

2.5 Grazing

2.5.1 Key Issues

Key issues for grazing and other agricultural uses include:

- Temporary and permanent loss of Animal Unit Months (AUMs)
- Temporary and permanent loss of water-related range improvements
- Temporary and permanent loss of other range improvements
- Increased number and distribution of livestock water sources (i.e., artificially created creeks and ponds) as a result of water being discharged from oil, gas, and mine development operations

2.5.2 Study Area

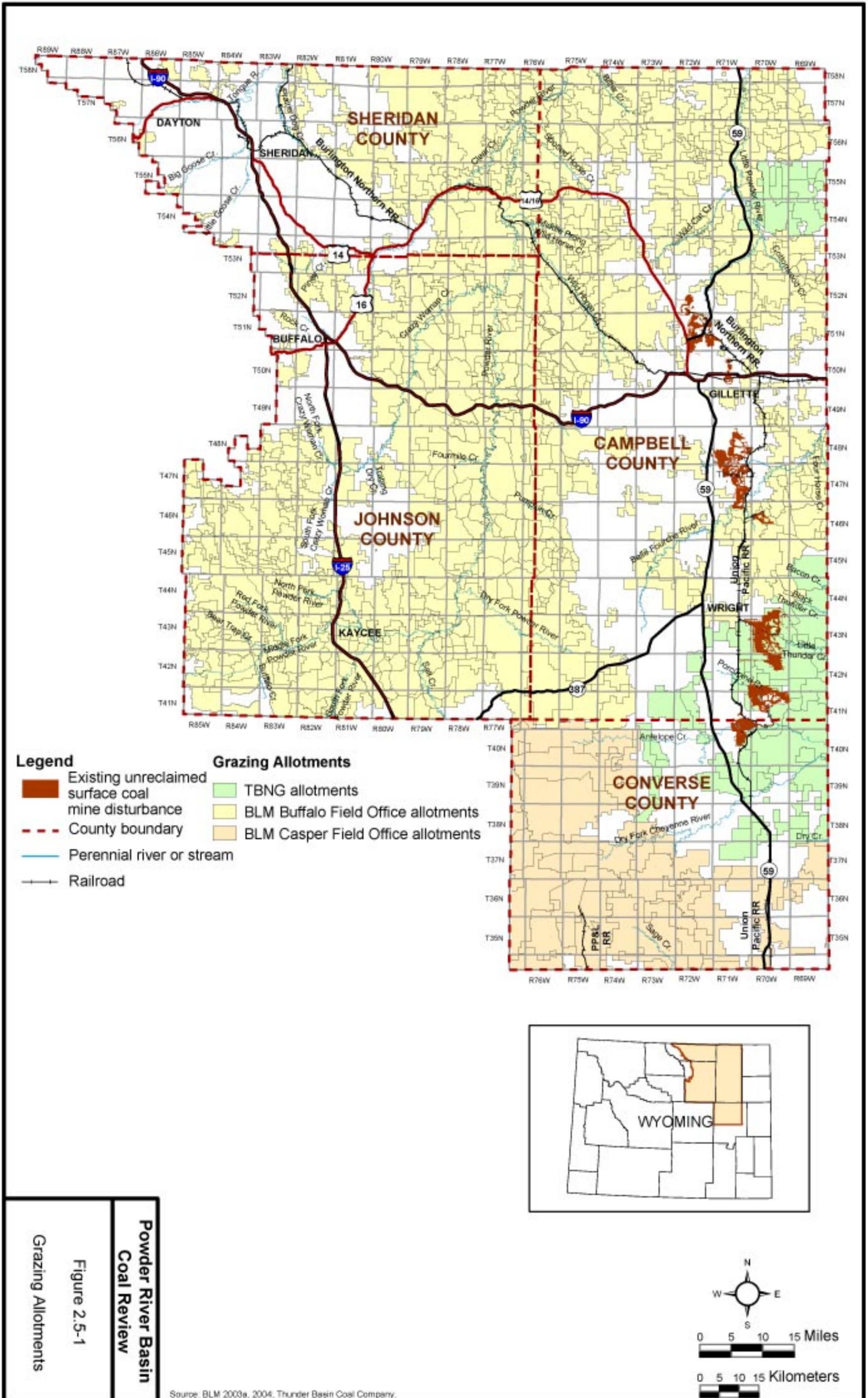
The study area for grazing and agricultural uses includes all or portions of Sheridan, Johnson, Campbell, and Converse counties (see **Figure 1-1**). It includes all of the area administered by the BLM Buffalo Field Office, a portion of the area administered by the BLM Casper Field Office, and a portion of the TBNG, which is administered by the USFS. State and private lands also are included in the study area (see **Figure 1-3**).

2.5.3 Current Conditions

Livestock grazing is one of the primary land uses within the PRB study area since the majority of the area consists of rangeland, most of which is privately owned. Livestock grazing also occurs on lands administered by the BLM, USFS, and State of Wyoming. BLM-administered rangeland within the study area is managed by the Buffalo Field Office (Sheridan, Johnson, and Campbell counties) and Casper Field Office (northern portion of Converse County). USFS-administered rangeland within the study area is part of the TBNG, which is managed by the Douglas Ranger District. A summary of the number of allotments, lessees, and AUMs on federally-administered lands in the study area is presented in **Tables 2.5-1**. Discussions relative to rangeland administered by the various BLM and USFS offices in the study area are presented below. State-administered rangeland is leased for livestock grazing and is managed by the State of Wyoming.

2.5.3.1 BLM-administered Rangeland

Livestock grazing that occurs on BLM-administered rangeland in the Buffalo Field Office area includes 470 grazing allotments, which cover approximately 798,000 acres with an associated 398 lessees and 420 grazing leases (**Figure 2.5-1**). The majority of BLM grazing allotments that occur in the study area are leased by one lessee, although several allotments are leased by two or more lessees. The majority of leases have yearlong authorization, which means the lessees have the option to use the public lands when they choose during the year; however, it does not allow for year-round grazing. A small percentage of lessees choose to utilize rangeland on a yearlong basis. A small number of the allotments include large parcels of public rangeland that are divided into numerous pastures. Livestock grazing within these allotments occurs on a rotational basis.



Powder River Basin Coal Review
 Figure 2.5-1
 Grazing Allotments

Source: BLM 2003a, 2004, Thunder Basin Coal Company.

Table 2.5-1
Rangeland Summary for Federally-administered Lands in the Study Area

Allotments, Lessees, and AUMs	BLM-administered Rangeland	USFS-administered Rangeland	Total
Number of Grazing Allotments	520	75	595
Acres of Rangeland	871,000	266,000	1,137,000
Number of Lessees	449	48	497
Number of Grazing Lessees	471	74	545
AUMs	132,775	51,373	184,148

Sources: Medders 2004; Nelson 2004; Schmitt 2004; and Stanton 2004.

The majority of ranch operations consist of cow/calf pairs (approximately 90 percent) and yearlings, and the remainder consist of sheep operations. Authorized livestock use within these grazing allotments total 105,152 AUMs. An AUM is the amount of forage necessary to support 1 cow and calf, or 5 sheep, for 1 month. There are no suspended AUMs on any of the allotments. The average stocking rate for the study area is 5 to 7 acres per AUM; however, it can vary widely based on annual precipitation levels.

Livestock grazing that occurs on BLM-administered rangeland in the Casper Field Office area includes 50 grazing allotments, which cover approximately 73,000 acres with an associated 51 lessees and 51 grazing leases. The majority of the BLM grazing allotments that occur in the study area are leased by one lessee, although one allotment is leased by two lessees. All of the leases have yearlong authorization. A small percentage of lessees choose to utilize rangeland on a yearlong basis. A small number of the allotments include large parcels of public rangeland that are divided into numerous pastures. Livestock grazing within these allotments occurs on a rotational basis despite the fact that the lease often authorizes use for the entire year.

All of the ranch operations consist of cow/calf pairs or sheep operations. Authorized livestock use within these grazing allotments total 27,623 AUMs. There are no suspended AUMs on any of the allotments. The average stocking rate for the study area is 5 to 6 acres per AUM, but can vary widely based on annual precipitation levels.

2.5.3.2 USFS-administered Rangeland

Livestock grazing that occurs on USFS-administered rangeland in the southern portion of the TBNG includes entire or partial portions of 60 grazing allotments, which cover approximately 174,000 acres with an associated 34 lessees and 60 grazing leases (**Figure 2.5-1**). The majority of the USFS grazing allotments that occur in the study area are leased by one lessee, although several allotments are leased by two or more lessees (i.e., community allotments). Within these community allotments, lessees use separate pastures or in rare instances utilize the same pasture at different times of the year. The majority of leases have yearlong authorization. A small percentage of lessees choose to utilize rangeland on a yearlong basis. A small number of allotments include large parcels of public rangeland that are divided into numerous pastures.

2.0 Description of Current Conditions

Livestock grazing within these allotments occurs on a rotational basis despite the fact that the lease often authorizes use for the entire year.

The majority of ranch operations consist of cow/calf pairs and yearlings, and, to a lesser extent, sheep. Authorized livestock use on the grazing allotments total 37,573 AUMs. The average stocking rate for the study area is 4.5 acres per AUM, but can vary widely based on annual precipitation levels.

Livestock grazing that occurs on USFS-administered rangeland in the northern portion (i.e., Spring Creek Unit north of Gillette, Wyoming) of the TBNG includes entire or partial portions of 15 grazing allotments, which cover approximately 92,000 acres with an associated 14 lessees and 14 grazing leases (**Figure 2.5-1**). The majority of USFS grazing allotments that occur in the study area are leased by one lessee, although several allotments are leased by two or more lessees (i.e., community allotments). Within these community allotments, lessees use separate pastures or in rare instances utilize the same pasture at different times of the year. The majority of leases have yearlong authorization. A small percentage of lessees choose to utilize rangeland on a yearlong basis. A small number of allotments include large parcels of public rangeland that are divided into numerous pastures. Livestock grazing within these allotments occurs on a rotational basis despite the fact that the lease often authorizes use for the entire year.

The majority of ranch operations consist of cow/calf pairs (89 percent) and sheep (10 percent). Horses also utilize rangeland within this area but only comprise 1 percent of all grazing within the area. Authorized livestock use on the grazing allotments total 13,800 AUMs. The average stocking rate for the study area is 3.5 to 4.0 acres per AUM, but can vary widely based on annual precipitation levels.

2.5.3.3 Range Improvements

A wide array of range improvements have been completed on the allotments in the PRB study area to better control livestock for management purposes. These range improvements include fences, cattle guards, weed control, erosion control, prescribed burns, reclaimed areas, springs, water pipelines, reservoirs, electric- and windmill-powered wells, and access roads. Mapped locations for all of the improvements within the study area are not available.

2.5.3.4 Existing Impacts

Based on GIS analysis, the existing surface disturbance associated with development activities in the study area (as of the end of year 2003) have resulted in the loss of approximately 56,788 acres of rangeland, 36,265 acres of which occur on BLM-administered allotments and 20,523 acres which occur on USFS-administered allotments. Approximately 1,912 acres of the existing disturbance on the BLM-administered allotments is related to coal mine development (ENSR 2005b). The majority of surface disturbance in the study area has occurred on private property. Based on an average stocking rate of 6.0 acres per AUM on BLM-administered allotments in the study area and an average stocking rate of 4.0 acres per AUM on USFS-administered allotments, existing development-related disturbance has resulted in the loss of 6,044 and 5,130 AUMs, respectively.

2.5.4 Comparison to Previous Predictions

Predictions relative to potential future impacts to grazing were not presented in the Coal Development Status Check (BLM 1996) or earlier EISs (BLM 1979, 1981) for the Wyoming PRB.