

# **Environmental Assessment**

**Exchange of Land Acquired by the  
Wyoming Game and Fish Commission with  
Wildlife and Sport Fish Restoration Grant Program Funds  
in FW-1-L at  
Ocean Lake Wildlife Habitat Management Area  
in Fremont County**

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## PURPOSE AND NEED

Table Mountain, located in the southern part of Fremont County in south-central Wyoming (Fig. 1), is included in an area designated by the Wyoming Game and Fish Department (Department) as the Popo Agie Crucial Habitat Area. This area provides important winter range for mule deer, elk, and other big game species that move down from the nearby Wind River Mountains into an area of lower elevation west and south of the town of Lander known as the Lander Front. The area also provides habitat for game birds including partridge and sage grouse.

Currently, the Lander Front is experiencing an increase in the development of scattered single family housing subdivisions on the large open tracts of land common in that area. This type of land use and development is resulting in fragmented wildlife habitat, and decreased carrying capacity and loss of critical winter range. Preventing this loss of habitat is considered one of the highest priorities of the Department. To this end, the Department has pursued the acquisition of a Conservation Easement (CE), referred to as the Mud Springs CE, on 1,882 acres of private land on Table Mountain, five miles south of Lander. Protecting this property from sub-division and development through acquisition of this CE will provide permanent protection to a core area of valuable wildlife habitat on Table Mountain, notably, mule deer winter range. The Department's budget cannot provide the funding required for a cash payment to acquire these rights; therefore, to obtain the CE, the Department has tentatively negotiated a property exchange with a private party that owns property on Table Mountain.

The Ocean Lake Wildlife Habitat Management Area (WHMA), a property owned by the Department, lies approximately twenty-nine miles north of Table Mountain and the Lander Front in centrally-located Fremont County, Wyoming (Fig. 1). Ocean Lake was developed by the U.S. Bureau of Reclamation (BOR) in the 1920's as part of the Riverton Reclamation Project in Wyoming. In the 1940s and 1950s, in cooperation with BOR, the Department began creating the Ocean Lake WHMA around and north of the lake by purchasing various properties from private landowners. Approximately 2,260 acres of the Ocean Lake WHMA were purchased by the Department with grant funds from the Wildlife and Sport Fish Restoration Program (WSFR) which is administered by the Fish and Wildlife Service (Service). These properties were acquired by the Department to preserve, enhance, and manage waterfowl and upland game bird habitat, and provide public hunting and fishing opportunities. The Department manages the WHMA via a 2006 Memorandum of Agreement with BOR.

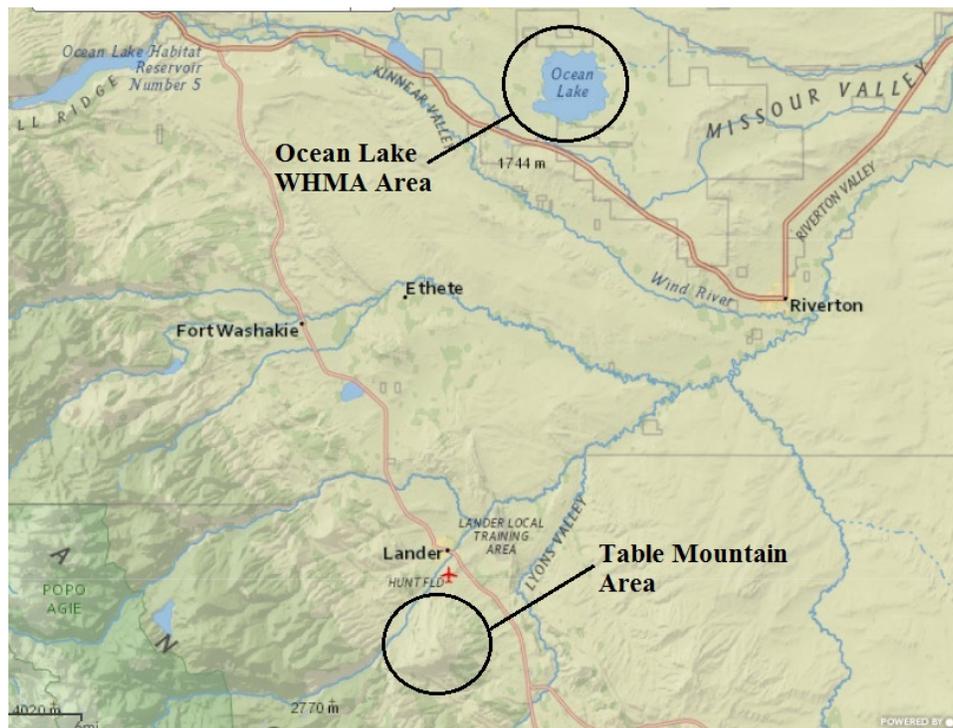


Figure 1. Central and South Fremont County, Wyoming

A 240-acre tract of land owned by the Department, known as the Maxon Parcel, lies approximately 1.5 miles north of the northwest corner of the Ocean Lake WHMA. Although it is isolated from the contiguous area of WHMA, it is considered part of it. This parcel is part of the original land acquired by the Department with WSFR grant funds. It has now been identified by the Department as the property to be included in the exchange for the Table Mountain Conservation Easement.

Federal regulations regarding the disposal or exchange of lands originally acquired with WSFR grant funds are found at 50 CFR Part 80 Administrative *Requirements, Pittman-Robertson Wildlife Restoration and Dingell-Johnson Sport Fish Restoration Acts*, and 2 CFR Part 200 Uniform *Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards*. Below are the pertinent excerpts from these regulations.

50 CFR 80.137 What if real property is no longer useful or needed for its original purpose?

If the director of the State fish and wildlife agency and the Regional Director jointly decide that grant-funded real property is no longer useful or needed for its original purpose under the grant, the director of the agency must:

- (a) Propose another eligible purpose for the real property under the grant program and ask the Regional Director to approve this proposed purpose, or
- (b) Request disposition instructions for the real property under the process described at 43 CFR 12.71 (*aka 2 CFR 200*), "Administrative and Audit Requirements and Cost Principles for Assistance Programs."

2 CFR 200.311 Real property

(c) Disposition. When real property is no longer needed for the originally authorized purpose, the non-Federal entity must obtain disposition instructions from the Federal awarding agency or pass-through entity. The instructions must provide for one of the following alternatives:

- 1) Retain title after compensating the Federal awarding agency.
- 2) Sell the property and compensate the Federal awarding agency.
- 3) Transfer title to the Federal awarding agency or to a third party designated/approved by the Federal awarding agency.

Service approval of the proposed conveyance of property originally acquired with WSFR grant program funds constitutes a federal action subject to the provisions of the National Environmental Policy Act of 1969, as amended (NEPA.) Therefore, the Service is required to prepare an Environmental Assessment (EA) to analyze the effects of this action on the human and natural environment and document the findings. The Service will use this analysis to determine if the Preferred Alternative is likely to result in significant impacts to the human and natural environment. If the Service determines that there are significant adverse effects, an Environmental Impact Statement will be developed. Otherwise, the Service will conclude NEPA compliance by issuing a Finding of No Significant Impact (FONSI.)

# ALTERNATIVES

## Preferred Alternative

In this alternative, the Department would convey fee title ownership of the 240-acre Maxon Parcel in Ocean Lake WHMA (Fig. 2) to local private landowners who own property that abuts the northern boundary of the parcel.

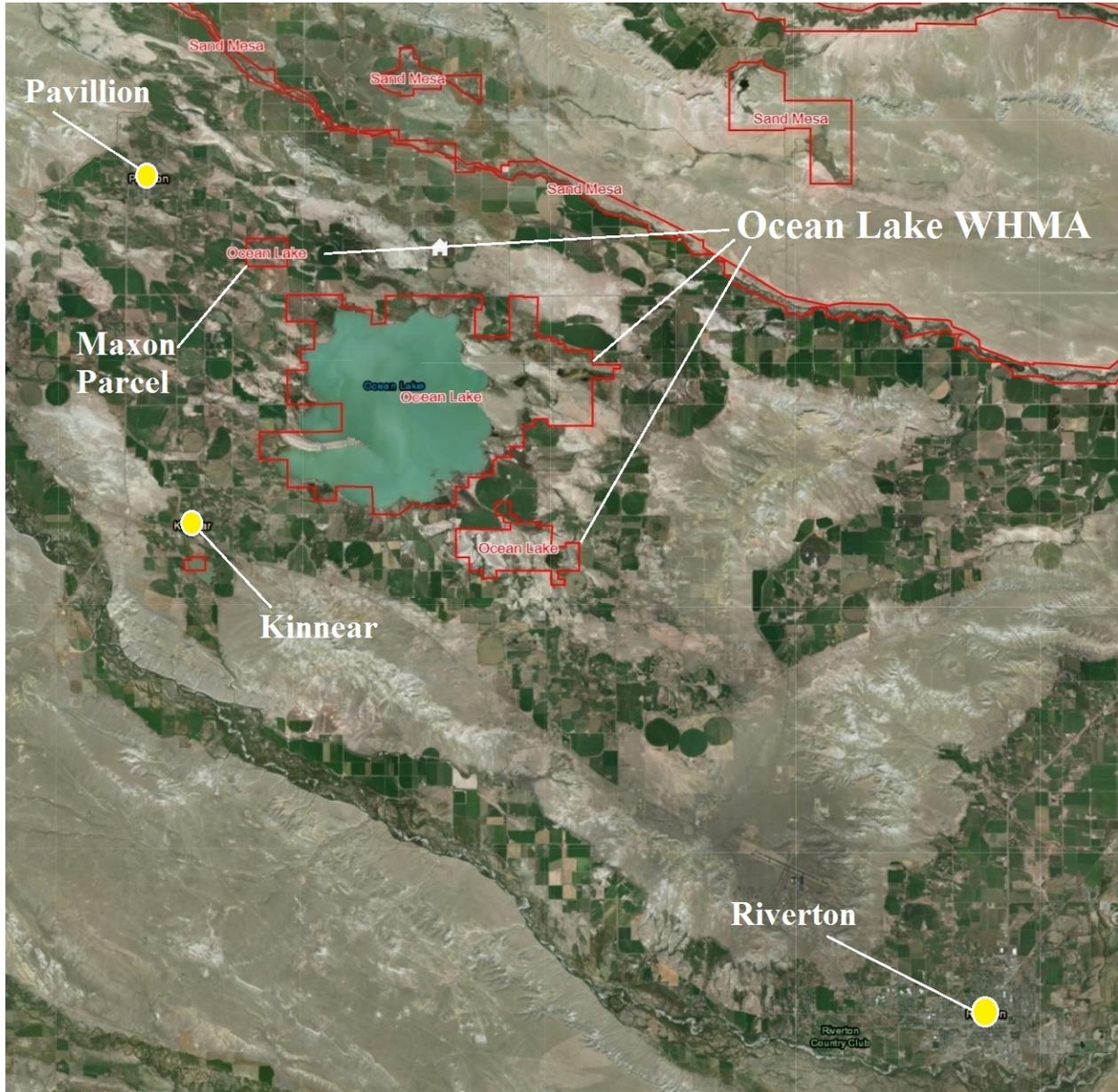


Figure 2. Maxon Parcel, Ocean Lake Wildlife Habitat Management Area

The Department would retain a permanent public access easement on the Maxon parcel for hunting deer, birds, and small game; and an administrative access easement to conduct the existing pheasant release program and undertake habitat improvement projects. Additionally, a permanent right-of-way easement will be donated by the private landowners to the Department for permanent public and administrative access to their lands adjacent to Ocean Lake WHMA.

Based on conversations with the private landowners, in addition to continued fall hunting, future land use of the Maxon parcel would include late winter/early spring grazing by cattle. Cattle would be removed during the growing season to allow for vegetative growth and recovery prior to the fall hunting season. As such, the type of land use on the Maxon parcel would remain the same, though the level of grazing would increase. Presently, the Maxon is grazed once every five years. The private landowners have stated that they will use the Maxon for spring thermal cover following calving in late February. Use will likely be on an annual basis.

In exchange, the private landowners would convey to the Department a 1,882-acre conservation easement (CE), known as the Mud Springs CE, on the eastern slope of Table Mountain (Fig. 3). The CE would be located on portions of Sections 5, 6, 7, 8, 17, and 18 at Township 32 North, Range 99 West, and portions of Sections 12 and 13 at Township 32 North, Range 100 West, an area approximately five miles south of the town of Lander.

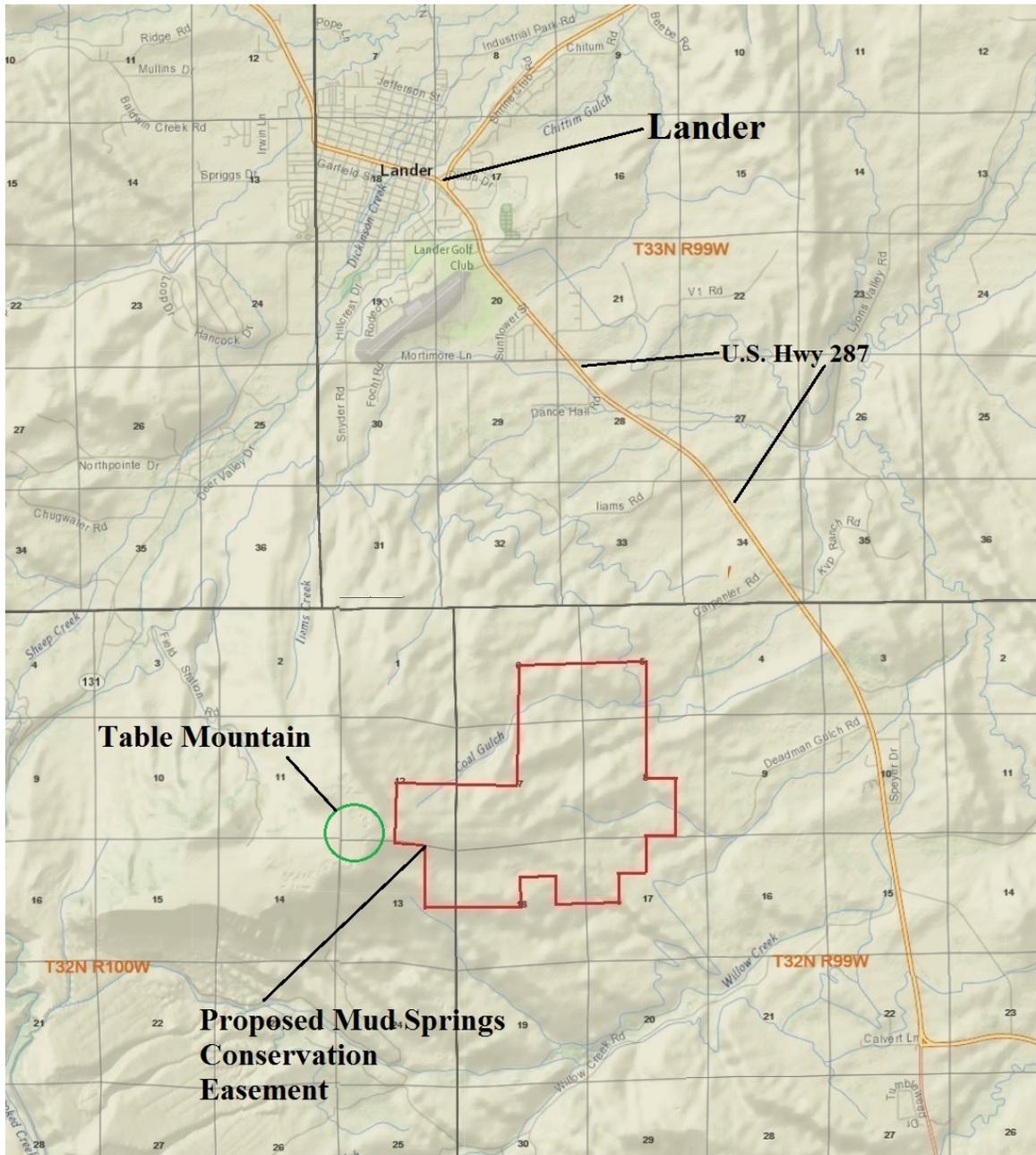


Figure 3. Proposed Mud Springs Conservation Easement in Fremont County

The purpose of the CE would be to maintain existing agricultural land use, specifically rangeland grazing and improvement of habitat conditions to benefit sage grouse, mule deer, and other wildlife. The following uses and practices would be prohibited on the land covered by the CE:

- changing, disturbing, altering, or impairing the significant relatively natural ecological features or any conservation values;
- degrading, polluting, or draining any surface or sub-surface water;
- changing the topography through the placement or removal of soil, land fill, dredging spoils, or other material (with specific exceptions described in the CE);
- transferring or severing water rights from the property without the prior approval of the Grantee;
- storing, dumping, or disposing toxic and/or hazardous materials, or non-compostable refuse;
- constructing or placing any buildings, any type of temporary living quarters, mobile homes, utility towers, or other structures, except as may be otherwise approved by the Grantee;
- constructing any new roads or vehicle trails;
- constructing, maintaining or placing billboards;
- establishing or maintaining any commercial feed lot; and
- exploring for or extracting minerals, oil, gas, or other hydrocarbons, coal bed methane, soils, sands, gravel, rock, or other materials on or below the surface of the property (with specific exceptions described in the CE) to the extent the Grantor owns or has control over the mineral rights on the property.

Rights associated with the conservation easement would include public hunting access limited to foot or horseback only. The acquisition of these rights would be expected to result in an increase in hunting activity in the area.

Both property rights were appraised by an independent Wyoming certified general appraiser. The current market value of the 1,882-acre Mud Springs Conservation Easement was appraised at \$560,000, and the Maxon Parcel fee property, unencumbered, appraised at \$495,000. To equalize this different in property values, the Department would pay the private landowners \$65,000.00. The Wyoming Wildlife and Natural Resource Trust stated they would provide these funds to the Department to complete the exchange.

Public notice of the land exchange has been completed as required by Department Policy Guidelines.

This alternative is preferred by the Department as it will consolidate land ownership by eliminating holdings outside of the contiguous Ocean Lake WHMA. Additionally, it will preserve public access for upland bird, small game, and deer hunting, along with administrative access which will facilitate the Department's pheasant release program.

The Department will acquire a public access and administrative easement that will allow for public big game hunting, as well as allow the Department employees and contractors access for habitat improvement projects. The exchange proposed in Alternative A will not result in a loss of any public recreation within the original purpose of acquisition.

## **No Action Alternative**

Under this alternative, WGFC would not exchange any lands or property rights; the private landowners and the Department would continue the current use and management of their respective lands. Given development patterns within the Lander Valley, the No Action Alternative likely would ultimately result in the privately-owned parcel on Table Mountain being sub-divided and converted to home-sites. This land use conversion would result in the decrease in the availability of mule deer habitat; the displacement of significant numbers of mule deer, and, likely a decrease in mule deer numbers across the south Wind River herd unit.

## **Alternatives Considered but Dismissed from Further Analysis**

Two alternatives were considered but dismissed: (1) acquisition of the Mud Springs CE via simple purchase from the private landowners; and (2) reservation of a conservation easement, as opposed to an easement for access only, on the Maxon parcel following conveyance to the private landowners. The Department's budget would not provide the funding required for a simple acquisition of the CE from the private landowners without including the value of a Department-owned parcel for exchange as part of the transaction; and reserving a conservation easement on the Maxon parcel would render its appraised value too low to facilitate a meaningful property exchange. Therefore, these alternatives were dismissed from further consideration.

# AFFECTED ENVIRONMENT

## Ocean Lake Wildlife Habitat Management Area – Maxon Parcel

### Location

The Ocean Lake WHMA covers 12,972 acres of land -- 2,404 acres are held by the Department in fee title, and the remaining 10,568 acres are owned by BOR. Included in the WHMA are a few isolated parcels and wetland ponds which do not abut the WHMA property that encircles Ocean Lake.

The WHMA is bordered by Wyoming Highway 134 to the north, U.S. Highway 26 to the south, and county roads to the east and west. Access to the WHMA is provided by approximately 19 miles of county roads east of the lake.

The WHMA lies within the boundaries of the Wind River Indian Reservation; however, this poses no limitations on public access to the WHMA. The area around the WHMA is rural and sparsely populated; the local economy consists primarily of agriculture and energy development. There are no national parks, wilderness areas, wild or scenic rivers, national natural landmarks, sole or principal drinking water aquifers, or national monuments in the Ocean Lake WHMA.

The Maxon parcel is 240 acres in size and lies approximately 20 miles northwest of Riverton, four miles southeast of Pavillion, and 1.5 miles north of the northwest corner of Ocean Lake WHMA. It is isolated from the contiguous area of WHMA. The parcel is legally described as the E1/2NW1/4 and NE1/4 of Section 21 at Township 3 North, Range 2 East (Fig. 4).

In the Riverton area, the average summer temperatures range from the upper 80s to the mid 50s, and the winter averages range from near 32° F for a high to a low around 5°F. Annual precipitation in the area averages nine inches, and the frost free period is approximately 130 days. The average annual snowfall is 37 inches.

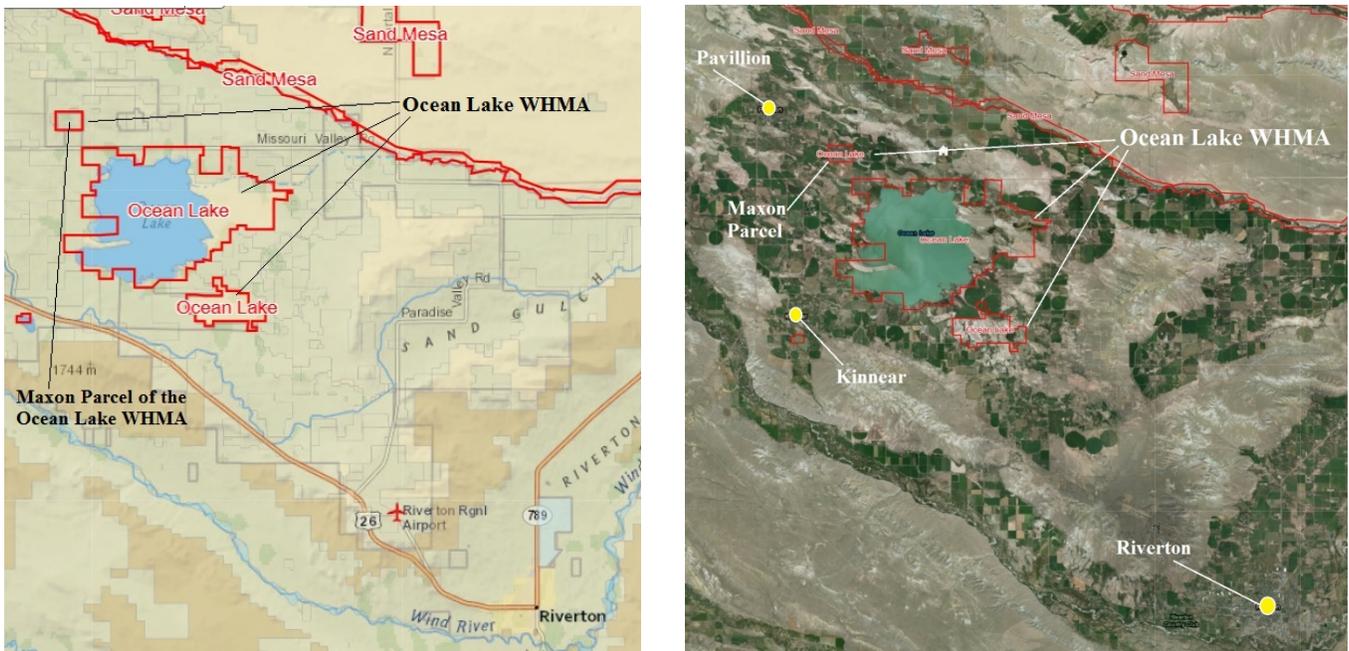


Figure 4. The Maxon Parcel, Ocean Lake WHMA, Fremont County

## Topography and Soils

Ocean Lake, which exists in a natural depression, is approximately 6,100 acres in size and lies at 5,265 feet in elevation. The topography of the surrounding land is largely flat with occasional areas of low rolling hills.

The Maxon parcel lies at approximately 5360 feet in elevation and is generally flat. Soils occurring on the parcel consist of the Apron-Lostwells Association and are classified as deep, well drained sandy loams and sandy clay loams. These soils are alluvium derived from sandstone and clay shale. A narrow ribbon of soil in the center of the parcel is categorized as Lostwells sandy clay loam (Fig. 5). This soil type is considered prime farmland if irrigated.



Report – Prime and other Important Farmlands		
Riverton Area, Wyoming		
Map Symbol	Map Unit Name	Farmland Classification
BoC	Birdsley clay loam, 0 to 10 percent slopes	Not prime farmland
ESB	Enos-Wall association, gently sloping	Not prime farmland
LoA	Lostwells sandy clay loam, 0 to 3 percent slopes	Prime farmland if irrigated
LtB	Lostwells sandy clay loam, saline, 0 to 6 percent slopes	Not prime farmland
OcC	Oceanet sandy loam, 0 to 10 percent slopes	Not prime farmland
ORE	Oceanet-Rock land association, hilly	Not prime farmland
PeE	Persayo sandy clay loam, 0 to 30 percent slopes	Not prime farmland
Sw	Saline wet land	Not prime farmland
TcB	Teapo sandy clay loam, 3 to 6 percent slopes	Not prime farmland
Wa	Wet alluvial land	Not prime farmland
Wc	Winkleman silty clay	Not prime farmland
We	Winkleman silty clay, saline	Not prime farmland
WoA	Worland sandy loam, 0 to 3 percent slopes	Not prime farmland
WoB	Worland sandy loam, 3 to 6 percent slopes	Not prime farmland
WoC	Worland sandy loam, 6 to 10 percent slopes	Not prime farmland
WrB	Worland sandy loam, saline, 0 to 6 percent slopes	Not prime farmland

Figure 5. Maxon Parcel Soils, Ocean Lake WHMA, Fremont County

## Water Resources (Ground and Surface)

Ocean Lake, which exists in a natural depression, serves as a reservoir for the Midvale Irrigation District (Midvale) which operates a number of drains and laterals (approximately 10) that traverse the lake (Fig. 6). Midvale manages a 400-mile-long system of canals and laterals which delivers irrigation water to over 73,000 acres of irrigable lands in central

Fremont County, 60% of which are used for the production of hay. The water supply is derived from the Wind River and its tributaries, a portion of which is stored annually in Bull Lake and Pilot Butte Reservoirs. Midvale Drain 6A traverses the Maxon parcel from the northwest to the southeast corner and is the only water source on the parcel. The Department holds water rights for irrigation of 481 acres of land and those associated with eight wetland ponds in the WHMA. No naturally occurring perennial streams exist within the WHMA.

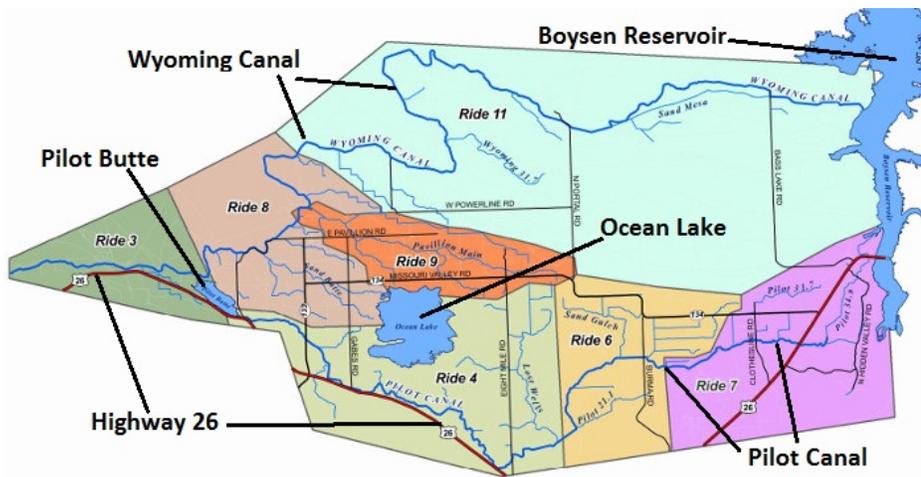


Figure 6. Midvale Irrigation District, Fremont County

## Floodplains and Wetlands

According to the Federal Emergency Management Agency (FEMA), The Ocean Lake WHMA, including the Maxon Parcel, is considered “Zone D.” The “Zone D” designation is used for areas where there are possible, but undetermined flood hazards, as no analysis of flood hazards has been conducted.

The Ocean Lake WHMA includes approximately 282 acres of wetlands (Fig. 7). In addition to the wetland habitat adjacent to the lake, the WHMA also supports eight wetland ponds east of the lake. These are managed to provide a variety of wetland habitat benefitting migratory waterfowl and shorebirds.

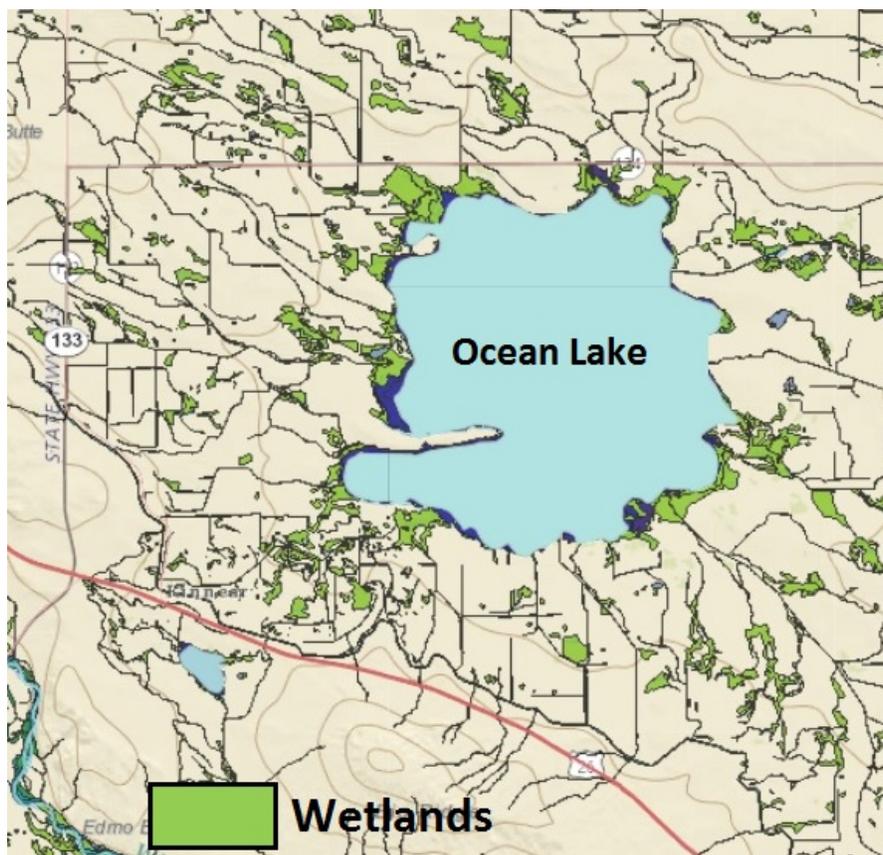


Figure 7. Wetlands near Ocean Lake WHMA, Fremont County



Figure 8. Wetlands on the Maxon Parcel, Ocean Lake WHMA, Fremont County

According to the National Wetlands Inventory, developed and maintained by the Service, the Maxon parcel contains between 20 and 25 acres of wetlands (Fig. 8). These include two types – the saturated emergent palustrine and the seasonally-flooded emergent palustrine. These wetlands may serve as groundwater recharge sites and aid in floodwater retention

Saturated emergent palustrine wetlands appear to account for 18-19 acres on the Maxon parcel. These wetland areas are at least 30% covered with herbaceous vegetation. A saturated surface exists during most of the growing season, but surface water is seldom present.

Seasonally-flooded emergent palustrine wetlands appear to account for approximately 5-6 acres on the parcel. This type of wetland is at least 30 percent vegetated with emergent, herbaceous vegetation and surface water is present for extended periods especially early in the growing season. Due to limited vegetative growth in early spring, these areas may be open water. These wetlands provide food sources for a variety of water birds and other animal life for higher food chain predators.

### Vegetation

Ocean Lake WHMA supports a variety of vegetation types ranging from wetlands and irrigated meadows to sagebrush steppe. Significant historic vegetation manipulation has occurred within the Maxon area, largely through farming activities and tree row plantings. Native species occur in very small patches within current sagebrush stands and on slopes too steep to farm or cultivate.

Current vegetation cover throughout the Maxon parcel consists mostly of introduced grass mixes. Smooth brome (*Bromus inermis*), crested wheatgrass (*Agropyron cristatum*), and introduced wild rye (*Elymus* spp.) are the consistent grass species present. Forbs present include maximilian sunflower (*Helianthus* spp.), kochia (*Kochia* spp.), Russian knapweed (*Centaurea repens*), curly cup gumweed (*Grindelia squarosa*), milkweed (*Asclepius* spp.), and curly dock (*Rumex crispus*).

Shrubs are present only on side-slopes where no cultivation has occurred and account for less than 10% of the parcel. Big sagebrush (*Artemisia tridentata wyomingensis*) dominates with co-dominant shrubs being rubber rabbitbrush (*Chrysothamnus viscidiflorus*), green rabbitbrush (*Chrysothamnus viscidiflorus*) and winterfat (*Krascheninnikovia lanata*). Some native grasses persist in these shrub areas including Indian ricegrass (*Acnatherum hymenoides*), needle and thread (*Hesperostipa comata*) and western wheatgrass (*Pascopyrum smithii*).

The parcel supports many trees which are planted in rows and consist largely of introduced species. The majority of trees present on the parcel are Russian olive (*Elaeagnus angustifolia*). There are a few stands of native willow species (*Salix* spp.) in the sub-irrigated areas and cottonwoods (*Populus deltoides*) are present throughout the area. Other tree rows

consist of skunkbush sumac (*Rhus aromatica*), chokecherry (*Prunus virginianus*), honeysuckle (*Lonicera* spp.), Siberian elm (*Ulmis pulmila*), green ash (*Fraxinus pennsylvanica*), and Caragana (*Caragana arborescens*).

Wetlands and riparian areas consist mostly of cattails. Stream incision has occurred, resulting in eroded cutbanks which are inhabited by rubber rabbitbrush.

Russian knapweed and hoary cress, both considered noxious weeds, also exist on the parcel.

### Wildlife and Fisheries

This Ocean Lake WHMA supports a variety of wildlife including game birds, migratory waterfowl, mule deer (*Odocoileus heminous*), white-tailed deer (*Odocoileus virginianus*), pronghorn (*Antilocapra americana*), and various non-game species. Ocean Lake supports a locally important sport fishery including walleye, yellow perch, bluegill, ling, white crappie, black crappie, and trout.

The area of the Maxon parcel supports a deer population in the single digits, consisting of both mule deer (*Odocoileus heminous*) and white-tailed deer (*Odocoileus virginianus*). These species use the Maxon parcel and surrounding lands for bedding and thermal cover, and adjacent private hay lands, composedly largely of alfalfa, for feeding areas. Other small mammals, such as raccoon (*Procyon lotor*) and cottontail (*Sylvilagus* spp.), occur in the area.

The parcel also supports wild ringneck pheasants (*Phasianus colchicus*) and likely some progeny of former farm-raised pheasants. The Department releases additional pheasant in the fall. Occasionally, Hungarian partridge (*Perdix perdix*) and chukar partridge (*Alectoris chukar*) may be found around the parcel. Waterfowl, primarily mallards (*Anas platyrhynchos*), may be found in Drain W-51-D, which traverses the area.

The Department has historically stocked Drain 6A with brown trout (*Salmo trutta*), though that effort ceased in 2010 due to declining habitat conditions. Survey data reveals that longnose dace (*Rhinichthys cataractae*) and lake chub (*Couesius plumbeus*) have also been historically present in Drain 6A.

### Federally Listed Threatened, Endangered, Proposed, and Candidate Species, and Critical Habitat

Information obtained from the Service's Information, Planning, and Conservation website (IPAC) indicates that the following species may occur in Fremont County, WY.

Desert Yellowhead	<i>Yermo xanthocephalus</i>	Threatened & CH (final designated)
Fremont County Rockcress	<i>Boechera pusilla</i>	Candidate
Ute Ladies'-tresses	<i>Spiranthes diluvialis</i>	Threatened
Western Prairie Fringed Orchid	<i>Platanthera praeclara</i>	Threatened
Whitebark Pine	<i>Pinus albicaulis</i>	Candidate
Bonytail Chub	<i>Gila elegans</i>	Endangered & CH
Colorado Pikeminnow	<i>Ptychocheilus Lucius</i>	Endangered & CH
Humpback Chub	<i>Gila cypha</i>	Endangered & CH
Pallid Sturgeon	<i>Scaphirhynchus albus</i>	Endangered
Razorback Sucker	<i>Xyrauchen texanus</i>	Endangered & CH
Least Tern	<i>Sterna antillarum</i>	Endangered
Piping Plover	<i>Charadrius melodus</i>	Threatened & CH
Whooping Crane	<i>Grus Americana</i>	Endangered & CH
Yellow-billed Cuckoo	<i>Coccyzus americanus</i>	Threatened & CH
Canada Lynx	<i>Lynx Canadensis</i>	Threatened & CH (final designated)
Grizzly Bear	<i>Ursus arctos horribilis</i>	Threatened & CH
North American Wolverine	<i>Gulo gulo luscus</i>	Proposed Threatened

However, according to information provided by the Service's Wyoming Field Office in Cheyenne, no Federally-listed endangered or threatened species occur on the Maxon Parcel.

## Historical, Cultural, and Archaeological Resources

High Country Archaeology Consultants performed an archaeological survey of the Maxon parcel (Consultant Project No. HJ2012-11). The inventory was conducted to locate and evaluate any cultural resources present in the Area of Potential Effect for the National Register of Historic Places. No archeological, cultural, or historic resources were found as a result of the inventory.

## Management and Habitat

The Department manages the WHMA for the production of waterfowl and pheasant. In addition, the area provides habitat for wading and shore birds, small game, mule deer, white-tailed deer, and nongame birds and mammals. The Maxon area is presently grazed as a pasture as part of the Northwest Pasture Grazing Plan. As such the Maxon is grazed on a five-year rotation to remove decadent vegetative overstory and increase the overall palatability of available forage.

The Northwest Pasture Grazing Plan consists of a five-year, five-pasture rotation with all grazing occurring during January and February. The four-year rest rotation between cattle entry ensures that none of the pastures are overgrazed. However, in order to manage adaptively to changing habitat conditions, more frequent winter grazing may be pursued in order to benefit habitat conditions. The timing of grazing during the winter ensures that only residual vegetative cover is consumed and no systemic harm occurs to the overall pasture. Additionally, the majority of the land within each of the five pastures is irrigated on an annual basis, which promotes continued herbaceous growth. The length and timing of the rotation period was designed to increase plant vigor by removing decadent herbaceous cover, generating minor surface disturbances, and introducing a nutrient source for soil retention and plant uptake.

## Public Use and Recreation

Ocean Lake WHMA provides important recreational opportunities in central Wyoming. It is managed for multiple uses including various recreational activities such as hunting, fishing, camping and wildlife viewing. The area is open all year except for a ½ mile area around aerators which is closed to waterfowl hunting from November 15 through March 10, and to all human activities from December 15 through March 10. Hunters throughout Wyoming travel to the WHMA due to the pheasant release program administered by the Department. The area supports wild pheasants and the Department stocks approximately 1,675 farm raised pheasants annually. Waterfowl hunters use Ocean Lake throughout the fall, hunting ducks and geese along the lake as well as along the wetland ponds east of the lake. Opportunities for trapping, and upland bird, small game, and deer hunting also exist on the WHMA. Hunter use data is not available.



Ocean Lake supports a locally important sport fishery. Four boat ramps with associated parking and five developed campsites – four along the western shore and one along the eastern shore of Ocean Lake – are provided to facilitate public use of the lake (Fig. 9). Anglers can enjoy a quality fishing experience there -- walleye, yellow perch, bluegill, ling, white crappie, black crappie, and trout inhabit that lake. Special winter ice fishing regulations are enforced on Ocean Lake during the winter.

Figure 9. Recreational Facilities at Ocean Lake WHMA, Fremont County

### Socio-economic Factors

The area around Riverton, including the Ocean Lake WHMA and the Maxon Parcel, is sparsely populated and rural. The town supports a population of 10,600 and its economy is largely supported by agriculture and energy development. Riverton lies within the boundary of the Wind River Reservation. According to the Bureau of Indian Affairs, 12,500 members of the Eastern Shoshone and Northern Arapaho tribes inhabit the Reservation.

# Table Mountain – Mud Springs Conservation Easement Area

## Location

The Mud Springs CE would encompass 1,882 acres on Table Mountain and surrounding lands – an area that lies approximately five miles southeast of the town of Lander in Fremont County and northeast of the Wind River Mountain Range (Fig. 10). State Highway 131 lies west of the Table Mountain area and U.S. Highway 287 lies to the east. The legal description of the Mud Springs CE would be portions of Sections 5, 6, 7, 8, 17 and 18, at Township 32 North, Range 99 West and portions of Sections 12 and 13 at Township 32 North, Range 100 West. This land abuts various properties owned by private parties, the Bureau of Land Management, and the Office of State Lands and Investments, many of which are currently protected by conservation easements. There are no national parks, wilderness areas, wild or scenic rivers, national natural landmarks, sole or principal drinking water aquifers, or national monuments that would lie within the Mud Springs CE. Annual precipitation in the area averages nine inches. The frost free period is approximately 130 days.

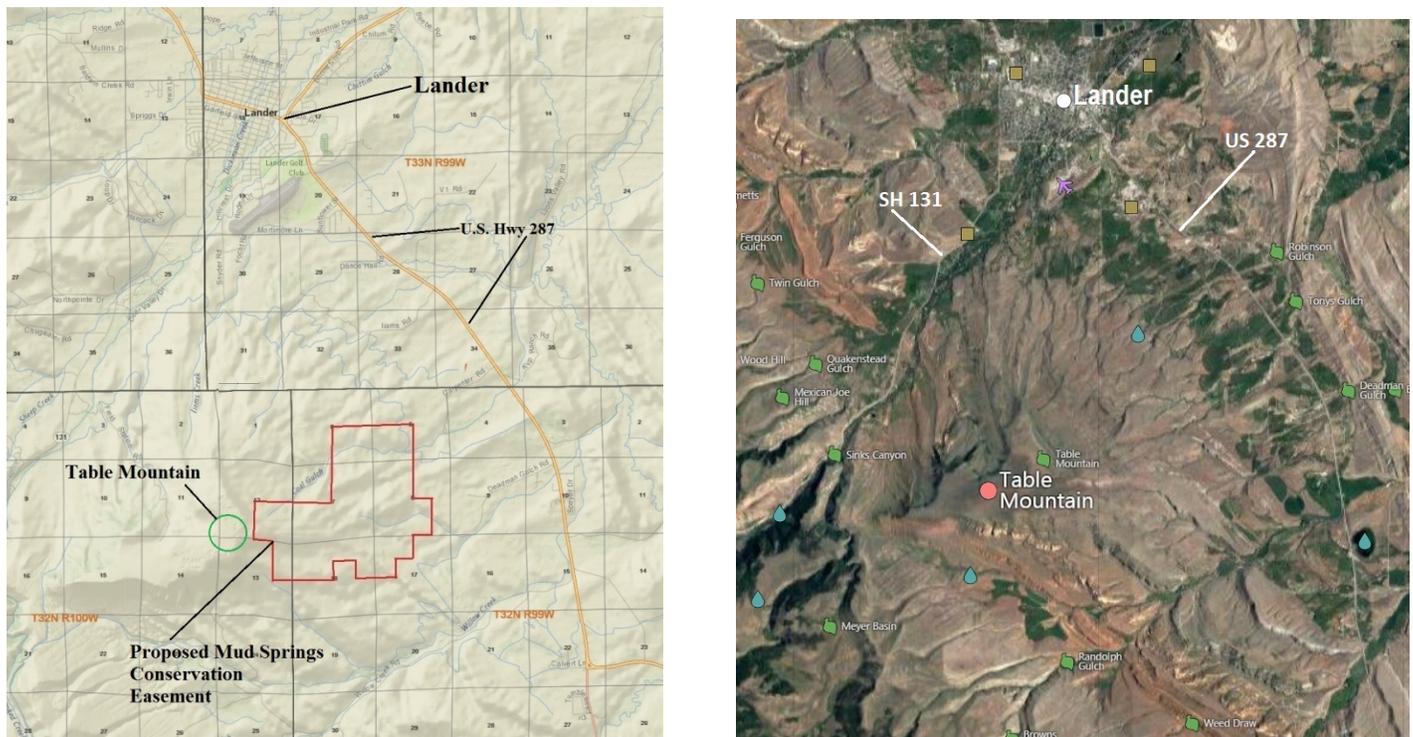


Figure 10. The proposed Mud Springs CE and Surrounding Area, Fremont County

## Topography and Soils

Table Mountain is north and east facing; and occupies an elevation range between 5500 and 7000 feet. The elevation of land within the proposed Mud Springs CE ranges from 5500 to 7300 feet. Soils that occur in that area include the Cotha-Blazon-Rock outcrop association and are classified as shallow clay loams and deeper fine sandy loams. These soils are alluvium derived from sandstone and clay shale. A couple of small areas along the east side of the CE area, shown below in blue, are categorized as Havre clay loam which is considered prime farmland if irrigated. The other soil types are shown in the legend (Fig. 11).

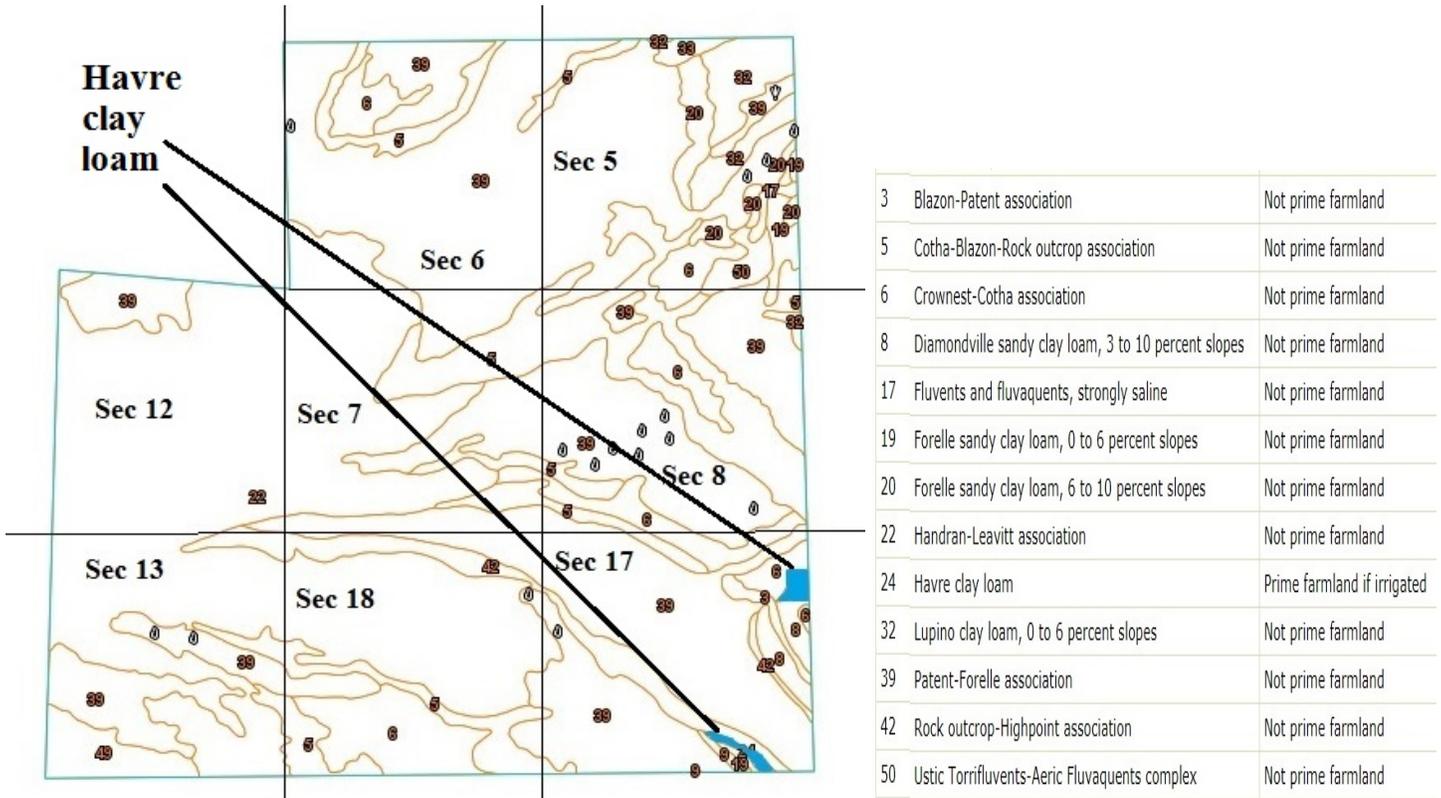
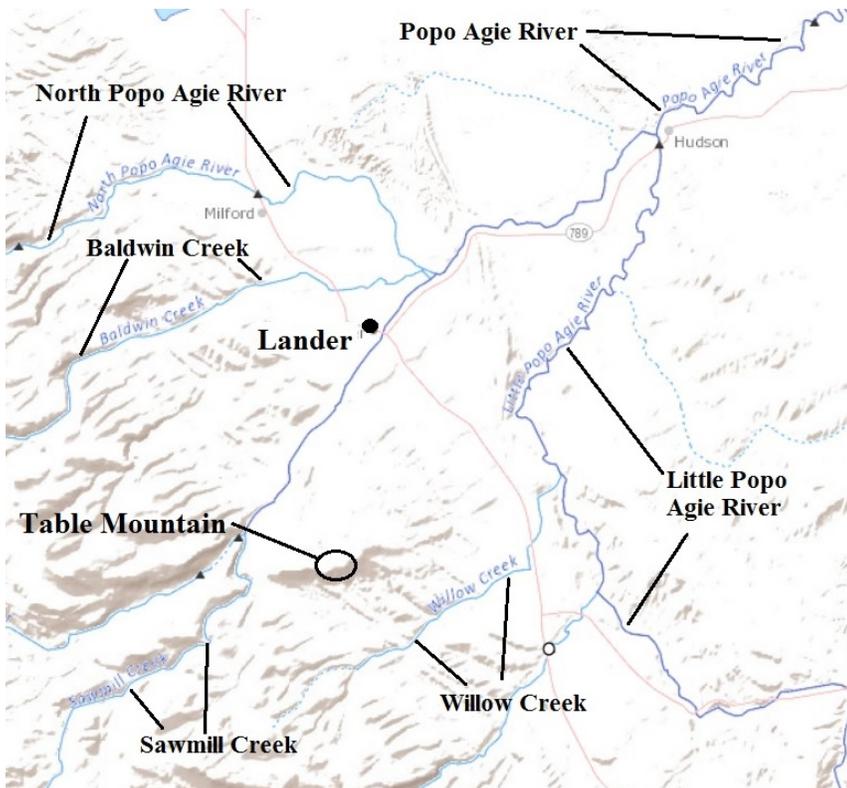


Figure 11. Soils in the area of the proposed Mud Springs CE, Fremont County

Water Resources (Ground and Surface)



Waters flow east from Table Mountain through various gulches and draws on lands encompassed by the CE that ultimately empty into the Little Popo Agie, Popo Agie, and Wind Rivers. Additionally, a portion of the Table Mountain Irrigation Ditch Extension traverses areas within the CE. (Fig. 12).

Figure 12. Water Sources in the area of the proposed Mud Springs CE

## Floodplains and Wetlands

According to FEMA, the area encompassed by the Mud Springs CE in the Table Mountain area is considered “Zone D.” The “Zone D” designation is used for areas where there are possible but undetermined flood hazards, as no analysis of flood hazards has been conducted. According to the National Wetlands Inventory, developed and maintained by the Service, a 1.16-acre wetland, categorized as temporarily flooded persistent emergent palustrine, occurs on the property to be included in the Mud Springs CE (Fig. 13).

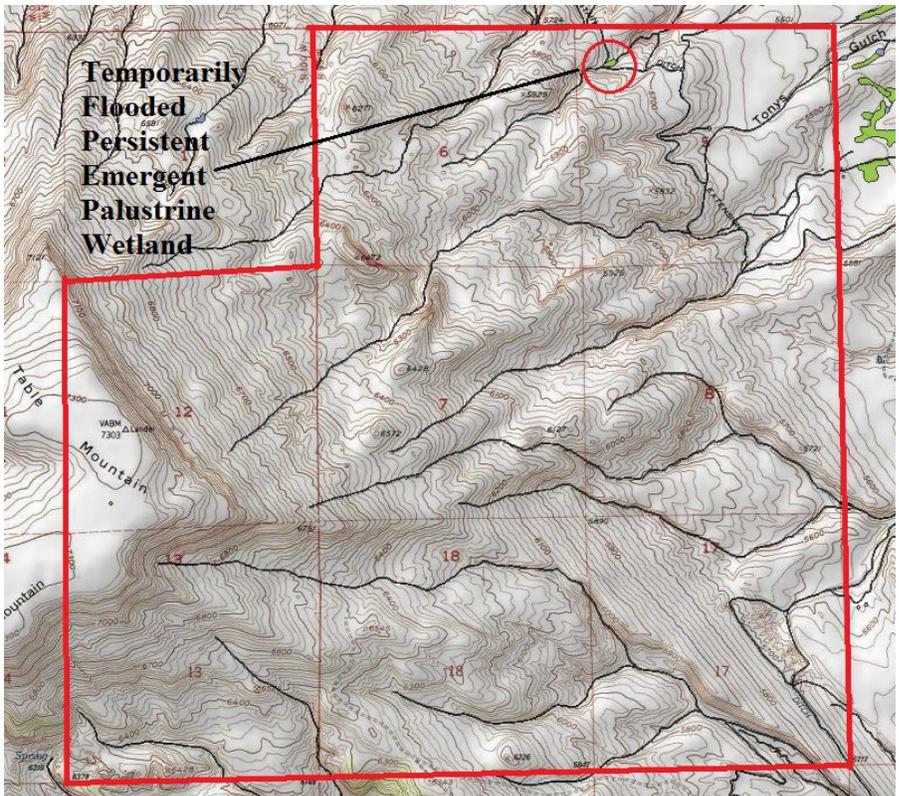


Figure 13. Wetlands in the area of the proposed Mud Springs CE

## Vegetation

Bluebunch wheatgrass (*Pseudoroegneria spicata*), Indian rice-grass (*Oryzopsis hymenoides*) and green needle grass (*Nassella viridula*) make up fifty to sixty percent of the potential plant community on Table Mountain. Sandberg bluegrass (*Poa secunda*), prairie junegrass (*Koeleria macrantha*), threadleaf sedge (*Carex filifolia*), western wheatgrass (*Pascopyrum smithii*) and big sagebrush (*Artemisia tridentata*) compose the corresponding forty to fifty percent. When areas within this site deteriorate, western wheatgrass (*Pascopyrum smithii*), threadleaf sedge (*Carex filifolia*) and big sagebrush (*Artemisia tridentata*) become more dominant. Cactus (*Opuntia*), cheat grass (*Bromus tectorum*), and annual forbs are the main invaders in the Table Mountain area. In recent years, cheat grass (*Bromus tectorum*) and leafy spurge (*Euphorbia esula*) have become increasingly wide-spread.

The average total annual production is approximately nine-hundred pounds per acre in excellent conditions. Production ranges from five-hundred pounds in less favorable years to eleven-hundred pounds in more favorable years.

## Wildlife and Fisheries

Table Mountain is an important area for big game. Mountain big sage and antelope bitter brush are the dominate shrub species with six other shrub species present. There is 16% to 25% canopy coverage of mostly mature and decadent age class with few seedlings and indicates heavy winter foraging by ungulates. There is a robust understory of herbaceous cover with eight species of grass and 25 species of forbs. The shrub community is in late seral stage throughout most of the Table Mountain area.

A mixture of Crucial Winter-Yearlong, Winter-Yearlong, and Yearlong range for big game species occurs in the Table Mountain area (Fig. 14 and 15).

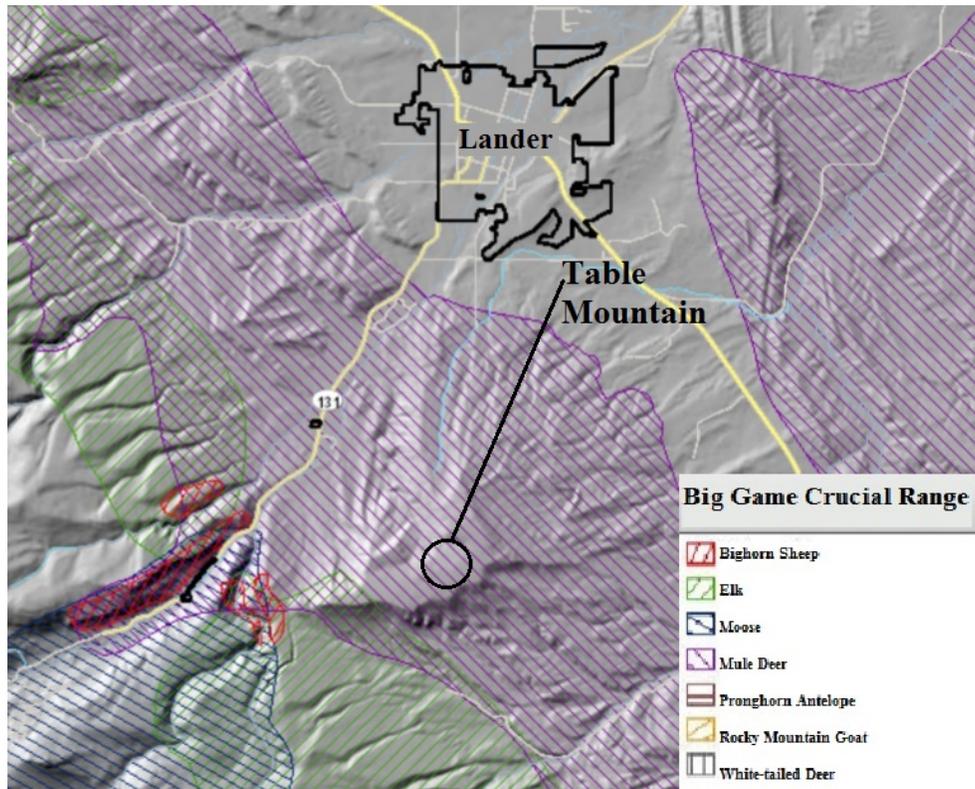


Figure 14. Crucial Winter Range in the Table Mountain Area for Various Big Game Species

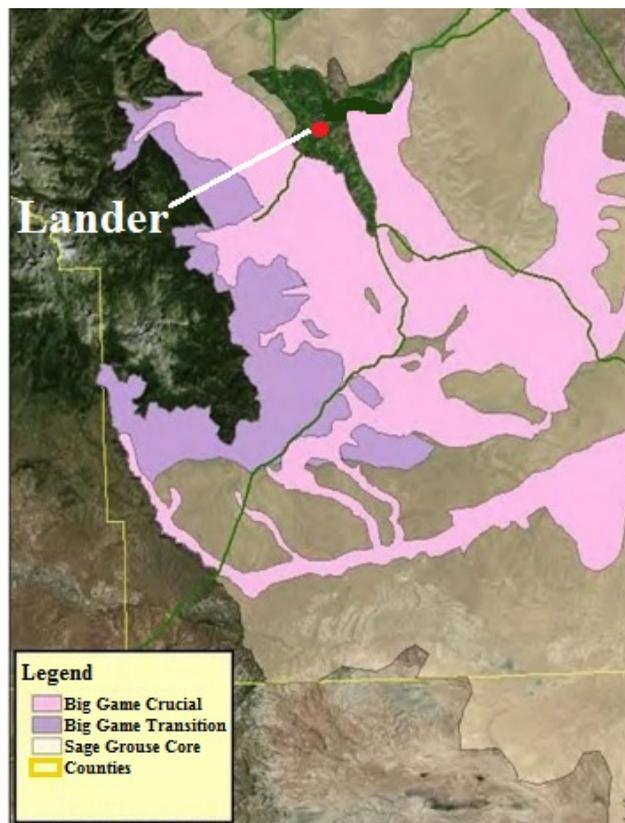


Figure 15. Crucial and Transitional Big Game Range in the Table Mountain Area

One third of the South Wind River mule deer (*Odocoileus hemionus*) herd unit, approximately 9,500 animals, utilizes this area as Crucial Winter-Yearlong range for bedding, thermal cover, and browsing native vegetation. The Mud Springs CE lies entirely within this range category. The Department's recent collar project indicates movement of mule deer from Table Mountain to higher elevations, but no migration corridors have been identified or designated at this time (Fig. 16).

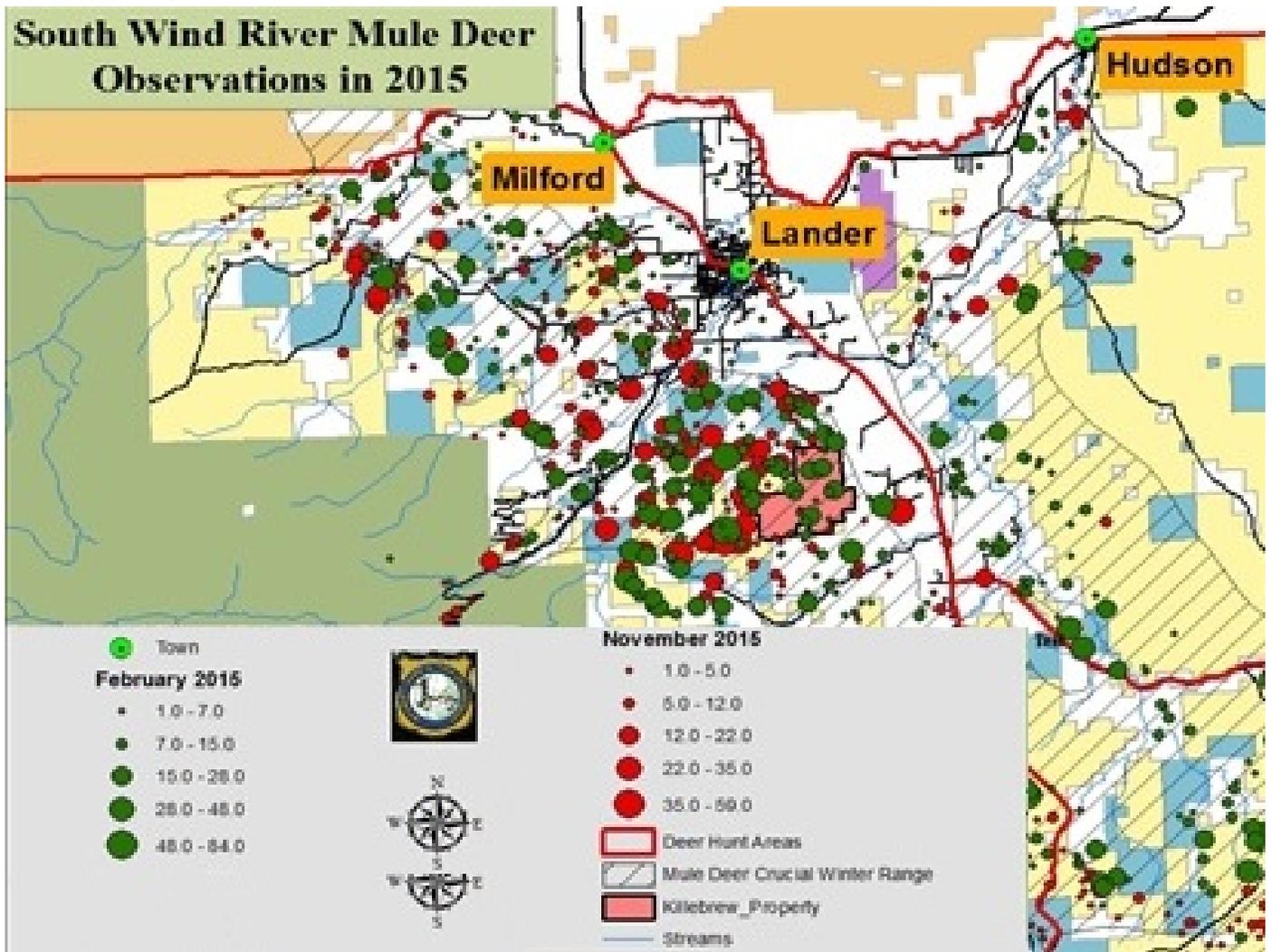


Figure 16. Mule Deer Observations along the Lander Front and Table Mountain Area

The area supports many other wildlife species including raccoon (*Procyon lotor*), cottontail (*Sylvilagus spp.*), and, infrequently, Hungarian partridge (*Perdix perdix*) and chukar partridge (*Alectoris chukar*) may be found there. There are no known fisheries in the area of the Mud Springs CE.

## Federally Listed Threatened, Endangered, Proposed, and Candidate Species, and Critical Habitat

Information obtained from the Service's Information, Planning, and Conservation website (IPAC) indicates that the following species may occur in Fremont County, WY.

Desert Yellowhead	<i>Yermo xanthocephalus</i>	Threatened & CH (final designated)
Fremont County Rockcress	<i>Boechera pusilla</i>	Candidate
Ute Ladies'-tresses	<i>Spiranthes diluvialis</i>	Threatened
Western Prairie Fringed Orchid	<i>Platanthera praeclara</i>	Threatened
Whitebark Pine	<i>Pinus albicaulis</i>	Candidate
Bonytail Chub	<i>Gila elegans</i>	Endangered & CH
Colorado Pikeminnow	<i>Ptychocheilus Lucius</i>	Endangered & CH
Humpback Chub	<i>Gila cypha</i>	Endangered & CH
Pallid Sturgeon	<i>Scaphirhynchus albus</i>	Endangered
Razorback Sucker	<i>Xyrauchen texanus</i>	Endangered & CH
Least Tern	<i>Sterna antillarum</i>	Endangered
Piping Plover	<i>Charadrius melodus</i>	Threatened & CH
Whooping Crane	<i>Grus Americana</i>	Endangered & CH
Yellow-billed Cuckoo	<i>Coccyzus americanus</i>	Threatened & CH
Canada Lynx	<i>Lynx Canadensis</i>	Threatened & CH (final designated)
Grizzly Bear	<i>Ursus arctos horribilis</i>	Threatened & CH
North American Wolverine	<i>Gulo gulo luscus</i>	Proposed Threatened

However, according to information provided by the Service's Wyoming Field Office, no Federally-listed endangered or threatened species occur in the area of the Mud Springs CE.

### Historical, Cultural, and Archaeological Resources

Indigenous peoples have lived in the area of Table Mountain and the Mud Springs CE for thousands of years. Notable archaeological and cultural artifacts have been discovered through numerous archaeological studies throughout the area. Undoubtedly, many artifacts and evidence of inhabitation still remain undiscovered there. Since the Department's proposed acquisition of the Mud Springs Conservation Easement would not result in any ground-disturbing activities, an archaeological and cultural inventory has not been undertaken in that area.

### Public Use and Recreation

Currently, the land that will be included in the Mud Springs CE is privately owned and there is no known public access to the area.

### Socio-economic Factors

The area around Lander, which is the county seat of Fremont County, is sparsely populated and rural. The town supports a population of 7,700 and its economy is largely supported by agriculture, energy, government, and outdoor recreation. Lander lies approximately 45 miles south of the Wind River Reservation. According to the Bureau of Indian Affairs, 12,500 members of the Eastern Shoshone and Northern Arapaho tribes inhabit the Reservation.

# ENVIRONMENTAL CONSEQUENCES

## Preferred Alternative

The Preferred Alternative is not likely to result in substantial changes in the type or level of human activities on the either of the properties involved in the exchange or on the social or economic conditions in the area due to the size and location of the exchange.

### Maxon Parcel at Ocean Lake WHMA

Currently, the Maxon Parcel (Parcel) is grazed on a five-year rotation to remove decadent vegetative overstory and increase overall palatability of available forage. These types of land uses will remain the same although the grazing frequency will increase to annual use. Stocking rates will be approximately 260 AUMs. The private landowners have indicated that both fall hunting and grazing of cattle in the late winter and early spring will continue. Cattle will be removed from the Parcel during the growing season (May through August) to allow for vegetative growth and recovery prior to the fall hunting seasons.

Since no Federally-listed endangered, threatened, proposed, or candidate species or critical habitats are known to occur on the Parcel, there would be no impacts to these resources from the land exchange and associated activities.

No construction, development, or ground-disturbing activities are planned. Consequently, adverse effects floodplains or wetlands; or archaeological, cultural, or historical resources would not be expected to occur. Any impacts to social or economic conditions would be minimal as there would be no significant change in the nature of the uses and activities that would occur on both parcels.

### Mud Springs Conservation Easement on Table Mountain

The purpose of the Mud Springs Conservation Easement (CE) is to maintain the existing agricultural land use (livestock grazing). Increased hunting activity would likely occur throughout the Mud Springs Conservation Easement area but impacts from this activity would be expected to be negligible as big game hunting access will be limited to foot or horseback only.

The private landowners have discussed a number of range and habitat improvement ideas that they may ultimately implement upon completion of the conservation easement but are not currently planned. Projects include:

- Management of noxious weeds, primarily cheat grass and leafy spurge, would involve the use of chemical and, potentially, bacterial herbicide application; grazing deferment; and establishment of preferable native herbaceous species.
- The development and management of existing springs in the area would include the construction of enclosure fencing (e.g., steel-jack fencing) around two separate springs and associated riparian and wet meadow areas, and the installation of hardened off-site watering facilities. This would increase available water sources for cattle and wildlife, encourage increased cattle distribution, and maximize the productivity of mule deer habitat.
- Dilapidated stock fence would be replaced with wildlife friendly fencing, allowing for migration of mule deer and other big game. New fences would be constructed with sage grouse reflectors.

Since no Federally-listed endangered, threatened, proposed, or candidate species or critical habitats are known to occur within the area of the CE, there would be no impacts these resources from the land exchange and associated activities.

Other than the replacement of fencing, no construction, development, or ground-disturbing activities would occur. Consequently, adverse effects floodplains or wetlands, or archaeological, cultural, or historical resources would not be expected. Any impacts to social or economic conditions would be minimal as there would be no significant change in the nature of the uses and activities that would occur on both parcels.

## **No Action Alternative**

Should the proposed exchange of property rights between the Department and the private landowners not take place, there would be no changes in the management, use, and basic character of the lands in the foreseeable future by both the Department and the private landowners. The private landowners would likely experience increasing pressure to sell their property for the development of single family housing and small rural home sites. If such a sale were to occur, this would likely result in adverse effects to wildlife, particularly big game and sage grouse, through the decrease in the amount and carrying capacity of wildlife habitat, especially through the winter; and in wildlife use and numbers along the lands along of the Lander Front.

## **Cumulative Impacts**

The Preferred Alternative would not cause a significant, cumulative environmental impact. The most significant effect would be improved habitat conditions for the resident wildlife species, increased winter survival for area ungulates, improved conditions for non-game species and the permanent conservation and protection of crucial native ungulate winter range.

## **LISTING OF AGENCIES & PERSONS CONSULTED**

Wyoming State Historic Preservation Office, Joseph Daniele  
U.S. Fish and Wildlife Service – Wyoming ES Office, Tyler Abbot  
Wyoming Game and Fish Department, Amy Anderson, Brian Parker, Brian Rognon, Stan Harter

## **PUBLIC COMMENTS**

In accordance with Department rules, the proposed exchange was advertised for four consecutive weeks in two locally circulated newspapers and one statewide circulated newspaper. The exchange proposal was available for viewing and comment on the Department website for six weeks. Additionally, the Department held two public meetings to gather public input on the proposed property right exchange.

During the 30-day public comment period, the Department received nineteen written comments -- one supporting and eighteen opposing the proposal. Many of the letters in opposition were “form fill” letters prepared by a single author, then printed and signed by various individuals. A letter of support was received from the Wyoming Wildlife Federation, which represents 10,000 active supporters.

The first public meeting was held in Lander on September 28, 2016 with 20 members from the public in attendance; and the second was in Pavillion on November 3, 2016 with 25 members from the public in attendance. Public comment forms were made available to the attendees at the meetings. Of the written comments received as a result of the public meetings, three were in favor and three were opposed to the exchange.

## **LITERATURE CITED**

Chase, J.M., Chase, J.E., and Ganoung, A. 2016. Class III Cultural Resource Inventory of Wyoming Game and Fish, Ocean Lake Parcel Proposed Property Disposal, Fremont County, Wyoming.

USDA-NRCS. 2017. Web Soil Survey, Riverton Area. <https://websoilsurvey.nrcs.usda.gov/app/> Wyoming Game & Fish Department. 2017. Fisheries stocking database. Gerrity, P. per. comm. Wyoming Game & Fish Commission. Department Land Management Summary. Ocean Lake

Wildlife Habitat Management Area. Services Division. Habitat & Access