



Mining Operations and Greater Sage-Grouse Best Management Practices (BMPs)

1. Greater Sage-Grouse and the importance of protecting their habitat

The greater sage-grouse (*Centrocercus urophasianus*) is a large, rounded-winged, ground-dwelling bird, up to 30 inches long and two feet tall, weighing from two to seven pounds. It has a long, pointed tail with legs feathered to the base of the toes. Females are a mottled brown, black, and white. Males are larger and have a large white ruff around their neck and bright yellow air sacks on their breasts, which they inflate during their mating display. Most sage-grouse nest under sagebrush and dense, tall shrubs. Grass and forb coverage also help protect sage-grouse nests from predators, and provide a nutritious food source as well. Because sage-grouse have a low reproductive rate (each nest averages seven to eight eggs, and sage-grouse rarely re-nest), taking measures to ensure that sage-grouse habitat is protected will help increase sage-grouse populations in Idaho and other western states. (Sources: U.S. Fish and Wildlife Service and Idaho Department of Fish and Game)



2. Distinguishing sage-grouse habitat in Idaho

Sage-grouse habitat is divided into three zones: Priority (Core) Habitat Zones, Important Habitat Zones, and General Habitat Zones.

- Priority (Core) Habitat Zones are considered the best habitat for sage-grouse, and contain key breeding areas, as well as nesting and wintering habitat.
- Important Habitat Zones include areas of value for migration corridors, connectivity among breeding areas, and long-term persistence of sage-grouse populations in Idaho.
- General Habitat Zones include a few active leks (traditional courtship display areas attended by male sage-grouse in or next to sagebrush-dominated habitat) and fragmented or marginal habitat.



3. Determining the sage-grouse habitat zone of your mining operation

If you know the Township, Range, and Section of your operation(s), you can visit [IDL's Idaho Maps webpage](https://www.idl.idaho.gov/home/idl-gis-program-idaho-maps-and-land-records/) (<https://www.idl.idaho.gov/home/idl-gis-program-idaho-maps-and-land-records/>) and go to the *Land Records Applications/Access IDL Customer Portal*, look up your operation(s), and click on "Sage-Grouse Habitat" under the Legends tab.

4. Sage-grouse BMPs and the requirement to incorporate them into your mining operation

Sage-grouse Best Management Practices, commonly referred to as BMPs, are a suite of techniques that guide or may be applied to management actions to aid in achieving desired outcomes. If you have a plan that is on state endowment trust land, then sage-grouse BMPs must be incorporated into your mining operation. If you have a mining operation that is not on state endowment trust land, you are not required to incorporate these BMPs. However, you are encouraged to do so. Additionally, BMPs do not apply in General



Habitat Zones on state endowment trust land. Below is a summarized list of required BMPs for mining operations on state endowment lands in Priority and Important Habitat Zones from the Idaho State Land Board Greater Sage-Grouse Conservation Plan which can be found on [IDL's Sage Grouse webpage](https://www.idl.idaho.gov/leasing/sage-grouse/) (<https://www.idl.idaho.gov/leasing/sage-grouse/>):

a. Wildfire Prevention

Authorized parties will be required to develop and implement a fire prevention plan and an emergency response plan that covers all aspects of the operation. Field personnel for authorized parties will carry an emergency response plan, as well as necessary prevention equipment. Authorized parties also must park vehicles on bare ground, and check to make sure vegetation is not touching the vehicle's catalytic converter, manifold, muffler, or exhaust.

b. Invasive Species

Vehicles that travel off approved/designated transportation routes must be inspected and cleaned of seeds and propagules to prevent the spread of invasive and noxious plant species. Reclamation activities should include certified weed-free seed mixes, and all materials used for reclamation (mulch, straw, etc.) should be certified weed free by the appropriate federal or state of Idaho agency. Authorized parties will use appropriate treatments including chemical, mechanical, and biological to treat invasive and state listed noxious plant species.

c. Surface Use and Timing

No surface occupancy of large scale infrastructure can occur within 0.62 miles of occupied leks. During lekking (breeding) periods, mid-March through mid-May, project activities will be avoided to the extent possible within 0.62 miles of occupied leks between 6 p.m. and 9 a.m. to avoid disturbance to lekking and roosting sage-grouse. Major construction and maintenance activity should be avoided by authorized parties in sage-grouse winter range from December 1 to February 15. Specific dates may be earlier or later, depending on local breeding chronology.

d. Noise

Limit noise levels from discretionary activities within Priority (Core) and Important Habitat Zones to no more than 10 decibels above ambient sound levels (typically 10-14 dBA) at occupied leks from two hours before sunset to two hours after sunrise during lekking periods. Noise levels must be kept to 65 decibels or less within the 0.62-mile buffer.

e. Fencing

New and existing wire fence segments that are located in high risk areas must be marked using collision diverter markers. High risk areas include fencing with characteristics such as evidence of grouse fence strikes, gentle topography near a lek, or fences that bisect winter concentration area.

f. Water Supply Structures

New or modified spring developments should be designed by authorized parties to maintain or enhance the free-flowing characteristics of springs and wet meadows, which will help maintain continuity of the pre-developed riparian areas. The construction of new ponds or reservoirs should be minimized, except as needed to meet important resource management or restoration objections in order to reduce the potential impact from West Nile Virus on sage-grouse. Wildlife escape ramps in new and existing water troughs and open water storage tanks should be installed and maintained to facilitate the use of and escape by wildlife.

g. Constructed Improvements

Construction methods should be implemented that minimize surface disturbance. Surface disturbances should be clustered in order to limit surface occupancy. Infrastructure should be placed by authorized parties in already disturbed locations, as feasible, where the habitat has not been established. New structures with a height over five feet should not be constructed within 0.62 miles of occupied leks. To the extent practicable, power lines, towers, and other tall structures that provide perch sites for raptors will not be constructed within 1.86 miles (3 km) of breeding period habitats. Permanent structures that create movement must be minimized.

h. Site Reclamation

The goal of reclamation should be to stabilize the site with plant species that are suitable to the site and include sage brush and native forb species, provide the opportunity for sage-grouse habitat to develop over time, and prevent non-native invasive species from occupying the site. Sites should be irrigated or mulched appropriately by authorized parties if necessary for establishing seedlings more quickly.

5. Additional questions or information

If you have questions about sage-grouse BMPs, please consult the complete Idaho State Land Board Greater Sage-Grouse Conservation Plan for additional details. If you have questions about sage-grouse and its habitat, please contact Addie Faust, Natural Resources Leasing Program Manager, at (208) 334-0275, or by email at afaust@idl.idaho.gov. For all other inquiries, please contact the Idaho Department of Lands permitting lead for your mine (see figure on page 6), or visit [IDL's Sage Grouse webpage](https://www.idl.idaho.gov/leasing/sage-grouse/) (<https://www.idl.idaho.gov/leasing/sage-grouse/>)



Note: All photos for this informational handout are courtesy of the Idaho Department of Fish and Game










"Working Lands, Trusted Stewards"

Exhibit 1: Sage-Grouse Habitat Zones and Ownership

Sage Grouse Habitat

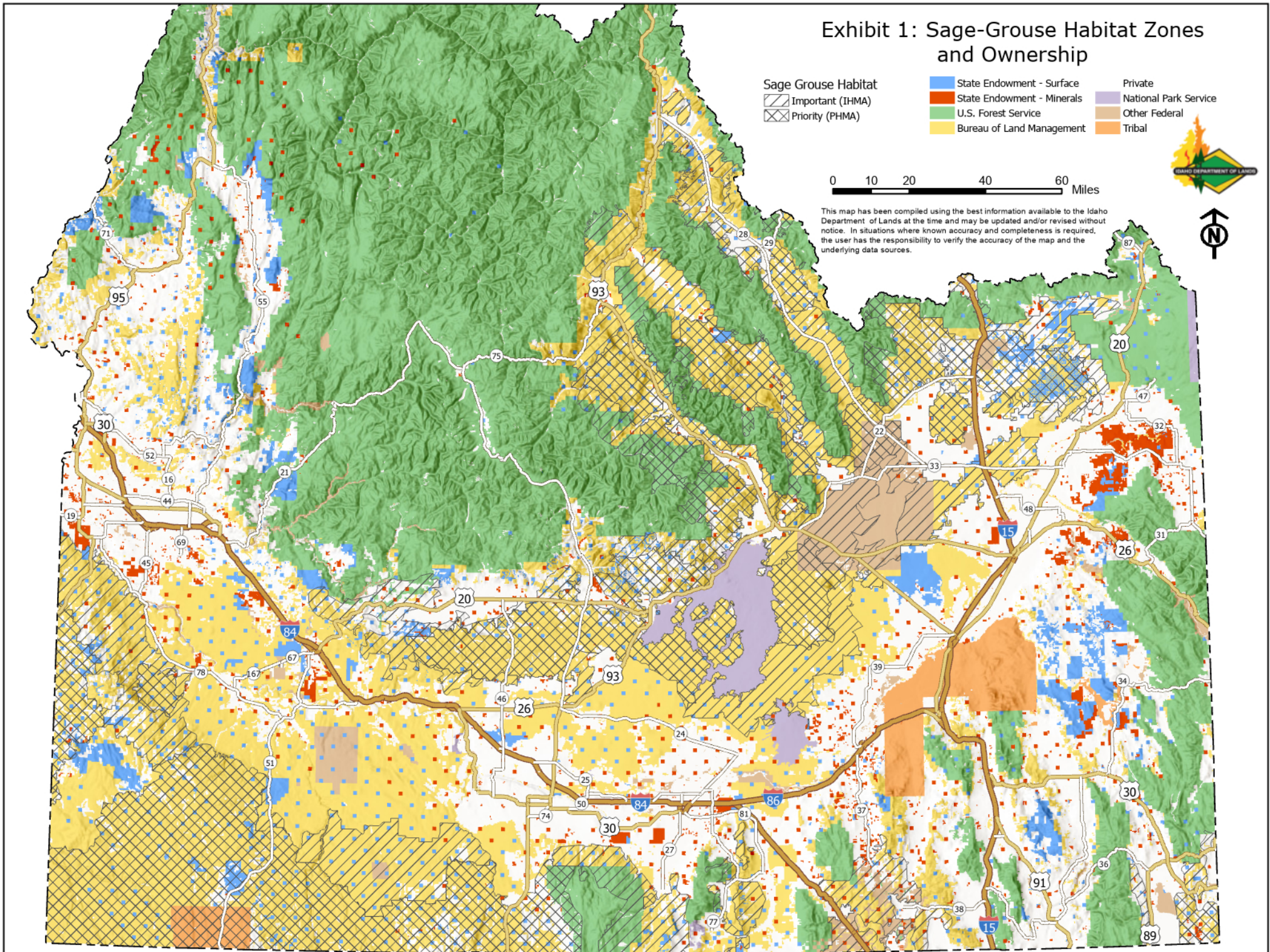
-  Important (IHMA)
-  Priority (PHMA)

-  State Endowment - Surface
-  State Endowment - Minerals
-  U.S. Forest Service
-  Bureau of Land Management

- Private
-  National Park Service
 -  Other Federal
 -  Tribal

0 10 20 40 60 Miles

This map has been compiled using the best information available to the Idaho Department of Lands at the time and may be updated and/or revised without notice. In situations where known accuracy and completeness is required, the user has the responsibility to verify the accuracy of the map and the underlying data sources.



State of Idaho Regulatory Minerals Zones and Permitting Leads

