

Greater Sage-grouse Record of Decision

Anthropogenic Disturbance Calculation Implementation Guide for Idaho, Nevada, and Utah

Version 3.3

Standards and Guidelines

The Standard GRSG-GEN-ST-004 states:

“In priority habitat management areas and sagebrush focal areas, do not issue new discretionary written authorizations unless all existing discrete anthropogenic disturbances cover less than 3% of the total greater sage-grouse habitat within the Biologically Significant Unit and the proposed project area, regardless of ownership, and the new use will not cause exceedance of the 3% cap.”

Sagebrush focal Areas (SFA) are a subset of Priority Habitat Management Areas (PHMA). Disturbance in Idaho is also monitored in Important Habitat Management Areas. Within PHMA and IHMA, it must be determined whether proposed activities will exceed the cap on anthropogenic disturbances before a new project can be permitted.

The Standard also states:

“Discretionary activities that might result in disturbance above 3% at the Biologically Significant Unit and proposed project area would be prohibited unless approved by the forest supervisor with concurrence from the regional forester after review of new or site-specific information that indicates the project would result in a net conservation gain at the Biologically Significant Unit and proposed project area scale.”

Discretionary activities would normally not be permitted if the 3% cap has been exceeded, unless a net conservation gain can be demonstrated. Refer directly to the amendment and the Mitigation guide to determine if compensatory mitigation can be used to create a net conservation gain and allow permitting.

What is an Anthropogenic Disturbance?—Clarification of the Amendment

There are some potential discrepancies within the amendments as to which activities should be considered as Anthropogenic Disturbances. The threats that the BLM and Forest Service (FS) Final Environmental Impact Statements (FEISs) considered fully are the ones being used in Anthropogenic Disturbance Cap Calculations after the ROD. The disturbances that are being monitored do not include all activities named in the amendment glossary (e.g., grazing-related facilities and structures). The Anthropogenic Disturbances at the **Biologically Significant Unit (BSU) scale** are: *Oil/Gas Wells and Development Facilities, Coal Mines, Wind Towers, Solar Fields, Geothermal Development Facilities, Mining, Roads, Railroads, Power lines, Communication Towers, Other Vertical Structures, and Other Developed Rights of Ways*. The additional threats that are also considered at the **Project Scale** are: *Coal Bed Methane Ponds, Meteorological Towers, Nuclear Energy Facilities, Airport Facilities, Military Range Facilities, Hydroelectric Plants, and Recreation Areas and Facilities (> 0.25 acres)*.

Anthropogenic Disturbance Calculation

A. The Biologically Significant Unit

The Biologically Significant Unit (BSU) used in the Anthropogenic Disturbance Calculation is the BSU defined in the relevant amendment. The BSU is the geographical/spatial used to aggregate PHMA and IHMA for comparative calculations. The BSUs can be found as defined within each applicable amendment and are mapped within the Supplemental Data information in the [USFS Vegetation Monitoring and Assessment Application](#).

The BLM calculates Anthropogenic Disturbance at the BSU scale yearly. It is published here: <http://www.landscape.blm.gov/geoportal/catalog/main/home.page>

Use the BLM site to determine what the percent and density of disturbances are for the BSU where a project is proposed. This information is updated yearly and relies upon the proprietary, large-scale data bases that the BLM manages.

B. The Project Area

The Project Area is a more precise, small scale area around the proposed project. The process for determining the level of Anthropogenic Disturbance in Idaho, Utah, and Nevada is to use the Surface Disturbance Analysis and Reclamation Tracking Tool ([SDARTT](#)). Spatial information must first be digitized before it can be analyzed with the SDARTT (see below). The Regional Office (Wildlife Program Leader, [John Shivik](#) or other designee) should be contacted for coordinating the use of the web tool.

Project Area, in the context of the Anthropogenic Disturbance Calculation, has a specific spatial definition and is not necessarily the analysis area that would be used in NEPA documents for a permitting decision. Specifically, the Anthropogenic Disturbance Project Area is created using GIS layers of the proposed project footprint, active or occupied lek locations, and Priority Habitat Management Area (PHMA) and Important Habitat Management Area (IHMA, as defined in Idaho). Anthropogenic Disturbances corresponding to the 19 specific disturbance categories identified above are used to calculate the Anthropogenic Disturbance rate at the Project Area scale.

Non-Discretionary Disturbances

For actions that are non-discretionary, there is no requirement to calculate the Project Scale disturbance, but because the information may be used for annual reporting, the proposed footprint (not the project area with all disturbances) ought to be entered into the SDARTT tool.

Non-habitat

Proposed projects require using the SDARTT to evaluate and track disturbances at the Project Area scale. If, however, a project within PHMA or IHMA can be located in non-habitat (see Habitat Guide) residual impacts could be completely avoided and minimized.

NEPA Considerations

If the proposed project falls within PHMA or IHMA, NEPA analysis should include the Anthropogenic Disturbance Calculation on the Project Area scale, the disturbance calculation at the BSU scale, a determination of residual, cumulative, or indirect effects by an action. Applicable elements of standards and guidelines specific to a proposed action must be incorporated into the decision.

If upon analysis it is determined that the proposed disturbance is sited in non-habitat without other effects (e.g., creating unacceptable noise levels) the standards and guidelines of the sage-grouse amendment do not apply (this exemption is only within PHMA, GHMA, and IHMA and does not apply within SFA).

Already Degraded Habitat and Co-locating Disturbances

If a proposed project occurs within degraded habitat within PHMA or IHMA areas, no additional habitat is being degraded. A biological report should consider the indirect effects of existing activities to determine an appropriate buffer influence of degraded habitat around the footprint of existing activities. For example, locating a new recreational facility in sagebrush habitat adjacent to a high-speed highway likely does not degrade additional habitat due to the wide corridor of influence of a highway, but locating new structures adjacent to a low use, ungraded and low-speed road would likely degrade additional habitat. It is essential to have a site-specific biological evaluation.

The footprint of proposed actions that occur under or within a buffer of habitat degradation from already existing activities, or in areas of non-habitat within PHMA or IHMA, must be put into the SDARTT calculator/database web tool for tracking purposes. Note that co-location of activities within already degraded habitat does not add to the sum of anthropogenic disturbances within a Project Area for analysis purposes.

GIS Requirement: Creating an Anthropogenic Disturbance Project Area for Uploading into SDARTT

1. Create a 4 mile buffer around the digitized proposed project footprint if it falls in or partially in SFA, PHMA, or IHMA. (See Table 6 of Monitoring Appendix for helpful buffer sizes, see below).
2. Identify any active or occupied leks that fall within the 4 mile project buffer.
3. Create a 4 mile buffer around each active or occupied lek that falls within the project buffer. If there are no leks within the project buffer, the analysis area is the spatial intersection of the proposed project buffer and PHMA (IHMA).
4. Merge the intersection of the project buffer, lek buffers, and mapped PHMA (IHMA). The intersection of the layers is the **Anthropogenic Disturbance Project Area** for calculating the

percent of area disturbed by Anthropogenic Disturbances.

5. In the Anthropogenic Disturbance Project Area, digitize the footprints (using imagery or other appropriate data sources). Consider the direct area of influence buffers identified in Table 6 of the Monitoring Framework when digitizing.
6. Provide short narrative of project including project point of contact (POC) information, and separate shapefiles for project footprint and for existing anthropogenic disturbances to the RO Contact (John Shivik, johnshivik@fs.fed.us).
7. The RO will run disturbance calculations (initially in cooperation with the BLM) for the Project Area and provide the results to the requestor.
8. The Disturbance Cap Calculation will be used to inform a decision regarding the proposed project.

From Monitoring Framework: Table 6.

| Degradation Type | Specific Activity | Direct Area of Influence |
|-------------------------|--------------------------|---------------------------------|
| Oil and Gas | | |
| | Wells | 5.0 ac (2.0 ha) |
| | Power Plants | 5.0 ac (2.0 ha) |
| Coal | | |
| | Mines | Digitized Polygon Area |
| | Power Plants | Digitized Polygon Area |
| Wind | | |
| | Wind Turbines | 3.0 ac (1.2 ha) |
| | Power plants | 3.0 ac (1.2 ha) |
| Solar | | |
| | Fields/Power Plants | 7.2 ac (3.0 ha)/MW |
| Geothermal | | |
| | Wells | 3.0 ac (1.2 ha) |
| | Power plants | Digitized Polygon Area |
| Mining | | |
| | Locatable Developments | Digitized Polygon Area |
| Roads | | |
| | Surface Streets | 40.7 ft (12.4 m) |
| | Major Roads | 84.0 ft (25.6 m) |
| | Interstate Highways | 240.2 ft (73.2m) |
| Railroads | | |
| | Active Lines | 30.8 ft (9.4 m) |
| Powerlines | | |
| | 1-199 kV | 100 ft (30.5 m) |
| | 200-399 kV | 150 ft (61.0 m) |
| | 400-699 kV | 200 ft (61.0 m) |
| | 700+ kV | 250 ft (76.2 m) |
| Communication | | |
| | Towers | 2.5 ac (1.0 ha) |