing as part of the current ranch operations and possibly hunting if allowed by the landowner. A portion of Tract H2 would likely continue to be farmed.

There would be cumulative impacts to cultural resources, since 17 sites eligible for listing on the National Register of Historic Places in Custer County and three sites in Carter County, if determined eligible, would be leaving federal ownership. These impacts would be dealt with through a Programmatic Agreement to mitigate the sites over a period of years and monitor them so they would not be impacted prior to mitigation. This would also be a required mitigation measure. TCF would donate to the BLM a permanent non-exclusive easement to the cultural site which is proposed to be retained and temporary non-exclusive easement(s) to the other sites until monitoring and mitigation of the sites have been completed.

The proposed increased management of Pumpkin Creek on the acquired non-federal lands could improve the condition of the perennial stream and associated riparian habitat and could have a positive effect on the creek downstream. While the federal and non-federal lands proposed for exchange each possess their own wealth of wildlife values, they most likely will function at or near the level of wildlife potential that they possess currently, the habitat on the acquired non-federal lands could be enhanced by various management practices. The enhanced recreational opportunities on the 20,500 plus acres of acquired non-federal land could have a positive effect on the local economy by bringing users into the area. The new environmental educational opportunities could be taken advantage of by local and out of town schools. If this exchange is consummated with a positive attitude, it will likely lead to more exchanges of this type within the Field Office.

**4.5 MITIGATING MEASURES:** Mitigating measures would consist of patent restrictions for lands within the 100-year floodplain on tracts H2, 89S7, 89S37, and 89S73. The patent for tract H-2 would also have a restriction for protection of the bald eagle nest. Seventeen sites eligible for listing on the National Register of Historic Places in Custer County and three sites in Carter County, if determined eligible, would be leaving federal ownership. These impacts would be dealt with through a Programmatic Agreement to mitigate the sites over a period of years and monitor them so they would not be impacted prior to mitigation. TCF would donate to the BLM non-exclusive easements to the eligible cultural sites for monitoring and mitigation purposes.

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