

Worksheet
Determination of NEPA Adequacy (DNA)
U.S Department of the Interior, Bureau of Land Management

A. Background

BLM Office: Central Oregon Resource Area (CORA). **NEPA Log #:** OR-050-08-155

Project/Lease/Serial/Case File #: None

Applicant: Bureau of Land Management Prineville District, Oregon State Office

Location: An area south of mile post 77 on State Highway 20. See maps - Attachment 1.

Proposed Action Title/Type: Glass Buttes Competitive Geothermal Lease Sale.

Description of the Proposed Action and any applicable mitigation measures: The issuance of competitive geothermal leases in the Glass Buttes area. The Bureau of Land Management Oregon State Office in concert with the BLM Prineville District Office regularly makes parcels available for lease through the competitive geothermal leasing process. The areas offered for Fall 2008 sale are listed in Attachment 2 as well as any special stipulations posted on the notice of sale.

B. Land Use Plan Conformance

Land Use Plan Name: Brothers/La Pine RMP **Date approved (ROD):** July 1989

The proposed action is in conformance with the applicable plan because it is specifically provided for in the following land use plan decisions: “Allows exploration and development of mineral and energy resources consistent with the BLM’s minerals policy while protection other significant resource values. (Page 14)”

C. Identify applicable National Environmental Policy Act (NEPA) documents and related documents that cover the proposed action

The following NEPA documents (EA, DEIS, FEIS) cover the proposed action:

Proposed Brothers/LaPine Resource Management Plan and Final Environmental Impact Statement, September 30, 1988.

The following other documentation is relevant to the proposed action (e.g., biological assessment, biological opinion, watershed assessment, allotment evaluation, and monitoring report):

None

D. NEPA Adequacy Criteria

1. Is the new proposed action a feature of, or essentially similar to, an alternative analyzed in the existing NEPA document(s)? Yes. The proposed action was anticipated for in the preferred alternative (D) of the Brothers LaPine RMP page 107-108 (Attachment 3).

Is the project within the same analysis area, or if the project location is different, are the geographic and resource conditions sufficiently similar to those analyzed in the existing NEPA document(s)? The area of consideration was analyzed for the proposed action in the existing NEPA document and there is no difference in geographic or resource conditions.

2. Is the range of alternatives analyzed in the existing NEPA document(s) appropriate with respect to the new proposed action, given current environmental concerns, interests, and resource values? Yes. The area under consideration was determined to have potential geothermal resource development. Mitigating measures through leasing stipulations were developed to protect other resource values.

3. Is the existing analysis valid in light of any new information or circumstances (such as rangeland health standard assessment, recent endangered species listings, updated lists of BLM sensitive species)? Can you reasonably conclude that all new information and new circumstances would not substantially change the analysis of the new proposed action? Yes, the existing analysis is valid for the current proposed action of issuing competitive geothermal leases. The entire lease area is considered occupied or potentially occupied sage grouse habitat. Any future exploration or development proposals within the lease area may result in an amendment to the Brothers LaPine and Three Rivers RMPs. An amendment would consider any species information, direction, policies, strategies and agreements collected or approved since the Brothers LaPine and Three Rivers RMPs were finalized in 1989 and 1992 respectively. The amendments will ensure that any required avoidance, set-back (buffer) zones, visual and noise levels, best management practices and any other required mitigations are consistent with the Resource Management Plans.

The public lands contained within the Glass Buttes Wilderness Inventory Unit were evaluated for wilderness character in 2008. The evaluation found that the public land parcels do not have wilderness character, because they lack outstanding opportunities for solitude or primitive, unconfined recreation.

4. Are the direct, indirect, and cumulative effects that would result from implementation of the new proposed action similar (both quantitatively and qualitatively) to those analyzed in the existing NEPA document(s)? Yes It was projected that there would be periodic geothermal exploration occurring within the planning area. The final decision allows for such exploration.

5. Are the public involvement and interagency review associated with existing NEPA document(s) adequately for the current proposed action? Yes. This project was listed on the Prineville Districts List of Proposed Projects on our public web site in July of 2008. There have not been substantial changes to the conditions in the area that would necessitate a review of the objectives and cumulative effects of this proposal.

E. Persons/Agencies/BLM Staff consulted

| <u>Name</u> | <u>Title</u> | <u>Resource/Agency</u> |
|-----------------|-------------------------|----------------------------------|
| John Zancanella | Archeologist | Cultural Resources |
| Jim Eisner | Biologist | Special Status Animals |
| Ron Halvorson | Botanist | Special Status Plants |
| Cari Johnson | Rangeland Specialist | Range |
| Heidi Mottl | Outdoor Rec. Planner | Rec. /Wilderness Characteristics |
| Steve Storo | Geologist | Minerals |
| Jan Hanf | Wildlife Biologist | Sensitive Species |
| Ayn Shlisky | Assistant Field Manager | CORA |
| Teal Purrington | NEPA Coordinator | Prineville District |

Note: Refer to the EIS for a complete list of the team members participating in the preparation of the original environmental analysis or planning documents.

Conclusion

Based on the review documented above, I conclude that this proposal conforms to the applicable land use plan and that the documentation fully covers the proposed action and constitutes BLM's compliance with the requirements of the NEPA.

Signature

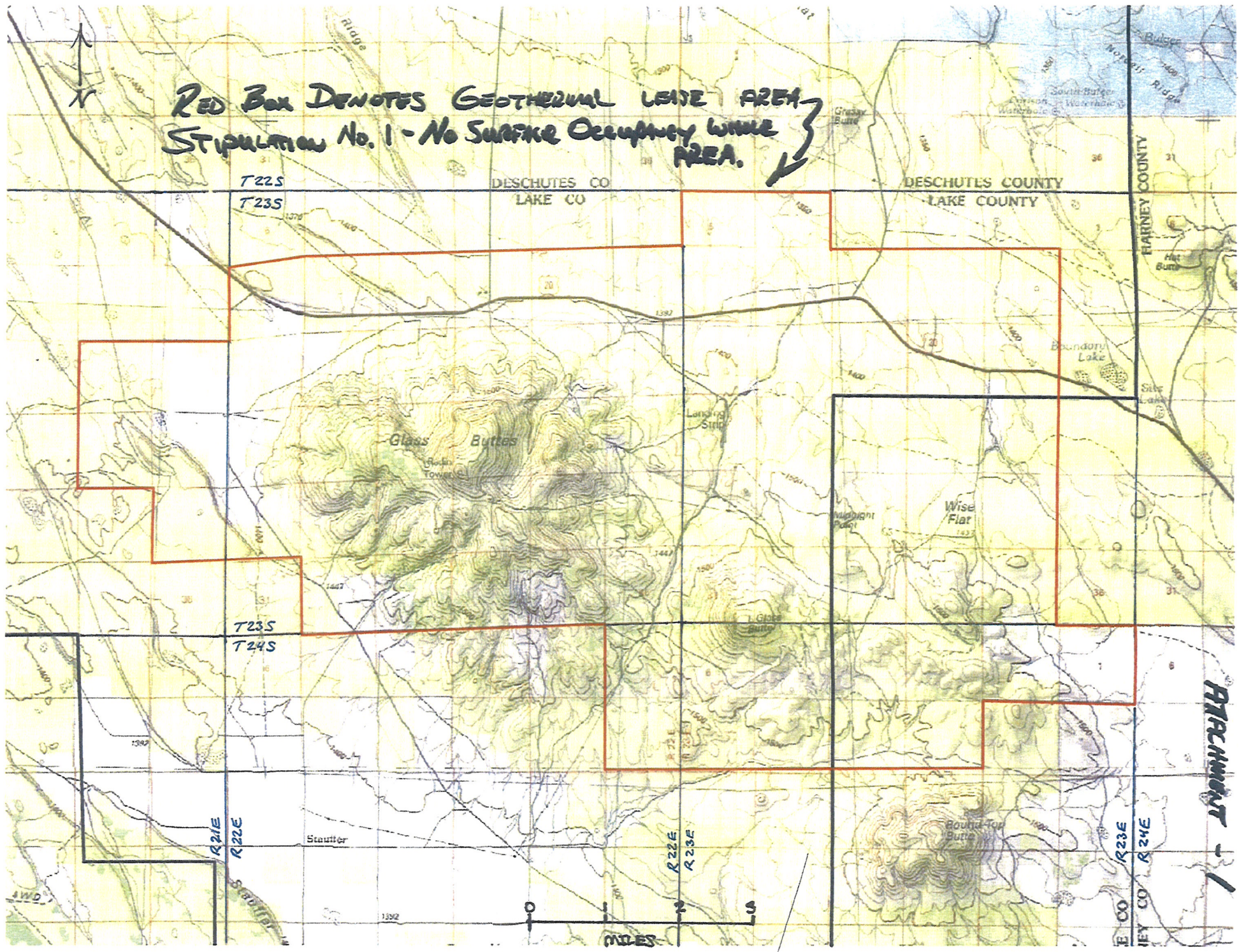
Responsible official: *Ayn Shlisky* 9.29.08
for Tina Welch-CORA Field Area Manager Date

Note: The signed Conclusion on this Worksheet is part of an interim step in the BLM's internal decision process and does not constitute an appealable decision. However, the lease, permit, or other authorization based on this DNA is subject to protest or appeal under 43 CFR Part 4 and the program specific regulations.

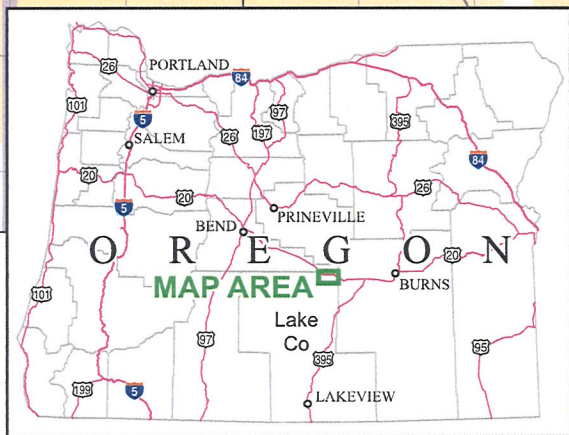
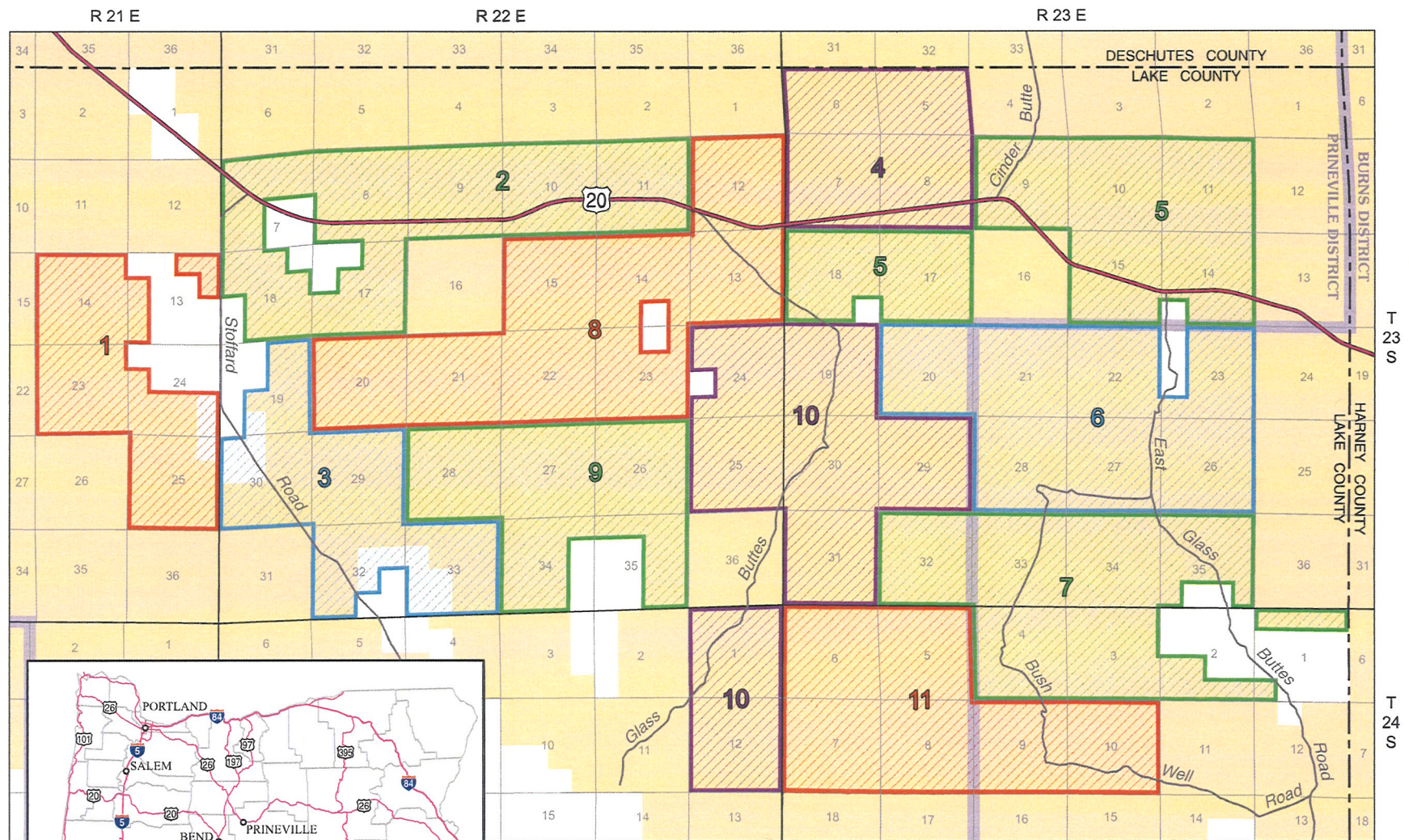
Contact Person

For additional information concerning this review, contact: Steve Storo Geologist, Prineville Field Office, 3050 NE 3rd Street, Prineville, OR 97754, telephone (541) 416-6885, sstoro@or.blm.gov.

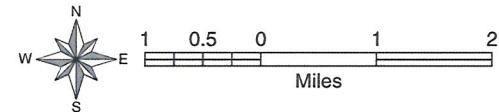
RED BOX DENOTES GEOTHERMAL LEASE AREA
STIPULATION No. 1 - No Surface Occupancy while
AREA.



Attachment 1



-  Lease Sale Parcel and Parcel ID
-  Administered Land
Bureau of Land Management
-  Private or Other



No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual or aggregate use with other data. Original data were compiled from various sources. This information may not meet National Map Accuracy Standards. This product was developed through digital means and may be updated without notification.

December 2008 Geothermal Lease Sale - Lake County, Oregon

| | | | | | | | | | | | | | | | | | |
|----|----|-----------------|----|----|----|-----------------|-----------------|----|----|----|----|-----------------|-----------------|----|-----------------|-----------------|----|
| 16 | 15 | 14 | 13 | 18 | 17 | 16 | 15 | 14 | 13 | 18 | 17 | 16 | 15 | 14 | 13 | 18 | |
| 21 | 22 | 23 | 24 | 19 | 20 | 21 | 22 | 23 | 24 | 19 | 20 | 21 | 22 | 23 | 24 | 19 | |
| 28 | 27 | T22S-R21E 26 | 25 | 30 | 29 | T22S-R22E 28 | 27 | 26 | 25 | 30 | 29 | T22S-R23E 28 | 27 | 26 | T22S-R24E 25 | 30 | |
| 33 | 34 | 35 | 36 | 31 | 32 | 33 | 34 | 35 | 36 | 31 | 32 | 33 | 34 | 35 | 36 | 31 | |
| 04 | 03 | 02 | 01 | 06 | 05 | 04 | 03 | 02 | 01 | 06 | 05 | 04 | 03 | 02 | 01 | 06 | |
| 09 | 10 | 11 | 12 | 07 | 08 | 09 | 10 | 11 | 12 | 07 | 08 | 09 | 10 | 11 | 12 | 07 | |
| 16 | 15 | 14 | 13 | 18 | 17 | 16 | 15 | 14 | 13 | 18 | 17 | 16 | 15 | 14 | 13 | 18 | |
| 21 | 22 | T23S-R21E 23 | 24 | 19 | 20 | T23S-R22E 21 | 22 | 23 | 24 | 19 | 20 | T23S-R23E 21 | 22 | 23 | T23S-R24E 24 | 19 | |
| 28 | 27 | 26 | 25 | 30 | 29 | 28 | 27 | 26 | 25 | 30 | 29 | 28 | 27 | 26 | 25 | 30 | |
| 33 | 34 | 35 | 36 | 31 | 32 | 33 | 34 | 35 | 36 | 31 | 32 | 33 | 34 | 35 | 36 | 31 | |
| 04 | 03 | 02 | 01 | 06 | 05 | 04 | 03 | 02 | 01 | 06 | 05 | 04 | 03 | 02 | 01 | 06 | |
| 09 | 10 | 11 | 12 | 07 | 08 | 09 | 10 | 11 | 12 | 07 | 08 | 09 | 10 | 11 | 12 | 07 | |
| 16 | 15 | 14 | 13 | 18 | 17 | 16 | 15 | 14 | 13 | 18 | 17 | 16 | 15 | 14 | 13 | 18 | |
| 21 | 22 | T24S-R21E 22 | 23 | 24 | 19 | 20 | T24S-R22E 21 | 22 | 23 | 24 | 19 | 20 | T24S-R23E 21 | 22 | 23 | T24S-R24E 24 | 19 |
| 28 | 27 | 26 | 25 | 30 | 29 | 28 | 27 | 26 | 25 | 30 | 29 | 28 | 27 | 26 | 25 | 30 | |
| 33 | 34 | 35 | 36 | 31 | 32 | 33 | 34 | 35 | 36 | 31 | 32 | 33 | 34 | 35 | 36 | 31 | |

PUBLIC DOMAIN LANDS
WILLAMETTE MERIDIAN, OREGON

BEGIN BLOCK 1

PARCEL NUMBER 7-24-08-1

T. 23 S., R. 21 E.,
Sec. 13, N2NE, SENE, SWNW, W2SW;
Sec. 14, All;
Sec. 23, All;
Sec. 24, SWNW, S2;
Sec. 25, All.

Lake County 2,520.00 acres

PARCEL NUMBER 7-24-08-2

T. 23 S., R. 22 E.,
Sec. 07, Lots 1-4, NE, E2W2;
Sec. 08, All;
Sec. 09, All;
Sec. 10, All;
Sec. 11, All;
Sec. 17, E2, SENW, SW;
Sec. 18, Lots 1, 2, W2NE, SENE, E2W2, SE.

Lake County 4,041.67 acres

PARCEL NUMBER 7-24-08-3

T. 23 S., R. 22 E.,
Sec. 19, E2, E2SW;
Sec. 29, All;
Sec. 30, Lots 1-4, E2, E2W2 (All);
Sec. 32, N2, SW, NWSE;
Sec. 33, All.

Lake County 2,835.92 acres

PUBLIC DOMAIN LANDS
WILLAMETTE MERIDIAN, OREGON

PARCEL NUMBER 7-24-08-4

T. 23 S., R. 23 E.,
Sec. 05, Lots 1-4, S2 (All);
Sec. 06, Lots 1-6, E2SW, SE (All);
Sec. 07, Lots 1-4, E2, E2W2 (All);
Sec. 08, All.

Lake County 2,206.85 acres

PARCEL NUMBER 7-24-08-5

T. 23 S., R. 23 E.,
Sec. 09, All;
Sec. 10, All;
Sec. 11, All;
Sec. 14, N2, N2SW, SESW, SE;
Sec. 15, All;
Sec. 17, All;
Sec. 18, Lots 1-4, NE, E2W2, N2SE, SWSE.

Lake County 4,402.72 acres

PARCEL NUMBER 7-24-08-6

T. 23 S., R. 23 E.,
Sec. 20, All;
Sec. 21, All;
Sec. 22, All;
Sec. 23, E2, E2W2, SWSW;
Sec. 26, All;
Sec. 27, All;
Sec. 28, All.

Lake County 4,360.00 acres

PUBLIC DOMAIN LANDS
WILLAMETTE MERIDIAN, OREGON

PARCEL NUMBER 7-24-08-7

T. 23 S., R. 23 E.,
Sec. 32, All;
Sec. 33, All;
Sec. 34, All;
Sec. 35, N2, N2S2, SWSW, SESE.

T. 24 S., R. 23 E.,
Sec. 01, Lots 1-4, SWSW;
Sec. 02, SW, S2SE.
Sec. 03, Lots 1-4, S2N2, S2 (All);
Sec. 04, Lots 1-4, S2N2, S2 (All).

Lake County 4,200.88 acres

END BLOCK 1

PARCEL NUMBER 7-24-08-8

T. 23 S., R. 22 E.,
Sec. 12, All;
Sec. 13, All;
Sec. 14, N2, SW, N2SE, SESE;
Sec. 15, All;
Sec. 20, All;
Sec. 21, All;
Sec. 22, All;
Sec. 23, E2NE, SWNE, W2, SE.

Lake County 5,040.00 acres

PARCEL NUMBER 7-24-08-9

T. 23 S., R. 22 E.,
Sec. 26, All;
Sec. 27, All;
Sec. 28, All;
Sec. 34, NENE, W2E2, W2;
Sec. 35, E2, N2NW.

Lake County 2,840.00 acres

PUBLIC DOMAIN LANDS
WILLAMETTE MERIDIAN, OREGON

PARCEL NUMBER 7-24-08-10

T. 23 S., R. 22 E.,
 Sec. 24, N2, E2SW, SWSW, SE;
 Sec. 25, All.
T. 24 S., R. 22 E.,
 Sec. 01, Lots 1-4, S2N2, S2 (All);
 Sec. 12, All;
T. 23 S., R. 23 E.,
 Sec. 19, Lots 1-4, E2, E2W2 (All);
 Sec. 29, All;
 Sec. 30, Lots 1-4, E2, E2W2 (All);
 Sec. 31, Lots 1-4, E2, E2W2 (All).

Lake County 5,071.04 acres

PARCEL NUMBER 7-24-08-11

T. 24 S., R. 23 E.,
 Sec. 05, Lots 1-4, S2N2, S2 (All);
 Sec. 06, Lots 1-7, S2NE, SENW, E2SW, SE (All);
 Sec. 07, Lots 1-4, E2, E2W2 (All);
 Sec. 08, All;
 Sec. 09, All;
 Sec. 10, All.

Lake County 3,843.22 acres

ATTACHMENT - 3

Support

Staff specialist support will be needed in determining the success in meeting resource management objectives in the conditional suppression and prescribed fire use areas.

pursued, an amendment of this plan and separate environmental impact statement, with public involvement, will be prepared.

Energy and Minerals

Management Direction

Leasable Minerals

It is projected that the next 10 to 15 years will see periodic oil and gas as well as some geothermal exploration on BLM managed lands within the planning area. For purposes of analysis it is assumed that a total of three exploratory wells for oil and gas and geothermal will be drilled. The surface disturbance associated with drilling for oil and gas and geothermal are similar with each well requiring approximately 3 acres for a well pad and an estimated average of 2 miles of moderate duty access road. Existing roads will be used whenever possible. The cumulative effect of this activity is expected to be a total of 9 acres of surface disturbance and 6 miles of new road. The well pads and possibly the roads (if they would not be needed for other uses) will be rehabilitated. The average duration of this activity would be approximately 6 months at each well site. Unless production is found, all impacts associated with exploration and drilling will be short-term and insignificant. If oil, gas or geothermal production is

Leasable minerals will continue to be made available on most land where the surface is also publicly owned. Approximately 910,000 acres of public land will be open to exploration subject to standard lease requirements and stipulations. A restrictive "no surface occupancy" stipulation for fluid minerals exploration and development will be maintained on 16,000 acres of public land around Prineville Reservoir and seasonal restrictions will continue on 44,580 acres of deer wintering areas and 3,560 acres of sage grouse strutting grounds. A no-surface occupancy stipulation for fluid minerals exploration and development will be imposed on 36,000 acres designated as Areas of Critical Environmental Concern. A 600-acre area around the Horse Ridge Research Natural Area will continue to be closed to mineral leasing. A total of 3,552 acres along 11.1 miles of the North Fork of the Crooked River was classified as "wild" under the National Wild and Scenic Rivers Act. This area has been withdrawn from mineral entry, thus it is closed to mineral leasing. Restrictions to protect 100,000 acres of land that are visually sensitive or of high scenic quality will also be continued. Table 20 and Maps 22 and 23 show leasable mineral potential in the Brothers Portion.

Table 20. Acres Potentially Valuable for Oil and Gas and Geothermal, Brothers/LaPine Planning Area

| Management Categories | Not Potentially Valuable | Low Value Potential | Moderate Value Potential | High Value Potential | Total | % Public Mineral Acres |
|----------------------------|--------------------------|---------------------|--------------------------|----------------------|-----------|------------------------|
| Oil and Gas | | | | | | |
| Open | 41,000 | 463,000 | 172,000 | 234,000 | 910,000 | 82 |
| Open-No Surface Occupancy | 0 | 29,000 | 8,000 | 11,000 | 48,000 | 4 |
| Open-Visual Restrictions | 10,000 | 20,000 | 40,000 | 30,000 | 100,000 | 9 |
| Open-Seasonal Restrictions | 0 | 5,000 | 20,000 | 23,000 | 48,000 | 4 |
| Closed-Non Discretionary | 0 | 1,000 | 0 | 4,000 | 5,000 | 1 |
| Total | 51,000 | 518,000 | 240,000 | 302,000 | 1,111,000 | 100 |
| Geothermal | | | | | | |
| Open | 815,000 | 215,000 | 6,000 | 0 | 1,036,000 | 93 |
| Open-No Surface Occupancy | 26,000 | 7,000 | 0 | 0 | 33,000 | 3 |
| Open-Visual Impact | 0 | 10,000 | 15,000 | 0 | 25,000 | 2 |
| Open-Seasonal Restrictions | 0 | 12,000 | 0 | 0 | 12,000 | 1 |
| Closed-Non-Discretionary | 4,000 | 1,000 | 0 | 0 | 5,000 | 1 |
| Total | 849,000 | 245,000 | 21,000 | 0 | 1,111,000 | 100 |

Map 24 shows minerals management areas for the Brothers Portion. There are no oil and gas or geothermal leases in the LaPine Portion and overall leasable mineral potential is low. There are no known deposits of coal, tar sands, oil shale or other leasable minerals in the Brothers/LaPine Planning Area. Leasing of any minerals other than oil and gas as geothermal will require an RMP amendment or revision.

Implementation

Exceptions to the no surface occupancy stipulation will be evaluated using the following criteria:

- 1) Any proposed drilling pad or road construction will be located to avoid steep slopes and areas of highly erosive soils. Surface disturbance will have to be restored to original contours when operations were completed.
- 2) Activities could not dominate the landscape or leave long-term visual impacts. The evidence of exploration or development activities will be substantially unnoticeable after reclamation has been completed.
- 3) All activities will use existing roads to the fullest extent possible.

Oil and Gas and Geothermal Leasing Standard Stipulations

Standard stipulations are listed in Section 6 of "Offer to Lease and Lease for Oil and Gas" Form 3100-11. They are:

Lessee shall conduct operations in a manner that minimizes adverse impacts to the land, air and water, to cultural, biological, visual and other resources, and to other land uses or users. Lessee shall take reasonable measures deemed necessary by lessor to accomplish the intent of this section. To the extent consistent with lease rights granted, such measures may include, but are not limited to, modification to siting or design of facilities, timing of operations, and specification of interim and final reclamation measures. Lessor reserves the right to continue existing uses and to authorize future uses upon or in the leased lands, including the approval of easements or rights-of-way. Such uses shall be conditioned so as to prevent unnecessary or unreasonable interference with rights of lessee.

Prior to disturbing the surface of the leased lands, lessee shall contact BLM to be apprised of procedures to be followed and modifications or reclamation measures that may be necessary.

Areas to be disturbed may require inventories or special studies to determine the extent of impacts to other resources. Lessee may be required to complete minor inventories or short-term special studies under guidelines provided by lessor. If in the conduct of operations, threatened or endangered species, objects of historic or scientific interest, or substantial unanticipated environmental effects are observed, lessee shall immediately contact lessor. Lessee shall cease any operations that would result in the destruction of such species or objects until appropriate steps have been taken to protect the site or recover the resources as determined by BLM in consultation with other appropriate agencies.

Special Stipulations

Special stipulations are attached to oil and gas leases to provide additional protection for fragile areas or critical resource values. The special stipulations are seasonal restrictions for critical wildlife habitat and no surface occupancy to protect special values or fragile areas. In the case of acquired lands, it is intended to protect the resource values for which the land was acquired. Figures 1, 2 and 3 are examples of special stipulations currently in effect on oil and gas leases within the planning area.

Locatable Minerals

Exploration for locatable minerals is expected to remain minimal during the next 10 to 15 years with minor economic production.

Management Direction

Areas not specifically withdrawn from mineral entry will continue to be open under the mining laws. Mineral exploration and development will continue to be regulated under 43 CFR 3809 to prevent unnecessary or undue land degradation. The 600 acre withdrawal on the Horse Ridge Research Natural Area, the 3,552 acre withdrawal along the "wild" section of the North Fork of the Crooked River and the 36,511 acre mineral segregations for chalcedony and obsidian at Glass Butte will be retained. An additional withdrawal of 13,000 acres in the Congleton Hollow/Liggett Table area will be proposed to the Secretary of the Interior. This withdrawal will apply only to chalcedony type material in order to protect public recreational rockhounding opportunities in this area.

There are 12 separate areas designated as ACECs which total 36,916 acres. A withdrawal from entry under the 1872 mining law as amended will be sought for four ACECs totaling 2,165 acres designated as Research Natural Areas. They are Benjamin, Forest

Figure 1. Sample Notice of Restrictions for Sensitive Visual Resources.

United States
Department of the Interior
Bureau of Land Management
Prineville District

Notice to Lessee

The area listed below is classified as a sensitive visual resource area and restrictions may be imposed to prevent undue visual intrusion during exploration and production activities. Proposed plans submitted to BLM should take this classification into account.

Willamette Meridian, Oregon
T. 17 S., R. 18 E.
Sec. 1: Lots 2, 3, 4, SW $\frac{1}{4}$ NE $\frac{1}{4}$, S $\frac{1}{2}$ NW $\frac{1}{4}$, S $\frac{1}{2}$
Sec. 2: Lots 1, 2, 3, S $\frac{1}{2}$ NE $\frac{1}{4}$, SE $\frac{1}{4}$ NW $\frac{1}{4}$, E $\frac{1}{2}$ SW $\frac{1}{4}$
Sec. 3: W $\frac{1}{2}$ SW $\frac{1}{4}$, SW $\frac{1}{4}$ SW $\frac{1}{4}$
Sec. 4: Lot 2, S $\frac{1}{2}$ NE $\frac{1}{4}$, N $\frac{1}{2}$ SE $\frac{1}{4}$
Sec. 7: E $\frac{1}{2}$, NE $\frac{1}{4}$ NW $\frac{1}{4}$, E $\frac{1}{2}$ SW $\frac{1}{4}$
Sec. 8: NW $\frac{1}{4}$ NE $\frac{1}{4}$, W $\frac{1}{2}$
Sec. 9: SE $\frac{1}{4}$ NE $\frac{1}{4}$, NEE $\frac{1}{4}$ SE $\frac{1}{4}$, S $\frac{1}{2}$ SE $\frac{1}{4}$
Sec. 11: NE $\frac{1}{4}$

Figure 2. Sample Notice of Special Stipulations.

United States
Department of the Interior
Bureau of Land Management

Special Stipulation - Prineville District

The following described lands lie in the vicinity of Prineville Reservoir. Due to watershed, soil, wildlife, vegetation, recreation and other values, stringent mitigating measures will be applied by BLM at the time the operating plan is reviewed.

Willamette Meridian, Oregon
T. 17 S., R. 18 E.,
Sec. 6: S $\frac{1}{2}$ SE $\frac{1}{4}$
Sec. 7: E $\frac{1}{2}$, NE $\frac{1}{4}$ NW $\frac{1}{4}$, E $\frac{1}{2}$ SW $\frac{1}{4}$
Sec. 8: NW $\frac{1}{4}$ NE $\frac{1}{4}$, W $\frac{1}{2}$

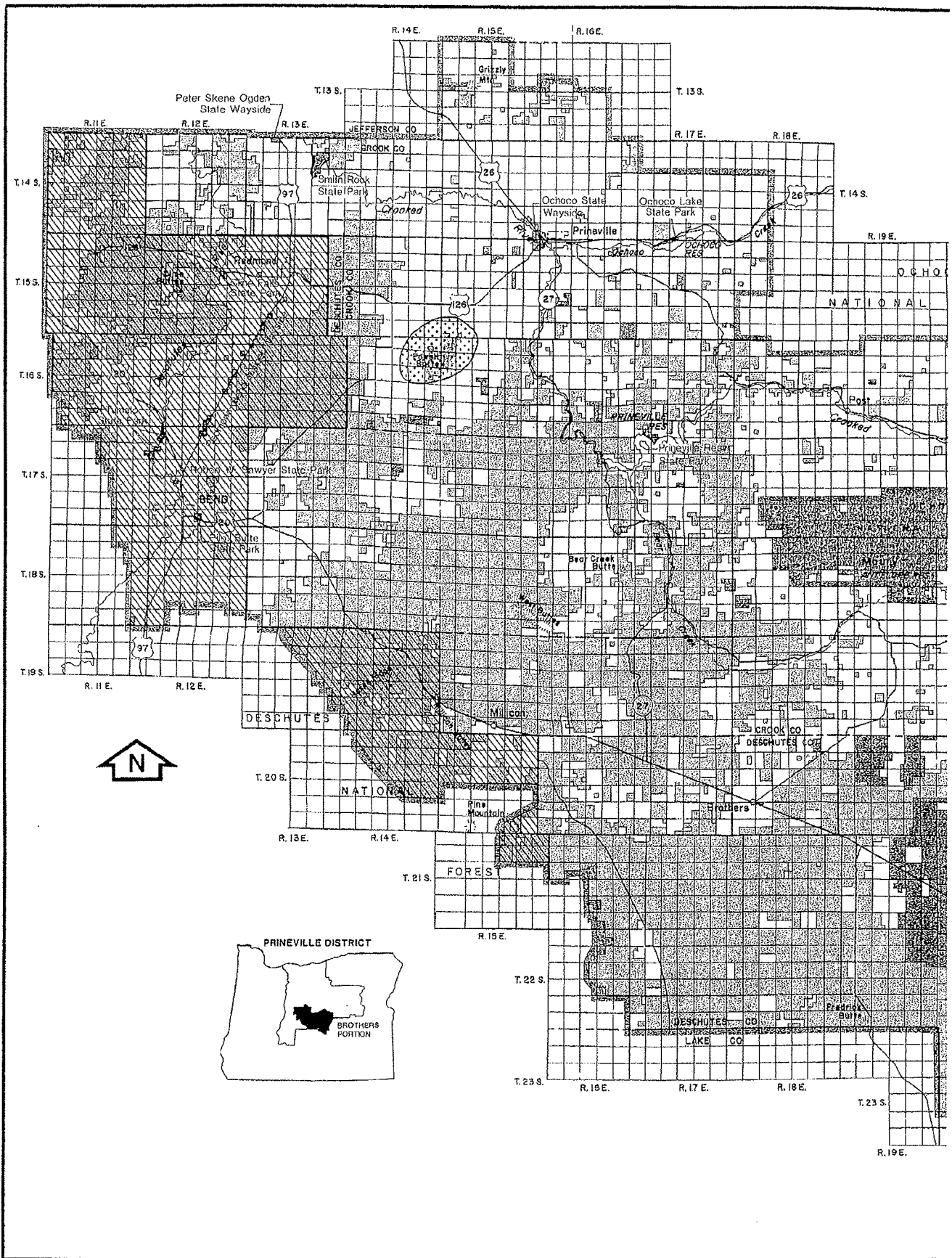
Figure 3. Sample Notice of Restrictions for Wildlife

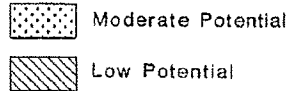
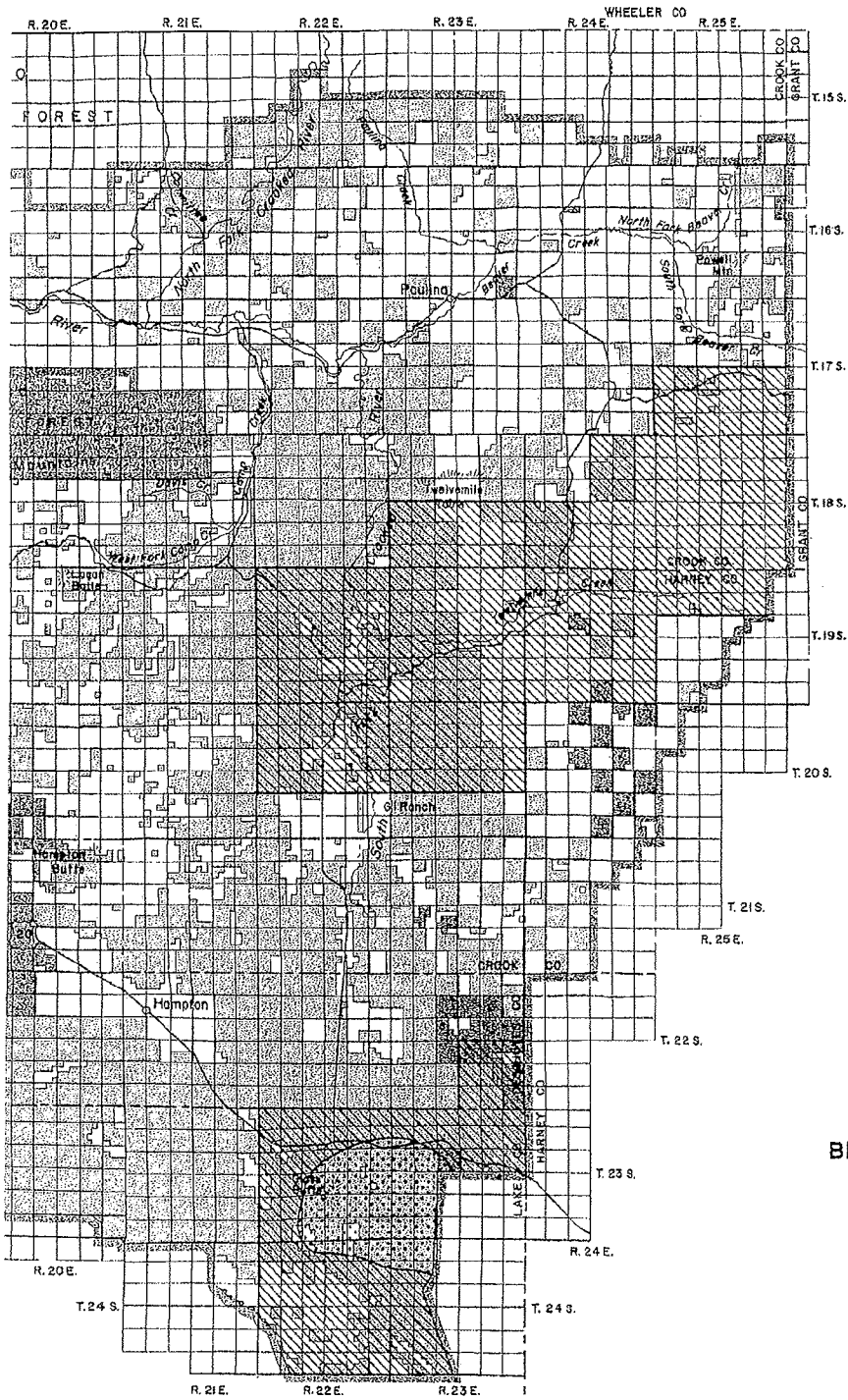
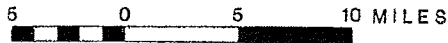
United States
Department of the Interior
Bureau of Land Management
Prineville District

Notice to Lessee

The area described below is in a critical deer winter range and restrictions on use may be imposed from December 1 through March 15.

Willamette Meridian, Oregon
T. 18 S., R. 18 E.,
Sec. 18: E $\frac{1}{2}$ SE $\frac{1}{4}$, SW $\frac{1}{4}$ SE $\frac{1}{4}$
Sec. 19: N $\frac{1}{2}$ SW $\frac{1}{4}$, NW $\frac{1}{4}$ SE $\frac{1}{4}$





US DEPARTMENT OF THE INTERIOR
Bureau of Land Management

PRINEVILLE DISTRICT
MAY 1989
BROTHERS/LA PINE PLANNING AREA

MAP 23
Geothermal Potential
Brothers Portion

September 30, 2008

Glass Butte Area Geo-thermal Lease

Parcel Number 6-12-08-1

1989 Brothers La Pine RMP stipulations:

No surface occupancy for 3,560 acres of sage-grouse strutting grounds (pg 107)

Standard stipulation: Lessee shall conduct operations in a manner that minimizes adverse impacts to the land, air, and water, to cultural, **biological**, visual and other resources, and to other land uses or users. (pg.108)

Special stipulations: Special stipulations are seasonal restrictions for critical wildlife habitat and no surface occupancy to protect special values or fragile areas. (pg.108)

Standard Operating Procedure: 2(d) Fisheries, Wildlife and Plant Habitat. The operator shall take such action as may be needed to prevent adverse impacts to threatened or endangered species and their habitat which may be affected by operations. (pg 116)

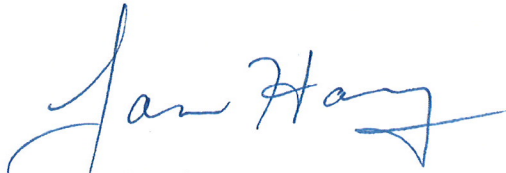
Sensitive species concerns:

Pygmy rabbit - species not specifically addressed in RMP but is a sensitive species is under USFWS review for listing. Areas to the east and south of identified area were surveyed for pygmy rabbit and rabbits and burrows were located.

Greater sage-grouse – a sensitive species with some concerns is (i.e. 2 mile radius around leks) specifically addressed in RMP. At present, new information is available which suggests that greater protection may be warranted. Species is under USFWS review for listing as well. Area is within year-round habitat for sage-grouse and known lek locations mapped.

Sensitive bat species – RMP did not specifically address Townsend's big-eared bat, spotted bat, or fringed myotis which are all currently on the State Director's Special Status Species List for Oregon and have been documented on the District.

District map of area identifying area is scanned and attached to this record.



Jan Hanf
District Wildlife Biologist