



THE WILDERNESS SOCIETY

Summary of “***Wildlife at a Crossroads: Energy Development in Western Wyoming,***” by The Wilderness Society, February 2005, 41 pages.

Overview:

Wyoming’s Upper Green River Valley, an undulating expanse of sagebrush hemmed by scenic mountain ranges, harbors a wildlife resource of national significance. It is the winter destination for some of the largest and longest-migrating populations of mule deer and pronghorn in the nation, as well as a year-round home for threatened sage grouse, one of the West’s signature game bird species. Some 100,000 big game animals rely on the Upper Green River Valley, as the largest block of publicly owned winter range in the 19 million-acre Greater Yellowstone Ecosystem. The area is vital as winter range because wind-scoured slopes and ridgelines ensure year-round exposure of sagebrush.

Beneath the Upper Green lies a vast reservoir of natural gas, and in recent years thousands of wells have been drilled and the Valley criss-crossed with miles and miles of access roads by an industry eager to reap the rewards of rising energy prices. Today, as shown by this Wilderness Society conducted spatial analysis, Wyoming’s cherished wildlife must share their winter home with transportation infrastructure and traffic associated with this natural gas boom.

Our analysis was performed on a 2.9 million-acre swath of land managed by the Bureau of Land Management (BLM), U.S. Forest Service, the state and private landowners. Among the BLM’s 1.2 million-acre holdings (both surface and subsurface mineral estate) in the Pinedale Resource Management Area (RMA), are found two of the nation’s most lucrative gas fields, the Jonah and the Pinedale Anticline, which are now carved up by sprawling transportation networks. Spatial analysis uses GIS route datasets provided by the BLM to quantify road densities and “core” areas, blocks of habitat a given distance from a transportation feature. These core areas measure the health of wildlife habitats and how energy development has fragmented the landscape. This report documents the extent to which roads undermine habitat for four of Wyoming’s signature game species: mule deer, pronghorn, elk and sage grouse. We urge the BLM to use these findings and adopt spatial analysis to guide its ongoing revision of the Pinedale Resource Management Plan (RMP).

Findings:

Roads affect wildlife in a variety of ways. Animals die in collisions with vehicles; they change behavior to avoid disturbance, possibly abandoning preferred habitat; roads spread noxious weeds, which displace native forage; roads consume land so there is less range for animals to use. Roads “fragment” habitat by breaking up the land into smaller and smaller units of contiguous habitat.

The Upper Green’s road networks alone, which is expected to become more extensive with increased energy development, already is endangering wildlife populations through fragmentation and destruction of habitat. Non-transportation energy infrastructure, such as well pads, retention ponds, pipelines and compressor stations, make the consequences for wildlife even more severe.

The study shows that the existing road networks do not allow much room for core habitat. For example, 90 percent of mule deer crucial winter range is within a half-mile of a road. Only 30 percent of sage grouse leks are farther than a quarter-mile from a road. Go half a mile from the roads and that figure drops to 5 percent, or just 1 in 20 leks. **(OVER)**

Among the key findings:

- On BLM land, 80 percent of the Pinedale Resource Area has road densities greater than 1 mile per square mile, with 36 percent greater than 2 miles. Also, 87 percent of BLM land is within half-mile of a road, and 65 percent within a quarter-mile.
- Most crucial winter range has densities greater than 1 mile per square mile: 90 percent for mule deer; 80 percent for pronghorn; 64 percent for elk.
- On the Jonah, a major 40,000-acre gas field slated for “in-filling,” 95 percent of the land has densities greater than 2 miles.

The surrounding National Forest land, which is not as heavily developed for residential use and energy development, is less fragmented. But this higher-elevation land is not a substitute for the lost habitat on BLM, state and private lands because it has much different vegetation and climate conditions. It doesn't meet the crucial habitat needs of sage grouse or wintering wildlife.

Recommendations:

Profitable natural gas extraction and healthy wildlife populations can co-exist in the Upper Green, but only if BLM adopts measures to close and reclaim unnecessary roads and regulate remaining and future roads to minimize their impacts. Habitat fragmentation is already so extensive that constraints on road use and energy development are needed to prevent irreparable harm to the four wildlife species we studied. Thus, the Wilderness Society urges the following practices:

- Use spatial analysis to guide management decisions.
- Through the Pinedale RMP revision, implement road closure plans to meet the following scientifically derived standards within crucial winter range and migration routes:
 1. **Mule deer:** increase amount of core habitat within crucial winter range and migration routes that is greater than 1,542 feet from a road.
 2. **Pronghorn:** increase core area that is farther than 3,168 feet from a road and reduce road densities to less than 1 mile per square mile.
 3. **Elk:** reduce road densities to less than 1 mile.
 4. **Sage grouse:** Implement seasonal road restrictions barring traffic within 656 feet of winter habitat, within 3 miles of leks, nesting and brood-rearing areas. Impose a 30 mph speed limit during non-restricted hours.
- Follow state Game and Fish Departments guidelines in construction of all new roads.
- Evaluate roads' impacts on wildlife as part of adaptive management process. RMP revision must assess these impacts and devise ways to mitigate them.
- Collect wildlife distribution data to deepen our knowledge of impacts on wildlife.
- BLM needs a *consistent approach* to identifying roads for closure and reclamation. BLM should close roads that don't have specific ongoing purpose or provide redundant access.
- BLM should identify roads that harm wildlife, or increase likelihood of noncompliance with conservation mandates, then close, reroute, or limit use to reduce their impacts.
- Do not grant any major exceptions to seasonal and temporal occupancy restrictions.
- Plan for and implement staged development.
- Designate Areas of Critical Environmental Concern (ACECs), so that sensitive habitat is protected by prescriptions against new development and unnecessary travel. Candidates would include the Trappers Point and Fremont Lake bottlenecks, the Green River Crossing, the Cora Butte transition area, portions of the Wyoming and Wind River Range front, and 90 percent of sage grouse winter habitat.

MORE INFORMATION: Go to www.uppergreen.org (“library”) to download the full report or contact Peter Aengst at: peter_aengst@twso.org or 406-586-1600