Appendix 6
How and Why BLM Terrestrial Wildlife Determinations are Made for TCGMA and Other Geographic Management Areas of Jordan Resource Area

TCGMA rangeland health Determinations for Oregon/Washington Standard 5 terrestrial wildlife habitats are made at the pasture level and based on background information found in Volume 1, Chapter 2, pp 66-90, Proposed SEORMP FEIS and ROD Appendix F.

Big Sagebrush Upland Determinations
Wyoming, basin, and mountain big sagebrush habitat Determinations for Standard 5 are based on two important plant community attributes; (1) shrub canopy capability to support sagebrush dependent species and (2) understory plant composition. Both of these habitat elements offer forage, cover, structure, and habitat security for wildlife.

The most productive and desirable big sagebrush wildlife habitats are comprised of mid to late maturity shrub stands with a complex herbaceous understory comprised of native forbs and grasses (consistent with range site capabilities). However, it is important to recognize that even sagebrush communities with relatively weak native understories will continue to support a number of important wildlife life history requirements. This is because in spite of less than optimal understory conditions, shrublands as defined in the ROD (classes 3,4, and 5) still provide important habitat elements; forage, structure, and cover used for wildlife security, escape, and thermal relief.

This is not to say that BLM desires to attain weakened sagebrush understory conditions. What it does mean, however, is that given the option, a weakened shrub community is preferable to shrub steppe habitats with little or no shrub cover. That contrast is a fundamental premise for shrubland management for wildlife under the SEORMP ROD.

This premise is a highly relevant management issue because Vale BLM is actively pursuing a land treatment program to introduce prescribed fire, control invasive plants, and supply a grass forage base for livestock permittees. And each of these actions can potentially impact wildlife habitat values when they result in loss or disturbance to sagebrush cover. In other words, as BLM pursues these legitimate land treatment and resource management goals, there is risk that such action can further aggravate chronic shrub habitat fragmentation problems for sagebrush steppe wildlife.

By paying close attention to the cumulative impacts of fire and land treatments at multiple spatial scales BLM may substantially avoid the cumulative and unintended consequences of land treatment actions. The way BLM has stated it will accomplish this task has been outlined in the SEORMP ROD, Appendix F.

Why is there so much emphasis in the ROD centered on big sagebrush types?

Big sagebrush habitat management was an important scoping issue in the land use plan and EIS. Big sagebrush range sites are the most abundant habitat type in Malheur County but they have also been subjected to a long history of land treatment actions related to livestock grazing, weed treatment, and fire management activities. Proper management of land treatment and fire related activities in this large habitat matrix has much to do with the ability of wildlife to survive on public land in Malheur County.

Grasslands and shrublands are identified with quantified data and field estimates
The canopy cover values (classes) that separate grasslands from shrublands have been defined with quantitative measures shown on pages F-7 through F-10 of the ROD. Classes 1 and 2 are collectively considered "grasslands" and classes 3, 4, or 5 are collectively considered "shrublands".

The five canopy cover classes are;

- class 1 - 0% sagebrush shrub cover
- class 2 - traces to 5% sagebrush shrub cover
- class 3 - >5% to 15% sagebrush shrub cover
- class 4 - >15% to 25% sagebrush shrub cover)
- class 5 - >25% sagebrush shrub cover

Big sagebrush habitat wildlife suitability Determinations are made on the basis of how much grassland and shrub-land habitat occurs within pastures and how it is distributed spatially. Thus BLM uses pasture level Determinations as building blocks to describe grassland and shrubland distributions within Geographic Management Areas and the Jordan Resource Area as a whole. In doing so, BLM may then determine if land use plan objectives for rangeland vegetation and wildlife are being met. This is done in conjunction with the Standards and Guides Assessment process so that wildlife considerations and management direction is built in to an important BLM program.

Grassland and Shrubland Proportions are an Important Rangeland Indicator
BLM employs this assessment method because from a wildlife habitat standpoint the proportion and arrangement of grassland and shrub-land communities on public land gives a strong indication of how well an area can support sagebrush dependent wildlife. This landscape oriented snapshot of resource conditions speaks directly to OR/WA Standard 5 indicators including ***spatial distribution of habitat***" and ***habitat connectivity*** (page 14, OR/WA Standards and Guides).

Once the existing upland habitat patterns and proportions have been revealed in an Assessment, BLM is then able to conclude in an Evaluation whether SEORMP terrestrial wildlife objectives are being achieved at various scales starting at the pasture and on up to the GMA and Resource Area as a whole.

Managing for target communities of wildlife
One of the important purposes in taking this tack is to help BLM manage very extensive

tracts of sagebrush for the benefit of target communities of wildlife as opposed to single species. Individual species habitat requirements are factored into this process and they cannot be ignored. However, the desired management outcome on public land is focused on a specific ***target community of wildlife*** referred to herein as ***species of management importance***.

Although sage-grouse have high priority for management in this strategy, sagebrush management objectives apply even when sage-grouse are not present. The land use plan direction for this community-based approach to management is found in ROD page 51, Proposed SEORMP FEIS Volume 1, page 161 Rangeland Vegetation Objective 2, and page 167 Wildlife Objective 2.

BLM has published a Technical Note on this management style

The approach and rationale for this assessment method are explained more fully in BLM Technical Note 417 – *Assessing Big Sagebrush at Multiple Spatial Scales (2005).* Information developed through this type of analysis at multiple scales provides additional context that is beneficial in understanding how plans and projects can be developed that meet multiple management objectives, including reducing risks to sensitive or unique resources. This landscape management principle has been well articulated in the *Interior Columbia Basin ecosystem Management Plan* science documents and the *Northwest Forest Plan.* Both of these important Pacific Northwest documents influenced the processes and approach included in the SEORMP.

Why has BLM taken a grassland and shrubland approach to wildlife habitat management?

Jordan Resource Area occupies a very large land base of about 2,587,300 total public land acres (ROD page 4). It is simply not possible or practical to obtain an ongoing, comprehensive inventory of terrestrial wildlife populations and habitat over such a vast area. Thus, managing wildlife habitat suitability in a way tied to grassland and shrub-land associations is a meaningful, measurable, and reasonable management strategy. Further, this approach has already been revealed and analyzed in a final EIS so it carries the full authority of an approved and current land use plan.

The assessment process and “outcome based” nature of prescriptive management that flows from this approach is relatively straightforward and can be understood by BLM permittees and the interested public alike. Clearly, rangeland science and wildlife habitat management really involves much more than simple contrasts of grasslands and shrublands. But the science is often so technical, subject to interpretation, and poorly understood by the general public that it often has limited value in terms of crafting and explaining practical management objectives for wildlife. Grasslands and shrub-lands as defined can be recognized in the field and their distributions can be monitored fairly accurately over time using standard interagency monitoring methods.

Simply stated, grassland habitat and shrub-land habitat can be expected to support very

different suites of terrestrial wildlife due to inherent habitat preferences and life history requirements. And this is precisely why a grassland and shrubland screening process was included in the SEORMP ROD and applicable for doing S&Gs work.

Sagebrush is truly a keystone plant for wildlife in southeastern Oregon. The fact is, when sagebrush shrub cover is removed repeatedly and/or over a sufficiently large area, the composition of resident wildlife communities will change dramatically and often in an adverse manner. That is why the ROD specifies a Desired Range of Future Conditions (DRFC) that considers and protects wildlife shrub values while allowing some opportunity for land treatment options.

Excluding upland meadows, grassland habitats in Jordan Resource Area are always indicative of range sites that have been impacted by disturbance from wildfire or various BLM initiated land treatments.

Land treatment is a contentious BLM action and thresholds of disturbance identified in the ROD help the agency practice adaptive management over time

There is no question that prescribed fire and land treatments have long been a controversial wildlife habitat issue on public lands. And in the absence of some defined and understandable grassland disturbance threshold to help BLM negotiate multiple use decisions, management can and will proceed in an uncertain and contentious climate.

In other words, without some understandable disturbance thresholds tied to more than one scale there can be no clear answer to the question of how much and what kind of treatment disturbance is acceptable (according to a land use plan). The SEORMP provides an answer to these kinds of questions. Adaptive land management in sagebrush steppe without a disturbance threshold will be left to a series of local and independently determined land treatment actions that will likely fail to meet the intent of the ROD or help BLM attain the Desired Range of Future Conditions (DRFC) supported in the SEORMP.

Record of Decision and the DRFC

What is the DRFC and where is it found in the land use plan? And how does the DRFC apply in big sagebrush habitats?

The DRFC for the Southeastern Oregon RMP is defined by three different ROD elements that link together and provide the basis for multiple scale management. It is important to note that the Rangeland Vegetation and Wildlife Habitat objectives in the ROD are consistent with one another regarding the DRFC; they are not independent from one another. They were proposed and analyzed that way intentionally in the FEIS.

The ROD elements are as follows:

- A qualitative and general narrative that “paints a picture” of rangelands and the

multiple use values they should provide (ROD pages 24-27).

- A minimum amount of shrub-land and a maximum amount of grassland for each Resource Area (ROD page *x)*. Note on this page that different grassland outcomes were analyzed in the FEIS and a specific decision has been made by BLM.
- Desired Amounts and Arrangements of Sagebrush Habitats within grazing allotment pastures and Geographic Management Areas (ROD page F-5 to F-6).

Maximum Allowable Grassland Thresholds for Jordan Resource Area
The maximum allowable amount of grassland permitted for Jordan Resource Area is an amount ≤ 30% of the land base capable of supporting Wyoming, basin, or mountain big sagebrush. Since about 1,923,695 acres of Jordan Resource Area is comprised of big sagebrush types, 30% of this figure is roughly 577,000 acres. (See Technical Note 417, pages 13-14)

The remaining 1.35 million acres of Jordan Resource Area big sagebrush types should then be comprised of various shrub-land communities. (Note that if and when a new Ecological Site Inventory is completed, these total acre figures may be adjusted to reflect more accurate big sagebrush habitat information.

GMA grassland thresholds
Each Jordan Resource Area GMA is slightly different in its landscape character. They are not all expected to provide identical locations and amounts of shrubland habitat for wildlife. The allowable grassland acreage is generally variable and dependent on the localized impacts from wildfires and other disturbances as described on ROD page F-6.

The best available data indicates the following ***maximum GMA grassland thresholds*** are appropriate and consistent with the 70% figure shown on page *x* of the ROD:

GMA Name	Estimated Total Acres of GMA	Maximum Allowable Grassland Threshold in Big Sagebrush Habitats	Minimum Shrubland Threshold in Big Sagebrush Habitats
Louse Canyon	528,900	≤ 15 %	≥ 85%
****Trout Creek***	***531,300***	***≤ 15 %***	**≥ 85%**
Saddle Butte	184,200	≤55 %	≥ 45%
Jackies Butte	218,300	≤ 65 %	≥ 35%
Soldier Creek	251,600	≤ 25 %	≥ 75%
Rattlesnake	211,200	≤ 15 %	≥ 85%
Cow Creek	251,700	≤ 70 %	≥ 30%
Barren Valley	440,600	≤ 20 %	≥ 80%

* Includes custodial allotment acres and public land in Nevada that were not included in

SEORMP tables

Resource Area and GMA grassland thresholds are a regulatory mechanism for management of greater sage-grouse and other species at risk
Resource Area and GMA grassland thresholds together are therefore important mid-scale regulatory mechanisms sensitive to cumulative effects impacts of fire and land treatment common in Malheur County, Oregon. And when these two mid-scale factors are combined with fine scale pasture level Determinations for seedings or native rangeland, practical landscape-level stewardship and cumulative effects analysis tied to a FEIS is possible.

Louse Canyon GMA has been fully evaluated and the grassland threshold shown above is now part of a final BLM decision. Saddle Butte GMA and all those listed below it in the table above have not yet been evaluated so their thresholds are proposed at this point and may be subject to some slight change based on Assessment findings. Nevertheless, it is important to note that the Jordan Resource Area total grassland threshold of $\leq$ 30% will remain unchanged until such time as a new EIS is written or a plan update has been completed. The ROD grassland threshold for Jordan Resource Area is therefore a controlling factor for what is or is not allowable in GMAs and pastures.

Oregon's conservation strategy for sage-grouse and the US Fish and Wildlife Service's PECE policy
The regulatory mechanism described in this Appendix demands that BLM maintain current fire and land treatment impact area records over time so that adaptive management consistent with the land use plan can be applied. This long term management approach will coincidently allow BLM to accomplish two important tasks;

- Stay consistent with ODFW's conservation plan for greater sage-grouse and other sagebrush dependent wildlife (Hagen 2005) because the Oregon state pan prescribes a management underpinning similar to the SEORMP in terms of grassland and shrub-land conditions.

- Provide the US Fish and Wildlife Service with quantifiable and spatially explicit habitat parameters that can demonstrate achievement of important plant community objectives. In other words, it can be used by the FWS to evaluate if BLM sagebrush habitat conservation actions for sage-grouse are actually being attained and if the BLM is meeting its stated land use plan obligations. When a future status review for potential sage-grouse listing occurs, FWS must evaluate agency plans and performance according to their own Policy for the Evaluation of Conservation Efforts (commonly referred to as the Services' PECE Policy).

Finally and as a conclusion to this appendix, BLM understands very clearly that numerous factors impact and fragment public land habitat for important species such as sage-grouse. However, factors diminishing the suitability of sage-grouse habitat including powerlines, fences, grazing, population cycles, weather, highways and so forth

will all become moot points if and when the fundamental habitat necessary to support the species, e.g. shrubland habitats, disappear over a large enough.