

**United States Department of the Interior
Bureau of Land Management**

Environmental Assessment WY-050-14-07

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Double D Ranch Wild Horse Eco-Sanctuary



Bureau of Land Management

LANDER FIELD OFFICE

1335 Main Street
Lander, WY 82520
(307) 332-8400



BLM

Wind River/Bighorn Basin District - Lander Field Office, Wyoming

The BLM's multiple-use mission is to sustain the health and productivity of the public lands for the use and enjoyment of present and future generations. The Bureau accomplishes this by managing such activities as outdoor recreation, livestock grazing, mineral development, and energy production, and by conserving natural, historical, cultural, and other resources on public lands.

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1.0 Purpose and Need

1.1 Legislative Background

The Wild Free-Roaming Horses and Burros Act of 1971 (WFRH&BA or Act) directs the Secretary of the Interior to manage wild horses and burros on ranges designated for their use in a manner that is designed to achieve and maintain a thriving natural ecological balance and multiple use relationship. The Bureau of Land Management (BLM) manages wild horses and burros in 179 separate herd management areas (HMA) in 10 western states.

Wild horse populations increase at relatively high rates due to lack of natural predators. If left unchecked, population growth results in a decline in both the health of the range and the wild horses (BLM, 2011). When populations exceed the Appropriate Management Level (AML) established to maintain a thriving natural ecological balance, the BLM is required to remove any excess horses from the HMA so as to achieve appropriate management levels (16 U.S.C. 1333(b) (2)).

The BLM has an active program to offer excess wild horses for sale and adoption; see <http://www.blm.gov/wo/st/en/prog/whbprogram.html>. However, adoptions have not kept pace with the growing number of excess horses removed from the range. As part of the 2010 Appropriations Act, Congress directed the BLM to consider private proposals for “eco-sanctuaries” to provide cost effective, humane, and long-term care for excess wild horses as well as to provide public education and interpretive opportunities. In addition, the Proposed Strategy for Future Management of America’s Wild Horses and Burros (BLM, 2011) identified the development of sanctuaries as a reasonable and viable option with strong public support.

The proposed action analyzed in this Environmental Assessment (EA) was submitted in response to the BLM Washington Office’s 2012 Request for Applications (RFA) to provide wild horse eco-sanctuaries on private lands; see the project webpage: www.blm.gov/wy/st/en/info/NEPA/documents/lfo/ecosanctuary.html. The Double D Ranch was the only proposal received for lands within the Lander planning area. Although the proposed action does not involve any use of public land and is located entirely within the boundaries of the Wind River Indian Reservation, the placement of wild horses on private land is a federal action requiring analysis under the National Environmental Policy Act of 1969 (NEPA) available online at: <https://ceq.doe.gov/nepa/regs/nepa/nepaeqia.htm>.

1.2 National Environmental Policy Act Requirements

This NEPA analysis is undertaken to assist the BLM in making a determination as to the environmental consequences of the BLM entering into a cooperative agreement (CA) for a wild horse eco-sanctuary on lands owned or leased by Double D Ranch (DDR). An EA provides information for determining whether to prepare an Environmental Impact Statement (EIS) or to issue a Finding of No Significant impacts (FONSI). “Significance” is defined by NEPA and is found in regulation 40 CFR 1508.27 (available at <http://www.gpo.gov/fdsys/pkg/CFR-2012-title40-vol34/pdf/CFR-2012-title40-vol34-chapI.pdf>.) If the decision maker determines that this project has significant impacts following the analysis in the EA, then an EIS would be prepared for the project. If not, a Decision Record (DR)

may be signed for the EA approving the selected alternative. A DR, including a FONSI statement, documents the reasons why implementation of the selected alternative would not result in significant environmental impacts.

1.3 Purpose and Need

Populations of wild horses that have been removed from the public lands and placed in short and long term holding facilities have reached the BLM's overall holding capacity (BLM, 2014). Congress indicated that the BLM should utilize partnerships to establish eco-sanctuaries as an approach to holding excess wild horses. An eco-sanctuary is defined as a place that safely provides a natural and healthy habitat for excess wild horses where they will be properly cared for, yet allowed to roam freely, while conserving the environment and ecology of the lands. An eco-sanctuary offers the public the opportunity to engage with the cultural heritage of wild horses through public outreach and the creation of economic opportunities for local communities. The specifics of the eco-sanctuary are provided in the RFA. These eco-sanctuaries must be entirely on private land owned or leased by the applicant and must be located a minimum of 10 miles away from any existing Herd Management Areas (HMA).

The BLM has determined that additional long-term holding capacity is necessary to place wild horses that have been gathered but have proved difficult to adopt. BLM's policy is not to destroy excess horses; therefore, additional long-term holding is necessary to provide pasture capacity for care and maintenance of excess wild horses. The question to be addressed in this EA is whether to approve a wild horse eco-sanctuary either as proposed by the applicant or with some variations.

The proposed DDR eco-sanctuary project area consists of approximately 950 acres located seven miles north of Lander, Wyoming; five miles from the nearest BLM-managed lands (see Wild Horse Eco Sanctuary overview and detailed view maps in Appendix 1). Of the 950 acres identified within the project area, 489 acres are currently available for pasturing wild horses through land ownership or lease terms. The Applicant is actively working to secure the remaining acreage for additional wild horse pasture. The nearest HMA is approximately 30 miles east of the project area. The parcels making up the 489 acres, as well as the possible expansion area to 950 acres are displayed on the overview maps in Appendix 1.

In August, 2012, the BLM authorized the Deerwood Eco-sanctuary on 4,000 acres of private land west of Laramie, Wyoming; see: http://www.blm.gov/wy/st/en/programs/Wild_Horses/deerwood-eco.html. This is the only existing eco-sanctuary in Wyoming. In addition to the Double D Eco-sanctuary, the BLM is evaluating potential sanctuaries in Montana and Oklahoma. (http://www.blm.gov/mt/st/en/info/newsroom/2014/march/blm_initiates_public.html.)

1.4 Scoping

Scoping or soliciting public input is an important part of NEPA analysis. On October 30, 2013, the BLM announced the project on its NEPA Register. On February 3, 2014, the BLM issued a Scoping Notice and press release. Copies of the scoping notice were mailed to approximately 70 recipients, including the adjacent land owners. This project proposal was also covered widely in the local and national media outlets. The BLM received approximately 30 letters and e-mail comments. The

written comments are posted on the project online webpage; see Section 1.1. In addition, the proponent met with the Arapahoe Business Council and the Shoshone Business Council. The BLM also conducted internal scoping with a BLM interdisciplinary team.

1.5 Identified Issues and Resources

Through BLM's scoping efforts and meetings with interested agencies including the Bureau of Indian Affairs (BIA) and others, the BLM identified issues particular to this project:

- Grazing and wild horse management within the eco-sanctuary
- Impacts to neighboring areas and properties
- Fencing and other infrastructure issues
- Suitability of proposed area for an eco-sanctuary
- Impacts to wet soils and other water quality issues
- Compliance, monitoring and enforcement
- Noxious weed management
- Conflicts with feral or stray domestic animals

The following resources identified in 40 CFR 1508.27 are not present in the project area and therefore do not need to be further described or analyzed:

- Park lands
- Prime farmlands
- Wild and scenic rivers
- Ecologically critical areas

The following resources, which are typically addressed in a NEPA document, are not further analyzed either because the environmental impacts did not vary by alternative or the resource is not present:

- Minerals
- Fire and fuels
- Forest and shrubland vegetation communities
- Wildlife including greater sage-grouse (this area does not contain suitable habitat)
- Special status plants except Ute ladies'-tresses
- Paleontology
- Recreation because the possible use of facilities for equestrian or tourism events under the proposed action is too speculative and is not part of the BLM authorization
- Rights of ways and other realty actions
- Travel management
- Special designations
- Health and Safety is not addressed in that visitation is not part of the eco-sanctuary being analyzed in this NEPA document. The contract to be awarded if the sanctuary is authorized will require the operation to conform to all local ordinances applicable to a tourist operation.

1.6 Conformance to BLM Land Use Plan(s)

The Federal Land Policy and Management Act of 1976 (FLPMA) requires that an action under consideration be in conformance with applicable BLM land use plans and be consistent with other federal, state, and local laws and policies to the extent possible. The Lander Resource Management Plan (LRMP) (2014) makes decisions only for BLM managed surface and mineral estate. The placement of excess wild horses onto private grasslands is not subject to the BLM land use planning regulations as land-use plans are specific to public lands.

The proposed sanctuary is in conformance with federal laws, regulations, and policy. The proposed location complies with the spacing or distance requirements from an existing HMA. Removal of wild horses from public rangelands is consistent with the WFRHBA.

1.7 Relationship to Other Statutes, Regulations or Plans

Removal of excess wild horses from the public rangelands is required by the WFRHBA. The Proposed Action complies with the goals of the BLM Strategic Plan for the Management of Wild Horses and Burros on Public Lands (June 1992). These goals include perpetuating and protecting viable wild horse and burro populations and their habitat, and ensuring humane care and treatment of excess wild horses and burros.

In addition to the WFRHBA and FLPMA, the following statutes and regulations are of primary concern to this EA:

- The National Environmental Policy Act of 1969, as amended
- National Historic Preservation Act, as amended
- Endangered Species Act of 1973, as amended
- Migratory Bird Treaty Act of 1918, as amended
- 1868 Treaty at Fort Bridger

The Proposed Action does not conflict with any known State or local planning or zoning ordinance. This action is not specifically addressed in the Fremont County plan; however, the proposal is consistent with the land uses occurring within the area (e.g., ranching and agriculture). The Fremont County Commission submitted scoping comments.

2.0 Description of Alternatives Including Proposed Action

2.1 Alternative A- Proposed Action

The Proposed Action is for the BLM to enter into a Cooperative Agreement (CA) for the care and maintenance of up to 250 excess wild horses on irrigated and sub-irrigated grassland pastures on private and leased lands within the boundaries of the Wind River Indian Reservation in Fremont County, Wyoming. The Proposed Action will result in converting a cattle ranch operation of approximately 380 cattle and 40 non-BLM horses into a wild horse eco-sanctuary. Existing facilities,

range improvements and the re-construction of portions of the existing perimeter fence between Double D Ranch and neighboring private property are also part the Proposed Action.

Wild horses maintained at the Double D Ranch will primarily come from Wyoming HMAs, but may also consist of wild horses from neighboring states. Horses are easily identified as to which facility they are from by the freeze brand on the left side of their neck. In general, horses that will be placed in the proposed sanctuary are wild horses that have been exposed to people and have adjusted to being fenced-in or placed in short term holding facilities. The CA will specify the period of project performance as one year with the option for four additional years. A CA can be re-negotiated at the end of each successive five year period. For purposes of this EA, the BLM, for the Proposed Action, assumes that the eco-sanctuary will continue into the foreseeable future although a Determination of NEPA Adequacy (DNA) or further NEPA analysis will be required at each renewal period.

The Proposed Action has been generated from the proposal submitted by the DDR in response to the RFA. The Proposed Action includes all features required by the RFA; these will be formalized in the CA if selected. For purposes of this NEPA analysis, the following specifics will be considered:

1. Wild horses will be maintained in non-reproductive herds. Any age animal can be shipped into the facility from other short term holding facilities; although older, harder to adopt animals will make-up the majority of this herd. Additional wild horses will be brought in as existing wild horses (depending on age) are either shipped to adoption events, sold or die over the life of the CA.
2. Wild horses will be maintained on private and controlled lease lands in pastures that are large enough to allow free-roaming behavior and that provide forage and water necessary to sustain the animals in good condition.
3. Handling of wild horses and sorting of the animals through chutes, gates and corrals will be minimized to the extent possible.
4. Regular on-the-ground visual observations and weekly counts of the wild horses to ascertain their well-being and safety will be conducted by the applicant. Quarterly site visits and inspections will be conducted by the BLM to assure wild horses and facilities are in good condition. The BLM's wild horse specialist will have sufficient knowledge and experience in wild horse behavior and nutritional requirements to provide professional assistance to evaluate the management and care of wild horses by Double D Ranch.
5. A disease abatement plan will be in place prior to arrival of the first wild horses and will include details on what actions will be taken in the event of a disease outbreak. Individual records for all wild horses will be maintained and provided to the BLM annually.
6. A contingency plan will be in place to ensure wild horses remain in good condition during difficult weather events such as deep snow or prolonged drought and an evacuation plan will be in place in the event of a wildland fire or other emergency that threatens the Double D Ranch.

7. Lands within the eco-sanctuary will be managed to ensure that hydrologic, nutrient, and biotic cycles are maintained in order to support healthy watersheds, native biotic populations and communities for as long as wild horses remain on the eco-sanctuary.
8. Economic activities that promote eco-tourism and attract visitors to the sanctuary will be considered.
9. The establishment of the sanctuary will be in compliance with all federal, state, and local governmental law and/or ordinances including the Clean Water Act.
10. Fencing and range infrastructure: The CA will require the use of fence standards that are equivalent to existing BLM standards and provide for safe wildlife movement/migration. Existing fencing will be modified to meet the following requirements:

Perimeter and division fences will be constructed to a maximum height of 48 inches. Approximately 1.5 miles of new interior fence construction will be required in order to successfully implement a grazing system that provides for deferment of vegetation. The majority of new fence construction will consist of four single strands of barbed wire, but in some areas the fence may be a combination of barbed and smooth wire strong and high enough to prevent trespass issues. An estimated 6 miles of perimeter type fencing would need to be completed prior to the arrival of horses. This perimeter fence may be barbed wire or horse safe type fence taller than 48” to prevent mixing of neighboring horses.

11. The recipient will flag certain fences with eight inches of suspended flagging attached to the top horizontal member of the fence every 100 feet to make the fences more visible to wild horses (or native wildlife). In some areas, existing fences will need to be reconstructed in order to prevent horses from trespassing onto adjacent private land. Modifications may include raising the bottom wire to 16-18 inches off the ground; use of extensive flagging to increase visibility; or, the construction of gates or sections of let-down fence at key wildlife crossings and openings or letting down these sections when wild horses are not in the pasture.

Prior to horses being released a detailed inspection of all perimeter fencing will be conducted as well as during the first year of operation to determine which sections are most prone to trespass issues. These sections will be reinforced, re-constructed or modified to reduce or eliminate trespass issues from or onto the eco-sanctuary. In most cases, this will mean installing 1 additional wire (barbed) to a height greater than 48 inches. Electric fencing may also be installed along segments of the perimeter fence to prevent trespass issues.

12. Gates, rather than cattle guards, will be used at all road crossings or fence openings.
13. The CA, available on the project webpage and consistent with BLM policies, has additional requirements on the construction of corrals, chutes and runways and the requirements for pastures, supplemental feed, feed supplements, and water.

14. Pastures will be fenced and will be large enough to allow free-roaming behavior, provide sufficient year-round forage (including native vegetation and/or feed supplements and supplemental feed, as needed), include natural shelter areas and areas with sufficient rock or gravel to provide for natural hoof wear and provide a year-round source of fresh water. The applicant will arrange for hoof trimming if natural wear is not sufficient. A “tip” chute provided by the BLM may be used to trim the horse’s hooves. In most cases, the size of pastures will vary from 40 to 80 acres. There are a total of 18 pastures under the Proposed Action, which includes the use of all 950 acres once all leases are secured. Under the Proposed Action, the existing pasture grazing rotation developed by the Natural Resources Conservation Service (NRCS) would continue to be used as described in Table 1, below. Working corrals and smaller pastures will be utilized to acclimate and quarantine the wild horses.

15. Animal Health Program: The CA has additional requirements for pastures, supplemental feed and feed supplements. Specific provisions of the CA address issues raised during the scoping period. These are:
 - a. All wild horses will have current vaccinations upon arrival and will be shipped in accordance with State of Wyoming livestock regulations. The eco-sanctuary horses will receive appropriate boosters and vaccinations as necessary through the care of a licensed veterinarian.
 - b. The applicant is a licensed veterinarian and will have a back-up veterinarian on call when away. These doctors will provide typical veterinarian services such as diagnosing and treating sick and injured horses.
 - c. Horses will be humanely euthanized when necessary and in accordance with BLM euthanasia policy (IM-2009-041). In the event euthanasia has to be performed, the applicant will provide written documentation regarding the cause of death. Tissue samples will be collected for postmortem examination as required by the BLM and the remains will be disposed of in accordance with Wyoming State law.

16. Feeding: Short, warm summers and long winters are typical within the project area and will require supplemental feed in the form of native grass hay, alfalfa or alfalfa/grass mix. Hay will be green, leafy, and free of mold, dust, and weeds. Supplemental winter feeding will occur on the hay meadows or pastures once snow begins to fall. It is a common practice to turn livestock out on hay meadows following harvest. The remaining vegetation following harvest is referred to as “aftermath” which can have a high nutritional value.
 - a. Hay will be fed for approximately four months during the fall/winter/spring at a rate of 25-30 pounds per animal per day. Animals must have adequate nutrition to maintain their body condition at a Hennecke score of 4-6 (Appendix 5). Hay will continue to be fed until sufficient snow melt has occurred and pastures are ready to be grazed. Hay will be fed on the ground with feeding location(s) moved often to minimize concentration of animals for any length of time.

- b. Salt and mineral supplements will be provided and moved frequently to encourage movement of wild horses. Wild horses in their native habitat are accustomed to ranging long distances from water to find adequate forage.
17. Vegetation monitoring will be conducted jointly by the BLM and the applicant on each of the soil and vegetation sites within the eco-sanctuary. Utilization associated with grazing wild horses on the irrigated and sub-irrigated pastures will be monitored by the applicant using the Wyoming Rangeland Monitoring Guide (August, 2001) to determine if pasture management practices need to be altered. Wild horse body condition will also be observed and recorded regularly and animals will receive additional feed, when needed.
18. Grazing plan: The NRCS developed a cattle grazing system that includes existing pastures and structures within the project area based on ecological site descriptions (see USDA NRCS Ecological Site Descriptions: <http://www.nrcs.usda.gov/wps/portal/nrcs/main/national/technical/ecoscience/desc/>). NRCS's analysis and grazing system, on which the BLM relies, are available on the eco-sanctuary webpage. Double D Ranch (DDR) is proposing to use the same grazing system under their proposal to pasture the BLM horses. The BLM and others use the term Animal Unit Months (AUMs) as the amount of forage necessary to feed one cow and calf for one month. Since horses generally consume more forage than cattle, the AUMs in the tables that follow have been increased to reflect this difference. An AUM is 780 pounds of forage per month for cattle or 975 pounds for a horse.
- a. The NRCS plan includes a rotational grazing system that provides growing season deferment for each pasture. Under the Proposed Action, the AUMs identified by NRCS are based on soils and ecological site descriptions inventoried in the project area. On leased lands, the AUMs will be limited to those authorized by the BIA. The pastures are displayed on the Pastures and Acreages Map in Appendix 1.
 - b. The AUM production assumes an average of approximately two tons to two and a half tons of hay per acre based upon the NRCS's productivity analysis of soil type, fertilizer and average management. The AUMs for the Proposed Action and the BLM Preferred Alternative are for horses (provided below). Based upon the NRCS's production calculations, each acre of pasture provides five cattle AUMs or four horse AUMs.

Table 1 identifies the grazing days and AUMs under the Proposed Action, including the 25% additional forage needed for horses.

Table 1 – Proposed Action Forage Requirements for Open Pasture Grazing

| Horses | Pounds of Forage Required per Month | Months of Feeding | Pounds Forage Grazed | AUMs of Forage Grazed for the Year | Average Forage Production on the Ranch- AUMs |
|--------|-------------------------------------|-------------------|----------------------|------------------------------------|--|
| 250 | 243,750 | 8 | 1,950,000 | 2,500 | 1,678 |

Grazing Days by Pasture

| Pasture | Acres | AUMS Available | Lands Controlled by Applicant | Days of Grazing Under Preferred Alternative | Days of Grazing Under Proposed Action |
|---------------|------------|----------------|--|---|---------------------------------------|
| 1 | 40 | 228 | Deeded | 32 | 22 |
| 2 | 45 | 0 | Not Authorized by BIA at this time | -- | 0 |
| 3 | 40 | 36 | Not Authorized by BIA at this time | -- | 4 |
| 3A | 36 | 51 | Not Authorized by BIA at this time | -- | 5 |
| 4 | 29 | 0 | Not Authorized by BIA at this time | -- | 0 |
| 5 | 82 | 120 | Trust | 17 | 12 |
| 6 | 37 | 40 | Not Authorized by BIA at this time | -- | 4 |
| 7 | 44 | 235 | Deeded | 33 | 23 |
| 8 | 80 | 115 | Not Authorized by BIA at this time | -- | 11 |
| 9 | 84 | 160 | Trust | 22 | 16 |
| 10 | 40 | 75 | Not Authorized by BIA at this time | -- | 7 |
| 11 | 40 | 211 | Deeded | 29 | 21 |
| 12 | 51 | 272 | Deeded | 38 | 26 |
| 13 | 22 | 118 | Deeded | 16 | 11 |
| 14 | 40 | 214 | Deeded | 30 | 21 |
| 15 | 40 | 75 | Not Authorized by BIA at this time | -- | 7 |
| 16 | 80 | 150 | Not Authorized by BIA at this time | - | 15 |
| 17 | 86 | 120 | Trust | 17 | 12 |
| 18 | 40 | 214 | Private Lease – Not secured at this time | -- | 21 |
| Total: | 956 | 2,434 | | 234 | 238 |

Under the Proposed Action, approximately four to five months of supplemental feeding of locally acquired hay would be needed. Table 2, below displays the amount of supplemental feed needed to support the BLM horses during the dormant period of the season under the Proposed Alternative.

| Table 2-Hay Requirements for Winter Feeding | | | | |
|--|---|--------------------------------------|----------------------------|--------------------------------|
| Horses | Pounds of Hay Required per Month at 27 lbs./ day | Length of Time Feeding Months | Pounds Hay Consumed | Tons of Hay feed Winter |
| 250 | 6,750 | 4 | 810,000 | 405 |

The ranch would not be authorized to accept any wild horses until the BLM verified that fencing and other required infrastructure are in place and maintained. This includes the removal of debris and other items in the fields that could pose harm to the horses, including the structures located close to Highway 287. Under the Proposed Action, the full number of horses (250) would be incorporated into the agreement and grazing system once the applicant secures the additional acreage. The applicant and BLM will monitor vegetation health, riparian area impacts, and impacts to soils using the Wyoming Rangeland Monitoring Guide (2001).

Under the Proposed Action, treatment of sick horses will be done in corrals, chutes or holding pens. Eventually, the applicant may convert an existing ranch building into a facility where more sophisticated horse care can be provided. Since this development will not be required by the CA, it will not be analyzed in this EA. If the subsequent conversion occurs, it may be a federal action that requires additional NEPA analysis.

All wild horses brought to the eco-sanctuary will be BLM freeze-branded for identification. The applicant will prepare a contingency plan in case any of the BLM horses escape from the eco-sanctuary's fenced pastures. The applicant will develop a contingency plan to retrieve any escaped horses as soon as possible, but no longer than 48 hours and examine them for injuries. While the ranch will be required in the CA to take all reasonable precautions to keep the BLM horses in the eco-sanctuary, Wyoming is a "fence out" state for cattle and horses, which requires private property owners to fence their property from loose stock. Any trespass issues will be handled in accordance with the regulations of the Wind River Indian Reservation and enforced by the BIA. Adjoining neighbors will call the applicant or the BLM about escaped horses. The applicant would be notified and will cooperate, as necessary, with the gathering of trespass BLM wild horses.

Pastures near the house and barns as well as along pasture roads are currently treated for invasive weeds occasionally by Double D Ranch staff. A noxious weed inventory and treatment plan would be developed by the applicant in 2015 and implemented as part of the management of the eco-sanctuary. County regulations require that all pesticides used be determined to be safe for grazing animals.

Existing irrigation infrastructure will require repair and perhaps upgrading. The Waterways Map (Appendix 1) shows the existing irrigation infrastructure within the proposed wild horse eco-sanctuary. Under the Proposed Action, the applicant will work with the irrigation branch of the BIA to make the required upgrades and repairs. In addition, the applicant is currently working with the NRCS to remove corrals and fencing that allows livestock to congregate in and near Mill Creek, Coolidge Canal

and an unnamed drainage. This and the other riparian/wetland features of the ranch are discussed below in the Affected Environment.

Tourism and Visitor Services: The Proposed Action includes development of a tourism and education center that would interpret the history of wild horses in North America. Working with the local tribes, the eco-sanctuary staff would develop displays and provide information on the role of horses in Native American culture. An information center and gift shop would be developed utilizing existing structures, including an existing log cabin. The portions of the applicant's proposal describing some of the visitor services and possible future development are attached as Appendix 3. These future developments are not a part of the CA. Since they are outside the scope of the Purpose and Need for the action, they will not be considered further except under the Cumulative Impacts section of this document.

2.2 Alternative B- No Action Alternative

The No Action Alternative is to not issue a CA for the care of excess wild horses on the private and leased lands of Double D Ranch. The Double D Ranch has traditionally been used to pasture 400 mother cows year round (calving, weaning and maintenance of mother cows). The Double D Ranch currently has 380 mother cows on the ranch and approximately 40 horses.

Under the No Action Alternative, the Double D Ranch would continue to be managed under the terms of the NRCS grazing plan. The applicant would have no obligation to remove the existing debris or dilapidated buildings. For purposes of analysis, the No Action Alternative assumes that ranch facilities would not be upgraded or fencing repaired although the applicant would be free to make any improvements that he determined to be beneficial. This EA assumes that the work currently underway under a cost-share agreement with the NRCS would continue as it is independent of the BLM's decision on the eco-sanctuary proposal but that new facilities and eco-tourism outreach would not occur.

Excess BLM wild horses removed from public rangelands will either be sent to contracted long-term pastures if available, or will be cared for in short-term facilities that provide an average of 700 square feet per animal.

2.3 Alternative C- The BLM Preferred Alternative

The BLM Preferred Alternative is similar to the Proposed Action in that the DDR would convert the existing cattle and small horse operation to a wild horse eco-sanctuary. However, since the Applicant has not secured the entire 950 acres, the Preferred Alternative only considers the 489 acres that are owned or leased by the Applicant. Under the Preferred Alternative, 100 horses would be placed within the project area with the option to increase the numbers to 150 if the Applicant successfully meets monitoring and compliance requirements. The 489 acres currently under the applicant's management produce sufficient forage for 150 horses for 282 days or about 9 ½ months. Horses would be rotated through a planned grazing system similar to what was proposed under the Proposed Action, incorporating the use of the multiple pastures within the project area. Rotation of wild horses would allow adequate time for vegetation to recover following grazing use. The remaining forage needed for approximately four months may be grown on hayfields currently

controlled by the applicant or purchased. Once the fencing and other necessary facilities are maintained, the wild horses would be brought to the eco-sanctuary in small groups of 30 to 35 horses.

All other aspects of the operation, including fencing and needed infrastructure, would be the same as the Proposed Action. Under this alternative, there would be nearly 5 acres per horse or about 280 times the space in a typical short term holding facility.

Under the Preferred Alternative, the BLM and the applicant would monitor horse health, vegetation and forage conditions using the same methods and techniques described in the Proposed Action. The applicant would supply the required veterinarian services for sick or injured horses and monitor for overall herd health. The same one-year term with an optional four years extension would be in place. The applicant would be required to meet all of the terms of the RFA as memorialized in the CA. At the applicant's discretion, the additional outreach and tourism stated in the proposal would be conducted.

Table 4 is the same as Table 1 above with the addition of information for the Preferred Alternative.

| Table 4 - Forage Requirements for Open Pasture Grazing | | | | | | |
|---|--------|----------------------------|--------------------------|----------------------|------------------------------|--|
| Alternative | Horses | Pounds of Forage per Month | Months of Feeding Months | Pounds Forage Grazed | Annual AUMs of Forage Grazed | Average AUM Forage Production on the Ranch |
| Proposed | 250 | 243,750 | 8 | 1,950,000 | 2,500 | 1,678 |
| Preferred | 100 | 97,500 | 9 | 780,000 | 1,125 | 1,678 |

| Pasture | Acres | AUMS Available | Lands Controlled | Days of Grazing Under Proposed Action | Days of Grazing Under Preferred Alternative |
|---------------|------------|----------------|------------------|---------------------------------------|---|
| 1 | 40 | 228 | Deeded | 22 | 37 |
| 5 | 82 | 120 | Trust | 12 | 19 |
| 7 | 44 | 235 | Deeded | 23 | 39 |
| 9 | 84 | 160 | Trust | 16 | 26 |
| 11 | 40 | 211 | Deeded | 21 | 34 |
| 12 | 51 | 272 | Deeded | 26 | 44 |
| 13 | 22 | 118 | Deeded | 11 | 19 |
| 14 | 40 | 214 | Deeded | 21 | 35 |
| 17 | 86 | 120 | Trust | 12 | 19 |
| | | | | | |
| Total: | 489 | 1,678 | | 164 | 272 |

Table 5 is the same as Table 2 with the addition of information regarding the hay requirements for winter feeding under the Preferred Alternative.

| Table 5 - Hay Requirements for Winter Feeding | | | | | |
|--|--------|--|-------------------------------|---------------------|-------------------------|
| Alternative | Horses | Total lbs. Hay per Month 27 lbs./ day | Length of Time Feeding Months | Pounds Hay Consumed | Tons of Hay feed Winter |
| Proposed | 250 | 6,750 | 4 | 810,000 | 405 |
| Preferred | 100 | 2,700 | 4 | 324,000 | 162 |

2.4 Alternatives Considered and Eliminated from Detailed Analysis:

An alternative was considered that authorized only 100 head without options to increase the numbers over time. The minimum number of horses to qualify as an eco-sanctuary is 100. However, this number is less than the carrying capacity of the controlled acres (see Table 1) and would not likely produce enough income to make the eco-sanctuary economically viable over the long-term. The cost of new fencing and other infrastructure would not be sufficiently offset by the BLM payment to justify the applicant's investment. In addition, the management cost to the BLM would remain the same as if a larger number of horses were accommodated at the ranch making the supervisory cost per horse much higher with no economy of scale. This alternative was not carried forward for detailed analysis because it did not meet the project's Purpose and Need for an economically sustainable project.

2.5 Assumptions for Analysis:

The two action alternatives carried forward for analysis assume that the CA's requirements for horse management and treatment will be adequate to provide for the long term wellbeing of the horses. This EA also assumes that the fencing required by the CA will be adequate to safely restrain the horses so that issue is not further analyzed in this EA.

3.0 Affected Environment and Environmental Impacts

3.1 Air Resources

The climate in the area near the Double D Ranch is a combination of Intermountain Semi-Desert and Southern Rocky Mountain Steppe. The Ranch is in the 10-14" precipitation zone. The ranch area is generally sunny with most precipitation historically occurring in spring. The area is often windy which contributes to drying of the land.

The Lander Field Office Environmental Impact Statement for the revision of the Resource Management Plan (BLM, 2013) analyzed the air quality within the LFO management area. The data indicate that annual average of measured air quality indicators were well below state and national limits including concentration of Criteria Pollutants and Hazard Air Pollutants. Visibility data collected at the Popo Agie Wilderness approximately 16 miles south west of the ranch show very good to excellent visibility, even for the 20% haziest days. Federal air quality regulations prohibit the degradation of the air shed of Class 1 air resources such as certain Wildernesses including the Popo Agie Wilderness.

The changing climate in the Rocky Mountain west is predicted to be warmer with more precipitation occurring in the form of spring and summer storm events. Over time, this may impact the availability of irrigation water from glacial melt in the Wind River Mountains. There are no indicators that this reduction will affect any proposed uses under any alternative within the foreseeable future. Changing climate over the long-term may require the proponent to change seed mixes for his pastures to shift to more warm weather types of grasses.

Impacts to Air Resources

All alternatives involve utilizing the ranch for grazing purposes which is not a meaningful contributor to air emissions including greenhouse gases on the scale proposed in any of the alternatives. Assuming that the pastures are maintained and not grazed down to the point where erosion results, there is unlikely to be any measurable dust created by any alternative that might reduce visibility in the nearby Wilderness, particularly since prevailing winds originate from the Wind River Mountains where the wilderness area is located.

The BLM expects visitation of the eco-sanctuary including an increase of vehicle traffic into and out of the project area. However, the increased traffic, including that on Highway 287, is unlikely to produce emissions that would cause any air quality standards to be exceeded or other degradation of air quality.

3.2 Soil and Vegetation

The vegetation on the ranch consists of introduced and native grass species that have been part of an agricultural operation for many decades. Many of these species are dependent on irrigation or sub-irrigation for production. Under all alternatives, this EA assumes that irrigation will continue to be available in the future because of the high priority of the water rights on the WRIR. Soil is displayed on the Soil Map and Vegetation on the Vegetation Map in Appendix 1.

The Natural Resources Conservation Service (NRCS) Fremont County Soil Survey states that a fertilized, sub-irrigated, hay meadow should be able to produce an average 2-2.5 tons per acre in a normal precipitation year; the NRCS calculations are available on the project webpage. The Double D Ranch hay meadows have been producing 2-2.5 tons per acre annually for the last 10 years. NRCS estimates a value of 2.5 AUMs per ton of hay. The NRCS has many decades of experience working with private land owners and operators in evaluating production from hay fields such as those on the Double D. For purposes of this EA, the BLM assumes that the NRCS production estimate is correct. For BIA leased lands in this EA, production estimates from BIA grazing permits were used. If production levels are not achieved (for any reason, including drought), both action alternatives assume the Double D Ranch will be able to purchase additional hay to supplement the open grazing consumption, or reduce the number of horses.

The NRCS's production was based upon the soil type from the Wind River Basin Soil Survey. These are estimated production figures based on good land management practices such as rotational grazing and normal to near normal precipitation. General vegetation communities on the Double D Ranch consist of mostly irrigated or sub-irrigated sites. The estimated yields reflect the productive capacity of each soil type and were used by the NRCS to provide the AUMs from each pasture.

Impacts to Soil and Vegetation

Overgrazing can result in adverse impacts to vegetation through stunted above and below ground growth, which can limit soil carbon storage (Oates and Jackson 2014) and forage available for grazing. Loss of vegetation can result in higher soil erosion and the loss of important topsoil. In low precipitation areas, such as at the ranch location, loss of vegetation health can be difficult to reverse and may require new seeding and supplementation. This would require more irrigation than is presently being used.

The BLM Preferred Alternative would have modestly beneficial impacts to vegetation, and thus soil, because it would result in the lightest grazing. Although the Proposed Alternative would gradually build up the number of horses to a maximum of 250, the Preferred Alternative would result in the least amount of forage utilized and therefore the least likelihood of overgrazing. Since it is less grazing than the system that produced the current condition, management under the action alternatives could improve vegetation and soil condition. The Proposed Action would likely result in greater impacts to vegetation in comparison to the Preferred Alternative but less than the No Action Alternative because it would be a reduction in use. The No Action Alternative is likely to result in the greatest chance of overgrazing since the NRCS AUMs could be maximized (except where precluded by BIA leases) with limited monitoring by the NRCS. Under both action alternatives, the applicant (with BLM involvement) will monitor forage utilization and vegetation health and adjust horse numbers as needed.

Soils and production estimates were obtained from the Wind River Basin Soil Survey. These estimates are production figures based on good land management practices, such as initiating rotational grazing systems, and average precipitation data.

3.3 Invasive Weeds

A detailed inventory of invasive weeds within the project area has not been conducted; however, several invasive weeds are present, including: Canada and musk thistle, black henbane, leafy spurge, and white-top. Under both the Proposed Action and the BLM Preferred Alternative, the applicant would be required to develop and implement a weed management plan in consultation with the BLM and Fremont County Weed and Pest. The weed management plan would include inventory, treatment, and post-treatment monitoring for each weed species.

Impacts to Invasive Weeds

Under the No Action Alternative, the applicant would continue to treat weeds as staffing and funding allow. Both action alternatives would have a beneficial impact by managing weeds to a greater extent than under the No Action Alternative, which would allow for only periodic weed management as farm employees and funding allowed.

3.4 Cultural Resources

The BLM worked in conjunction with the Bureau of Indian Affairs (BIA) and the Tribal Historic Preservation Officers (THPOs) from the Eastern Shoshone and Northern Arapaho Tribes to establish survey parameters suitable for this undertaking. An intensive cultural survey was deemed appropriate for areas where future developments are anticipated (e.g. fences, corrals, and buried water lines). Future developments are anticipated on the 280 acres of deeded ground belonging to the project applicant and along 70 acres of the project periphery requiring new fencing. A Class III intensive cultural resource inventory was conducted in the summer of 2014 by Atlatl Industries, LLC covering 350 total acres of combined block and linear inventory. All cultural resources located within areas potentially affected by this project were found to be Not Eligible for listing on the National Register of Historic Places by the BLM, the Northern Arapaho THPO, and the Eastern Shoshone THPO. No significant cultural resources were located within the project area.

Impacts to Cultural Resources

Under the No-Action Alternative, no effects on cultural resources would be expected beyond the current situation. The No Action Alternative has no potential to impact historic properties.

Under both action alternatives, no significant cultural resources exist within the project area(s). The action alternatives have no potential to impact historic properties; therefore the standard cultural stipulation (see Appendix 2) would be applied.

3.5 Water Resources

The project area lies within the Wind River watershed and contains reaches of the Mill Creek tributary, as well as Coolidge Canal and an unnamed linear feature. In addition to the natural drainage networks, there are also anthropogenic irrigation systems in the project area that support hay production. Current influences on water resources include cattle grazing and hay production related irrigation. Water resources in the area are displayed on the Waterways Map in Appendix 1.

Flows from springs, seeps, and wells vary from several gallons/minute to wet spots that are a few feet in diameter. Water quality of perennial sources is generally good and supports use by livestock and riparian habitat. From above and below the Double D Ranch, these water features appear to be heavily grazed with visible adverse impacts to stream banks and riparian areas. In addition to the natural waters, the pastures are sub-irrigated as part of the BIA irrigation system (see Waterways Map). As indicated above, the assumption for analysis is that there will be sufficient irrigation water to maintain the pastures to produce the forage calculated by the NRCS.

Impacts to Water Resources

Under the No Action Alternative, the cost-share removal of existing fencing that degrades the banks and riparian areas along Mill Creek will be completed. For purposes of this EA, these improvements are treated as part of the affected environment. Other than these improvements, the No Action Alternative is not expected to result in any improvements to water and riparian resources, so the existing negative impacts would likely continue.

The two action alternatives would have fewer negative impacts to riparian wetlands and water quality. As a federal undertaking, the BLM will require that an eco-sanctuary comply with the Clean Water Act as enforced by the Wind River Environmental Quality Commission (WREQC). (The laws apply equally to purely private actions such as the Double D Ranch but the WREQC is not staffed to enforce those regulations.) Further, irrigation infrastructure would likely be impacted to a lesser degree from horses than cattle because horses generally do not rub and interact with structures as cattle do. The overall number of horses will be less than total number of cattle within the project area, which should directly reduce impacts to structures in the area. The applicant would continue to pay irrigation fees associated with lands the applicant owns and controls.

In addition, wild horses do not linger in riparian areas as much as cattle do when temperatures are high or when green forage is not available in non-riparian areas. The switching of operations from cows to horses will also reduce the number of animals in the riparian areas. Moreover, the BLM would require the operator to place mineral and feed supplementation away from water resources. This would reduce the adverse impacts from grazing within the project area. Regular monitoring by the applicant and

oversight from the BLM would ensure water management issues were being addressed. Compared to the current condition of the irrigation infrastructure and stream banks, actions under this alternative would likely lead to improved water resources. The Preferred Alternative would have the least impact to soil and water resources since it contains the least amount of grazing animals. Over time, soil and water conditions are likely to improve at a faster rate than under the Proposed Action and No Action alternatives.

The No Action Alternative will continue the cattle operation with bank destabilization, loafing, and over-use of riparian vegetation. The removal of the corrals and buildings near Mill Creek under the cost share agreement with the NRCS is likely to reduce the impact of cattle on the irrigation canal. However, overuse of the riparian vegetation and wetland areas is expected to continue.

3.6 Wild Horses

Excess wild horses removed from public rangelands are kept in short-term holding facilities. Animals can be adopted (usually younger aged animals or animals with color) or sold (11 year and older animals). Short-term holding facilities receive wild horses following the BLM wild horse gathers where BLM staff freeze brand, vaccinate, worm, and acclimate the wild horses to hay. Horses are vaccinated for a variety of infectious disease, including tetanus, influenza, strangles, rabies and West Nile virus. In both short-term and long-term grassland pastures animals receive all the forage, water, feed supplements and supplemental feed they need to maintain body condition. The major difference is the amount of space for each animal. In short-term holding facilities, a wild horse has an average of 700 square feet of space. Under the Proposed Action and the Preferred Alternative, each horse would have an average of 142,005 square feet or just over three acres, which will provide fresh, seasonal forage (green grass) because of the actively managed irrigation system.

There are currently over 15,000 wild horses in short-term holding facilities. The BLM anticipates there is an adoption/sale demand for approximately 2,500 wild horses annually. The remaining wild horses are excess animals that require some sort of long-term care. At present, there are over 33,000 wild horses in BLM-contracted long-term grassland pasture facilities.

Impacts to Wild Horses

This situation would not change under the No Action Alternative and the adverse impacts associated with small, corralled spaces would continue. Both action alternatives only provide minimal improvement to the excess holding capacity problem nationally. However, both action alternatives have the potential of providing an important test case by using a new approach to eco-tourism as one potential solution to the long-term holding issue.

The Double D proposed eco-sanctuary may provide a good model for eco-tourism success. Thus, the benefits to the BLM's wild horse program go beyond those associated with caring for a relatively low number of wild horses.

As indicated above, this EA is to evaluate the establishment of an eco-sanctuary in the specified location. The BLM's policy of conducting gathers of wild horses in excess of AML or its use of short or long-term holding facilities is outside the scope of the Purpose and Need for this eco-sanctuary, as are the comments about wild herd social structure concerns, or whether to conduct gathers at all. This

EA analyzes an eco-sanctuary for already gathered horses that have been taken out of a herd social structure. Similarly, the concerns raised in several comments that the horses in the eco-sanctuary be limited to those gathered from a specific geographic location (the WRIR, Fremont County, the State of Wyoming) is difficult to address because the target horses have been mixed together in holding facilities. While many of these horses were gathered from public lands in Wyoming and some from HMAs within Fremont County, it is possible that horses from outside the geographic area could be placed within the eco-sanctuary.

Wild horses in the eco-sanctuary will typically be of 10 plus years in age, or unadoptable animals. These animals will be all of one sex, either geldings or mares and be a non-reproducing herd. Most of these horses will no longer exhibit reproducing herd behavior as the studs have been castrated and the mares are all the same sex. Animals will be rotated from one pasture to the next and trained to be herded by the applicant. The Mantle wild horse training facility in Wheatland, Wyoming has successfully used hay and pellets to train the horses to rotate. The horses will follow the supplemental feed vehicle used to distribute feed and supplement(s). In so doing horses will then follow the feed vehicle through a gate and into the next pasture. The use of rotational grazing will allow vegetation to recover and attain vigor prior to winter dormancy.

To ensure that the wild horses are given quality supplemental feeding, under both action alternatives, the BLM would apply the feeding stipulation in Appendix 2 as a condition of approval.

3.7 Wildlife and Fisheries

Any federal project must consider impacts to species listed under the Endangered Species Act (ESA) even if the project is on non-federal lands. Desktop analysis indicated that potential habitat for Ute ladies'-tresses orchid (*Spiranthes diluvialis*)—a U.S. Fish and Wildlife Service (USFWS) Threatened species—could be present in the project area. No other species listed or proposed for listing by USFWS were determined to have potential habitat present in the project area. Lands within the project area have been converted to agricultural use and heavily grazed for many years. There is potential nesting and brood rearing habitat for a variety of migratory bird species and raptors. No comments were received from the WGFD. Within the WRIR boundaries, the USFWS is the lead agency that identifies impacts to all wildlife species within reservation boundaries. The Service's comments are addressed below.

Ute Ladies'-Tresses

Ute ladies'-tresses (ULT) is a perennial orchid, 8 to 20 inches tall, with white or ivory flowers clustered into a spike arrangement at the top of the stem. ULT was listed as Threatened in 1992 (USFWS 1992a). Populations have been reported in Niobrara, Converse, Goshen, and Laramie counties but not in Fremont County (Fertig et al., 2005). ULT inhabits low, flat floodplain terraces, or abandoned oxbows below 7,000 feet (USFWS 1992b). Sites are sub-irrigated, often seasonally flooded, and remain moist into the summer. Soils are sandy loams, sands, and silt loams derived from Quaternary alluvial deposits. During the past decade, surveys for the species have located additional populations along irrigation canals, berms, levees, irrigated meadows, excavated gravel pits, roadside barrow pits, reservoirs, and other human-modified wetlands (Fertig et al., 2005).

The proposed project area falls within the USFWS Section 7 consultation range for ULT; thus, the BLM must consult with the USFWS if the proposed project “may affect” this listed species or its habitat. While there are no known populations of ULT in the project area (WYNDD 2012), potential habitat exists along Mill Creek. ULT can only be reliably found and identified when it is flowering, which typically occurs from late-July through mid-August in the closest known population located in the Antelope Creek sub-basin in Converse County on lands administered by the BLM Casper Field Office. Surveys conducted at other times of the year are not reliable and are therefore not acceptable to the USFWS for purposes of clearance under Section 7 of the ESA.

On August 12, 2014, the LFO Botanist visited the Antelope Creek ULT population and observed approximately 40 ULT plants in flower, as well as the overall habitat and associated species. On August 14, 2014, the LFO Botanist surveyed the section of Mill Creek in the proposed project area for ULT. Field reconnaissance confirmed that suitable habitat exists along Mill Creek; however, no ULT plants were observed. Many orchid species take 5 to 10 years to reach reproductive maturity; this appears to be true for ULT (USFWS 1992a). Furthermore, reproductively mature plants do not necessarily flower every year. For these reasons, 2 to 3 years of surveys are necessary to determine presence or absence of ULT (USFWS personal communication). The BLM’s brochure on ULT orchids is attached as Appendix 4.

Raptors

The USFWS stated that they did not have any information on raptor nests in their observation database. The Service indicated that it is possible that Swainson’s and red-tail hawks as well as great-horned owls could nest in suitable nest trees. Habitat for short-eared owls and northern harriers and ground nesting species is possible as well. Since accurate information is not available, a raptor survey during suitable nesting times should identify active nests prior to any construction being authorized. The Service requested being advised regarding the results of any survey.

Impacts to Wildlife and Fisheries and Special Status Species

The proposed project is unlikely to affect any raptors nesting in the project area except for the possible damage from trampling of nests. Trampling is the most likely to occur under the No Action Alternative and the least likely under the BLM Preferred Alternative, which has the lightest level of grazing.

The BLM will conduct surveys during nesting periods prior to construction of fences and other disturbances to determine if active nests are present. A timing stipulation will be applied as a condition of approval.

The proposed project is unlikely to directly or indirectly affect the ESA-listed Ute ladies’-tresses (ULT) orchid. The primary justification is that no ULT were observed in the suitable habitat within the project area during field reconnaissance, which was conducted during the prime flowering window. Additionally, even if ULT were present, the horse grazing under either action alternative would be at a lesser intensity than existing cattle grazing. Wild horses are less likely than cattle to linger in wet areas where the listed orchid might be found (personal communication with Scott Fluer, BLM Wild Horse Specialist) so there is less likelihood that grazing-caused adverse impacts would occur.

While the BLM did not identify any adverse impacts to ULT under any alternative from grazing, it is possible that under either action alternative, additional surface disturbance would occur if the applicant develops some of the proposed tourism facilities. Before any new roads or new disturbance would be undertaken under either action alternative, additional surveys would be required through a stipulation applied to the authorization. This mitigation would prevent any adverse effects to ULT individuals, populations, or habitat. Additionally, repeat field surveys for ULT will be conducted during the flowering period in 2015 and 2016 to confirm no plants are located within the project area.

Surveys for Ute ladies'-tresses will be completed at the appropriate time of year in 2015 and 2016 under either of the action alternatives to confirm the absence of the listed orchid. If ULT plants are found in future surveys, consultation with USFWS and the BIA will be conducted and protection and avoidance measures will be developed and implemented. Raptor surveys will be completed during appropriate nesting periods for the species identified by the USFWS and seasonal buffers would be applied around any active nests identified in the survey for any construction activities.

Conflicts with Wildlife and Feral or Stray Domestic Animals

Conflicts under all three alternatives would be minimal. There are no known predators except for Mountain Lions in the area that could occasionally kill a wild horse but this is very unlikely in this habitat. Other animals that could impact wild horses within the eco-sanctuary would be feral dogs. Feral dogs are common within the project area. Wild horses may run or even strike at feral dogs that are chasing the animals. Horses may run through fences and get out on neighboring lands. Should this event occur, the horses would need to be gathered by the applicant, put back into the eco-sanctuary, and the fence repaired. Should the horses strike a dog, injury or death may be the end result of such confrontation.

Other horses that get out of neighboring properties (trespass) on the reservation may come into contact with the wild horses. There is a potential that studs and or mares may try and access BLM's non-reproducing wild horses within the sanctuary. Fences that are designed to keep BLM wild horses in, would keep non-BLM horses out. As with horses anywhere, there is always potential for horses to mix with other horses. Efforts to reduce mixing of animals will be carried out by the applicant and with BLM standard fencing design features. Additional fence improvements, such as a supplemental electric fence or higher standard sections could be employed on perimeter fences, if necessary. Horses that do mix will be removed from the herd by the applicant in accordance with Wyoming State estray laws and BIA policy.

3.8 Socioeconomics

The affected environment for social and economic impacts is the operation of the Double D Ranch under the No Action Alternative. The applicant is not required to provide financial information of current operations but experienced BLM staff members indicate that gross revenue of \$200,000 to \$350,000 is likely with the upper range being a function of the current high prices received for cattle at the sale barn in Riverton (personal conversations with Scott Fluor and Ira Waldron, 2014). Gross revenue is an appropriate measure because it considers not only the net income to the producer, but also expenses such as water, supplemental feed, employees, and equipment spent in Fremont County.

In comparison, the gross revenue that could be obtained as identified in the RFA will not exceed \$500,000; (see the RFA on the project web page.) It is unlikely that either of the action alternatives will meet this amount. Unlike holding facilities which are paid an agreed rate per head, the CA will pay for management including eco-tourism operations. The actual amount the CA would award under the BLM Preferred Alternative is unknown but is expected to be more than the gross revenue under the No Action Alternative.

The additional revenue will be spent in the community and will include salaries for employees (expected to include Native American youth), supplemental feeding supplies, fencing, water improvements, and the other items identified in the applicant's RFA.

It is likely that additional beneficial impacts from the action alternatives would be generated as the applicant implements activities to generate eco-tourism. The CA will require that these activities take place. The specific activities and the economic benefits from them, however, are too speculative to quantify although they are likely to be beneficial.

In the context of the entire Fremont County economy, the beneficial impacts of either of the action alternatives are relatively minor but more meaningful if the context is the WRIR. This is more fully addressed below under the cumulative impacts section.

The BLM received several scoping comments regarding social and economic impacts. Some comments suggested that the proposed sanctuary would be beneficial as it would provide educational information and partnering opportunities with educational institutions and would likely create economic benefits. This is especially true as eco-tourism efforts are implemented and the many travelers who pass by the ranch on the way to the national parks or to the nearby casinos.

Other comments, particularly from nearby residents, stated that the eco-sanctuary would have an adverse impact to the value of their private lands. This included an analysis by one certified appraiser that the eco-sanctuary would have a "negative" impact on ranches' "highest and best use" as hobby ranches of 40 to 160 acres. The determination of negative impact assumed that horses would have a negative effect on water quality upstream of the private lands and a loss of scenic value for buyers who would prefer to not view wild horses on adjacent property.

The CA will require that water quality not be degraded and the applicant, in cooperation with the BLM, will monitor to ensure that this is the case. Under the No Action Alternative, the downstream owners have no similar protection. The appraisal also did not consider improvements to the Double D Ranch such as removing the dilapidated former commercial buildings near the highway frontage or the broken items and concrete rubble from the fields as well as significantly improved fencing that could benefit the viewshed and thus offset some perceived negative effects. Should the CA not continue into the future, these benefits will remain without any of the negative effects identified in the appraisal.

Beyond the quantifiable effect of the increase in gross revenue under the action alternatives, the BLM determined that the economic effect of the eco-tourism aspects of the eco-sanctuary were too speculative and uncertain to measure or analyze and do not warrant a formal appraisal of the effect of the action alternatives on the value of surrounding property.

3.9 Cumulative Impact Assessment

BLM considers the cumulative impact of the alternatives when combined with past, present, and future actions that may change or influence the impacts from the proposed action. These include actions by the BLM on other projects, or the actions of other entities on private and state lands as well as other lands within the WRIR.

The proposed eco-sanctuary is located entirely within the WRIR boundaries, which encompasses over 2.3 million acres.

The Northern Arapaho, who constitute about 54 percent of the Native American population on the WRIR (U.S. Census Bureau 2000a), operate three casinos on the reservation (Wind River Casino, Little Wind Casino, and 789 Smoke Shop & Casino). The Eastern Shoshone, who constitute about 30 percent of the Native American population on the reservation, operate one casino (Shoshone Rose Casino). These are the only casinos in the State of Wyoming. The casinos provide job opportunities for Native Americans and other people, both directly and indirectly (through a multiplier effect). Although the casinos in Wyoming do not pay state taxes on their proceeds, they do provide revenue to the state via other sources, such as sales taxes and hotel occupancy taxes. A 2008 report commissioned by the Northern Arapaho tribe found that the three Northern Arapaho casinos generated \$90 million in economic activity, including multiplier effects, \$800,000 in county sales tax revenue, and \$1.6 million in state sales tax revenue (NativeBiz 2009, Over 2009). These income-generating activities are expected to continue into the future. The Northern Arapahoe recently opened the Wind River Hotel as part of its casino complex near Riverton.

In addition to the casino business, several other initiatives generate economic activity. For example, the Northern Arapaho Tourism Information Council, a recently established nonprofit organization, plans to develop several recreational and cultural attractions for visitors to the WRIR. The Northern Arapaho Tourism Information Council has no projects currently under construction, but ideas for future projects include a visitor center, a site commemorating the Sand Creek Massacre Trail, and concessions from which native guides could take visitors to the best spots for hunting and fishing on the WRIR. These projects would require additional funding and approvals from several different agencies on the WRIR. Thus, the schedule for implementation is not known at this time (Barela 2009, Northern Arapaho Public Relations Department 2009).

In addition to the tourism activities on the reservation, extensive oil and gas development has occurred for decades and is likely to occur in the future. Development of minerals owned by the Tribes using enhanced oil recovery (EOR) has and will continue to lead to additional oil and gas recovery from older fields. Since mineral development on the WRIR is a tribal function, the benefits from EOR will contribute to Tribal income.

The NRCS will continue to work with ranches and property owners in the area around the proposed eco-sanctuary to improve water quality and wildlife habitat (particularly that of greater sage-grouse) with projects similar to the cost-share fence removal projects being done on the Double D Ranch.

Additional development in the area may include subdivision of existing agricultural operations into “hobby ranches” or Fremont County authorized subdivisions (off the WRIR). While the demand for

such properties is a function of the national and local economy, Fremont County has been among the western counties with a population growth over the last decade (BLM, 2013).

One of the most likely incremental or future developments that should be included for cumulative impacts analysis is the potential for future development of the eco-tourism aspect to the eco-sanctuary. Over time, the Double D Ranch plans to offer both wagon and sleigh rides to view wild horses. During the summer months, Double D Ranch plans to offer developed camping opportunities. Ranch tours may also be offered along with bird-watching. The tours will occur only on private lands, not on Trust Lands. The beautiful views of the Wind River Mountains could be a draw for photographers or tourists interested in the setting. Camping facilities may encourage visitors to spend more time in the area, enjoying some of the local retail and dining opportunities.

Other than tourism generated development, there have been few changes from historic uses in the area. The National Outdoor Leadership School (NOLS) recently completed an expansion of its Wilderness Medical Institute in Red Canyon and the Wyoming Catholic College continues to increase in size. Its plan to develop a campus on Highway 28 towards South Pass will bring additional economic benefits to the community from the construction of the new facility as well as the income contributed by the additional numbers of students and faculty associated with the expansion of the College.

The city of Lander is expected to expand over time. A recent housing development off of Sinks Canyon Road is projected to add over one hundred new homes to the Lander market. While some of these homes will be purchased by existing Lander residents, the overall availability of additional housing units may encourage the growth of the community.

Future development of tourism opportunities under the Proposed Action or the BLM Preferred Action would increase economic opportunities on the WRIR. They might include the salaries of the individuals hired to provide tourism related services (work in museums, stores, driving tourism vehicles, etc.) as well as ranch hands to assist the applicant's operations and provide on-site presence.

These reasonably foreseeable development activities will not have a measurable impact to the direct and indirect effects on various resources described above. The increased commercial and residential development will result in increased production of greenhouse gases and criteria pollutants but not to the extent that air quality standards will be exceeded or that the visibility of the nearby Popo Agie Wilderness will be impacted.

The area of analysis for cumulative impacts to vegetation resources is the Double D Ranch because development and/or soil disturbing activities elsewhere on the WRIR or surrounding non-Reservation lands is unlikely to be large or meaningful enough to impact those resources on the ranch. Additional development of identified eco-tourism efforts will need to be carefully monitored to ensure that overall resource values are not adversely impacted. Camping facilities will require parking areas and hygiene facilities, which could result in additional erosion. Initially, these impacts would be unlikely to reduce any of the identified beneficial impacts from the eco-sanctuary.

None of the identified future development is expected to impact the federally listed Ute ladies'-tresses orchid. Any development on the WRIR would be done in consultation with the USFWS and the BIA in an effort to avoid any adverse impacts to the orchids. Future development of the eco-tourism

facilities would also require surveys and avoidance of any existing populations. Since the orchids are mostly found in wetter environments, which are unsuitable for development, there is little likelihood for future adverse impacts.

The proponent intends to proceed with adding additional acres not currently available for wild horse pasture to the eco-sanctuary. Obtaining consent for this expansion is cumbersome, as the properties are controlled by hundreds of owners who must be contacted in order to obtain consent. The approval of the BIA is required.

The additional acres added to the eco-sanctuary would expand the operation beyond what the BLM identified as the Preferred Alternative. This would result in additional wild horses being brought to the area. Generally, this cumulative impact would be beneficial. It would expand the improvements to riparian areas and limit the adverse impacts from overgrazing (the proposed expanded lands are likely in the same grazed condition as the existing lands) to a greater area. The larger the eco-sanctuary, the more grazing control that would be available, expanding the monitored pasture rotation with more management flexibility. With this expansion, the additional acres (up to the original 900 acres proposed for the eco-sanctuary) would benefit from the more managed operation of the facility, with beneficial impacts to vegetation, riparian areas, and protected cultural resources. (Any expanded operation would require cultural surveys of areas that have not been surveyed.)

4.0 Coordination and References Cited

4.1 Coordination

The BLM notified all surrounding neighbors whose ownership interests could be discerned. Due to the intricacies of the WRIR records, some property owners and/or people residing nearby may not have been specifically contacted. Several nearby property owners did provide scoping comments. The BLM received scoping comments from agencies, local government, organizations, and individuals. These are available on the project web page.

Some neighbors surrounding the Double D Ranch were contacted by BLM to further discuss the project and to better understand the comments they submitted during the scoping period. Discussion items focused on escaped horses, disease issues, devaluation of their property, mixing of outside horses with BLM wild horses, and management ability of Double D Ranch staff. They felt as private land owners that their privacy and right to graze livestock on their ranches and controlled lands would be impeded by BLM wild horses being present on the Double D Ranch.

The BLM met twice with the BIA to discuss issues raised in the BIA's scoping comments. In addition, the BLM provided a preliminary draft of this EA for review and comment prior to the EA being made available on the project webpage for additional public comment. Response to public comments can be found under Appendix 6 of this document.

4.2 References Cited

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Appendices

| Appendix | Title |
|----------|--|
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| | Wild Horse Eco Sanctuary 1:63,000 |
| | Wild Horse Eco Sanctuary 1:40,000 |
| | Pastures and Acreages |
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