



COGEMA
Mining, Inc.

**LICENSE SUA-1341
DOCKET NO. 40-8502**

August 31, 2001

U.S. Nuclear Regulatory Commission
ATTN: Mel Leach, Chief
Fuel Cycle Licensing Branch
Mail Stop T-8A33
Two White Flint North
11545 Rockville Pike
Rockville, MD 20852-2738

RE: Clarifications to COGEMA Mining, Inc. Decommissioning Plan, Revised June 2001

Dear Mr. Leach,

In June, 2001, COGEMA Mining submitted revisions to our December, 2000 Decommissioning Plan for the Irigaray and Christensen Ranch ISL projects. Several questions arose from our NRC project manager's review of the June, 2001 revisions and we have responded to those through clarifications provided in telephone conversations and e-mails. We would now like to formalize these clarifications in writing.

Accordingly, attached to this letter are COGEMA Mining's clarifications to questions from Ms. Elaine Brummett regarding the June, 2001 revisions to the December 2000 Decommissioning Plan.

Please contact me if you should have any questions regarding this submittal.

Sincerely,

John Vaselin by PH

John Vaselin
Radiation Safety Officer

Attachments

cc: E. Brummett – NRC Headquarters, Washington D.C.
C. Cain – NRC Region IV, Arlington TX
G. Mooney – WDEQ, Sheridan WY
K. Baker – ERG, Albuquerque NM
D. Wichers, W. Heili - COGEMA

NMSSOI Public

COGEMA Mining, Inc.
Clarifications to NRC Questions Regarding June 2001 Decommissioning Plan Revisions
August 31, 2001

NRC Question # 1: Why will a final soil survey not be done for Irigaray spill #1 ?

COGEMA Response: The referenced spill is actually Christensen # 1 and was erroneously listed as Irigaray Spill # 1 in the June 15 , 2001 submittal to Mr. Mel Leach. General information on this spill was given on page 6 of the Decommissioning Plan. A revision to the page in error will be sent if needed. The Christensen # 1 spill occurred in 1989 at several small locations on an access road between the Irigaray and Christensen mine sites. Note that this road is regularly used by mine suppliers, ranchers and oil field workers, in addition to the COGEMA employees. The amount of material released was estimated to be less than a pound as reported to the NRC by letter dated 4-17-1989. In the spill report written by the RSO it was stated "Based on the immediate action taken, the small amount of source material spilled and the almost total recovery of that material, it is believed that the incident was not significant". If any residual spill material was left on the road, it could no longer be found due to the twelve years of traffic, weathering, and road grading that has past. It would also be impossible to accurately identify the spill locations. Therefore, it is not practical nor is it felt necessary to conduct further soil surveys of this spill.

NRC Question # 2: How were the 507 cubic yards of soil removal determined for the 2000 bond estimate?. How closely reflects current plan? Provide an acreage estimate of the area that is proposed for soil cleanup, including the surface discharge locations.

COGEMA Response: The 507 cubic yards of soil removal is based on an average depth of 3 inches removed from under the process areas at both sites. Section 3.5 (Estimated Volume of Contaminated Soil) of the decommissioning plan lists the volumes of soil/gravel to be cleanup at ponds, spills areas and the process areas, however, the surface discharge locations were not included. The acreage of these areas is listed below along with the depth and volumes.

| <u>Area Locations</u> | <u>Acreage</u> | <u>Depth (inch)</u> | <u>Volume (cubic yards)</u> |
|-----------------------|----------------|---------------------|-----------------------------|
| Process | 1.26 | 3.0 | 507 |
| Ponds | 3.44 | 3.0 | 1,387 |
| Spills | 0.09 | 3.0 | 36 |
| Surface discharges | 0.26 | 6.0 | 207 |
| Total | 5.05 | | 2,137 |

Note that the soil surface characterization study conducted for the Decommissioning Plan did not identify any significant areas of contamination other than the surface discharge locations, which have now been included.

NRC Question # 3: Why would known/expected expenses in the surety estimate be part of a contingency item?

COGEMA Response: The next surety update is due to NRC by August 18. A commitment was made in our June 15 submittal to NRC to revise the next surety update to increase the

cost of radiation surveys from \$75/acre to \$580/acre, and to list the costs for an RSO and administrative time as a separate line item. These will be included in the August, 2001 update. We will also make note of the items where conservative estimates are given (max cost). Also, acreage to be cleaned as a result of spills and surface discharge will be added to the estimate.

Many years ago a straight contingency percentage (say 10%) was added to the surety estimate. About fifteen years ago the Wyoming Department of Environmental Quality asked the company to begin providing a specific breakdown of the contingency based on DEQ's Guideline 12 (Standardized Reclamation Performance Bond Format and Cost Calculation Methods). All of the items listed as a contingency in COGEMA's surety estimate follow the categories required by WDEQ in Guideline 12. Guideline 12 also provides referenced and typical percentages for each of these categories. For each annual surety update, adjustments to the individual contingency percentages can be made as the reclamation plan becomes more focused and realistic. For example, the percentage for project design may drop from 2% to 1% or zero as the plan is finalized. Some of these contingencies could be known or expected and listed as line items in the surety estimate. However, COGEMA uses this format, as this is what WDEQ requires.

NRC Question # 4: The Mountain Plover and the Blacktail Prairie Dog are candidates for the Endangered Species Act. How will we conduct surveys for these species, or how do we justify not.

COGEMA Response: COGEMA has received and reviewed the guidelines for conducting surveys for Mountain Plover from the U.S. Fish and Wildlife Service. Based on conversations with Mary Jennings (U.S. Fish and Wildlife Service) and Sam Crowe (USDA Wildlife Services), there is a high probability that Mountain Plovers are not even present in the mine areas due to the lack of appropriate habitat. Therefore, a formal survey for the birds is not planned. COGEMA will educate the employees on Plover identification, and how to report sightings, prior to the start of decommissioning. If evidence of the Mountain Plover is found, COGEMA will consult with the Fish and Wildlife Service as mentioned in Section 9.3 of the Decommissioning Plan.

A small prairie dog town exists near Mine Unit 8 at the Christensen Ranch Project. Although Mine Unit 8 was never constructed, a small amount of reclamation work associated with development drilling is scheduled for the fall of 2001. COGEMA will determine if the prairie dogs are black-tailed prairie dogs. Any confirmed locations of black-tailed prairie dogs will be avoided as much as possible during the reclamation activity.

Black-footed ferret surveys are recommended by the U.S. Fish and Wildlife Service for colonies or complexes of black-tailed prairie dogs that are greater than 79 acres in size, or for white-tailed prairie dog colonies greater than 200 acres in size. Since the entire prairie dog complex located near Mine Unit 8 is less than 1 acre in size, black-footed ferret surveys are not required and will not be conducted.

It should be noted that the U.S. Department of Interior, Bureau of Land Management, conducted field surveys of the BLM land within the Christensen Ranch for the BLM/Christensen land exchange (60 Bar Ranch Exchange, Bureau of Land Management Buffalo Field Office: Environmental Assessment No. WY-070-78, prepared April 14, 2001). As stated on page 6 of that Environmental Assessment, "None of the field examined parcels contained prairie dog towns so that the Black-footed ferret and mountain plover are not considered to occur on the proposed area." A copy of the EA is included with this submittal for information purposes.

NRC Question # 5: When were the most recent archeological studies done at the sites.

COGEMA Response: An excellent summary of the archaeological and paleontological surveys and clearances for the Irigaray and Christensen Ranch sites is provided by NRC in the June, 1998 Environmental Assessment for Renewal of the Source Material License (pages 16 and 17). The dates of all surveys are provided in this summary, but will be repeated here for the sake of the reader. Archaeological clearance was provided by the State Archaeologist for the Irigaray site in 1977. The State of Wyoming SHPO and BLM provided archaeological clearance for the Christensen Ranch site in 1988, with the exception of two sites. The last and most recent survey was conducted for these two archaeological sites, located near Mine Units 6 and 7, in July and August of 1995. One site was cleared by BLM for development (48CA534) and the other site (48CA533) was reduced in area, with recommended avoidance of a 288 square-meter area where potential buried cultural materials could remain. This area was restricted from development by COGEMA and BLM and the surface owner accepted the mitigation plan. There have been no archaeological surveys conducted since then.

NRC Question # 6: Are Landowner Maps Available for the E.A.?

COGEMA Response: Landowner maps are available but will soon be changed due to a large land exchange between John Christensen and the BLM. A revised map will be available once the ownership change is final.

With regard to the land exchange, John Christensen is acquiring surface ownership of approximately 11,000 acres of federal BLM land where he presently holds grazing leases on the Christensen Ranch. The Washington D.C. office of BLM has approved a feasibility analysis for a comprehensive land exchange to accomplish this. BLM has published a formal notice of the exchange, conducted a mineral report and cultural resources, threatened and endangered species and hazardous materials clearances. NRC may wish to contact BLM to receive copies of the threatened and endangered species, cultural resources and hazardous materials clearances on the properties that are scheduled to become private lands.

NRC Question # 7: Have the landowners been informed about the plans for decommissioning?

COGEMA Response: All surface land owners were provided copies of the mine permit applications (prior to permit approval) and were asked to review the mine and reclamation plans. Each landowner then signed a "Surface Landowner Consent Form", thereby agreeing with the terms and conditions of the mine and reclamation plans. Decommissioning, and re-vegetation (seed mixes) were a large part of the reclamation plan. Surface owner consents were received for the Irigaray permit in 1978, and the Christensen permit in 1988. Prior to planting the permanent seed mix, COGEMA agrees that consultation with the landowners is advisable to insure the landowner's agreement due to the large amount of time passed since permit approval.

NRC Question # 8: What increase in road traffic is expected during decommissioning?

COGEMA Response: As stated in Section 9.2 for the Decommissioning Plan "Contractor traffic will increase at various times during decommissioning, particularly with the transport of

byproduct and decommissioned materials, but the impact will be minimal”(to the air quality). Compared to routine mining operations, the decommissioning traffic will be minimal. In fact, the tables provided below show that routine mining contributes 87% more traffic than expected during the decommissioning operations.

Decommissioning Shipment Summary - Total Shipments for 2003-2006

| <u>Source (Bond Worksheets)</u> | <u>Total Truck Loads</u> | <u>Loads to Licensed Facility</u> |
|---------------------------------|--------------------------|-----------------------------------|
| Plant Equipment | 50 | 15 |
| Plant Buildings | 38 | 0 |
| Plant Concrete | 24 | 24 |
| Plant Soil | 25 | 25 |
| Pond Sludge | 166 | 166 |
| Pond Liner | 22 | 22 |
| Wellfield piping | 21 | 21 |
| Wellfield pumps | 7 | 3 |
| Wellfield surface trunklines | 7 | 7 |
| Wellfield buried trunklines | 18 | 18 |
| Wellfield equipment | 3 | 3 |
| Misc. (Worksheet 8) | 4 | 0 |
| Bond Sub-Total | 385 | 304 |
| | | |
| <u>Source (not in the bond)</u> | | |
| Spill & surface discharge soil | 12 | 12 |
| Trash | 16 | 0 |
| | | |
| Four Year Total | 413 | 316 |
| Annual Average Total | 103 | 79 |

Conclusion

Approximately 100 off-site shipments will be made annually during decommissioning (2003-2006). Note that approximately 76% of the shipments will go to a licensed facility (Pathfinder's Shirley Basin mill tailings facility).

Operations Annual Shipment Summary (based on 500,000 lbs. of yellowcake production)

| <u>Shipment Type</u> | <u>Total Truck Loads</u> | |
|---------------------------------|--------------------------|--------------------------------|
| Trash | 8 | |
| Byproduct | 6 | |
| Resin | 250 | |
| Yellowcake | 17 | |
| Chemicals: | | |
| Oxygen | 56 | |
| Carbon Dioxide | 90 | |
| Soda Ash | 45 | |
| Hydrogen Peroxide | 11 | |
| Salt | 28 | |
| Acid | 28 | (258 total chemical shipments) |
| | | |
| Wellfield construction supplies | 20 | |

(pipe, wire, etc.)

Well installation supplies 260
(cement, casing, etc.)

Total Annual Shipments 819

Conclusion

Shipments will be reduced significantly (by 716 per year !!!) during decommissioning compared to a 500,000 lb. production year.

NRC Question #9: Were the updated versions of NUREG-1575 (MARSSIM) and 1620 (SRP for the Review of a Reclamation Plan ...) used in the decommissioning plan?

COGEMA Response: The August 2000 version of NUREG-1575 (MARSSIM) was used in the Decommissioning Plan; however, it was mistakenly referenced as the December 1997 version in Section 13.0.

The Draft NUREG-1620 (SRP) was originally used in the Decommissioning Plan and referenced in Section 13.0. A recent review of the latest version (May 2000) of NUREG-1620 determined that the Decommissioning Plan is consistent with NUREG-1620.

NRC Question #10: What is the status of EPA's approval of the aquifer exemption for the two new disposal wells?

COGEMA Response: The State of Wyoming UIC permit was issued for the two new wells in November, 2000. Construction of the wells is allowed, but injection into the wells cannot occur until EPA issues the aquifer exemption. The last we heard from EPA (late May, 2001), all internal EPA approvals had been issued. The last step was final publication in the Federal Register (stating that no public comments had been received and that EPA is issuing the aquifer exemption). We then heard that a new person was assigned the task of reviewing the final Federal Register notice and that this new person had trouble with the way the notice was written (not plain English). To date, we are still waiting for the EPA to publish the final notice. Unfortunately, it is out of our hands and EPA does not care about the timing.



United States Department of the Interior

BUREAU OF LAND MANAGEMENT

Buffalo Field Office
1425 Fort Street
Buffalo, Wyoming 82834-2436

DLW
↓
DRA

2800
WYW143315

AUG 23 2001

CERTIFIED MAIL NO: 7000 0600 0026 1621 3792
Return Receipt Requested

Dennis Anderson
Pathfinder Mines
P.O. Box 730
Mills, Wyoming 82644

Re: Cow Creek LLC (60 Bar Ranch) Exchange

Dear Sir:

Per your phone request on August 21, 2001, please find the enclosed copy of the Environmental Assessment (EA) and Finding of No Significant Impact (FONSI) that were completed for the Cow Creek LLC Exchange. If you have any questions, please contact John Kolnik or Jennifer Bates at 307-684-1100.

Sincerely,

Dennis R. Stenger
Field Manager

Enclosure



60 BAR / BLM
EXCHANGE

60 Bar Ranch Exchange

Bureau of Land Management
Buffalo Field Office

Environmental Assessment No. WY-070-78
Case File:

Prepared April 14, 2001

Public Land For Disposal By The Exchange Process.
Federal Disposal Lands Are Located in Campbell and Johnson
Counties, Wyoming.

**BUFFALO FIELD OFFICE AREA
FEDERAL DISPOSAL LAND PARCELS**

60 BAR RANCH

T53N/R71W, 6th P.M.

Campbell County, Wyoming

| | | | |
|-------------|--------|------------|--|
| Section 31: | Lot 8 | (38.10 a.) | (NW $\frac{1}{4}$ NW $\frac{1}{4}$) |
| | Lot 14 | (28.14 a.) | (Part NE $\frac{1}{4}$ SE $\frac{1}{4}$ West of Hwy. 59) |
| | Lot 15 | (17.18 a.) | (Part SW $\frac{1}{4}$ SE $\frac{1}{4}$ West of Hwy. 59) |
| | Lot 17 | (0.15 a.) | (Part SE $\frac{1}{4}$ SE $\frac{1}{4}$ West of Hwy. 59) |

Containing 83.57 acres, more or less.

BARLOW RANCH

T48N/R75W, 6th P.M.

Campbell County, Wyoming

| | | | |
|------------|--------|------------|--------------------------------------|
| Section 4: | Lot 13 | (38.26 a.) | (NE $\frac{1}{4}$ SE $\frac{1}{4}$) |
| | Lot 14 | (38.19 a.) | (NW $\frac{1}{4}$ SE $\frac{1}{4}$) |
| | Lot 15 | (37.95 a.) | (NE $\frac{1}{4}$ SW $\frac{1}{4}$) |
| | Lot 16 | (37.88 a.) | (NW $\frac{1}{4}$ SW $\frac{1}{4}$) |
| | Lot 17 | (37.95 a.) | (SW $\frac{1}{4}$ SW $\frac{1}{4}$) |
| | Lot 18 | (38.03 a.) | (SE $\frac{1}{4}$ SW $\frac{1}{4}$) |
| | Lot 19 | (38.20 a.) | (SW $\frac{1}{4}$ SE $\frac{1}{4}$) |
| | Lot 20 | (38.27 a.) | (SE $\frac{1}{4}$ SE $\frac{1}{4}$) |
| Section 5: | Lot 13 | (38.41 a.) | (NE $\frac{1}{4}$ SE $\frac{1}{4}$) |
| | Lot 20 | (38.39 a.) | (SE $\frac{1}{4}$ SE $\frac{1}{4}$) |
| Section 7: | Lot 13 | (39.83 a.) | (NE $\frac{1}{4}$ SE $\frac{1}{4}$) |
| | Lot 18 | (39.89 a.) | (SE $\frac{1}{4}$ SW $\frac{1}{4}$) |
| Section 8: | Lot 1 | (39.26 a.) | (NE $\frac{1}{4}$ NE $\frac{1}{4}$) |
| | Lot 2 | (39.46 a.) | (NW $\frac{1}{4}$ NE $\frac{1}{4}$) |
| | Lot 3 | (39.65 a.) | (NE $\frac{1}{4}$ NW $\frac{1}{4}$) |
| | Lot 6 | (39.53 a.) | (SE $\frac{1}{4}$ NW $\frac{1}{4}$) |
| | Lot 7 | (39.33 a.) | (SW $\frac{1}{4}$ NE $\frac{1}{4}$) |

| | | | |
|-------------|--------|------------|--|
| | Lot 8 | (39.14 a.) | (SE ¹ / ₄ NE ¹ / ₄) |
| | Lot 9 | (39.10 a.) | (NE ¹ / ₄ SE ¹ / ₄) |
| | Lot 13 | (39.49 a.) | (SW ¹ / ₄ SW ¹ / ₄) |
| | Lot 14 | (39.32 a.) | (SE ¹ / ₄ SW ¹ / ₄) |
| Section 9: | Lot 1 | (38.42 a.) | (NE ¹ / ₄ NE ¹ / ₄) |
| | Lot 2 | (38.60 a.) | (NW ¹ / ₄ NE ¹ / ₄) |
| | Lot 3 | (38.74 a.) | (NE ¹ / ₄ NW ¹ / ₄) |
| | Lot 4 | (38.93 a.) | (NW ¹ / ₄ NW ¹ / ₄) |
| | Lot 5 | (38.91 a.) | (SW ¹ / ₄ NW ¹ / ₄) |
| | Lot 6 | (38.72 a.) | (SE ¹ / ₄ NW ¹ / ₄) |
| | Lot 7 | (38.56 a.) | (SW ¹ / ₄ NE ¹ / ₄) |
| | Lot 8 | (38.38 a.) | (SE ¹ / ₄ NE ¹ / ₄) |
| | Lot 9 | (38.30 a.) | (NE ¹ / ₄ SE ¹ / ₄) |
| | Lot 10 | (38.56 a.) | (NW ¹ / ₄ SE ¹ / ₄) |
| | Lot 11 | (38.78 a.) | (NE ¹ / ₄ SW ¹ / ₄) |
| | Lot 12 | (38.99 a.) | (NW ¹ / ₄ SW ¹ / ₄) |
| | Lot 13 | (38.97 a.) | (SW ¹ / ₄ SW ¹ / ₄) |
| | Lot 14 | (38.76 a.) | (SE ¹ / ₄ SW ¹ / ₄) |
| | Lot 15 | (38.51 a.) | (SW ¹ / ₄ SE ¹ / ₄) |
| | Lot 16 | (38.26 a.) | (SE ¹ / ₄ SE ¹ / ₄) |
| Section 17: | Lot 9 | (39.47 a.) | (NE ¹ / ₄ SE ¹ / ₄) |
| | Lot 10 | (39.62 a.) | (NW ¹ / ₄ SE ¹ / ₄) |
| | Lot 11 | (39.77 a.) | (NE ¹ / ₄ SW ¹ / ₄) |
| | Lot 12 | (39.93 a.) | (NW ¹ / ₄ SW ¹ / ₄) |
| | Lot 13 | (40.11 a.) | (SW ¹ / ₄ SW ¹ / ₄) |
| | Lot 14 | (39.96 a.) | (SE ¹ / ₄ SW ¹ / ₄) |
| | Lot 15 | (39.81 a.) | (SW ¹ / ₄ SE ¹ / ₄) |
| | Lot 16 | (39.66 a.) | (SE ¹ / ₄ SE ¹ / ₄) |
| Section 18: | Lot 10 | (40.08 a.) | (SE ¹ / ₄ NW ¹ / ₄) |
| | Lot 11 | (40.02 a.) | (SW ¹ / ₄ NE ¹ / ₄) |
| | Lot 12 | (39.97 a.) | (SE ¹ / ₄ NE ¹ / ₄) |
| | Lot 13 | (40.10 a.) | (NE ¹ / ₄ SE ¹ / ₄) |
| | Lot 14 | (40.15 a.) | (NW ¹ / ₄ SE ¹ / ₄) |
| | Lot 15 | (40.20 a.) | (NE ¹ / ₄ SW ¹ / ₄) |
| | Lot 18 | (40.33 a.) | (SE ¹ / ₄ SW ¹ / ₄) |
| | Lot 19 | (40.28 a.) | (SW ¹ / ₄ SE ¹ / ₄) |
| | Lot 20 | (40.24 a.) | (SE ¹ / ₄ SE ¹ / ₄) |
| Section 20: | Lot 16 | (40.88 a.) | (SE ¹ / ₄ SE ¹ / ₄) |

Section 28: Lot 4 (40.98 a.) (NW¹/₄NW¹/₄)
Lot 5 (40.93 a.) (SW¹/₄NW¹/₄)
Lot 12 (40.52 a.) (NW¹/₄SW¹/₄)
Lot 13 (40.47 a.) (SW¹/₄SW¹/₄)

Section 29: Lot 1 (40.74 a.) (NE¹/₄NE¹/₄)
Lot 8 (40.42 a.) (SE¹/₄NE¹/₄)
Lot 9 (40.09 a.) (NE¹/₄SE¹/₄)
Lot 16 (39.77 a.) (SE¹/₄SE¹/₄)

Section 33: Lot 5 (40.54 a.) (SW¹/₄NW¹/₄)
Lot 6 (40.55 a.) (SE¹/₄NW¹/₄)

Containing 2,559.51 acres, more or less.

JOHN O. CHRISTENSEN RANCH

T44N/R75W, 6th P.M.

Campbell County, Wyoming

Section 4: Lot 8 (28.18 a.) (NW¹/₄NW¹/₄)
Lot 9 (38.11 a.) (SW¹/₄NW¹/₄)

Section 5: Lot 5 (25.22 a.) (NE¹/₄NE¹/₄)

T44N/R76W, 6th P.M.

Campbell County, Wyoming

Section 2: Lot 5 (26.42 a.) (NW¹/₄NE¹/₄)
Lot 6 (26.50 a.) (NE¹/₄NW¹/₄)
Lot 7 (26.33 a.) (NW¹/₄NW¹/₄)
Lot 8 (36.22 a.) (SW¹/₄NW¹/₄)
Lot 9 (36.73 a.) (SW¹/₄NE¹/₄)
Lot 10 (36.88 a.) (SE¹/₄NE¹/₄)
Lot 11 (36.07 a.) (NW¹/₄SW¹/₄)
Lot 12 (35.96 a.) (SW¹/₄SW¹/₄)

Section 3: Lot 5 (36.44 a.) (NE¹/₄SE¹/₄)
Lot 6 (36.87 a.) (NW¹/₄SE¹/₄)
Lot 7 (36.89 a.) (SW¹/₄SE¹/₄)

Lot 8 (36.33 a.) (SE¹/₄SE¹/₄)
NW¹/₄SW¹/₄ (40.00 a.)

Section 4: Lot 5 (26.34 a.) (NE¹/₄NE¹/₄)
Lot 6 (26.01 a.) (NW¹/₄NE¹/₄)
Lot 7 (25.78 a.) (NE¹/₄NW¹/₄)
Lot 8 (25.73 a.) (NW¹/₄NW¹/₄)
Lot 9 (36.48 a.) (SW¹/₄NW¹/₄)
Lot 10 (36.52 a.) (SE¹/₄NW¹/₄)
Lot 11 (36.60 a.) (SW¹/₄NE¹/₄)
Lot 12 (36.77 a.) (SE¹/₄NE¹/₄)
Lot 13 (38.22 a.) (NE¹/₄SE¹/₄)
Lot 14 (37.70 a.) (NW¹/₄SE¹/₄)
Lot 15 (37.27 a.) (NE¹/₄SW¹/₄)
Lot 16 (36.75 a.) (NW¹/₄SW¹/₄)
Lot 17 (36.75 a.) (SW¹/₄SW¹/₄)
Lot 18 (37.25 a.) (SE¹/₄SW¹/₄)

Section 5: Lot 5 (25.71 a.) (NE¹/₄NE¹/₄)
Lot 6 (25.82 a.) (NW¹/₄NE¹/₄)
Lot 11 (38.86 a.) (SW¹/₄NE¹/₄)
Lot 12 (36.59 a.) (SE¹/₄NE¹/₄)
Lot 13 (36.59 a.) (NE¹/₄SE¹/₄)
Lot 14 (36.71 a.) (NW¹/₄SE¹/₄)
Lot 19 (36.76 a.) (SW¹/₄SE¹/₄)
Lot 20 (36.73 a.) (SE¹/₄SE¹/₄)

Section 8: NE¹/₄, N¹/₂SE¹/₄ (240.00 a.)

Section 9: NW¹/₄NW¹/₄, NE¹/₄SE¹/₄, S¹/₂SE¹/₄ (160.00 a.)

Section 10: N¹/₂, N¹/₂S¹/₂, S¹/₂SW¹/₄, SW¹/₄SE¹/₄ (600.00 a.)

Section 11: W¹/₂NE¹/₄, NW¹/₄SE¹/₄, N¹/₂NW¹/₄ (200.00 a.)

Section 14: N¹/₂NE¹/₄, NE¹/₄NW¹/₄ (120.00 a.)

Section 15: NW¹/₄NE¹/₄, S¹/₂NE¹/₄, SE¹/₄, W¹/₂ (600.00 a.)

Section 17: NE¹/₄NE¹/₄, W¹/₂SE¹/₄ (120.00 a.)

Section 20: NW¹/₄NE¹/₄, S¹/₂NE¹/₄, SE¹/₄ (280.00 a.)

Section 22: N $\frac{1}{2}$ NW $\frac{1}{4}$, SW $\frac{1}{4}$ NW $\frac{1}{4}$ (120.00 a.)
 Section 29: E $\frac{1}{2}$ (320.00 a.)
 Section 32: E $\frac{1}{2}$ (320.00 a.)
 Section 33: W $\frac{1}{2}$ (320.00 a.)

T44N/R76W, 6th P.M.
 Johnson County, Wyoming

Section 5: Lot 7 (26.01 a.) (NE $\frac{1}{4}$ NW $\frac{1}{4}$)
 Lot 8 (25.92 a.) (NW $\frac{1}{4}$ NW $\frac{1}{4}$)
 Lot 9 (36.99 a.) (SW $\frac{1}{4}$ NW $\frac{1}{4}$)
 Lot 10 (36.98 a.) (SE $\frac{1}{4}$ NW $\frac{1}{4}$)
 Lot 15 (36.84 a.) (NE $\frac{1}{4}$ SW $\frac{1}{4}$)
 Lot 16 (36.98 a.) (NW $\frac{1}{4}$ SW $\frac{1}{4}$)
 Lot 17 (37.03 a.) (SW $\frac{1}{4}$ SW $\frac{1}{4}$)
 Lot 18 (36.90 a.) (SE $\frac{1}{4}$ SW $\frac{1}{4}$)

Section 6: Lot 8 (25.90 a.) (NE $\frac{1}{4}$ NE $\frac{1}{4}$)
 Lot 9 (26.56 a.) (NW $\frac{1}{4}$ NE $\frac{1}{4}$)
 Lot 10 (38.10 a.) (SW $\frac{1}{4}$ NE $\frac{1}{4}$)
 Lot 11 (37.61 a.) (SE $\frac{1}{4}$ NE $\frac{1}{4}$)
 Lot 12 (37.46 a.) (NE $\frac{1}{4}$ SE $\frac{1}{4}$)
 Lot 13 (37.97 a.) (NW $\frac{1}{4}$ SE $\frac{1}{4}$)
 Lot 14 (37.32 a.) (SE $\frac{1}{4}$ SE $\frac{1}{4}$)
 SE $\frac{1}{4}$ NW $\frac{1}{4}$ (40.00 a.)

Section 7: Lot 1 (40.99 a.) (NW $\frac{1}{4}$ NW $\frac{1}{4}$)
 Lot 2 (40.87 a.) (SW $\frac{1}{4}$ NW $\frac{1}{4}$)
 Lot 5 (36.90 a.) (NW $\frac{1}{4}$ SE $\frac{1}{4}$)
 Lot 6 (37.43 a.) (NE $\frac{1}{4}$ SW $\frac{1}{4}$)
 Lot 7 (38.67 a.) (NW $\frac{1}{4}$ SW $\frac{1}{4}$)
 Lot 8 (38.21 a.) (SW $\frac{1}{4}$ SW $\frac{1}{4}$)
 Lot 9 (37.09 a.) (SE $\frac{1}{4}$ SW $\frac{1}{4}$)
 Lot 10 (36.53 a.) (SW $\frac{1}{4}$ SE $\frac{1}{4}$)
 Lot 11 (36.04 a.) (SE $\frac{1}{4}$ SE $\frac{1}{4}$)
 SE $\frac{1}{4}$ NW $\frac{1}{4}$ (40.00 a.)

Section 8: Lot 1 (38.34 a.) (NE $\frac{1}{4}$ NW $\frac{1}{4}$)
 Lot 2 (37.56 a.) (NW $\frac{1}{4}$ NW $\frac{1}{4}$)
 Lot 3 (37.52 a.) (SW $\frac{1}{4}$ NW $\frac{1}{4}$)

Lot 4 (38.29 a.) (SE $\frac{1}{4}$ NW $\frac{1}{4}$)
NE $\frac{1}{4}$ SW $\frac{1}{4}$ (40.00 a.)

Section 17: W $\frac{1}{2}$ (320.00 a.)

Section 20: W $\frac{1}{2}$ (320.00 a.)

Section 29: W $\frac{1}{2}$ (320.00 a.)

T44N/R77W, 6th P.M.
Johnson County, Wyoming

Section 1: Lot 7 (25.88 a.) (NE $\frac{1}{4}$ NW $\frac{1}{4}$)
Lot 8 (25.85 a.) (NW $\frac{1}{4}$ NE $\frac{1}{4}$)
Lot 9 (38.43 a.) (SW $\frac{1}{4}$ NW $\frac{1}{4}$)
Lot 10 (38.22 a.) (SE $\frac{1}{4}$ NW $\frac{1}{4}$)

Section 2: Lot 5 (26.37 a.) (NE $\frac{1}{4}$ NE $\frac{1}{4}$)
Lot 6 (26.39 a.) (NW $\frac{1}{4}$ NE $\frac{1}{4}$)
Lot 7 (26.42 a.) (NE $\frac{1}{4}$ NW $\frac{1}{4}$)
Lot 8 (26.36 a.) (NW $\frac{1}{4}$ NW $\frac{1}{4}$)
Lot 9 (40.01 a.) (SW $\frac{1}{4}$ NW $\frac{1}{4}$)
Lot 10 (39.79 a.) (SE $\frac{1}{4}$ NW $\frac{1}{4}$)
Lot 11 (39.56 a.) (SW $\frac{1}{4}$ NE $\frac{1}{4}$)
Lot 12 (39.28 a.) (SE $\frac{1}{4}$ NE $\frac{1}{4}$)

Section 3: Lot 5 (26.11 a.) (NE $\frac{1}{4}$ NE $\frac{1}{4}$)
Lot 6 (26.26 a.) (NW $\frac{1}{4}$ NE $\frac{1}{4}$)
Lot 7 (26.60 a.) (NE $\frac{1}{4}$ NW $\frac{1}{4}$)
Lot 8 (26.01 a.) (NW $\frac{1}{4}$ NW $\frac{1}{4}$)
Lot 9 (40.04 a.) (SW $\frac{1}{4}$ NW $\frac{1}{4}$)
Lot 10 (40.42 a.) (SE $\frac{1}{4}$ NW $\frac{1}{4}$)
Lot 11 (40.50 a.) (SW $\frac{1}{4}$ NE $\frac{1}{4}$)
Lot 12 (40.21 a.) (SE $\frac{1}{4}$ NE $\frac{1}{4}$)

Section 10: Lot 1 (39.45 a.) (NE $\frac{1}{4}$ NE $\frac{1}{4}$)
Lot 2 (39.56 a.) (NW $\frac{1}{4}$ NE $\frac{1}{4}$)
Lot 8 (39.41 a.) (SE $\frac{1}{4}$ NE $\frac{1}{4}$)

Section 11: Lot 1 (39.12 a.) (NE $\frac{1}{4}$ NE $\frac{1}{4}$)
Lot 2 (39.21 a.) (NW $\frac{1}{4}$ NE $\frac{1}{4}$)
Lot 3 (39.30 a.) (NE $\frac{1}{4}$ NW $\frac{1}{4}$)

| | | |
|--------|------------|--|
| Lot 4 | (39.39 a.) | (NW ¹ / ₄ NW ¹ / ₄) |
| Lot 5 | (39.37 a.) | (SW ¹ / ₄ NW ¹ / ₄) |
| Lot 6 | (39.28 a.) | (SE ¹ / ₄ NW ¹ / ₄) |
| Lot 7 | (39.18 a.) | (SW ¹ / ₄ NE ¹ / ₄) |
| Lot 8 | (39.09 a.) | (SE ¹ / ₄ NE ¹ / ₄) |
| Lot 9 | (39.07 a.) | (NE ¹ / ₄ SE ¹ / ₄) |
| Lot 10 | (39.16 a.) | (NW ¹ / ₄ SE ¹ / ₄) |
| Lot 11 | (39.25 a.) | (NE ¹ / ₄ SW ¹ / ₄) |
| Lot 14 | (39.23 a.) | (SE ¹ / ₄ SW ¹ / ₄) |
| Lot 15 | (39.14 a.) | (SW ¹ / ₄ SE ¹ / ₄) |
| Lot 16 | (39.04 a.) | (SE ¹ / ₄ SE ¹ / ₄) |

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| Section 14: Lot 1 | (39.07 a.) | (NE ¹ / ₄ NE ¹ / ₄) |
| Lot 2 | (39.16 a.) | (NW ¹ / ₄ NE ¹ / ₄) |
| Lot 3 | (39.24 a.) | (NE ¹ / ₄ NW ¹ / ₄) |
| Lot 6 | (39.30 a.) | (SE ¹ / ₄ NW ¹ / ₄) |
| Lot 7 | (39.21 a.) | (SW ¹ / ₄ NE ¹ / ₄) |
| Lot 8 | (39.12 a.) | (SE ¹ / ₄ NE ¹ / ₄) |
| Lot 9 | (39.18 a.) | (NE ¹ / ₄ SE ¹ / ₄) |
| Lot 10 | (39.26 a.) | (NW ¹ / ₄ SE ¹ / ₄) |
| Lot 11 | (39.35 a.) | (NE ¹ / ₄ SW ¹ / ₄) |
| Lot 14 | (39.40 a.) | (SE ¹ / ₄ SW ¹ / ₄) |
| Lot 15 | (39.32 a.) | (SW ¹ / ₄ SE ¹ / ₄) |
| Lot 16 | (39.23 a.) | (SE ¹ / ₄ SE ¹ / ₄) |

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| Section 23: Lot 1 | (39.24 a.) | (NE ¹ / ₄ NE ¹ / ₄) |
| Lot 2 | (39.33 a.) | (NW ¹ / ₄ NE ¹ / ₄) |
| Lot 3 | (39.43 a.) | (NE ¹ / ₄ NW ¹ / ₄) |
| Lot 6 | (39.38 a.) | (SE ¹ / ₄ NW ¹ / ₄) |
| Lot 7 | (39.28 a.) | (SW ¹ / ₄ NE ¹ / ₄) |

T45N/R75W, 6th P.M.
Campbell County, Wyoming

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| Section 32: Lot 14 | (49.52 a.) | (SE ¹ / ₄ SW ¹ / ₄) |
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| Section 33: Lot 13 | (40.86 a.) | (SW ¹ / ₄ SW ¹ / ₄) |
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T45N/R76W, 6th P.M.
Campbell County, Wyoming

| | | |
|-------------------|------------|--|
| Section 33: Lot 9 | (41.39 a.) | (NE ¹ / ₄ SE ¹ / ₄) |
| Lot 10 | (41.52 a.) | (NW ¹ / ₄ SE ¹ / ₄) |

Lot 11 (41.63 a.) (NE $\frac{1}{4}$ SW $\frac{1}{4}$)
Lot 12 (41.57 a.) (NW $\frac{1}{4}$ SW $\frac{1}{4}$)
Lot 13 (41.67 a.) (SW $\frac{1}{4}$ SW $\frac{1}{4}$)
Lot 14 (41.73 a.) (SE $\frac{1}{4}$ SW $\frac{1}{4}$)
Lot 15 (41.67 a.) (SW $\frac{1}{4}$ SE $\frac{1}{4}$)
Lot 16 (41.53 a.) (SE $\frac{1}{4}$ SE $\frac{1}{4}$)

Section 35: Lot 13 (40.74 a.) (SW $\frac{1}{4}$ SW $\frac{1}{4}$)
Lot 14 (40.75 a.) (SE $\frac{1}{4}$ SW $\frac{1}{4}$)

T45N/R76W, 6th P.M.

Johnson County, Wyoming

Section 19: Lot 16 (38.55 a.) (NW $\frac{1}{4}$ SW $\frac{1}{4}$)
Lot 17 (37.46 a.) (SW $\frac{1}{4}$ SW $\frac{1}{4}$)

Section 20: Lot 10 (40.95 a.) (NW $\frac{1}{4}$ SE $\frac{1}{4}$)
Lot 11 (40.51 a.) (NE $\frac{1}{4}$ SW $\frac{1}{4}$)
Lot 16 (41.42 a.) (SE $\frac{1}{4}$ SE $\frac{1}{4}$)

Section 29: Lot 1 (41.44 a.) (NE $\frac{1}{4}$ NE $\frac{1}{4}$)
Lot 8 (41.50 a.) (SE $\frac{1}{4}$ NE $\frac{1}{4}$)
Lot 9 (41.52 a.) (NE $\frac{1}{4}$ SE $\frac{1}{4}$)
Lot 13 (40.22 a.) (SW $\frac{1}{4}$ SW $\frac{1}{4}$)
Lot 14 (40.72 a.) (SE $\frac{1}{4}$ SW $\frac{1}{4}$)
Lot 15 (41.08 a.) (SW $\frac{1}{4}$ SE $\frac{1}{4}$)
Lot 16 (41.57 a.) (SE $\frac{1}{4}$ SE $\frac{1}{4}$)

Section 30: Lot 6 (39.96 a.) (NW $\frac{1}{4}$ NE $\frac{1}{4}$)
Lot 7 (40.09 a.) (NE $\frac{1}{4}$ NW $\frac{1}{4}$)
W $\frac{1}{2}$ NW $\frac{1}{4}$ (80.00 a.)

Section 31: Lot 8 (29.76 a.)
Lot 9 (37.15 a.)
Lot 10 (35.30 a.)
Lot 11 (28.02 a.)
Lot 12 (39.61 a.)
Lot 13 (40.30 a.)
Lot 14 (22.59 a.)
Lot 15 (18.23 a.)
Lot 16 (39.36 a.)
Lot 17 (10.27 a.)
Lot 18 (40.12 a.)

Lot 19 (43.00 a.)
Lot 20 (44.92 a.)
Lot 21 (12.82 a.)
Lot 22 (17.74 a.)
Lot 23 (22.72 a.)
(S $\frac{1}{2}$,S $\frac{1}{2}$ N $\frac{1}{2}$)

T45N/R77W, 6th P.M.
Johnson County, Wyoming

Section 22: Lot 9 (40.33 a.) (NE $\frac{1}{4}$ SE $\frac{1}{4}$)
Lot 10 (40.32 a.) (NW $\frac{1}{4}$ SE $\frac{1}{4}$)
Lot 11 (40.31 a.) (NE $\frac{1}{4}$ SW $\frac{1}{4}$)
Lot 12 (40.30 a.) (NW $\frac{1}{4}$ SW $\frac{1}{4}$)
Lot 13 (40.35 a.) (SW $\frac{1}{4}$ SW $\frac{1}{4}$)
Lot 14 (40.36 a.) (SE $\frac{1}{4}$ SW $\frac{1}{4}$)
Lot 15 (40.37 a.) (SW $\frac{1}{4}$ SE $\frac{1}{4}$)
Lot 16 (40.37 a.) (SE $\frac{1}{4}$ SE $\frac{1}{4}$)

Section 24: Lot 10 (40.14 a.) (NW $\frac{1}{4}$ SE $\frac{1}{4}$)
Lot 11 (40.09 a.) (NE $\frac{1}{4}$ SW $\frac{1}{4}$)
Lot 12 (40.08 a.) (NW $\frac{1}{4}$ SW $\frac{1}{4}$)
Lot 15 (40.11 a.) (SW $\frac{1}{4}$ SE $\frac{1}{4}$)

Section 27: Lot 1 (40.36 a.) (NE $\frac{1}{4}$ NE $\frac{1}{4}$)
Lot 2 (40.35 a.) (NW $\frac{1}{4}$ NE $\frac{1}{4}$)
Lot 3 (40.35 a.) (NE $\frac{1}{4}$ NW $\frac{1}{4}$)
Lot 4 (40.34 a.) (NW $\frac{1}{4}$ NW $\frac{1}{4}$)
Lot 5 (40.27 a.) (SW $\frac{1}{4}$ NW $\frac{1}{4}$)
Lot 6 (40.27 a.) (SE $\frac{1}{4}$ NW $\frac{1}{4}$)
Lot 7 (40.28 a.) (SW $\frac{1}{4}$ NE $\frac{1}{4}$)
Lot 8 (40.28 a.) (SE $\frac{1}{4}$ NE $\frac{1}{4}$)

Section 34: Lot 9 (39.99 a.) (NE $\frac{1}{4}$ SE $\frac{1}{4}$)
Lot 10 (39.50 a.) (NW $\frac{1}{4}$ SE $\frac{1}{4}$)
Lot 15 (39.60 a.) (SW $\frac{1}{4}$ SE $\frac{1}{4}$)
SE $\frac{1}{4}$ SE $\frac{1}{4}$ (40.00 a.)

Section 35: Lot 8 (40.05 a.) (NE $\frac{1}{4}$ SE $\frac{1}{4}$)
Lot 9 (39.99 a.) (NW $\frac{1}{4}$ SE $\frac{1}{4}$)
Lot 10 (39.93 a.) (NE $\frac{1}{4}$ SW $\frac{1}{4}$)
Lot 11 (39.96 a.) (NW $\frac{1}{4}$ SW $\frac{1}{4}$)

Lot 12 (39.93 a.) (SW¹/₄SW¹/₄)
Lot 13 (39.91 a.) (SE¹/₄SW¹/₄)
Lot 14 (39.99 a.) (SW¹/₄SE¹/₄)
Lot 15 (40.04 a.) (SE¹/₄SE¹/₄)

Containing 11,685.56 acres, more or less.

ROBERT F. AND JANET K. CHRISTENSEN RANCH

T45N/R75W, 6th P.M.

Campbell County, Wyoming

Section 6: Lot 10 (38.96 a.) (NE¹/₄NW¹/₄)
Lot 13 (39.35 a.) (SE¹/₄SW¹/₄)
Lot 18 (39.21 a.) (NE¹/₄SW¹/₄)
Lot 21 (39.31 a.) (SE¹/₄SW¹/₄)

T45NR76W, 6th P.M.

Campbell County, Wyoming

Section 3: Lot 9 (39.77 a.) (SW¹/₄NW¹/₄)
Lot 16 (39.76 a.) (NW¹/₄SW¹/₄)

Section 4: Lot 9 (39.89 a.) (SW¹/₄NW¹/₄)
Lot 12 (39.71 a.) (SE¹/₄NE¹/₄)
Lot 13 (39.40 a.) (NE¹/₄SE¹/₄)
Lot 20 (39.36 a.) (SE¹/₄SE¹/₄)

Section 9: Lot 1 (39.60 a.) (NE¹/₄NE¹/₄)
Lot 5 (38.88 a.) (SW¹/₄NW¹/₄)
Lot 8 (39.26 a.) (SE¹/₄NE¹/₄)
Lot 12 (38.33 a.) (NW¹/₄SW¹/₄)
Lot 13 (38.03 a.) (SW¹/₄SW¹/₄)
Lot 14 (38.17 a.) (SE¹/₄SW¹/₄)
Lot 15 (38.22 a.) (SW¹/₄SE¹/₄)

Section 10: Lot 2 (39.80 a.) (NW¹/₄NE¹/₄)
Lot 3 (39.69 a.) (NE¹/₄NW¹/₄)

Lot 4 (39.59 a.) (NW¹/₄NW¹/₄)
Lot 5 (39.29 a.) (SW¹/₄NW¹/₄)
Lot 6 (39.40 a.) (SE¹/₄NW¹/₄)
Lot 7 (39.50 a.) (SW¹/₄NE¹/₄)
Lot 10 (39.21 a.) (NW¹/₄SE¹/₄)
Lot 11 (39.11 a.) (NE¹/₄SW¹/₄)
Lot 12 (39.00 a.) (NW¹/₄SW¹/₄)

Section 21: Lot 4 (41.67 a.) (SW¹/₄NW¹/₄)
Lot 5 (41.63 a.) (SE¹/₄NW¹/₄)
Lot 8 (41.65 a.) (NE¹/₄SE¹/₄)
Lot 9 (41.69 a.) (NW¹/₄SE¹/₄)
Lot 10 (41.73 a.) (NE¹/₄SW¹/₄)
Lot 11 (41.77 a.) (NW¹/₄SW¹/₄)
Lot 12 (41.88 a.) (SW¹/₄SW¹/₄)
Lot 13 (41.84 a.) (SE¹/₄SW¹/₄)
Lot 14 (41.80 a.) (SW¹/₄SE¹/₄)
Lot 15 (41.76 a.) (SE¹/₄SE¹/₄)

Section 22: Lot 11 (41.31 a.) (NE¹/₄SW¹/₄)
Lot 12 (41.58 a.) (NW¹/₄SW¹/₄)
Lot 13 (41.36 a.) (SW¹/₄SW¹/₄)
Lot 14 (41.09 a.) (SE¹/₄SW¹/₄)

Section 23: Lot 16 (41.68 a.) (SE¹/₄SE¹/₄)

Section 25: Lot 5 (39.78 a.) (SW¹/₄NW¹/₄)

Section 27: Lot 3 (40.61 a.) (NE¹/₄NW¹/₄)
Lot 4 (40.15 a.) (NW¹/₄NW¹/₄)
Lot 14 (40.89 a.) (SE¹/₄SW¹/₄)

Section 28: Lot 1 (40.41 a.) (NE¹/₄NE¹/₄)
Lot 2 (40.83 a.) (NW¹/₄NE¹/₄)
Lot 3 (41.28 a.) (NE¹/₄NW¹/₄)
Lot 4 (41.71 a.) (NW¹/₄NW¹/₄)
Lot 7 (40.77 a.) (SW¹/₄NE¹/₄)

T45N/R76W, 6th P.M.
Johnson County, Wyoming

Section 5: Lot 6 (40.85 a.) (NW¹/₄NE¹/₄)

Section 7: Lot 7 (41.77 a.) (NE¹/₄NW¹/₄)

Lot 8 (39.27 a.) (NW¹/₄NW¹/₄)

Lot 9 (39.01 a.) (SW¹/₄NW¹/₄)

Lot 10 (41.41 a.) (SE¹/₄NW¹/₄)

Lot 13 (41.28 a.) (NE¹/₄SE¹/₄)

Lot 14 (41.17 a.) (NW¹/₄SE¹/₄)

Lot 15 (40.93 a.) (NE¹/₄SW¹/₄)

Lot 16 (38.54 a.) (NW¹/₄SW¹/₄)

Lot 18 (40.76 a.) (SE¹/₄SW¹/₄)

Lot 19 (40.92 a.) (SW¹/₄SE¹/₄)

Lot 20 (41.02 a.) (SE¹/₄SE¹/₄)

Section 8: Lot 6 (38.77 a.) (SE¹/₄NW¹/₄)

Lot 9 (38.06 a.) (NE¹/₄SE¹/₄)

Lot 11 (38.85 a.) (NE¹/₄SW¹/₄)

Lot 12 (39.25 a.) (NW¹/₄SW¹/₄)

Lot 13 (39.33 a.) (SW¹/₄SW¹/₄)

Lot 14 (38.94 a.) (SE¹/₄SW¹/₄)

Lot 15 (38.54 a.) (SW¹/₄SE¹/₄)

Lot 16 (38.14 a.) (SE¹/₄SE¹/₄)

Section 17: Lot 2 (38.48 a.) (NW¹/₄NE¹/₄)

Lot 13 (39.42 a.) (SW¹/₄SW¹/₄)

Lot 14 (39.09 a.) (SE¹/₄SW¹/₄)

Section 18: Lot 5 (40.51 a.) (NE¹/₄NE¹/₄)

Lot 14 (38.24 a.) (NW¹/₄SW¹/₄)

Lot 15 (38.15 a.) (SW¹/₄SW¹/₄)

NE¹/₄SW¹/₄ (40.00 a.)

NW¹/₄SE¹/₄ (40.00 a.)

Section 19: Lot 8 (38.25 a.) (NW¹/₄NW¹/₄)

Lot 9 (38.46 a.) (SW¹/₄NW¹/₄)

Section 20: Lot 2 (40.89 a.) (NW¹/₄NE¹/₄)

Lot 3 (40.45 a.) (NE¹/₄NW¹/₄)

Lot 4 (40.01 a.) (NW¹/₄NW¹/₄)

Lot 6 (40.48 a.) (SE¹/₄NW¹/₄)

Lot 7 (40.92 a.) (SW¹/₄NE¹/₄)

Lot 8 (41.37 a.) (SE¹/₄NE¹/₄)

Lot 9 (41.38 a.) (NE¹/₄SE¹/₄)

T45N/R77W, 6th P.M.

Johnson County, Wyoming

Section 12: Lot 8 (40.86 a.) (SE¹/₄NE¹/₄)
Lot 9 (40.61 a.) (NE¹/₄SE¹/₄)
Lot 10 (40.59 a.) (NW¹/₄SE¹/₄)

T46N/R75W, 6th P.M.

Campbell County, Wyoming

Section 18: Lot 20 (42.36 a.) (SE¹/₄SE¹/₄)

T46N/R76W, 6th P.M.

Campbell County, Wyoming

Section 24: Lot 6 (39.76 a.) (NE¹/₄NW¹/₄)
Lot 7 (39.75 a.) (SE¹/₄NW¹/₄)

Section 25: Lot 3 (39.74 a.) (NE¹/₄NW¹/₄)
Lot 4 (39.73 a.) (NW¹/₄NW¹/₄)

Section 27: Lot 1 (40.05 a.) (NE¹/₄NE¹/₄)
Lot 11 (40.27 a.) (NW¹/₄SW¹/₄)
Lot 12 (40.45 a.) (SW¹/₄SW¹/₄)
Lot 13 (40.50 a.) (SE¹/₄SW¹/₄)

Section 33: Lot 9 (40.29 a.) (NE¹/₄SE¹/₄)
Lot 16 (40.23 a.) (SE¹/₄SE¹/₄)

Containing 4,048.77 acres, more or less.

T-CHAIR RANCH

T42N/R75W, 6th P.M.

Campbell County, Wyoming

Section 6: Lot 7 (43.57 a.) (SW¹/₄SW¹/₄)

T43N/R76W, 6th P.M.
Campbell County, Wyoming

Section 5: SW $\frac{1}{4}$ SE $\frac{1}{4}$ (40.00 a.)
Section 9: NW $\frac{1}{4}$, E $\frac{1}{2}$ (480.00 a.)
Section 12: N $\frac{1}{2}$ NW $\frac{1}{4}$ (80.00 a.)
Section 13: NW $\frac{1}{4}$ NW $\frac{1}{4}$ (40.00 a.)
Section 14: NW $\frac{1}{4}$, W $\frac{1}{2}$ NE $\frac{1}{4}$,
NE $\frac{1}{4}$ NE $\frac{1}{4}$ (280.00 a.)
Section 15: NW $\frac{1}{4}$ NW $\frac{1}{4}$,
E $\frac{1}{2}$ NW $\frac{1}{4}$ (120.00 a.)
Section 22: N $\frac{1}{2}$ NE $\frac{1}{4}$ (80.00 a.)
Section 24: SW $\frac{1}{4}$ (160.00 a.)

T44N/R75W, 6th P.M.
Campbell County, Wyoming

Section 18: Lot 7 (40.34 a.) (NE $\frac{1}{4}$ NW $\frac{1}{4}$)
Lot 8 (41.84 a.) (NW $\frac{1}{4}$ NW $\frac{1}{4}$)
Lot 10 (40.65 a.) (SE $\frac{1}{4}$ NW $\frac{1}{4}$)
Lot 15 (40.96 a.) (NE $\frac{1}{4}$ SW $\frac{1}{4}$)
Section 32: Lot 11 (44.26 a.) (NE $\frac{1}{4}$ SW $\frac{1}{4}$)

T44N/R76W, 6th P.M.
Campbell County, Wyoming

Section 13: NE $\frac{1}{4}$ NW $\frac{1}{4}$ (40.00 a.)
Lot 1 (35.81 a.) (SE $\frac{1}{4}$ NW $\frac{1}{4}$)
Lot 2 (19.36 a.) (Part SW $\frac{1}{4}$ SW $\frac{1}{4}$)
Section 14: SE $\frac{1}{4}$ SE $\frac{1}{4}$ (40.00 a.)

| | | |
|---|-------------|---|
| Section 23: Lot 1 | (37.67 a.) | (Part NE ¹ / ₄ NE ¹ / ₄) |
| Lot 2 | (36.88 a.) | (Part SE ¹ / ₄ NE ¹ / ₄) |
| Lot 3 | (37.15 a.) | (Part NE ¹ / ₄ SE ¹ / ₄) |
| W ¹ / ₂ E ¹ / ₂ | (160.00 a.) | |

| | | |
|-------------------|-----------|---|
| Section 24: Lot 1 | (5.46 a.) | (Part SW ¹ / ₄ NE ¹ / ₄) |
| Lot 2 | (4.70 a.) | (Part NW ¹ / ₄ SE ¹ / ₄) |

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|--|------------|--|
| Section 25: S ¹ / ₂ SW ¹ / ₄ | (80.00 a.) | |
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| Section 26: W ¹ / ₂ NE ¹ / ₄ | (80.00 a.) | |
| W ¹ / ₂ SW ¹ / ₄ | (160.00 a.) | |

| | | |
|--|------------|--|
| Section 35: S ¹ / ₂ NE ¹ / ₄ | (80.00 a.) | |
| SE ¹ / ₄ NW ¹ / ₄ | (40.00 a.) | |
| N ¹ / ₂ SE ¹ / ₄ | (80.00 a.) | |

Containing 2,468.65 acres, more or less.

**GRAND TOTAL BLM SELECTED DISPOSAL ACRES = 20,846.06
ACRES MORE OR LESS**

EXHIBIT A

NON-FEDERAL (OFFERED) LANDS

Campbell County, Wyoming

Township 44 North., Range 75 West, 6th P.M.

Section. 32: NW $\frac{1}{4}$ SW $\frac{1}{4}$

Acres
Total
40.00
40.00

Township 52 North, Range 70 West, 6th P.M.

Section 18: Lots 1 and 2

Section 19: SW $\frac{1}{4}$ NE $\frac{1}{4}$, NE $\frac{1}{4}$ SE $\frac{1}{4}$

70.03
80.00
150.03

Township 52 North, Range 71 West, 6th P.M.

Section 1: Lot 3, SE $\frac{1}{4}$ NW $\frac{1}{4}$, E $\frac{1}{2}$ SW $\frac{1}{4}$

Section 2: Lot 4, SW $\frac{1}{4}$ NW $\frac{1}{4}$, W $\frac{1}{2}$ SW $\frac{1}{4}$

Section 3: Lots 1 and 2, S $\frac{1}{2}$ NE $\frac{1}{4}$, SE $\frac{1}{4}$

Section 4: S $\frac{1}{2}$, SE $\frac{1}{4}$ NE $\frac{1}{4}$

Section 5: Lots 1, 2, 3, S $\frac{1}{2}$ N $\frac{1}{2}$, E $\frac{1}{2}$ SW $\frac{1}{4}$, SW $\frac{1}{4}$ SW $\frac{1}{4}$, SE $\frac{1}{4}$

Section 6: Lots 2, 3 and 7, S $\frac{1}{2}$ NE $\frac{1}{4}$, E $\frac{1}{2}$ SW $\frac{1}{4}$, SE $\frac{1}{4}$ NW $\frac{1}{4}$, SE $\frac{1}{4}$

Parcels 11A, 12A,

Section 7: E $\frac{1}{2}$, E $\frac{1}{2}$ NW $\frac{1}{4}$

Section 8: E $\frac{1}{2}$, NE $\frac{1}{4}$ NW $\frac{1}{4}$, W $\frac{1}{2}$ W $\frac{1}{2}$

Section 9: NE $\frac{1}{4}$, W $\frac{1}{2}$, W $\frac{1}{2}$ SE $\frac{1}{4}$

Section 10: E $\frac{1}{2}$, SW $\frac{1}{4}$

Section 11: S $\frac{1}{2}$ N $\frac{1}{2}$, NW $\frac{1}{4}$ NW $\frac{1}{4}$, S $\frac{1}{2}$

Section 12: SW $\frac{1}{4}$ NE $\frac{1}{4}$, SW $\frac{1}{4}$ NW $\frac{1}{4}$, S $\frac{1}{2}$

Section 13: N $\frac{1}{2}$ NE $\frac{1}{4}$, SE $\frac{1}{4}$ NE $\frac{1}{4}$, NW $\frac{1}{4}$ NW $\frac{1}{4}$

Section 14: E $\frac{1}{2}$ NE $\frac{1}{4}$, NW $\frac{1}{4}$ NE $\frac{1}{4}$, NW $\frac{1}{4}$, N $\frac{1}{2}$ S $\frac{1}{2}$, SE $\frac{1}{4}$ SW $\frac{1}{4}$

Section 15: S $\frac{1}{2}$ NE $\frac{1}{4}$, NE $\frac{1}{4}$ NE $\frac{1}{4}$, E $\frac{1}{2}$ SW $\frac{1}{4}$, W $\frac{1}{2}$ SE $\frac{1}{4}$

Section 17: N $\frac{1}{2}$, NE $\frac{1}{4}$ SW $\frac{1}{4}$, SE $\frac{1}{4}$

Section 20: N $\frac{1}{2}$ NE $\frac{1}{4}$

Section 21: N $\frac{1}{2}$

Section 22: NW $\frac{1}{4}$

161.53
161.72
322.29
360.00
563.68
528.01
400.00
520.00
560.00
480.00
520.00
400.00
160.00
480.00
280.00
520.00
80.00
320.00
160.00

6977.2

Township 52 North, Range 72 West, 6th P.M.

| | |
|--|------------------|
| Section 1: Parcels 10A, 11A, 16A | 46.39 |
| Section 12: E $\frac{1}{2}$ NE $\frac{1}{4}$, Parcels 2A, 6A, 9A, 10A | 158.72 205.11 |

Township 53 North, Range 71 West, 6th P.M.

| | |
|---|--------|
| Section 27: S $\frac{1}{2}$ N $\frac{1}{2}$, SW $\frac{1}{4}$, NE $\frac{1}{4}$ SE $\frac{1}{4}$, W $\frac{1}{2}$ SE $\frac{1}{4}$ | 440.00 |
| Section 28: S $\frac{1}{2}$ SE $\frac{1}{4}$, NE $\frac{1}{4}$ SE $\frac{1}{4}$, Parcels 4A, 5A, 7A, 8A | 225.88 |
| Section 32: SE $\frac{1}{4}$ NE $\frac{1}{4}$, SE $\frac{1}{4}$ SW $\frac{1}{4}$, SE $\frac{1}{4}$, Parcel 5A | 278.31 |
| Section 33: All | 640.00 |
| Section 34: SE $\frac{1}{4}$ NE $\frac{1}{4}$, E $\frac{1}{2}$ SE $\frac{1}{4}$ | 120.00 |
| Section 35: W $\frac{1}{2}$ W $\frac{1}{2}$ | 160.00 |

1855.9

5

Containing 9236.56 acres, more or less

Revised 2/9/01-JJK

ENVIRONMENTAL ASSESSMENT

I. INTRODUCTION

A. Need for the Proposed Action:

The public lands proposed for disposal can be categorized as either small, isolated, or unmanageable lands, most of which do not have legal access. There is public access to four separate parcels of public land containing about 2080 acres on the Barlow ranch. There is no public access to the remaining 18,766 acres of public land proposed for exchange. Those parcels that have and also, those that do not have legal access, contain only limited acres of public land with no known significant benefit to the public nor known significant resource value. Adjoining landowners in the area have indicated their desire to exchange these public lands which lie within their ranch units. They do not wish to exchange directly with BLM in their ranch units but simply wish to make their ranch units whole in private ownership. In most cases, these parcels of public lands are surrounded by private lands.

Since these public land parcels are either small, scattered, and/or of limited value, they frequently cannot be exchanged in individual transactions since the value of the individual parcels do not warrant the expense nor merit a high public interest determination for completing small individual land exchanges. By combining the parcels into a land exchange, the expense of conducting the exchange can be distributed among several different participants and a higher dollar value can be utilized to exchange for lands or public interest therein that BLM has identified for high priority acquisition.

There is a high demand from Campbell County residents as well as other public land users to acquire access to public land for recreational pursuits such as hunting, fishing, hiking, ATV use, etc. Gillette is growing yearly due to the present coal bed methane boom and continued coal expansion. This exchange will provide an additional 17,800 acres of public land available for recreational use in Campbell County which presently has limited public access.

B. Conformance with Land Use Plan:

Plan conformance for the project area is documented in the Buffalo Resource Management Plan (BLM, 1985). The Resource Management Plan

decisions applicable to the proposal is Land Disposition: Exchanges, and acquisitions as amended, (BLM, Approved Resource Management Plan, 2001, P. 17). Basically, the decision is to exchange those public lands that are small, scattered, unaccessible, or have little resource value, for lands adjacent to large accessible blocks of public land and/or lands with high recreational, wildlife, riparian or other resource values.

C. Relationship to Statutes, Regulations, or Other Plans

This environmental assessment was prepared in accordance with the requirements of the National Environmental Policy Act of 1969 (NEPA) and other statutes relevant to the proposal. Authority for the proposed action and alternatives is contained in Section 206 of the Federal Land Policy and Management Act of 1976, as amended (FLPMA) and the regulations in 43 CFR 2200. Other relevant guidance include BLM Manual, Handbook Sections in the 2200 series and applicable Instruction Memoranda.

General requirements and limitations from these directives include:

1. Disposal of public lands by exchange shall be considered as serving the national interest within the policy context of Section 102(a)(1) of FLPMA.

2. The BLM shall strive to process mutually benefitting, public interest, land exchanges in a timely and efficient manner through continually maintaining and streamlining its land use planing, appraisal, and exchange processes.

3. Acquisition, through exchange rather than purchase of lands or interests in lands required for Federal resource management or protection programs will retard the present expansion of Federal real estate holdings and help assure the integrity of State and local tax bases.

4. Exchanges shall be utilized to effect ownership and management area boundary changes or adjustments and to fashion more logical and efficient land and resource management areas for both the Federal Government and non-Federal owners.

D. Special Congressional Designation

Public Law 106-490 was passed by the United States Congress on 1/24/2000, that provided for the 60 Bar Land Exchange.

II. Alternatives Including The Proposed Action

A. Assembled Land Exchange Proposal (Proposed Action):

The proposed action is to exchange, some 20846.06 acres of public land, listed above in Johnson and Campbell Counties for like valued private lands and/or interest therein, (approximately 9236 acres, more or less). The legal description of the private lands to be acquired and proposed federal lands for disposal are shown in the preceding attachments. For the private lands, preference will be given to acquiring lands in Campbell county where these public lands are to be disposed of. Any of the above identified potential exchange federal parcels where potentially and/or eligible cultural resources, threatened or endangered or proposed species, or other significant resources may be located, will not be disposed of until evaluated and/or mitigated, and the BLM has made a determination that it is in the best public interest to dispose of them.

B. No Action Alternative:

Under the no action alternative, both the federal land and the private land would remain under current ownership. The scattered public lands would remain isolated, hard to manage and mostly unaccessible. The private landowners would continue to be constrained over full management control of range, minerals and recreational use of public lands, administered by the BLM, within their ranches.

C. Alternatives Considered But Eliminated from Analysis

(1) Sale of the public lands instead of an exchange:

This alternative was considered, but was not presently pursued since exchanging was determined to be more beneficial, more timely and in the public interest. Selling the identified public land to interested parties did not solve the immediate problems of lack of access to land locked parcels of federal land and the limited amount of public land available in Campbell County. Competitive sales of public land not identified in Land Use Plans is presently against BLM policy.

(2) Exchange other public lands:

The landowners have entered into an agreement with the BLM to share in the costs associated with the proposed exchange, including appraisal, cultural surveys, notifications, etc. This up-front financial commitment by the proponents to accomplish this exchange is a preference to the Government over the timely process of searching for other potential parcels of public land.

III. Affected Environment

General Setting:

The federal lands proposed for exchange, some 20,846 acres are located between 20 miles west to 40 miles southwest of Gillette, Wyoming (see map). The offered parcels can be accessed via Interstate Highway 90, State Highway 50, and various Campbell County and private roads. The area has a semiarid climate with most of the area having an annual precipitation of 10 to 14 inches of precipitation. Daily and seasonal temperature extremes are typical, ranging from 100°F in the summer to -40°F during the winter. Topography is rolling prairie grassland with occasional steep and rugged ephemeral drainage, that have very erosive silty, clayey soils. There are some parcels located on or near the Pumpkin Buttes, a rocky escarpment containing juniper and limber pine and sagebrush /grassland understory vegetation.

The proposed action is a land disposal preferably by exchange. Transfer of title in and of itself generally does not cause direct impacts to most of the natural resources especially since it is anticipated the current use of livestock grazing and landowner controlled big game hunting will remain the same. The mineral estate will remain in federal ownership and any subsequent actions as a result of mineral development will be analyzed according to applicable laws at that time to include anticipated impact.

The private lands to be acquired include 9236 acres of private land contiguous to 9180 acres of unaccessible BLM and State of Wyoming lands, totaling about 18,416 acres of land, in one accessible block. This block is located approximately 15 miles north of Gillette, Wyoming, adjacent to highway 59.

The precipitation is 15 to 17 inches yearly. The topography varies from rolling sagebrush-grasslands to steep precipitous drainages, scoria buttes and clayey outcrops with juniper and ponderosa pine uplands. There are several intermittent drainages that contain plains cottonwood and juniper trees and some scattered springs and wetlands.

Access: Legal and physical access to the majority of proposed federal land is unaccessible to the general public because access roads are private. There is public access to 2080 acres of public land on the Barlow ranch.

There is road access to the proposed private lands, as well as additional public lands to be acquired on the 60 Bar ranch, off of highway 59 on the west and the Adon County road on the north end of the property.

Land Uses and Land Use Capability: Livestock grazing and wildlife habitat to include big game hunting, and oil and gas development are the primary land uses in the general area. Active mineral development for oil and gas and uranium is present on the selected public lands and adjacent private and state lands. Past mineral development is discussed in the Mineral Report found in the attachments section of this report. The public lands are in good ecological condition with little man-caused problems such as erosion, overgrazing. Wildlife populations such as deer and antelope are healthy due to controlled access and hunting. Other common wildlife include sage grouse, golden eagles and other raptors, coyote and bobcat, wild turkey, numerous song birds and small mammals. There is no live water from springs or riparian areas on the selected parcels.

The proposed private lands also are used for livestock grazing and wildlife habitat, and mineral development is limited. There are a few abandoned drill holes on the subject lands. The deeded lands have some springs, wetlands and intermittent riparian areas located on them for water sources. The proposed deeded lands are in pristine condition with minimal man-caused resource problems such as erosion or overgrazing. Recreational hunting for deer and antelope is excellent due to controlled access and outfitted hunting.

Soils: The soils in this area are typical of semiarid grasslands. They range from clayey on the tops and sides of the steep drainage to silty and sandy in the lower more rolling hills areas. The uses of all the federal land is not anticipated to change, to any degree, after readjustment of ownership so that soils are not anticipated to be affected significantly. Any significant soil disturbance or loss excluding natural catastrophic events, will most likely occur due to mineral development, and since the minerals will remain in federal ownership, potential mineral development impacts will be analyzed with appropriate mitigation applied to surface disturbing activities.

Vegetation: The vegetation for the public lands identified for disposal is stratified corresponding to the uplands, bottom lands, and buttes. The predominant vegetation types are pine-juniper, sagebrush-grassland, grasslands, and riparian. Sagebrush-grassland is the predominant community found on the federal lands. Vegetation common to this type is dominated by big sagebrush, while the common grasses include western wheatgrass, needle and thread, Indian ricegrass, and june grass. The grasslands with level to rolling topography, are grasses such as western wheatgrass, Indian ricegrass, needle and thread, blue gramma and sandberg bluegrass with common forbs such as buckwheat, yarrow and prickly pear cactus. The Pumpkin Buttes contains scattered stands of juniper and limber pine with the ground cover made up mostly of prairie grasses and sagebrush.

The proposed private lands to be acquired have a variety of wheat grasses as well as those mentioned above. The wetland and riparian areas contain cottonwood, juniper and sedges and rushes at the springs and wetland areas. The upper slopes contain ponderosa pine/juniper, with an under-story of sagebrush, grasslands.

There is no indication of proposed or listed threatened or endangered plant species found on the disposal parcels according to surveys conducted in 1999 and 2000. There are no ephemeral or perennial streams on proposed public land parcels, thus there is no potential habitat for Utes' Ladies Tresses, a listed plant species. The proposed private lands to be acquired have not been inventoried for rare plants.

There is no anticipated change in the current vegetation makeup of the Federal lands identified for exchange by disposal.

Wildlife: Wildlife common to the selected public lands include deer and antelope, rabbits, and other small rodents, sage grouse and a variety of predators, birds and reptiles. Mule deer and antelope occur in the area year long. There are no crucial big game winter ranges in the area. Raptor nests occur on public land as well as private land within the general area on cottonwood trees, cliffs and rock outcrops. Species include ferruginous hawks, red-tailed hawk, swainson's hawk, great horned owl, golden eagles and occasional prairie falcons. Sage grouse are known to occur on public and private lands. None of the field examined parcels contained prairie dog towns so that Black-footed ferret and mountain plover are not considered to occur on the proposed area. Bald eagles have been observed in the area during the winter, however no nests or winter roost sites have been identified on public land.

Species of wildlife are similar on the proposed private parcels, however, wildlife diversity and numbers on the 60 Bar ranch are expected to be higher due to wetland and riparian areas, as well as additional habitat cover and structure associated with cottonwood, ponderosa and juniper trees, and rough broken topography.

Water Resources: The public lands identified for exchange contain developed water sources as follows:

- seven wells, associated windmills or pumps and troughs
- 2 reservoirs
- approximately 4 miles of pipelines
- 4 springs

There are no perennial streams or riparian areas on the selected public lands.

The offered private lands on the 60 Bar ranch have several acres of springs and wetlands and more than 2 miles of cottonwood riparian vegetation along Cow creek, and Cedar draw. There are 2 water wells and several small reservoirs.

Mineral Resources: Based on a BLM mineral report (Queen, 1998), the subject federal lands are prospectively valuable for oil, gas, coal, sand, and gravel and scoria as well as locateable minerals, uranium. Oil and gas exploration and development has occurred on most of the public land parcels and uranium mining is presently occurring on the John O. Christensen ranch.

There has been no major mineral development on the 60 bar ranch proposed private lands, except for occasional oil and gas exploration and some scoria development. Both private and Federal minerals presently occurring on the 60 bar, will remain in that ownership state. The mineral report for this exchange is available for review at the Buffalo Field Office.

Cultural and Historic Resources: A cultural resource inventory was completed for 20, 472 acres of federal land. There were 60 sites recorded on the public lands, 6 sites were considered potentially eligible for the National Register of Historic Places, 7 sites are of unknown eligibility and will require further evaluation, and 47 sites have been determined to be not eligible. The cultural report for this exchange is available for review in the Buffalo Field Office.

Visual Resource: Most of the proposed public lands lie in a Class III visual resource area or where contrasts to the basic elements caused by a management activity are evident, but should remain subordinate to the existing landscape.

Much of the 60 Bar private lands are more scenic and include contrasting Red and Gray Walls, open rolling rangeland, cottonwood riparian areas and pine covered hills.

Recreation Resources: Big game hunting is the largest recreational use on the public lands proposed for exchange. All recreational access is controlled by the private landowners except for about 2080 acres of public land on the Barlow ranch, with access from a county road. The highest concern expressed to the BLM during public scoping meetings on land management, was the lack of access to many blocks of public land, as well as the demand for additional recreational areas. Because the proposed public lands are difficult to nearly impossible to access and locate, the public is adamantly for BLM exchanging these unaccessible public lands for other lands with access.

The private lands to be acquired lie adjacent to public roads on two sides and would consolidate more than 18,000 acres for recreational use such as hunting, birding, hiking, mountain biking, off road vehicle use and camping if compatible to other resources. Because of the high demand for recreational access, a cooperative management plan will be developed with affected interests to best decide the extent and type of recreation compatible with protecting wildlife and other natural resources.

Air Quality: In the vicinity of the study area, the main sources of air pollution are natural sources of dust, vehicle traffic, surface coal mines, power plants and various sources associated with oil and gas production facilities and pipelines. Even with the level of development from mining and oil and gas production, air quality in the area is generally good. There are few physical constraints to pollutant dispersal (Wyodak Coal Bed Methane EIS, 1999).

Social-Economic: Campbell County is energy dependent for much of their economic stability with a large percentage of the workforce concentrated in both coal development and oil and gas field activities and ancillary facilities. Presently there is a large amount of coal bed methane drilling and associated development taking place. Additional economic influence is present from agricultural interests to include the livestock industry.

The 2000 population of Campbell County is estimated at 32,970, while Johnson County population is 6920. More than 90% of the coal produced in Wyoming comes from Campbell County. Campbell County also produces 25% of the oil produced in Wyoming. The per capita income in Campbell County ranked sixth in the state in 1996, whereas Johnson County ranked 12th in the state.

The public lands were appraised for an average value of \$66. per acre. The private deeded lands were appraised at approximately \$142.00 per acre. The appraisal report(s) are available for review in the Buffalo Field Office.

IV. Environmental Consequences of the Proposed Action

The following critical elements have been analyzed and do not occur or are not anticipated to be impacted within the area of the proposed action.

- hazardous and/or solid waste
- cultural or historical resources or values (see also "Cultural Resources")

- species listed or proposed for listing as threatened or endangered (see also "Wildlife")
- prime or unique farmlands
- wetlands and riparian zones (see also "Water Resources")
- flood plains
- native American religious concerns
- wild and scenic rivers
- wilderness values
- water quality and prime or sole source of drinking water
- areas of critical environmental concern
- air quality
- invasive, non-native species
- environmental justice

Hazardous and/or Solid Wastes: The subject lands, both the private and federal, have been examined in accordance with Section 120(h) of SARA. No evidence was found to indicate that any hazardous substance was stored for one year or more or disposed of or released on the proposed Federal or private properties. Inventory results are available for review in the Buffalo Field Office. No significant solid waste problems were discovered on the federal lands identified for disposal.

Wildlife: There is no anticipated affect to wildlife and/or habitat which included threatened and endangered species with the disposal of these parcels. The Threatened and Endangered Species Habitat report is available for review in the Buffalo Field Office.

The wildlife habitat on the proposed private lands on the 60 Bar ranch is more diverse and of higher quality than the public lands proposed to be exchanged. The area has potential for improved wildlife habitat under plans to improve resource conditions through limited recreational access, range improvements and livestock management.

Water resources: Because these water sources were developed several years ago it is anticipated that future use by the private landowners will not change significantly on these areas.

Mineral Resources: Only the surface estates will be exchanged in the proposed action, and all minerals will be reserved to the United States on the federal parcels for any disposal actions for the affected parcels.

Cultural/ Historic Resources: The proposed action will have no impact on historic properties eligible for the National Register of Historic Places or on paleontological resources. All lands with

eligible or potentially eligible historic sites will remain in federal ownership pending further evaluation or appropriate mitigation is applied. Significant paleontological resources are not known to be present in the area. All the area being analyzed will be evaluated for cultural and paleontological resources and appropriate mitigation will be completed and or added prior to any disposal action.

The potential for cultural resources on the 60 Bar private lands is high due to the occurrence of water sources, and variety of topography and vegetation.

Visual Resources: There is no anticipated visual affect by this land adjustment action that would create strong contrasts to the form, line, color and texture in the area.

Recreation Resources: The highest concern expressed to the BLM during public scoping meetings on land management, was the lack of access to many blocks of public land, as well as the demand for additional recreational areas. Because the proposed public lands are difficult to nearly impossible to access and locate, the public is adamantly for BLM exchanging these unaccessible public lands for other lands with access. Acquiring additional private lands or interest therein through exchange in areas where the public could more easily identify and utilize consolidated blocks of federal land, would help improve and enhance outdoor recreational use. Disposing of isolated public lands would aid in resolving negative confrontation and trespass problems and enhance the manageability of the lands for the private landowner.

Air Quality: The proposed exchange would not change the air quality on the public land or 60 Bar private parcels.

Social Economics: This proposed action, if accomplished, would provide additional economic benefit to both the private surface owner and the BLM. The BLM would benefit by disposing of uneconomical, unmanageable, and unaccessible blocks of federal lands. The private land owner would gain a more manageable unit with less trespass potential which could lend more economical gain to their operation. Positive benefits would be realized both short and long term by the general public and the private land owner. Benefits such as increased recreation access to public lands and potential wildlife habitat improvement while disposing of uneconomical and isolated parcels of public land, would be realized by the BLM and the general public. The private landowner would acquire a more manageable, potentially higher valued, agricultural unit. The private land proponents would realize an economic gain by not having encumbrances

from the Federal government as a result of scattered inholdings. Landowners would receive additional income from future right-of-way and leasing actions, and recreation and hunting fees.

The appraisal reports for both the offered public lands and selected private lands are available at the Buffalo Field Office.

V. Environmental Consequences of the No Action Alternative

Under the "no action" alternative, the existing management problems for both the BLM and the private landowners would continue. The BLM would continue to not properly manage small, isolated parcels of Federal land according to multiple use mandates. The private landowners would continue to face problems associated with split ownership in dealings with mineral development and recreational access. The BLM would not consolidate lands and access to other blocks of Public land, that an exchange would afford.

Mitigation and Monitoring

Mitigating measures are generally not applicable to land disposal actions. The direct environmental impacts of this land disposal are minor. Necessary "mitigation" would be included in terms of protecting existing land uses and property interests (e. g., rights-of-way) through patent restrictions.

The parcels that contain unknown or potentially eligible cultural sites will be properly evaluated or mitigated prior to any disposal action.

Residual Impacts

Disposal of the land as proposed, is for all practical purposes an irreversible action although land to be acquired by BLM in exchange for these disposal parcels, could be disposed of in the future, by exchange or sale.

Consultation and Coordination

Three public meetings were held in April 1999 in Gillette, Buffalo and Sheridan to solicit input to the assembled land exchange concept in general and specifically the 60 Bar exchange proposal. The public was overwhelmingly in favor of such a proposal at all three meetings. The BLM also received three letters on file, that recommended BLM competitively sale public lands on the Barlow ranch which had public access, rather than directly to the present lessee(Barlow). It is presently against BLM policy to competitively sale public land unless

such sales have been identified in current Land Use Plans. United States Senator Mike Enzi introduced special legislation for the 60 Bar exchange. Public law 106-490 was approved by Congress on January 24, 2000, authorizing the Secretary of Interior to proceed with the Proposed exchange.

All correspondence related to this land exchange is available for review at the Buffalo Field Office.

| | |
|--------------------|------------------------|
| BJ Earle | BLM Archeologist |
| Willy Frank | BLM Hazmat Coordinator |
| Larry Gerard | BLM Wildlife Biologist |
| Kay Medders | BLM Range Specialist |
| Steve Hannan | BLM Range Specialist |
| John Kolnik | BLM Realty Specialist |
| Gerald Queen | BLM Geologist |
| Haultain Corbett | Attorney |
| John Christensen | Adjoining Landowner |
| Robert Christensen | Adjoining Landowner |
| William Barlow | Adjoining Landowner |
| Patricia Clark | Adjoining landowner |
| Rod Smith | Adjoining landowner |

Terms and Conditions to be included in the Patents for Federal Lands

These terms and conditions are:

Reservations:

1. All minerals including the right to prospect for, mine and remove the same.
2. Ditches and canals under authority of the Act of August 30, 1890.

Subject to:

1. Valid existing rights to include all authorized mineral leases and rights of way.
2. Compensation for range improvements where appropriate and mandated by regulations

Attachments

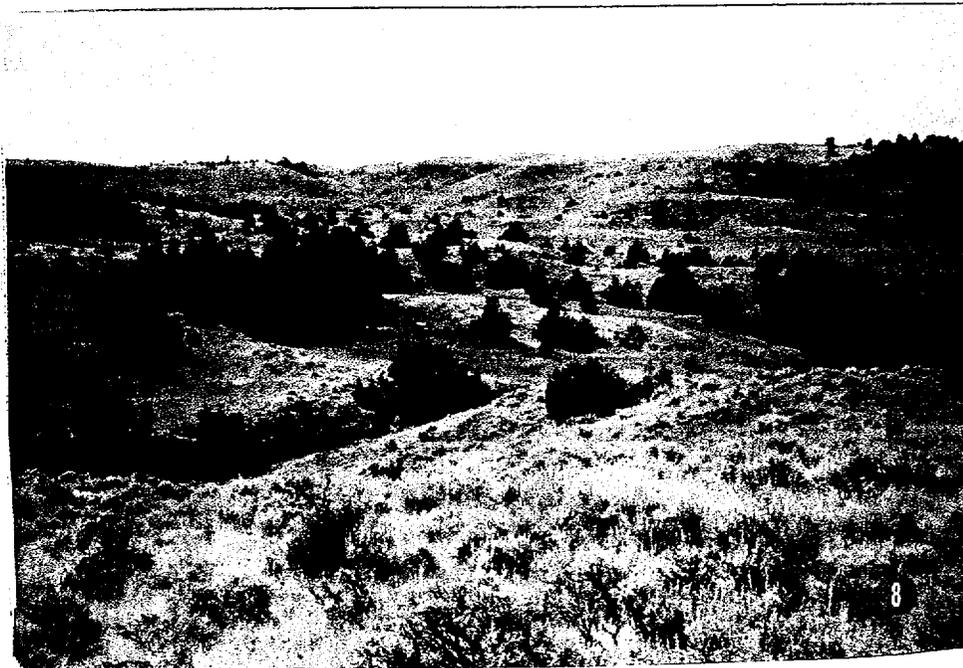
- Maps of disposal lands and 60 Bar acquisition lands.
- Photographs of the lands.

References

- United States. Department of the Interior. Bureau of Land Management. (1999). Wyodak Coal Bed Methane Project Draft Environmental Impact Statement . Buffalo, WY.
- United States. Department of the Interior. Bureau of Land Management. (1984a). Draft Resource Management Plan/Environmental Impact Statement for the Buffalo Resource Area. Buffalo, WY.
- United States. Department of the Interior. Bureau of Land Management. (1985b). Final Resource Management Plan/Environmental Impact Statement for the Buffalo Resource Area. Buffalo, WY.
- United States. Department of the Interior. Bureau of Land Management. (1985). Record of Decision for the Resource Management Plan/Final Environmental Impact Statement for the Buffalo Resource Area. Buffalo, WY.
- University of Wyoming. Agricultural Experimentation Station. (1977). Wyoming General Soil Map. Research Journal 117. Laramie, WY.
- Queen, Gerald. (1999). "Preliminary Geologic Report On Public Lands Identified For Disposal In 60 Bar Exchange." Unpublished report. Bureau of Land Management. Buffalo, WY.



60 Bar deeded lands southeast from highway 59 on the west boundary



60 Bar deeded lands, undeveloped spring in Sec. 17 looking southwesterly.



60 Bar lands looking southwesterly near the southwest corner of the big pasture



60 Bar deeded lands along cow creek looking northerly



John Christensen BLM lands in Sec. 20, 29; T.44N.,
R.76W. Looking north



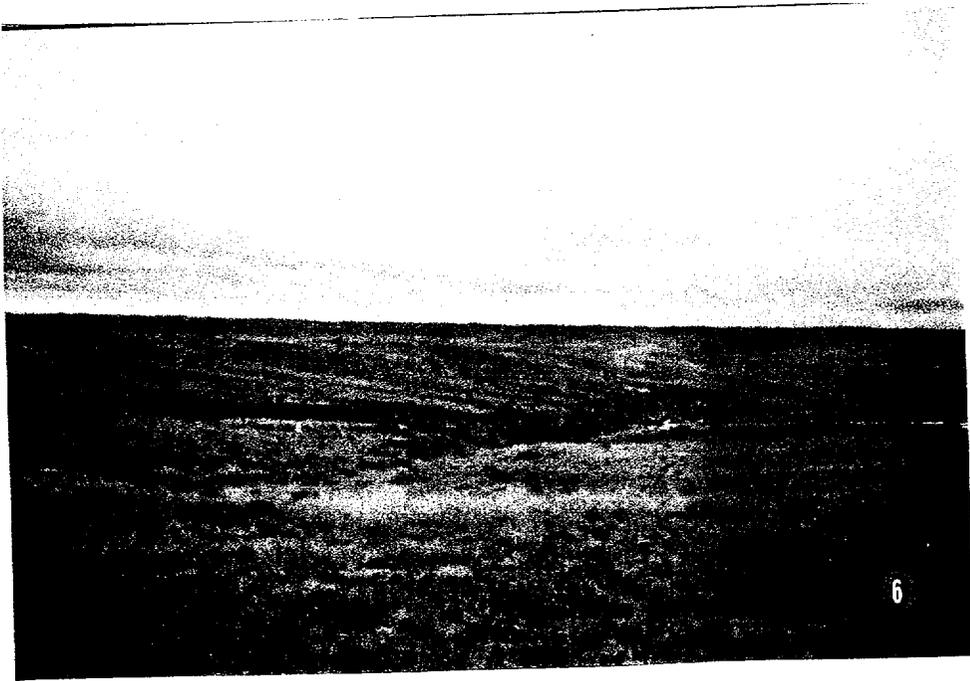
John Christensen BLM lands in Sec. 11,14 and 23 in
T.44N. R.77W. View northeasterly



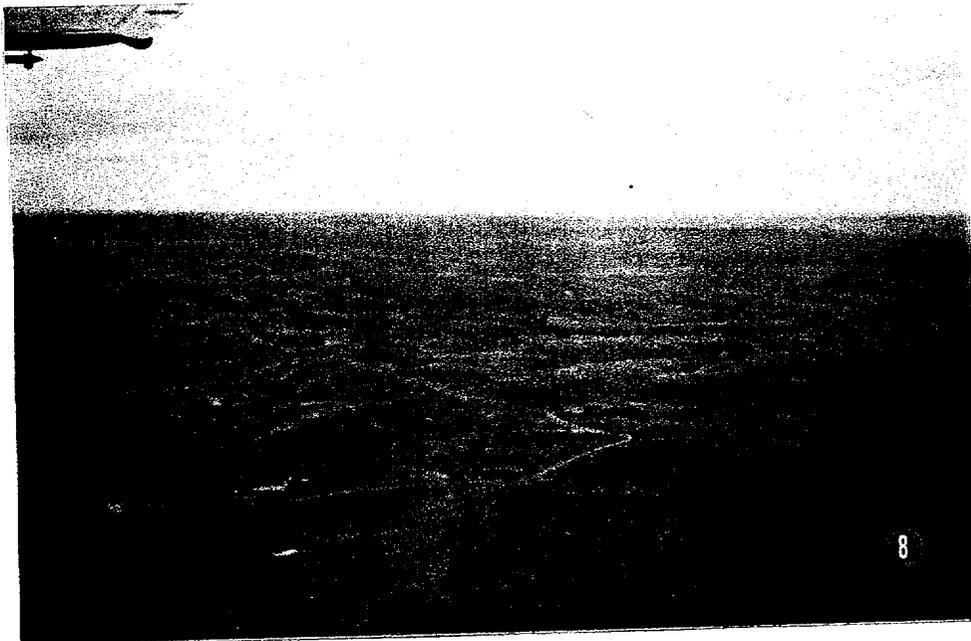
BLM land on J. Christensen ranch near the corner of T.44 & T.45 and R.76W.



BLM lands on Bob Christensen ranch on the west side of ranch near willow and craney creek. View west.



BLM lands on Bill Barlow ranch in sec. 28 & 29 along the south boundary of the ranch



BLM lands on the T-Chair ranch in the northwest corner of the ranch

UNITED STATES DEPARTMENT OF INTERIOR
BUREAU OF LAND MANAGEMENT
DECISION RECORD/FONSI
COW CREEK LLC (60 Bar Ranch) EXCHANGE
ENVIRONMENTAL ASSESSMENT WY070-01-78
WYW 143315

DECISION:

It is my decision to complete as proposed in the approved Agreement to Initiate a Land Exchange dated June 1, 1998, and amended September 28, 1998, and June 8, 2001, the 60 Bar Ranch Exchange between BLM and the proponent, Cow Creek LLC. I have determined the public interest will be well served by the exchange, pursuant to the criteria identified in 43 CFR 2200.0-6(b).

The values of the land to be exchanged will be equalized as described in Exhibit E. The proposed land exchange will be subject to the terms and conditions in 43 CFR 2200 and to the Federal Land Transaction Facilitation Act (FLTFA) of 2000, Pub. L. No. 106-248. An equalization payment of \$86,418.01, from the proponent will be deposited into the FLTFA Account, in accordance with Pub. L. No. 106-248.

The exchange is in conformance with the Buffalo RMP, dated October 4, 1985, as amended April 2001. Total acreage in the exchange is disposal of 20,846.06 acres of Federal land and acquisition of 9,228.32 acres of non-Federal land.

The legal description for the selected, Federal land, is attached as Exhibit A. The legal description for the offered, Private land, is attached as Exhibit B.

The property rights to be acquired with the offered, private land (water rights), are attached as Exhibit C. It has been determined that the United States will acquire 100% of the valid, filed water rights associated with the property. The United States will dispose of the Federal land subject to valid existing rights (rights-of-way) listed on Exhibit D. Also attached as Exhibit D, are existing oil and gas leases on the Federal mineral estate. Since this is a surface estate only exchange, the oil and gas leases will not be affected. This exchange has an added Federal benefit of reuniting the surface estate and the entire mineral estate on over 7,708 acres of land and the surface and coal estate on an additional 1,520 acres of land which will become Federal. Relinquishment of rights to surface

patents on existing mining claims are required and will be made a condition of escrow, and the title closing.

The United States will convey all of its surface right interests, identified as Exhibit F (Range Improvement Property Interests) to the proponent. These property rights have been reviewed by the Authorized Officer and have been found to be old boundary fences, corrals, and stock water improvements where BLM had no capital investments. Title to these improvements will merge with the title as the General Partners of the Cow Creek LLC each receive the Federal interests that lie within their own ranching operations.

The patent will be issued to Cow Creek LLC and will reserve all minerals to the United States; the patent will reserve a ditches and canals reservation under the Act of August 30, 1890; and, the patent will be issued subject to valid existing rights, which include the rights of prior permittees or lessees to use so much of the surface of said land as is required for mining operations without compensation to the patentee for damages resulting from proper mining operations.

RATIONALE:

Public Interest Determination:

The following resource values were analyzed in the environmental assessment which shows the public interest will be well served by the exchange.

A. Consolidation of lands. This acquisition when combined with other Federal land will provide access to 18,400 acres of public land in Campbell County where public access is limited. Increasing rural development and growth in the area continue to limit and decrease access to public lands.

B. Recreation. The exchange will significantly enhance opportunities for public recreation by consolidating the offered lands with a large block of Federal land. There is a high demand from Campbell County residents as well as other public land users to acquire access to public land for recreational pursuits such as hunting, fishing, hiking, ATV use, etc. Gillette is growing yearly, largely due to a coal bed methane boom and continued coal expansion.

C. Wildlife. Wildlife values are similar on the proposed private parcel and Federal lands, however, wildlife diversity and numbers on the 60 Bar Ranch are higher due to wetland and riparian areas, as well as additional habitat cover.

D. Riparian. While the selected Federal lands have some privately developed stock-watering sources (wells, reservoirs, pipelines), the offered private lands have several acres of active springs, and more than 2 miles of cottonwood riparian vegetation along Cow Creek, and Cedar Draw. The BLM has no capital invested in these private range improvements.

When the multiple use values of the offered and selected lands are compared, the benefits to the public for access for recreation and for riparian watersheds outweigh the loss of the small, isolated, scattered parcels, largely without public access. Disposal of the selected Federal land in the exchange will allow better utilization of scattered land within the ranching operations of the proponent(s).

In accordance with 43 CFR 2200.0-6(b)(2), I have determined that the intended use of the conveyed Federal lands for on-going grazing operations will not significantly conflict with established management objectives on adjacent Federal lands (currently grazing use), and Indian trust lands (non applicable).

Appraisal Requirements:

Both the offered and Selected lands were appraised by fee appraiser, John Widdoss, ARA, in the summer of 1997. During February and March of 2001, Don Shepard, Chief Appraiser in the Wyoming State Office, completed an appraisal of the rate of change of the market conditions since 1997. He concluded that the rate of change for the areas within which the subject properties are located would be an increase of .5% per month. Additionally, there were slight modifications made to the acreage of both the offered and selected lands. The highest and best use of the properties was determined to be agricultural with recreational and small tract influences. Based on these adjustments, the current value of the offered (Private) land is \$1,620,500.00. The current value of the selected (Federal) land is \$1,747,225.00. This leaves a difference in value of \$126,725.00. The difference in appraised value is within 25% of the value of the Federal lands and the authorized officer has determined that it is in the public interest to compensate the proponent \$42,019.99, through the adjustment to the land value of the private land. This compensation will reimburse the proponent for assuming the BLM's share of costs, for cultural and appraisal work, and is provided for in 43 CFR 2201.1-3(a)(2), and (b). An equalization payment of \$84,705.01, from the proponent will be deposited into the FLTFA Account, in accordance with Pub. L. No. 106-248. The specific breakdowns of the compensation costs are described in the attached Exhibit E.

Conformance with Land Use Plans:

Acquisition of the non-Federal lands as well as disposal of the isolated, scattered, small parcel of Federal land will promote the multiple use values and will meet the stated objectives in the Buffalo Resource Management Plan dated October 4, 1985, as amended April/2001. The land tenure adjustment decisions of the plan state that the decision is to exchange those public lands that are small, scattered, and inaccessible, for lands adjacent to large accessible blocks of public land, and/or lands with high recreational, wildlife, riparian or other resource values. The acquisition would add significant recreation land contiguous to existing public lands in Campbell County, and will improve management and accessibility to those lands. The acquired lands will be managed under the principles of multiple use consistent with the Buffalo RMP.

Past and present support for the exchange has been expressed by the residents of Gillette, the Campbell County Commissioners, and indirectly through Senator Enzi who was instrumental in passing legislation which resolved mineral conflicts and facilitated this exchange. In general, the public is very supportive of the exchange because it will provide access to an exceptionally large block of public lands which will be available for recreation activities while only disposing of small, scattered parcels which are largely without public access.

Implementation Period:

The exchange decision will be implemented following the completion of a 45 day protest period which begins upon publication of a Notice of Availability of the Decision and upon resolution of any protests which may be made on the decision.

Mitigation Measures:

No mitigation measures were identified in the EA that would become conditions for completing the exchange.

Compliance Plan:

Not Applicable.

Signature of Preparer:

Lamara Hertuch
(Signature)

8/10/01
(Date)

Signature of Preparer:

John J. Kolnik
(Signature)

8/10/01
(Date)

Signature of Environmental
Coordinator

Jerry J. Gerard
(Signature)

8/13/01
(Date)

FONSI/ENVIRONMENTAL ASSESSMENT WY070-01-78
WYW 143315

The environmental assessment WY070-01-78, analyzing the environmental effects of the proposed Cow Creek LLC exchange, has been reviewed.

The public lands being conveyed have been examined in accordance with Section 120 (h) of CERCLA. No evidence was found to indicate that any hazardous substance was stored for one year or more or disposed of or released on the property.

This results in a finding of no significant impact on the human environment. Therefore, an environmental impact statement is not necessary to further analyze the environmental effects of the proposed action. This exchange is found to be in the public interest as required by 43 CFR 2200.0-6(b).

Signature of Authorized Official:

Robert D. Hartman Acting FM
(Signature/Title)

Date Signed:

August 13, 2001
(Date)