United States Department of the Interior
Bureau of Land Management

BLM

Proposed Sale of Public Land
Environmental Assessment
[WYW167726]
[EA# WY-040-EA14-85]

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CHAPTER 1: PURPOSE AND NEED

1.1 Introduction

This Environmental Assessment (EA) [WY-040-EA14-85] is written to evaluate direct and indirect impacts of the proposed sale of a Bureau of Land Management (BLM) administered 60.00 acre parcel of land (Sale Parcel) to PacifiCorp (proponent). PacifiCorp is interested in purchasing the federal parcel because it would allow northward expansion of the adjacent PacifiCorp-owned Jim Bridger Landfill to connect with another parcel of land owned by PacifiCorp. The Sale Parcel is located 6.5 miles north of Point of Rocks, Wyoming, Interstate 80 (I-80), and north of County Road 15. The Sale Parcel is more specifically found in T. 21 N., R.101 W., section 24, 6th P.M., Sweetwater County, Wyoming. The Sale Parcel is located in Sweetwater County, Wyoming directly on the north side of the existing landfill and is 2.5 miles north of the existing Jim Bridger Power Plant (also referred to as Power Plant) and approximately 25 miles northeast of Rock Springs, Wyoming (see **Appendix A**, **Figures 1.1** and **1.2**).

This EA has been prepared to meet the requirements of the National Environmental Policy Act (NEPA) of 1969 and the Green River Resource Management Plan (GRRMP) Record of Decision (ROD) signed August 8, 1997 (BLM 1997). The federal case file number for this proposed land sale is WYW167726.

1.2 Background

The Sale Parcel is adjacent to the Jim Bridger Power Plant and landfill. The existing landfill is currently at capacity. PacifiCorp intends to expand the landfill onto the Sale Parcel if the land sale is completed. If the sale is not completed, under current conditions, the existing landfill design would be modified to accommodate impending capacity needs, reducing the landfill life.

The Power Plant is owned by PacifiCorp and Idaho Power and produces power for the electrical grid in the western United States (Idaho, Oregon, Utah, Washington, and Wyoming). The Power Plant secured a Solid Waste Chapter 3 Operating Permit (SHWD File #20.455) from the State of Wyoming, Department of Environmental Quality (WyDEQ) to construct and operate a landfill for their power generation operations. This permit expired on August 18, 2011, and was extended to December 31, 2013 via a letter from the WyDEQ dated July 21, 2011. PacifiCorp has applied for a second extension on the operating permit. The second permit extension was approved on April 26, 2013 and is set to expire 8 years from the approval date (April 26, 2019).

Under a plan approved by the operating permit, the landfill is divided into predetermined subdivisions called cells that are used to track the waste disposal rate and landfill capacity. The current landfill design shows the current status and future development on portions of cells 10, 11, and 12 extending onto the Sale Parcel (see **Appendix A**, **Figure 1.3**).

Prior to the final design of the landfill and subsequent Proposed Action, PacifiCorp has considered various proposals to the BLM, including purchasing 28.00 acres of federally-administered land for a plant expansion, purchasing 12.50 acres of federal land to expand the landfill area, purchasing 35.00 acres of land to expand the landfill area, and purchasing the

entire 60.00 acres between PacifiCorp's existing ownership for the landfill expansion as well as 280.00 acres of land. The proposals previously considered were not feasible for PacifiCorp due to either economic conditions, or insufficient land to accommodate the long-term landfill footprint.

The land proposed for sale specifically meets the disposal criteria under Section 203 [43 U.S.C 1713], Part 1 of the Federal Lands Policy and Management Act of 1976 (FLPMA), which states that:

> *"...a tract of the public lands (except land in units of the National Wilderness Preservation System, National Wild and Scenic Rivers Systems, and National Systems of Trails) may be sold under this Act where, as a result of land use planning required under section 202 of this Act, the Secretary determines that the sale of such tract meets the following disposal criteria...because of its location or other characteristics is difficult and uneconomic to manage as part of the public lands, and is not suitable for management by another Federal department or agency."*

1.3 Purpose and Need

1.3.1 Purpose

The purpose is for the BLM to consider and evaluate the proposed land sale, as required under agency responsibilities, as defined in Sections 203 and 209 of the Federal Lands Policy and Management Act of 1976 (FLPMA) and 43 Code of Federal Regulations (CFR) Parts 2711 and 2720.

1.3.2 Need

The need for action is established in Section 102 (a) of FLPMA, which states that all public lands will be retained in federal ownership unless it is determined that disposal of a particular parcel will serve the national interests. The need is established under the FLPMA of 1976 and 43 CFR 3160.

The Sale Parcel is adjacent to an existing landfill, and has been identified for disposal due of its location and management issues (BLM1997, Appendix 8-1, page 171). Furthermore, the BLM no longer authorizes landfills on federal lands (BLM 1997, page 9).

1.3.2.1 Decisions to Be Made

The decision the BLM will make is to either sell federal land or retain the subject Sale Parcel under federal ownership. If the BLM's decision is to sell the public lands, then under what terms and conditions will be identified.

1.4 Conformance with BLM Land Use Plan(s)

The proposal (consideration of selling the identified federal land parcel administered by the BLM Rock Springs Field Office [RSFO]) is consistent with the goals and objectives of the GRRMP. In reference to Disposal Criteria, the GRRMP (page 173) states: "The FLPMA of 1976 provides for the retention of public lands in federal ownership and management by BLM for multiple use and

sustained yield of lands and resources. Disposal by sale, exchange or Recreation and Public Purpose patent remain as options if such an action will serve as an important objective and have a public benefit. Lands cannot be considered for disposal if they are allocated for a specific use, even though they meet the general disposal criteria." Also, the GRRMP, Appendix 8-1: Lands Identified as Possibly Suitable for Disposal, lists the 60.00-acre Sale Parcel in T. 21 N., R.101 W., section 24: NW¼SW¼, W½NE¼SW¼, 6th P.M., Sweetwater County, Wyoming as lands available for sales/exchange for community or industrial expansion (BLM 1997, page 171). Additionally, the GRRMP Land Ownership Adjustment guidelines, page 9, state, "The BLM will aid in finding suitable landfill sites on public land." (BLM 1997)

The GRRMP identifies several conditions that must be satisfied prior to any disposal:

- A site-specific analysis must determine that the lands contain no significant wildlife, recreation or other resource values;
- The land has no overriding public values and represents no substantial public investment; and
- The disposal serves the public interest.

In addition, as outlined in Section 203 of FLPMA, lands to be considered for disposal, at a minimum must meet the following criteria:

- They are difficult and uneconomical to manage, and are not suitable for management by another federal department or agency;
- Disposal would serve important public objectives, including but not limited to, community expansion or economic development that could not be achieved prudently or feasibly on land other than public lands and which outweigh the public objectives or values; and
- Such a tract was acquired for a specific purpose, and the tract is no longer required for that purpose or any other Federal purpose.

1.5 Relationship to Statutes, Regulations, Plans or Other Environmental Analyses

1.5.1 Federal

The Proposed Action and alternatives are subject to the following federal laws and regulations:

Federal Land Policy and Management Act of 1976, as amended (43 U.S.C. 1701 et seq.)	Outlines functions of the BLM Directorate, provides for administration of public lands through a land-use and resource management planning process.
National Environmental Policy Act of 1969 (42 U.S.C. 4321 et seq.)	Requires the preparation of environmental impact statements for federal projects which may have a significant effect on the environment. It requires systematic, interdisciplinary planning to ensure the integrated use of the natural and social sciences and the environmental design arts in making decisions about major federal actions that may have a significant effect on the environment.
The Endangered Species Act (ESA) of 1973, as amended (16 U.S.C. 1531 et seq.)	Directs federal agencies to ensure that their actions do not jeopardize threatened and endangered species, and that through their authority they help bring about the recovery of these species.

The National Historic Preservation Act of 1966, as amended (16 U.S.C. 470)	Expands protection of historic and archeological properties to include those of national, State and local significance. It also directs federal agencies to consider the effects of proposed actions on properties eligible for or included in the National Register of Historic Places.
Taylor Grazing Act of 1934 (43 U.S.C. 315), as amended by the Act of August 28, 1937 (43 U.S.C. 1181d)	Authorizes the establishment of grazing districts, regulation and administration of grazing on the public lands, and improvement of the public rangelands. It also authorizes the Secretary to accept contributions for the administration, protection, and improvement of grazing lands, and establishment of a trust fund to be used for these purposes.
The General Mining Law of 1872, as amended (30 U.S.C. 22 et seq.), as amended by P.L. 108-447 Division E, Section 120 (30 U.S.C. et seq.	Provides for locating and patenting mining claims where a discovery has been made for locatable mineral on public lands in specified states, mostly in the western U.S.
Executive Orders	EO 11514 – Protection & Enhancement of Environmental Quality EO 11593 – Protection & Enhancement of the Cultural Environment EO 11988 – Management of Floodplains EO 11990 – Management of Riparian and Wetlands EO 12898 – Environmental Justice EO 13112 – Management of Invasive Species EO 13007 – Protection of Sacred Sites EO 13186 – Management of Migratory Birds

The Proposed Action has been analyzed for consistency with WY-IM-012-019 "Greater Sage-Grouse Habitat Policy on Wyoming BLM Administered Public Lands" and WO-IM-2012-043 "Greater Sage-Grouse Interim Management Policies and Procedures."

The Resource Management Plan (RMP) for the Rock Springs Field Office is currently undergoing amendment as part of the Wyoming Greater Sage-Grouse Land Use Plan Amendment (Amendment). The Draft Amendment and Environmental Impact Statement was released in December 2013.

The Proposed Action was screened against the Draft Amendment to ensure that the Proposed Action would not preclude BLM's ability to select any alternative in a ROD. The Proposed Action/Decision was also determined to not be inconsistent with the direction outlined in the Amendment's Preferred Alternative.

1.6 Scoping, Public Involvement and Issues

Scoping is the process by which the BLM solicits internal and external input on the issues, impacts, and potential alternatives that will be addressed in the EA.

For purposes of BLM NEPA analysis, an "issue" is a point of disagreement, debate, or dispute with a proposed action based on some anticipated environmental effect.

Scoping assists in determining the range of actions, alternatives and their impacts to be analyzed in a NEPA document. Questions, issues of concern and relevant data from knowledgeable and interested individuals and parties are solicited early in the NEPA process to help focus the analysis. The BLM reviewed the proposed public land sale to PacifiCorp and conducted internal scoping in July and August of 2011. Formal public scoping was initiated in 2013. Specifically, the BLM gave notice of realty action to prepare an EA and solicit public feedback on the proposed land sale via the Federal Register on December 12, 2013. The BLM also published a Notice of Realty Action in the Rock Springs Rocket Miner on Tuesday, December 17, 24, and 31, 2013.

The following bulleted list summarizes the substantive issues raised during internal and public scoping, which have been carried forward for analysis in **Chapters 3** and **4** of this EA.

1.6.1 Cultural Resources

- Potential impacts to historic and prehistoric sites.

1.6.2 Threatened, Endangered, or Candidate Plant Species

- Potential impacts to blowout penstemon and Ute ladies' tresses.

1.6.3 Fish and Wildlife, Including Special Status Species

- Potential impacts to BLM sensitive species, sagebrush obligate species, migratory birds, raptors, and big game species.

1.6.4 Threatened, Endangered, or Candidate Animal Species

- Potential impacts to Greater Sage-Grouse nesting and brooding habitat and black-footed ferret habitat (prairie dog towns).

1.6.5 Livestock Grazing

- Potential impacts from the decrease in available forage for livestock and wildlife.

1.6.6 Wild Horse and Burros

- Potential impacts to the future management of the Great Divide Basin Wild Horse Herd Management Area (HMA).

1.7 Issues Considered but Eliminated from Further Analysis

Those resources and environmental elements identified as not present or not affected to a degree that detailed analysis is required were not carried forward into the EA. Those resources and environmental elements not carried forward are described in the Clearance forms listing the BLM resource specialists' concerns (see **Appendix B** and **Table 3.1-1**).

CHAPTER 2: DESCRIPTION OF ALTERNATIVES – INCLUDING PROPOSED ACTION

2.1 Proposed Action and Alternatives

The Power Plant is owned by PacifiCorp and Idaho Power and produces power for the electrical grid in the western United States (Idaho, Oregon, Utah, Washington, and Wyoming). The existing landfill is currently at capacity. The proponent, PacifiCorp, has plans to expand the landfill onto the Sale Parcel if the land sale is completed. The BLM no longer authorizes landfills on federal lands. Under current conditions, the existing landfill is near capacity, at which time the existing landfill design would be modified to accommodate impending capacity needs, reducing the landfill life.

The following section describes the No Action, Proposed Action, and Alternatives Considered but Eliminated from Further Analysis.

2.2 Alternative I – No Action Alternative

Under the No Action Alternative, the Sale Parcel would not be sold and there would be no transfer of jurisdiction to private ownership. The surface and mineral estate would remain public and would continue to be managed by the BLM per the GRRMP. Under this alternative, once the existing PacifiCorp landfill is at capacity, PacifiCorp would modify the existing landfill design to accommodate impending capacity needs, reducing the landfill life.

2.3 Alternative II – Proposed Action Alternative

Under the Proposed Action alternative, the BLM would offer conveyance of the surface estate for the following parcel of public land to PacifiCorp on a non-competitive basis, at a price no less than fair market value:

Sale Parcel

The Sale Parcel is a 60.00-acre tract of land located adjacent to an existing landfill and an existing Power Plant in the T. 21 N., R. 101 W., section 24: NW¼SW¼, W½NE¼SW¼, 6th P.M., Sweetwater County, Wyoming (see **Appendix A**, **Figures 1.2** and **2.1**).

Table 2.3-1 Parcel Identification Summary

EA Parcel ID[1]	Parcel Name	County Assessor Parcel ID
Sale Parcel	BLM 210124[2]	2101-24-1-00-001-00[2]

[1] *The parcel name listed under "EA Parcel Name/ID" was assigned by the BLM for the EA document and is not recognized by other entities or agencies to identify the parcel.*

[2] *The 60.00-acre Sale Parcel is a portion of the 530.00-acre parcel identified with the Sweetwater County Assessor's Office.*

The mineral estate would remain under the ownership of the BLM. A U.S. Department of the Interior Certified Appraiser prepared a land appraisal report to determine fair market value of the Sale Parcel. The evaluation determined that the land proposed for sale is valued at $9,600.00 or $160.00 per acre. The evaluation is valid until June 5, 2015. The land appraisal conforms to Uniform Appraisal Standards for Federal Land Acquisitions (2000) and the Appraisal Foundations Uniform Standards of Professional Appraisal Practice (USPAP).

The 60.00-acre Sale Parcel has no buildings, structures or improvements except a fence, authorized by right-of-way under BLM federal number WYW109298, located on the ownership line between BLM and PacifiCorp lands. The existing landfill is located to the south of the Sale Parcel. The purchase of the 60.00 acres of federal land would allow the landfill expansion to continue on contiguous land to the north.

2.4 Alternatives Considered, but Eliminated From Further Analysis

No other alternatives were identified for consideration.

CHAPTER 3: AFFECTED ENVIRONMENT

3.1 Introduction

This chapter presents the potentially affected existing environment (i.e., the physical, biological, social, and economic values and resources) of the land sale area.

Table 3.1-1 Affected Resources Overview

Determination[1]	Resource	Rationale for Determination
NI	Air Quality/ Greenhouse Gas Emissions	Implementation of the Proposed Action would have no impact on air quality. Implementation of the Proposed Action would have no impact on greenhouse gas emissions.
NP	Areas of Critical Environmental Concern	After review of GIS records and the Approved GRRMP, the closest Area of Critical Environmental Concern (ACEC) is the Natural Corrals ACEC located approximately 5 miles northwest of the land sale area. No ACECs are located within the Sale Parcel.
PI	Cultural Resources	See sections 3.3.1 and 4.2.1 below.
NI	Environmental Justice	The Proposed Action was reviewed in accordance with Executive Order 12898. No impacts to minority or low-income populations are expected.
NP	Farmlands: Prime or Unique	According to Natural Resource Conservation Service (NRCS) soils survey and knowledge of the soils, there are no prime and/or unique soils mapped within the land sale area, nor are there any prime and/or unique soils in the vicinity of the Sale Parcel. As such, there are not farmlands in the lands sale area.
NP	Floodplains	After inspection of U.S. Geological Survey (USGS) 7.5 minute maps of the area, it is determined no floodplains as defined by Executive Order 11988, Federal Emergency Management Agency (FEMA), or U.S. Army Corps of Engineers are found on or near the Sale Parcel.
PI	Geology/Mineral Resources	See sections 3.3.3 and 5.2.3 below.
NI	Invasive Species/ Noxious Weeds	The proposed sale would not have an effect on invasive species or noxious weeds.
PI	Lands/Access	See sections 3.3.6 and 4.2.6 below.
PI	Livestock Grazing	See sections 3.3.7 and 4.2.7 below.
PI	Migratory Birds	See sections 3.3.5 and 4.2.5 below.
PI	Native American Religious Concerns	See sections 3.3.1 and 4.2.1 below.
PI	Paleontology	See sections 3.3.2 and 4.2.2 below.
NI	Public Health & Safety	There would be no increase or decrease risk to the health and safety to the general public resulting from the Proposed Action.
NI	Rangeland Health Standards	Implementation of the Proposed Action would have no impact on Rangeland Health Standards.
NI	Recreation	There are no developed recreation facilities in the land sale area.

Determination[1]	Resource	Rationale for Determination
NI	Socio-Economics	Implementation of the Proposed Action would not contribute to socio-economic impacts because the Proposed Action is small in scope and would not result in changes to employment or revenue, other than the sale price.
NI	Soils	The Proposed Action would not have an impact on soils.
PI	BLM Sensitive Animal Species	See sections 3.3.5 and 4.2.5 below.
PI	BLM Sensitive Plant Species	See sections 3.3.4 and 4.2.4 below.
PI	Threatened, Endangered or Candidate Animal Species	See sections 3.3.5 and 4.2.5 below.
NP	Threatened, Endangered or Candidate Plant Species	The land sale area has been identified as containing habitat for Threatened, Endangered, or Candidate plant species.
NI	Wastes (hazardous or solid)	There was no evidence of surface contamination on any portion of the Sale Parcel. Also, there are no recognized environmental conditions as determined by Phase I parameters (PERCO 2008, amended 2012). The sale of the federal parcel to a non-public entity would not increase or decrease the risk of hazardous materials being generated or remediated.
NI	Water Resources/Quality (drinking/surface/ ground)	There would be no impacts to water resources or quality from the sale of the federal parcel to a non-public entity.
NP	Wetlands/Riparian Zones	There are no wetlands or riparian zones found within the Sale Parcel.
NP	Wild and Scenic Rivers	There are no Wild and Scenic Rivers within or near the Sale Parcel as per review of the GRRMP and GIS maps.
NP	Wilderness/WSA	There is no Wilderness or Wilderness Study Areas within or near the Sale Parcel as per review of the GRRMP and GIS maps.
NP	Woodland/Forestry	There are no woodland areas or areas where forest products are found within or near the Sale Parcel.
NI	Vegetation	Implementation of the Proposed Action would not adversely impact vegetation or overall vegetative communities.
NI	Visual Resources	The Sale Parcel is designated Visual Resource Management Class III, which allows for major modification to the visual character of the landscape.
PI	Wild Horses	See sections 3.3.8 and 4.2.8 below.
PI	Fish and Wildlife	See sections 3.3.5 and 4.2.5 below.
NI	Noise	The proposed action would not impact noise in the project area.
NP	Areas with Wilderness Characteristics	There are no areas with Wilderness Characteristics or Wildlands within the Sale Parcel as per review of the GRRMP and GIS maps.

[1]**Determination:**

PI: Present with Potential for Impact

NP: Not Present in the area impacted by the Proposed or alternative actions

NI: Present, but Not affected or Impacted

3.2 General Setting

The Sale Parcel is located 6.5 miles north of Point of Rocks, Wyoming and Interstate 80 (I-80) and north of County Road 15. The Sale Parcel is more specifically found in T. 21 N., R. 101 W., section 24: NW¼SW¼, W½NE¼SW¼, 6th P.M., Sweetwater County, Wyoming. The Sale Parcel is surrounded by industrial land uses including the Jim Bridger Power Plant and related facilities including a landfill, evaporative ponds, roads, railroad tracks, a conveyor belt, and pipeline facilities to the south. The Sale Parcel is also near an active open pit coal mine operated by Bridger Coal which is located north of the Sale Parcel.

The natural environment of the land Sale Parcel is considered arid, high elevation desert located at around 6,100 to 6,700 feet above mean sea level and is known for low precipitation (7 to 9 inches per year), cool summers and long, cold winters. The Sale Parcel is typical of the high elevation desert with vegetative communities that include sagebrush and bunchgrass communities. The rainfall averages around 8 to 9 inches per year. The Sale Parcel is located on the eastern side of the Green River Basin where precipitation and snow melt flows into a tributary of Bitter Creek that eventually flows into the Green River. The Sale Parcel is located on a ridge between Potash Wash to the south and Deadman Wash to the north.

3.3 Resources/Issues Brought Forward for Analysis

3.3.1 Cultural Resources

Cultural resources are the products of human history in the form of material items produced by human workmanship or use, and elements of the natural environment that were altered by human activities. As defined in 36 CFR 800, adverse effects to significant historic properties include physical alteration, damage, and destruction; alteration of the character of the setting of a property where the setting contributes to its significance, or neglect that results in deterioration or destruction of the property. The land sale area is located within an area of low cultural site density with limited potential to contain intact, buried cultural resources.

Surrounding Area

A Class I file search documented six cultural inventories conducted in T. 21 N., R. 101 W., section 24 covering approximately 537.00 acres in the vicinity of the Sale Parcel. As a result of these inventories, four cultural resources were identified, three prehistoric sites and one historic site. Two prehistoric sites have been evaluated as not eligible for the National Register of Historic Places (NRHP). The historic site and one prehistoric site are eligible for the NRHP. The aforementioned historic site is the Point of Rocks to South Pass City Stage Road; the segment of the stage road is within a mile of the Sale Parcel, but is considered to be a non-contributing segment for its eligibility to the NRHP.

Sale Parcel

A Class III cultural resource inventory was conducted to locate, document and evaluate any cultural resources within the Sale Parcel in order to comply with Section 106 of 36 CFR 800, the National Historic Preservation Act (NHPA) of 1966, as amended. The Class III inventory was conducted in May 2011.

This cultural inventory determined the location of six prehistoric sites; five are not eligible and one is eligible for the NRHP. A portion of the eligible site is located within the proposed Sale

Parcel boundary and was tested to determine if in situ cultural remains were buried within the sand shadow covering that portion of the site. Through testing and exposed soil profiles it was determined the portion of the site within the Sale Parcel boundary does not contribute to the site's eligibility.

3.3.2 Paleontology

The Sale Parcel has the potential to contain vertebrate and non-vertebrate fossils. Paleontological resources are closely tied to the geologic units (i.e., formations, members, or beds) that contain them. The probability for finding paleontological resources can be broadly predicted from the geologic units present at or near the surface. The importance of the various formations with regard to fossils was determined, in part, by referencing the U.S. Geological Survey's Wyoming Bedrock Geology GIS data (1994) where the area of the Sale Parcel has been mapped as Fox Hills Sandstone and Lewis Shale, which has been reclassified as the Lance Formation. Based on the Potential Fossil Yield Classification (PFYC) system used by BLM, a system that ranks geological formations from tier 1 to tier 5, with formations designated tier 1 having the lowest potential and formations designated tier 5 having the highest potential for fossils, the Sale Parcel is within a tier 3 formation.

3.3.3 Geology and Minerals

The Sale Parcel lies within the Green River Basin which contains several important mineral deposits, including large deposits of coal, natural gas and trona. A mineral potential report was completed by the RSFO on February 28, 2013. The mineral report concluded that based on the review of existing literature and observations of the subject tract the following conditions exists: (1) a high potential for leasable minerals, (2) a low potential for salable minerals, and (3) no potential for locatable minerals. Minimal surface interference related to potential mineral development and potential surface uses is anticipated.

3.3.4 Fish and Wildlife Species, Including Special Status Species

Several resources were consulted to identify wildlife species and habitat that may occur within the project area. The primary resources included:

- The wildlife database compiled and managed by the BLM RSFO wildlife biologists
- The Final Environmental Impact Statement and Proposed Resource Management Plan for the Green River Resource Area (GRPRMP/FEIS) (BLM 1996)
- The Wyoming Game and Fish Department (WGFD) annually updated Big Game Job Completion Report and sage-grouse database (WGFD 2012)
- The Wyoming Natural Diversity Database (WYNDD 2014)
- Wyoming State Wildlife Action Plan (WGFD 2010)

A habitat assessment and general wildlife observations were performed by a BLM wildlife biologist during the onsite visit. The BLM wildlife biologist verified modeled and mapped wildlife information, evaluated potential impacts to wildlife resources, and recommended project modifications where wildlife issues arose. No formal surveys were conducted for any additional BLM sensitive species.

Wildlife habitats that could be affected by the project include both the areas that would be physically disturbed by the Proposed Action and zones of influence surrounding them. Zones of

influence are defined as those areas surrounding, or associated with, project activities where impacts to a given species or its habitat could occur. The shape and extent of such zones varies with species and is described in individual species sections below.

Wildlife habitat types within the project area have been classified by the Wyoming State Wildlife Action Plan (WGFD 2010) and verified by BLM biologists. Habitat classifications take into account a combination of geographic features and ecological attributes that influence the plant and animal communities within a given area. Habitat types within the project area are described below.

Sagebrush Shrublands

Sagebrush shrublands are characterized by semi-desert climates that receive a high proportion of annual precipitation during the winter (WGFD 2010). In Wyoming, sagebrush communities range from 4,000 to 9,500 feet in elevation, with annual precipitation varying from 6 inches to over 20 inches. In general, sagebrush habitats occur on variety of aspects from dry flats to rocky hill slopes. Sagebrush shrublands can contain a variety of shrubs, grasses and forbs. Numerous threats to sagebrush habitats have been identified and include invasive plants, energy development, rural subdivision development, off-road vehicle use, varying habitat management goals, livestock grazing, conifer encroachment, and drought (WGFD 2010). .

Big Game

Big game species that occur in the project area include Rocky Mountain elk (*Cervus canadensis*), mule deer (*Odocoileus hemionus*), and pronghorn antelope (*Antilocapra americana*). Big game species populations that live in habitat managed by BLM are managed by the WGFD. The proposed project occurs within sagebrush shrubland habitat types. These habitat types have been further classified by into areas that are considered important to big game species during certain times of the year and are described in (**Table 3..3-1** below; The Wyoming Chapter of the Wildlife Society 2007).

Table 3.3-1 WGFD Identified Big Game Habitat within Project Area.

Species	WGFD Identified Habitat	Habitat Affected by Proposed Action Yes/No
Rocky Mountain Elk	[2]Winter-yearlong	Yes
Mule Deer	Winter-yearlong	Yes
Pronghorn Antelope	[1]Crucial winter range, winter-yearlong	Yes

[X]Crucial Winter Range: is any winter seasonal range or habitat component which has been documented as a determining factor in a population's ability to maintain and reproduce itself at a certain level.. [X]Winter-Yearlong use is when a population or a portion of a population of animals makes general use of the documented suitable habitat sites within this range on a year-round basis. During the winter months there is a significant influx of additional animals into the area from other seasonal ranges.

The proposed sale parcel also occurs within designated Pronghorn Crucial Winter Range. Crucial Winter Range are areas which a wildlife species is confined during periods of heavy snow cover

or that portion of the year-long range which is crucial to survival because it is where big game find forage and/or cover during the most inclement and difficult winter conditions.

This proposed sale parcel occurs in the following herd units:

Elk

- Steamboat elk herd. The steamboat elk herd population is currently below objective and has been for the past three years. Recent drought conditions have been attributed to the downward trend of this herd (WGFD 2012).

Mule Deer

- Steamboat mule deer herd unit. The Steamboat mule deer herd population is currently below objective and has been for the past four consecutive years. Factors attributed to the downward trend include increased doe harvest in 2009 and 2010, followed by severe winter conditions and drought (WGFD 2012).

Pronghorn

- Red Desert pronghorn herd. The Red Dessert pronghorn herd population is currently below objective and has been for the past two years. Factors attributed to the downward trend include energy development, impeded migration from sheep-tight fences, and extreme weather conditions (WGFD 2012).

Raptors

Raptors include eagles, hawks, owls, falcons, and vultures. Nesting sites for these species include cliffs, trees and shrubs, cavities, rock outcrops and ground substrate, and man-made structures. Most species build substantial stick nests, may re-use the same or alternate nests within their territory, and may switch nests occasionally in years after brood failure. There are two raptor species known to have nested within 1 mile of the Sale Parcel: ferruginous hawks and golden eagles. Identified special status raptor species will be further discussed below.

Ferruginous Hawks

In addition to being listed as a Wyoming BLM sensitive species, ferruginous hawks (*Buteo regalis*) are a WGFD Species of Greatest Conservation Need (SGCN), because population status and trends are unknown, they are experiencing ongoing loss of habitat, and they are sensitive to human disturbance. The Wyoming Bird Conservation Plan rates them as a Level I species, indicating they are clearly in need of conservation action. They are also listed by U.S. Fish and Wildlife Service (USFWS) as a Bird of Conservation Concern (BCC) for Region 10.

Ferruginous hawks are comparatively sensitive to human disturbance; pairs may abandon nests even when mildly disturbed during nest construction and incubation (Smith and Murphy 1978, White and Thurow 1985, Olendorff 1993). Furthermore, disturbed nests fledge fewer young, and they often are not reoccupied the year following disturbances (White and Thurow 1985). Rather than becoming acclimated to repeated disturbance, ferruginous hawks become sensitized and flush at greater distances (White and Thurow 1985), which may result in increased clutch or brood mortality due to exposure, predation, starvation, or nest desertion.

Suitable habitat and nesting substrate required by ferruginous hawks is ubiquitous in the area. The BLM raptor database indicates that there are six documented ferruginous hawk nest occurrences within 1 mile of the Sale Parcel. Ferruginous hawk habitat is present and it is likely that the species may use habitat and initiate nests within the area in the future.

Golden Eagles

Golden eagles (*Aquila chrysaetos*) were identified as a Level III species in the Wyoming Bird Conservation Plan. Golden eagles are sensitive to extensive human activity around nest sites and are threatened by loss of nesting habitat to industrial development, powerline executions, and other factors (Nicholoff 2003). The WGFD Wyoming Bird Conservation Plan habitat objectives for golden eagles include maintaining open country to provide habitat for small mammals as a food source. Recommendations for management include restricting human activities near nests during peak breeding season; protecting, enhancing, and restoring prey populations; and protecting known nesting territories.

Suitable habitat and nesting substrate required by golden eagles is ubiquitous in the area. The BLM raptor database indicates that there is one documented golden eagle nest occurrence within 1 mile of the Sale Parcel. Golden eagle habitat is present and it is likely that the species may use habitat and initiate nests within the area in the future.

BLM Sensitive Wildlife Species

BLM sensitive species are generally those species that are in need of special management considerations. The objectives for management of special status animal species are to: 1) maintain or enhance essential and important habitat and prevent destruction or loss of the species' communities and important habitat; 2) provide opportunities for enhancing or expanding the habitat; and 3) prevent the need for listing these species as threatened or endangered (BLM 1997). The list of BLM sensitive wildlife species that are potentially found in the vicinity of the Sale Parcel and their habitat preferences is found in **Table 3.3-2**.

Table 3.3-2 BLM Sensitive Species with Potential to Occur in Land Sale Area

Common Name	Scientific Name	Habitat
MAMMALS		
Pygmy rabbit	*Brachylagus idahoensis*	Basin prairie and riparian shrub
Townsend's big-eared bat	*Corynorhinus townsendii*	Forests, basin-prairie shrub, caves and mines
White-tailed prairie dog	*Cynomys leucurus*	Basin-prairie shrub, grasslands
Spotted bat	*Euderma maculatum*	Cliffs over perennial water, basin-prairie shrub
Long-eared myotis	*Myotis evotis*	Conifer and deciduous forests, caves and mines
Wyoming pocket gopher	*Thomomys clusius*	Meadows with loose soil
BIRDS		
Sage sparrow	*Amphispiza belli*	Basin-prairie shrub, mountain-foothill shrub
Burrowing owl	*Athene cunicularia*	Grasslands, basin-prairie shrub
Ferruginous hawk	*Buteo regalis*	Basin-prairie shrub, rock outcrops

Common Name	Scientific Name	Habitat
Greater Sage-Grouse	*Centrocercus urophasianus*	Basin-prairie shrub, mountain-foothill shrub
Mountain plover	*Charadrius montanus*	Short-grass & mixed prairie, openings in shrub ecosystems, prairie dog towns
Trumpeter swan	*Cygnus buccinators*	Lakes, ponds, rivers
Peregrine falcon	*Falco peregrines*	Tall cliffs
Bald eagle	*Haliaeetus leucoephalus*	Primarily along rivers, streams, lakes and waterways
Loggerhead shrike	*Lanius ludovicianus*	Basin-prairie shrub, mountain-foothill shrub
Sage thrasher	*Oreoscoptes montanus*	Basin-prairie shrub, mountain-foothill shrub
Brewer's sparrow	*Spizella breweri*	Basin-prairie shrub
AMPHIBIANS		
Northern leopard frog	*Rana pipiens*	Beaver ponds, permanent water in plains and foothills
Great basin spadefoot	*Spea intermontana*	Spring seeps, permanent and temporary waters

Sagebrush obligates

Sagebrush ecosystems support a variety of species. Sagebrush obligates are animal species that cannot survive without sagebrush and its associated perennial grasses and forbs; in other words, species requiring sagebrush for some part of their life cycle. Sagebrush obligates within the Sale Parcel, listed as sensitive species by BLM Wyoming include: Brewer's sparrow (*Spizella breweri*), sage thrasher (*Oreoscoptes montanus*), and the sage sparrow (*Amphispiza belli*). Sage sparrows, Brewer's sparrows, and sage thrashers all require sagebrush for nesting, with nests typically located within or under the sagebrush canopy. Sage thrashers usually nest in tall dense clumps of sagebrush within areas having some bare ground for foraging. Sage sparrows prefer large continuous stands of sagebrush, and Brewer's sparrows are associated closely with sagebrush habitats having abundant scattered shrubs and short grass (Paige and Ritter 1999). Species observed during the onsite visit by the BLM biologist include sage thrashers, sage sparrows and Brewer's sparrows.

The majority of the proposed land sale area is dominated by sagebrush/grassland habitat type. The sagebrush cover varies from sparse sage/grassland to a dense sage/grassland. It has been determined that the immediate area does provide suitable habitat for sagebrush obligates.

Migratory Birds

Habitats in the overall Project Area are primarily sagebrush shrublands . Many species that are of high management concern use these areas for their primary breeding habitats (Saab and Rich 1997).

Migratory birds are those that migrate for the purpose of breeding and foraging at some point in the year. As outlined in Instruction Memorandum No. 2008-050 (BLM 2007), BLM must include migratory birds in every NEPA analysis of actions that may have the potential to affect them, in order to fulfill its obligations under the Migratory Bird Treaty Act.

The WGFD Wyoming Bird Conservation Plan (Nicholoff 2003) identified three groups of high-

priority bird species in Wyoming:

- Level I – those that clearly need conservation action
- Level II – species where the focus should be on monitoring, rather than active conservation
- Level III – species that are not otherwise of high priority but are of local interest.

Nationally, grassland and shrubland birds have declined more consistently in the last 30 years than any other ecological association of birds (WGFD 2009). Species that may occur in these vegetation types in southwest Wyoming, according to the Wyoming Bird Conservation Plan, are listed in **Table 3.3-3** and are grouped by Level as identified in the Plan.

Migratory birds are those that migrate for the purpose of breeding and foraging at some point in the year. According to BLM Washington Office Instruction Memorandum No. 2008-050, BLM must include migratory birds in every NEPA analysis of actions that may have the potential to affect them, in order to fulfill its obligations under the Migratory Bird Treaty Act.

The WGFD Wyoming Bird Conservation Plan (Nicholoff 2003) identified three groups of high-priority bird species in Wyoming:

- Level I – those that clearly need conservation action;
- Level II – species where the focus should be on monitoring, rather than active conservation; and
- Level III – species that are not otherwise of high priority but are of local interest.

The primary vegetation throughout the land sale area is considered shrub-steppe. Many species that are of high management concern use these areas for their primary breeding habitats (Saab and Rich 1997).

Table 3.3-3 High priority bird species with potential to occur in the major vegetation type within the Sale Parcel

Level	Species	Wyoming BLM Sensitive
Level I	Brewer's Sparrow	Yes
	Long-billed Curlew	Yes
	McCown's Longspur	No
	Mountain Plover	Yes
	Sage-Sparrow	Yes
Level II	Black-Chinned Hummingbird	No
	Grasshopper Sparrow	No
	Lark Bunting	No
	Lark Sparrow	No
	Loggerhead Shrike	Yes
	Pygmy Nuthatch	No
	Sage Thrasher	Yes
	Vesper Sparrow	No
	Yellow Billed Cuckoo	Yes
	Western Bluebird	No
Level III	Common Poorwill	No

Threatened, Endangered, or Candidate Animal Species

In accordance with Section 7(a)(2) of the ESA, the USFWS must ensure that any federal action to be authorized, funded, or implemented does not jeopardize the continued existence of a listed species, or destroy or adversely modify the listed species' critical habitat. Four animal species occur in Sweetwater County that are federally listed as threatened or endangered, proposed for federal listing as threatened or endangered, or considered to be a candidate for federal listing as threatened or endangered under the ESA; however, only one has potential to be found within the proposed Sale Parcel (see **Table 3.3-4**).

Table 3.3-4 Threatened, Endangered, or Candidate Animal Species

Common Name	Scientific Name	Status	Habitat
Greater Sage-Grouse	*Centrocercus urophasianus*	Candidate	Basin-prairie shrub, mountain-foothill shrub

Source: BLM 2012

Greater Sage-Grouse

Greater sage-grouse concentrate for courtship and breeding areas (lek), which are typically in openings surrounded by sagebrush, with an average canopy density of 10 to 30 percent. Greater sage-grouse nest under sagebrush, with 60 percent of hens nesting within a 2-mile radius of the lek, and 70 percent of hens nesting within a 4-mile radius of the lek. Wintering areas for greater sage-grouse typically contain tall sagebrush that is available above the snow for cover and food. Total shrub canopy cover, residual grass cover, nonfood forb cover, and litter cover are the best predictors of greater sage-grouse nesting habitat (Holloran 1999; Lyon 2000). Typically, greater sage-grouse nests are located within sagebrush communities that have 10 to 30 percent canopy cover (Holloran 1999; Lyon 2000).

The Greater Sage-Grouse is listed as a candidate species under the ESA. Habitats in the overall Project Area are primarily sagebrush shrublands.

In 2010, the USFWS determined that the sage-grouse was warranted for federal listing across its range, but listing was precluded by other higher priority listing actions. In addition to being listed as a Wyoming BLM sensitive species, sage-grouse are listed as a WGFD species of greatest conservation need, due to declining populations and ongoing habitat loss. The Wyoming Bird Conservation Plan rates sage-grouse as a Level I species, indicating they are clearly in need of conservation action.

The proposed land sale does not occur within any mapped Wyoming Greater Sage-Grouse Core Area protection regions as identified by Wyoming governor's Executive Order number 2011-05, which was implemented to conserve Greater Sage-Grouse populations and habitat to preclude listing under the ESA.

WGFD records indicate that no leks occur within 4 miles of the land sale area.

Productive sage-grouse seasonal habitats are characterized by 80 percent of an area containing between 10 to 30 percent sagebrush canopy cover intermixed with 15 percent grass/forb cover (Connelly et. al. 2000). The sagebrush steppe habitat within 2 miles of the Sale Parcel is considered suitable nesting and brood rearing habitat.

3.3.5 Lands/Access

The FLPMA, as amended (FLPMA; 43 U.S.C. 1761-1771), governs the management of public lands under BLM's administration. Various applications of land use are received by BLM each year. It is the policy of the BLM to process all lands and realty applications, at the discretion of the authorized officer, in the most efficient and economical manner possible. The vast majority of the authorizations fall under the rights-of-way (ROWs) grant under Title V of FLPMA and Section 28 of the Mineral Leasing Act of 1920, as amended (MLA; 43 U.S.C. 185).

The primary objective of the BLM Lands and Realty Program is to facilitate the use of public lands through ROWs, leases, and permits. The secondary objective is to provide support to other programs that protect and enhance resources. The goal of these two objectives is to create a balance between land use and resource protection that serves the public at large.

Lands are currently managed under classifications, withdrawals, ROWs, short-term land permits, leases, and disposal actions. ROWs across public lands are granted under Title V of FLPMA and Title I of the Mineral Leasing Act (43 CFR 2800 and 2880). ROWs are issued for many purposes and are recorded on master plats, which are located at the RSFO and the BLM Wyoming State Office.

The Sale Parcel is north of County Road 15 (also known as 9 Mile Road), which provides access to and from the Jim Bridger Power Station. Nearby land uses include the Jim Bridger Power Plant and related facilities including a landfill, evaporative ponds, roads, railroad tracks, a conveyor belt, and pipeline facilities to the south. The Sale Parcel is also near an active open pit coal mine operated by Bridger Coal which is located north of the Sale Parcel.

3.3.6 Livestock Grazing

The Sale Parcel is currently utilized as native rangeland within the Rock Springs Allotment. This allotment totals 2,061,062 acres as shown in **Table 3.3-5**, Rock Springs Allotment Land Ownership. A total of approximately 148,524 animal unit months (AUM's) are permitted within this allotment and the Sale Parcel comprises approximately 4 AUMs. Of the Active AUMs, 107,991 or 73 percent of the total permitted AUM's are available for use. Stocking rates for livestock are approximately 13.9 acres/AUM (JBR 2004).

Native rangelands are critical to ranching operations as these lands provide all or a portion of the annual forage needed by the livestock. Approximately 90 percent of allotment total permitted use is controlled by the Rock Springs Grazing Association (RSGA). The majority of livestock (cattle and sheep) grazing today on the Rock Springs Allotment is limited to mostly dormant season grazing (December 01 – May 15). Some growing season or season-long grazing occurs in the allotment by in-holders. There are also two horse permits held by these in-holders which are located in the northwest portion of the Rock Springs Allotment, west of the Green River. This use amounts to approximately 10% of the total permitted use in the allotment. Most of the in-holders (owners of small parcels of land within the boundary of the allotment) are separate from the RSGA; however, some are also RSGA shareholders and as such, operate year-round or nearly year-round on the Rock Springs Allotment.

Table 3.3-5 Rock Springs Allotment Land Ownership

Allotment Name	Allotment Number	Public Acres	Other Federal Acres	State Acres	Private Acres	Total Acres
Rock Springs	13018	956,682	98,795	20,782	984,803	2,061,062

3.3.7 Wild Horses

The objectives for management of wild horses are to: 1) protect, maintain, and control viable, healthy herds of wild horses while retaining their free-roaming nature; 2) provide adequate habitat for free-roaming wild horses through management consistent with principles of multiple use and environmental protection; and 3) provide opportunity for the public to view wild horses (BLM 1997).

The Sale Parcel is located in the Great Divide Basin Wild Horse Management Area (HMA). The Appropriate Management Level (AML) for the HMA is 415 to 600 wild horses as identified in the GRRMP.

CHAPTER 4: ENVIRONMENTAL IMPACTS

4.1 Introduction

4.1.1 General Analysis Assumptions and Guidelines

This chapter describes the effects of implementing the alternatives on the affected environment as described in Chapter 3. Each resource section in this chapter addresses effects in terms of direct, indirect and cumulative impacts. Within this chapter, the terms "impact" and "effect" are used synonymously and interchangeably. Each type of effect is defined below.

- Direct impacts are those that occur at the same time and place as the triggering action.
- Indirect impacts are those that occur later or away from the triggering action.
- Cumulative impacts results from the incremental impacts of a proposed action when added to past, present, and reasonably foreseeable future actions, regardless of who takes the action (40 CFR 1508.7).

Within this chapter, the above-mentioned impacts were evaluated quantitatively and/or qualitatively, depending on available data and the nature of the resource analyzed.

4.2 Direct and Indirect Impacts

The following sections describe the direct and indirect impacts that could occur under the No Action and Proposed Action alternatives. As previously stated, direct impacts are those that occur at the same time and place as the triggering action. Indirect impacts are those that occur later or away from the triggering action.

4.2.1 Cultural Resources

4.2.1.1 Alternative I – No Action

Under the No Action alternative, the proposed land sale would not be completed. As such, no changes to the existing environment would occur, and no effects to the cultural resources would be anticipated.

4.2.1.2 Alternative II – Proposed Action

In accordance with Section 106 of the NHPA 36 C.F.R. 1508 under NEPA, a Class III Cultural Resource Inventory was conducted in May 2011 to determine if properties eligible for the NRHP were present within the Area of Potential Effect (APE).

Five of the six prehistoric sites within the APE are not eligible for the NRHP and may leave federal management without further consideration. A portion of the one prehistoric site eligible for the NRHP is located within the Sale Parcel boundary. The portion was determined to be a non-contributing portion of the site through testing to determine if in situ cultural remains were buried within the sand shadow covering that portion of the site. The testing and exposed soil profiles determined the portion of the site within the Sale Parcel boundary does not contribute to the site's eligibility.

The land sale would not affect the setting of the nearby Point of Rocks to South Pass City Stage Road since the segment of the road is non-contributing to its eligibility for the NRHP. This segment of the Point of Rocks to South Pass City Stage Road is non-contributing because it is no longer physically intact. The visual impacts to the Point of Rocks to South Pass City Stage Road are mitigated by the Point of Rocks Memorandum of Agreement.

Under the Programmatic Agreement between the Wyoming BLM and the Wyoming State Historic Preservation Office (WYSHPO), the WYSHPO was consulted regarding the National Register status of cultural sites as well as the overall affect that the proposed project may have on historic properties within the area of the potential effect for this undertaking.

No cultural properties were identified during the Class III cultural resource inventory that the Eastern Shoshone Tribe of the Wind River Reservation, the Northern Arapaho Tribe, the Shoshone-Bannock Tribes of the Fort Hall Reservation and the Ute Tribe of the Uintah and Ouray Reservation have previously indicated to require consultation.

4.2.2 Paleontology

4.2.2.1 Alternative I – No Action

Under the No Action alternative, the proposed land sale would not be completed. As such, no changes to the existing environment would occur, and no effects to paleontological resources would occur.

4.2.2.2 Alternative II – Proposed Action

Stratigraphic Rex, LLC completed a paleontological field survey report of the Sale Parcel on October 25, 2011 and no findings of vertebrate fossils or fossils of significance were identified. Based on the report findings and the PFYC of tier 3, no adverse impacts to paleontological resources from the sale of the federal parcel are anticipated. Although no paleontological resources were identified, the sale of the property would result in the loss of any unidentified paleontological resource from public ownership.

4.2.3 Geology and Minerals

4.2.3.1 Alternative I – No Action

Under the No Action alternative, the proposed land sale would not be completed. As such, no changes to the existing environment would occur, and no effects to the geology and mineral resources would occur.

4.2.3.2 Alternative II – Proposed Action

Under the Proposed Action, minimal surface interference related to potential mineral development and potential surface uses is anticipated. The BLM Mineral Report completed on February 28, 2013 recommends proceeding with processing the application for the sale with the following reservations; coal, oil and gas.

4.2.4 Fish and Wildlife Species, Including Special Status Species

4.2.4.1 Alternative I – No Action

Under the No Action alternative, the proposed land sale would not be approved. Wildlife, including special status species and wildlife habitat on BLM administered lands would continue to be managed by the BLM in accordance with the GRRMP.

4.2.4.2 Alternative II – Proposed Action

Big Game

Sixty (60.00) acres of habitat would be removed from the BLM's management under the Proposed Action. Accordingly, mule deer winter yearlong habitat, elk winter yearlong habitat, and pronghorn antelope crucial winter range habitat would be removed from federal management, and therefore directly impacted by the realization of the proposed land sale.

Raptors

Human activities in close proximity to active raptor nests may interfere with nest productivity. Romin and Muck (1999) indicate that activities within 0.5 miles of a nest are prone to cause adverse impacts to nesting raptors. If disruptive activities occur during nesting, they could be sufficient to cause adult birds to remain away from the nest and their chicks for the duration of the activities. This absence can lead to overheating or chilling of eggs or chicks and can result in egg or chick mortality. Prolonged disturbance can also lead to the abandonment of the nest by the adults. Routine human activities near these nests can also draw increased predator activity to the area and resulting in increased nest predation.

Sixty (60.00) acres of habitat would be removed from the BLM's management under the proposed action. The proposed land sale is located in close proximity to six known ferruginous hawk nests, and one golden eagle nest.

BLM Sensitive Wildlife Species

Sagebrush obligates

The species directly affected by the proposed land sale include the Brewer's sparrow, sage sparrow and the sage thrasher. Potential impacts to the sagebrush obligates identified within the Sale Parcel are discussed in the Migratory Bird section below.

Migratory Birds

Migratory bird species within the immediate area nest in the spring and early summer and are vulnerable to the same effects as sage-grouse and raptor species. Though no timing restrictions are typically applied specifically to protect migratory bird breeding or nesting, where sage-grouse or raptor nesting timing limitations are applied, nesting migratory birds are also protected. Where these timing limitations are not applied and migratory bird species are nesting, migratory birds remain vulnerable.

Under the Proposed Action, the act of selling federal land does not produce any impacts to migratory birds.

Threatened, Endangered, or Candidate Animal Species

Greater Sage-Grouse

Impacts to greater sage-grouse associated with energy development are discussed in detail in the 12-Month Findings for Petitions to List the Greater Sage-Grouse (*Centrocercus urophasianus*) as Threatened or Endangered (USFWS 2010). Impacts to sage-grouse are generally a result of loss and fragmentation of sagebrush habitats associated with roads and infrastructure. Research indicates that sage-grouse hens also avoid nesting in developed areas.

Implementation of the project would adversely impact nesting habitat, both through direct loss and avoidance of the area by sage-grouse. An initial 60 acres of habitat would be removed from federal management. Realization of the sale would also contribute to reduced effectiveness of management of habitat on federal lands. Disruptive activities related to maintenance and construction could inhibit sage-grouse from using remaining habitat. The proposed project does not occur in BLM key and/or Wyoming Core sage-grouse or mapped habitat areas.

4.2.5 Lands / Access

4.2.5.1 Alternative I – No Action

Under the No Action alternative the proposed land sale would not be completed.

4.2.5.2 Alternative II – Proposed Action

Under the Proposed Action, there would be no direct or indirect impacts to the existing County Road 15 (9 Mile Road).

4.2.6 Livestock Grazing

4.2.6.1 Alternative I – No Action

Under the No Action alternative, the proposed land sale would not be approved. There would be no project related, direct or indirect impacts on livestock grazing or the Rock Springs Allotment.

4.2.6.2 Alternative II – Proposed Action

Under the Proposed Action, the amount of public land available to grazing would be reduced, which would reduce the grazing permit. More specifically, the total permitted use of 148,524 AUMs would be reduced by four AUMs (or 0.003 percent) to 148,520 permitted AUMs. While this impact is considered neglible, Tthe Sale Parcel would no longer be available for livestock grazing.

4.2.7 Wild Horses

4.2.7.1 Alternative I – No Action

Under the No Action alternative, the proposed land sale would not be approved. There would be no project related, direct or indirect impacts on wild horses or the Great Divide Basin HMA.

4.2.7.2 Alternative II – Proposed Action

Under the Proposed Action alternative, the 60.00-acre parcel would no longer be available for wild horse use within the Great Divide Basin HMA. Direct and indirect impacts to wild horses would be negligible.

4.3 Cumulative Impacts Analysis

Cumulative impacts result from the incremental effects of an alternative when added to other past, present, and reasonably foreseeable future actions, regardless of who takes the action (40 CFR 1508.7).

Cumulative impacts analysis in this EA follows the guidance contained in the BLM NEPA Handbook (BLM 2008) and the CEQ Guidance on Considering Cumulative Effects under the NEPA (CEQ 1997).

The same resources evaluated for project effects (Chapter 3.0) are evaluated for cumulative effects. Physical boundaries for cumulative impacts analysis vary by resource and would be identical to those analysis areas used in Chapter 3.0 to determine the context of impacts.

Past, present and reasonably foreseeable future actions in the area surrounding the Sale Parcel include, but are not limited to, dispersed recreation, the power plant, the existing landfill, coal mine, oil and gas development, pipelines, and transportation infrastructure including Interstate 80 and County roads.

Cumulative impacts to big game, raptors, and other species habitat are negligible to low throughout the analysis area. The relatively low amount of cumulative impact is unlikely to impact the overall population viability of those species in the analysis area.

Cumulative impact to the majority of the special status species, including federally listed or candidate species from reasonably foreseeable future actions and the Proposed Action are negligible to low and are unlikely to contribute to a loss in population viability for the species.

The relatively low amount of impact to federally-listed or candidate species, big game, small game, and other species, including reduction of habitat and subsequent expansion of the landfill, is unlikely to impact the overall population viability of these species in the analysis area.

Contribution of the land sale when combined with the cumulative effects of past, present and reasonably foreseeable future actions would be neglible to low on cultural resources, paleontological resources, geology and minerals, lands and access, livestock grazing, and wild horses.

However, any incremental impact, no matter how small, must be considered in the context of cumulative impacts. Combined with other past, present, and future land sale actions as well as other activities that impede BLM's management ability and authority (e.g., land swaps, trespass activities), the proposed land sale would reduce the BLM's ability to implement land management decisions and policies designed to protect natural and cultural resources and values in the RSFO management area, thereby leaving those resources and values vulnerable.

CHAPTER 5: CONSULTATION AND COORDINATION

5.1 Introduction

Staff from the BLM RSFO reviewed the Proposed Action and identified potential resource issues. The issue identification section describes those issues carried forward for detailed analyses in **Chapter 3** and **4** (see **Appendix B**). **Appendix B** and **Table 3.1-1** provide rationale for issues that were considered by not analyzed further. The issues that were identified through the public and agency involvement process are described in **Sections 5.2** and **5.3** below.

5.2 Persons, Groups, and Agencies Consulted

Table 5.2-1 identifies the agencies and organizations consulted for purposes of this EA.

Table 5.2-1 Agencies and Organizations Consulted for Purposes of this EA

Name	Purpose & Authorities for Consultation or Coordination	Findings & Conclusions
Wyoming State Historic Preservation Office (WYSHPO)	Consultation for undertakings, as required by the National Historic Preservation Act (NHPA) (16 USC 470)	SHPO Concurrence letter received on 9/22/2011
Wyoming Game and Fish Department	Consult with WGFD as the agency with expertise on impacts on ferruginous hawks and Greater Sage-Grouse.	Data and analysis regarding ferruginous hawks and Greater Sage-Grouse incorporated into **Chapters 3** and **4**

5.3 Summary of Public Participation

The public participation process was initiated on December 12, 2013, when the BLM posted the Notice of Realty Action in the Federal Register and solicited public input as part of the public scoping process. The scoping comment period for the Proposed Action was open from December 12, 2013 to January 27, 2014. Public comments and BLM responses are included in **Appendix C**.

5.4 List of Preparers

Tables 5.4-1 and **5.4-2** identify the BLM and contractor preparers of this EA.

Table 5.4-1 List of Preparers – BLM

Area of Expertise/Responsibility	Name	Title
Solid Minerals	Jeff Clawson	Solid Leasable Minerals
Wild Horses and Burros	Jay D'Ewart	Wild Horse Specialist
Floodplains	Dennis Doncaster	Hydrologist
Water Resources/Quality (drinking/surface/ground)		
Wetlands/Riparian Zones		
Transportation Planning	Bruce Estvold	Operations Civil Engineer
NEPA	Nancy Favour/Phillip Blundell	NEPA Coordinator
Visual Resource Management	Georgia Foster	Recreation Specialist
Wilderness		
Recreation		
Areas of Critical Environmental Concern		
Transportation Planning		
Invasive Species/Noxious Weeds	Jim Glennon	Botanist
Soils		
Threatened, Endangered or Candidate Plant Species		
Vegetation		
Fishery Biology	John Henderson	Fishery Biologist
Oil and Gas Development	Doug Linn	Supervisory Natural Resource Specialist
Livestock Grazing	Cherette Mastny	Range Management Specialist
Farmlands: Prime or Unique		
Rangeland Health Standards		
Economist	Jessica Montag	Economist
Project Leader	Carol Montgomery	Realty Specialist
Lands/Access		
Geology/Mineral Resources	Kirk Rentmeister	Geologist
Paleontology		
Wastes (hazardous or solid)		
Special Status Species	Mark Snyder	Supervisory Wildlife Biologist
Threatened, Endangered or Candidate Animal Species		
Wildlife		
Cultural Resources	Breelyn Van Fleet	Archeologist
Native American Religious Concerns		

Table 5.4-2 List of Preparers – Contractors

Area of Expertise/Responsibility	Name	Affiliation
Draft EA Project Manager	Don Hamilton	Star Point Enterprises, Inc.
Draft EA Author/QA/QC	Chrissy Schaffner	Star Point Enterprises, Inc.
Environmental Conditions Report Author	Brian Young	PacifiCorp Property Agent

Environmental Reviewer

5/26/15
Date

CHAPTER 6: REFERENCES, GLOSSARY AND ACRONYMS

6.1 References Cited

Bureau of Land Management (BLM). 1996. Green River Resource Area Resource Management Plan and Environmental Impact Statement. Rock Springs Field Office

Bureau of Land Management (BLM). 1997. Green River Resource Management Plan and Record of Decision

Bureau of Land Management (BLM). 2008. Bureau of Land Management NEPA Handbook (Handbook H-1790-1). BLM Washington Office.

Kirk N. Rentmeister, 2013. Bureau of Land Management (BLM) Mineral Potential Report

Bureau of Land Management (BLM), 2013, Land Description Review Workshop

Rick Pole, P.G., Alpine Environmental Solutions LLC, 2014, Phase I Environmental Site Assessment

Melissa V. Connely, Stratigraphic rex, LLC, 2011, Paleontological Field Survey

Connelly, J. W., M. A. Schroeder, A. R. Sands, and C. E. Braun. 2000. Guidelines for management of sage grouse populations and habitats. Wildlife Society Bulletin 28:967-985

Council on Environmental Quality. 1997. Considering Cumulative Effects Under the National Environmental Policy Act. Council on Environmental Quality, Executive Office of the President, Washington, DC. January.

Hiat, G.S. and D. Baker. 1981. Effects of oil/gas drilling on elk and mule deer winter distributions on Crooks Mountain, Wyoming. Wyoming Game and Fish Department.

Ingelfinger, F., and S. Anderson. 2004. Passerine response to roads associated with natural gas extraction in a sagebrush steppe habitat. Western North American Naturalist 64:385-395.

JBR Environmental Consultants. 2004. Environmental Assessment PacifiCorp – Jim Bridger Power Plant Land Purchase Project. (WY040–EA04-061)

Munn, L.C., and C.S. Arneson. 1998. Draft Wyoming Estimated Net Annual Aquifer Recharge, University of Wyoming Spatial Data and Visualization Center, Laramie, WY.

Nicholoff, S. H. 2003. Wyoming Bird Conservation Plan, Version 2.0. Wyoming Partners in Flight. Wyoming Game and Fish Department.

Olendorff, R. R. 1993. Status, Biology, and Management of Ferruginous Hawks: A Review. Boise, ID: Raptor Research and Technical Assistance Center, Special Report. USDI, Bureau of Land Management.

Paige, C., and S. A. Ritter. 1999. *Birds in a sagebrush sea: managing sagebrush habitats for bird communities*. Partners in Western Flight working group, Boise, ID.

PERCO. 2008, amended 2012. Phase I Environmental Site Assessment for an Undeveloped Property Located near the PacifiCorp Energy Company Jim Bridger Power Plant Industrial Landfill.

Romin, L. A. and J. A. Muck. 1999. Utah field office guidelines for raptor protection from human and land use disturbances. U.S. Fish and Wildlife Service, Utah Field Office, Salt Lake City, UT, 42pp.

Saab, V. and T. Rich. 1997. Large-Scale Conservation Assessment for Neotropical Migratory.

Smith, D.G., and J.R. Murphy. 1978. Biology of the Ferruginous Hawk in central Utah. Sociobiology.

SWCA Environmental Consultants. 2010. Environmental Assessment, Jim Bridger Power Plant 3-D Seismic and Electromagnetic Surveys. (WY040-EA10-111)

Temple S. A. and J. R. Cary. 1988. Modeling Dynamics of Habitat-Interior Bird Populations in Fragmented Landscapes. Cons. Biol. 2:340-347.

Temple, S. A. and B. A. Wilcox. 1986. Introduction: Predicting Effects of Habitat Patchiness and Fragmentation. Wildlife 2000:261-262.

Tetra Tech. 2008. Leucite Permit Wildlife Monitoring Map. Leucite Hills Mine.

Western Archaeological Services, Inc., 2011. Class III Cultural Resource Inventory and Testing Report for the PacifiCorp, Jim Bridger Power Plant, Section 24 Ash Landfill Acquisition Project, Sweetwater County, Wyoming. (10-WAS-441a)

White. C.M. and T.L. Thurow, 1985. Reproduction of ferruginous hawks exposed to controlled disturbance.

Wyoming Game and Fish Department (WGFD). 2009. Minimum Recommendations for Development of Oil and Gas Resources within Crucial and Important Wildlife Habitats on BLM Lands. WGFD. Cheyenne, WY.

Wyoming Weed and Pest Council. 2010. Weed and Pest Declared List (By County) Amended February 2010. Available online at http://www.wyoweed.org. Accessed May 22, 2012.

U.S. Fish & Wildlife Service (USFWS). 2010. Endangered and Threatened Wildlife and Plants; 12-Month Findings for Petitions to List the Greater Sage-Grouse (*Centrocercus urophasianus*) as Threatened or Endangered. 50 CFR Part 17.

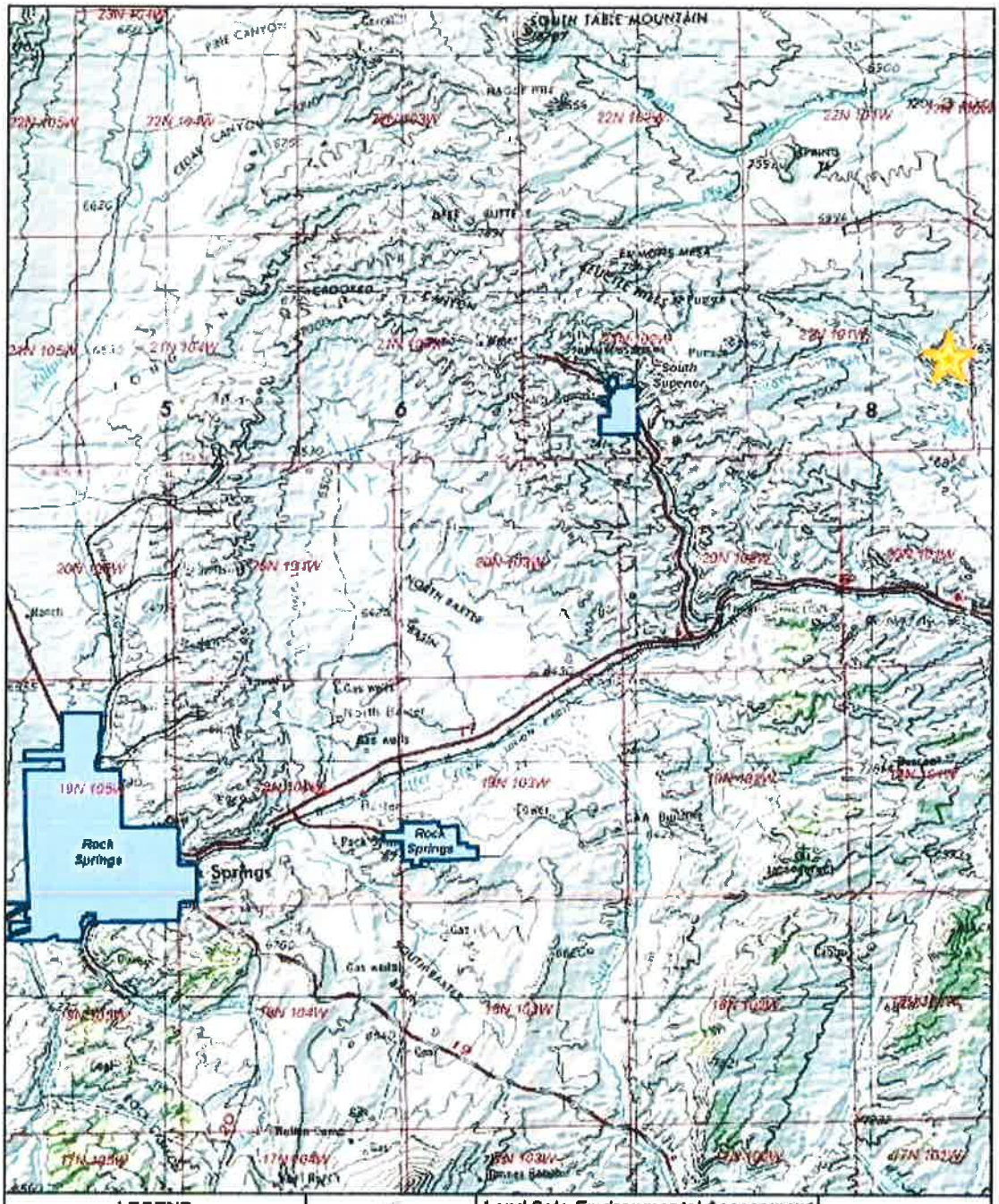
U.S. Fish & Wildlife Service (USFWS). 2012. Endangered Species by County. Available online: http://ecos.fws.gov/tess_public/countySearch!speciesByCountyReport.action?fips=5607 Access May 29, 2012.

U.S. Geological Survey. 1994. Wyoming Bedrock Geology at 1:500,000 Geostation Data Presentation Form: Vector Digital Data. Wyoming State Geological Survey.

6.2 List of Acronyms

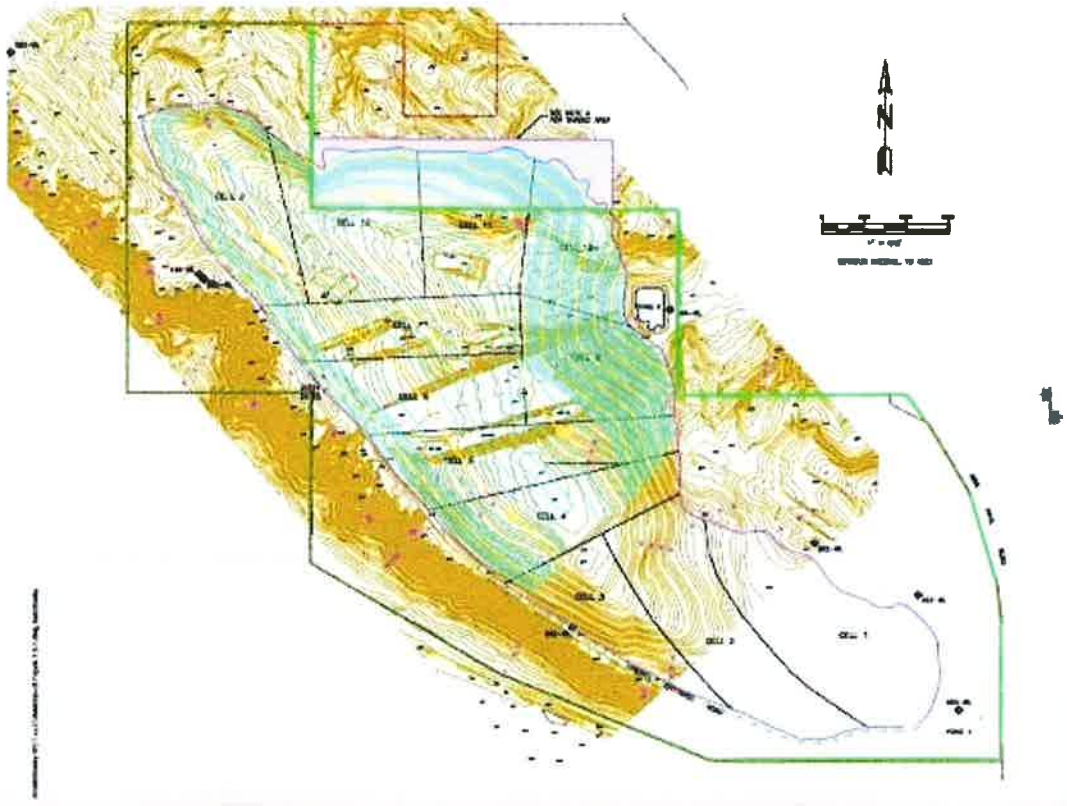
AUM	Animal Unit Months
AML	Appropriate Management Level
ACEC	Area of Critical Environmental Concern
APE	Area of Potential Effect
BBC	Bird of Conservation Concern
BLM	Bureau of Land Management
CFR	Code of Federal Regulations
CEQ	Council on Environmental Quality
DR	Decision Record
ESA	Endangered Species Act
EA	Environmental Assessment
EIS	Environmental Impact Statement
FEMA	Federal Emergency Management Agency
FLPMA	Federal Lands Policy and Management Act
FONSI	Finding of No Significant Impact
GHG	Greenhouse Gas
GIS	Geographic Information System
GRRMP	Green River Resource Area Management Plan
HMA	Horse Management Area
I-80	Interstate 80
NAAQS	National Ambient Air Quality Standards
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NRHP	National Register of Historic Places
NRCS	Natural Resource Conservation Service
ROD	Record of Decision
ROW	Right-of-Way
RSFO	Rock Springs Field Office
RSGA	Rock Springs Grazing Association
SGCN	Species of Greatest Conservation Need
THPO	Tribal Historic Preservation Office
USPAP	Uniform Standards of Professional Appraisal Practice
USGS	United States Geological Survey
VRM	Visual Resource Management
WGFD	Wyoming Game and Fish Department
WyDEQ	Wyoming Department of Environmental Quality
WYNDD	Wyoming Natural Diversity Database
WYSHPO	Wyoming State Historic Preservation Office

APPENDIX A: FIGURES



LEGEND		Land Sale Environmental Assessment	Vicinity Map	
Sale Parcel Location Town		BLM Wyoming, Rock Springs Field Office NW1/4 SW1/4 and W1/2 NE1/4 SW1/4 Section 24, T21N, R101W, 6th P.M. Sweetwater County, UT	Figure 1.1	February 2014

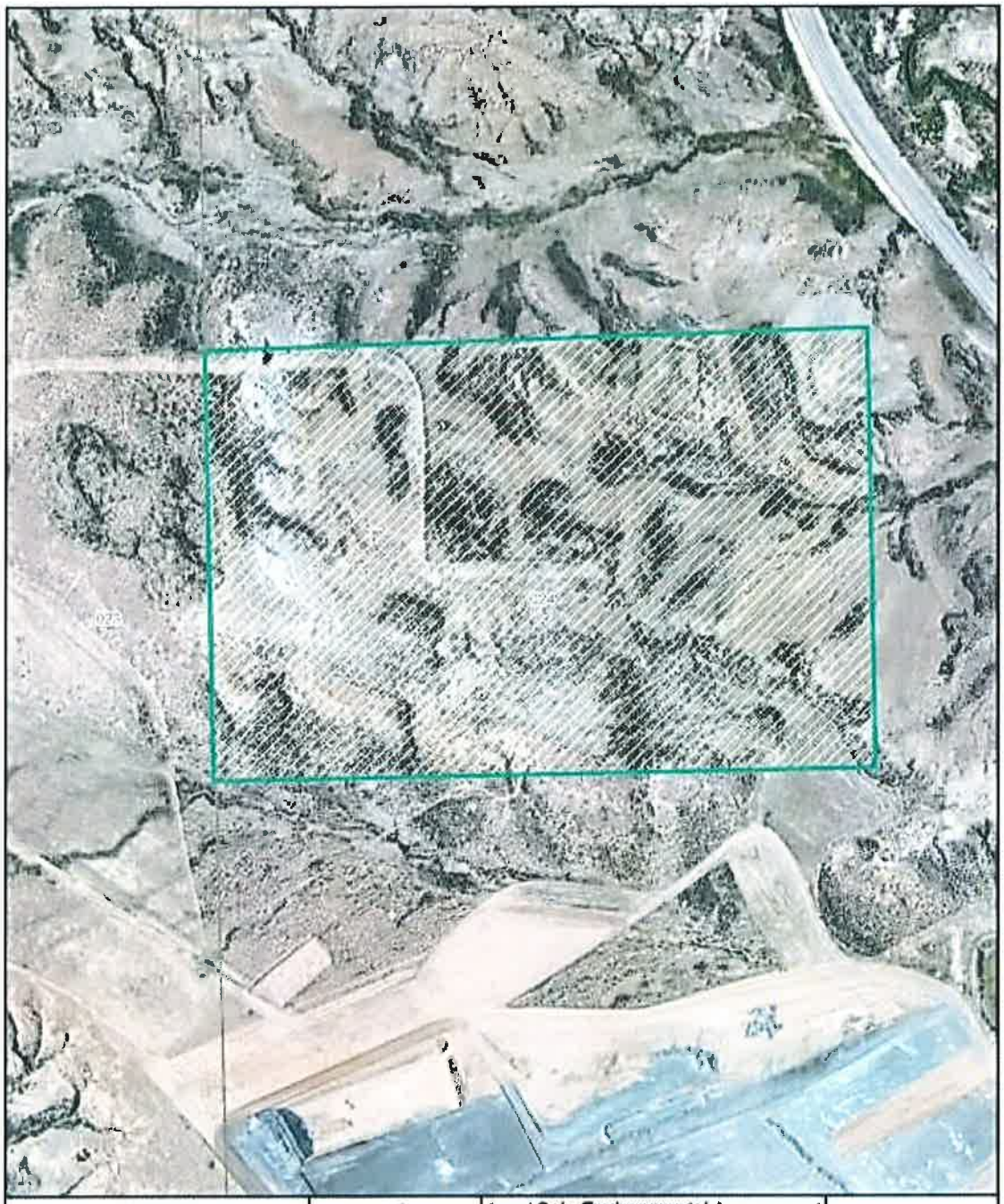
LEGEND		Land Sale Environmental Assessment	Sale Parcel and Existing Land Use	
Sale Parcel		BLM Wyoming, Rock Springs Field Office NW1/4 SW1/4 and W1/2 NE1/4 SW1/4 Section 24, T21N, R101W, 6th P.M. Sweetwater County, UT	Figure **1.2**	February 2014



LEGEND:

- LANDFILL BOUNDARY
- ASH FILL BOUNDARY
- ASH CELL BOUNDARY
- EXISTING PERIMETER FENCE
- EXISTING GROUND CONTOUR
- EXISTING PERIMETER DRAINAGE DITCH
- GROUNDWATER MONITORING WELL
- EXISTING ROADWAY
- PROPOSED FINAL CONTOUR

Land Sale Environmental Assessment	**Jim Bridger Landfill Design**	
BLM Wyoming, Rock Springs Field Office NW1/4 SW1/4 and W1/2 NE1/4 SW1/4 Section 24, T21N, R101W, 6th P.M. Sweetwater County, UT	Figure **1.3**	February 2014



LEGEND		Land Sale Environmental Assessment	Proposed Action	
Sale Parcel	0 200 400 Feet 1 in = 400 ft	BLM Wyoming, Rock Springs Field Office NW1/4 SW1/4 and W1/2 NE1/4 SW1/4 Section 24, T21N, R101W, 6th P.M. Sweetwater County, UT	Figure 2.1	February 2014

APPENDIX B: INTERDISCIPLINARY TEAM CLEARANCE REPORTS

Interdisciplinary Team Clearance Reports are filed in the case file at the Rock Springs Field Office.

APPENDIX C: PUBLIC COMMENTS

WYOMING GAME AND FISH DEPARTMENT

5400 Bishop Blvd. Cheyenne, WY 82006

Phone: (307) 777-4600 Fax: (307) 777-4699

wgfd.wyo.gov

GOVERNOR
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CHARLES PRICE

January 24, 2014

WER 13329
Bureau of Land Management
Rock Springs Field Office
Notice of Reality Action;
Notice of Segregation and Proposed (Non-Competitive)
Direct Sale of Public Land to PacifiCorp
Sweetwater County

Mike Phillips
Acting Field Manager
Bureau of Land Management
Rock Springs Field Office
280 Highway 191 North
Rock Springs, WY 82901

Dear Mr. Phillips:

The staff of the Wyoming Game and Fish Department has reviewed the Direct Sale of Public Land to PacifiCorp totaling 60 acres adjacent to the Jim Bridger Plant landfill and located approximately 30 miles east of Rock Springs, Wyoming in Sweetwater County. We offer the following comments for your consideration.

Terrestrial Considerations:

The location of the 60 acres occurs within pronghorn crucial winter range. We recommend the area be fenced to exclude ungulates and prevent entanglement. As the landfill usefulness nears completion, we recommend reclamation occur that provides vegetation suitable for big game wintering (establishing sagebrush) and that the exclusion fence be removed at that time.

Aquatic Considerations:

We have no aquatic concerns pertaining to this project.

"Conserving Wildlife - Serving People"

Mike Phillips
January 24, 2014
Page 2 of 2 - WER 13329

Thank you for the opportunity to comment.

Sincerely,

Mark Konishi
Deputy Director

MK/mf/gb

cc: USFWS
Mark Zornes, Green River Region
Robb Keith, Green River Region

BLM Response to Comment

In response to the WFGD comment letter, the BLM RSFO made a recommendation in **Section 4.3**, *Mitigation Measures*. The recommendations include 1) any future land uses that could potentially impact wildlife be fenced in order to exclude wildlife (e.g., pronghorn), and 2) if the land use changes where the potential effects to wildlife are no longer present, any fencing be removed and previous disturbance be reclaimed to habitat suitable for wildlife use.