

Upper Green River Valley Coalition

FOR IMMEDIATE RELEASE

October 6, 2005

Contacts: Peter Aengst, The Wilderness Society, 406-586-1600
Linda Baker, Upper Green River Valley Coalition: 307-367-3688

Industry-Funded Scientific Study Shows Drilling Displacing Mule Deer in Wyoming's Upper Green River Valley

Second Installment of Multi-Year Study Reveals Mule Deer Population in Drilling Area Declined by 46 Percent Since 2002

PINEDALE, Wyo. – More evidence is gathering that oil and gas development in Wyoming's sage-covered winter range is displacing the State's legendary big game herds and undermining their abundance. The latest installment in a multi-year study of the Upper Green River Valley's mule deer, released Oct. 3, suggests a 46 percent decline of the herd wintering on the Mesa portion of the Pinedale Anticline, where rapid development is occurring. Development might also be associated with a decline in the over-winter fawn survival rate, according to the industry-funded study by Western EcoSystems Technology, Inc. (WEST).

By comparison, the study has found no evidence of a corresponding decline in the nearby control area on the Wind River Front, another vital Upper Green winter range west of Pinedale, where no drilling is now occurring. So far, after five years of study, mule deer tend to avoid access roads and well pads associated with natural gas.

Through the first three years of study the WEST study found that areas considered "high use" prior development were less frequented by deer as development progressed. By the third year (2002-03), for example, 41 percent of areas classified as "high use" before development had changed to medium-low or low use. Conversely, 40 percent of "low-use" areas were classified as medium-high to high use.

"Assuming habitats with high probability of use prior to development were more suitable than habitats with lower probability of use, these results suggest natural gas development on the Mesa displaced mule deer to less suitable habitats," the reports states on page 44 (for more report summary and quotes see attached fact sheet).

The northern half of the Pinedale Anticline, known locally as the Mesa, is among the newest and most productive gas fields in western Wyoming. It also provides crucial winter range to some of the 32,000 mule deer and 48,000 pronghorn that migrate to the Upper Green to survive the harsh Wyoming winter on the valley's rich sagebrush habitat.

The study, funded by Questar, Ultra Petroleum, the Bureau of Land Management (BLM), and the Wyoming Game and Fish Department, was designed to measure industry's impact on the region's rich, yet vulnerable wildlife resource. Launched in 2002, Phase II of the study will be completed in 2007. Highlights of the report include:

- Mule deer abundance on the Mesa has declined. The Mesa's overall mule deer population is down 46 percent since 2002. Over-winter fawn survival rates have been slightly lower on the Mesa compared to the control region for four of the five years;

- Mule deer are moving from previously “high use” winter habitat areas into areas that previously had been of “low use” suggesting that drilling and development has displaced mule deer to less suitable habitats;
- Sublette County’s mule deer are among the most migratory in the West, traveling between 60 to 100 miles between summer and winter ranges. Documented migration routes, such as Trapper’s Point Bottleneck, remain important pathways between winter range in the Upper Green and summer range in the surrounding mountains.

The 2005 report urges that energy development steers clear of migration corridors because mule deer often demonstrate a high level of fidelity to historic migration pathways, often pinched to widths of about mile or less in spots biologists call “bottlenecks.” These pinch points are vital to the survival of big game and development in them could be detrimental for the Upper Green’s deer and pronghorn.

Note: Sawyer’s full analysis, *Sublette Mule Deer Study: 2005 Annual Report*, can be found at web address: http://www.west-inc.com/big_game_reports.php Sawyer can be reached at: (307) 634-1756 or hsawyer@west-inc.com.

Sawyer’s ongoing study reinforces other scientific reviews on the impact of drilling on wildlife in the Upper Green. Earlier this year, The Wilderness Society released a report, *Wildlife at a Crossroads* that showed how drilling-related infrastructure was fragmenting key wildlife habitat areas. That report revealed constraints on road use and new energy development are needed to ensure healthy wildlife populations in the Upper Green over the long term. The full study is at: <http://www.wilderness.org/library/documents/pinedale.cfm>. A media friendly version of one of the report’s key maps is also available.

Peter Aengst, who co-authored The Wilderness Society study, commented on Sawyer’s report: “This industry-funded report clearly shows that drilling is forcing mule deer out of their natural winter range habitat and that mule deer populations near drilling are falling rapidly. All evidence shows that we must work together now to minimize future impacts or wildlife populations in the Upper Green could be severely impacted for the long term.”

The Bureau of Land Management (BLM) is in the process of revising its Resource Management Plan for public land it manages in the region studied by Sawyer. This area, in addition to containing key habitat for Wyoming’s largest mule deer population, contains some of America’s largest free-roaming pronghorn antelope populations and one of the world’s last remaining long-distance big game migrations.

Local residents and conservation groups have developed a common-sense plan to guide energy development in the Upper Green River Valley and are urging the BLM to adopt it in their upcoming Resource Management Plan revision. Titled the “Responsible Energy Development proposal,” their plan promotes best management practices and off-limit areas in order to decrease the energy industry’s ecological ‘footprint’ and lessen the potential to displace wildlife. (Go to www.uppergreen.org to view this proposal).

Note: Photos of the drilling and wildlife in the Upper Green are available at the photo gallery on the Upper Green coalition web page at: <http://www.uppergreen.org>.

Sublette Mule Deer Study: Long-term monitoring plan to assess potential impacts of energy development on mule deer in the Pinedale Anticline Project Area 2005 Annual Report

Methodology: Hall Sawyer's groundbreaking research in Upper Green River Valley, Wyoming's big game winter mecca, is the only multi-year study of how natural gas development affects mule deer. With funding provided by Questar, Ultra Petroleum, BLM, and WGFD, WEST initiated Phase II of this mule deer study in 2002. Every December, Sawyer captures 30 deer and releases them with collar-mounted GPS units that record the animals' positions every few hours. This data are plotted on a map of the Upper Green for a graphic representation of deer distribution and movements over time. Not only does Sawyer compare deer movement, habitat selection and population parameters on the Mesa with those from a control area, but he also compares them with data he collected for three years prior to the arrival of drill rigs and roads.

So far after five years of study, it appears mule deer tend to avoid access roads and well pads associated with natural gas development despite seasonal restrictions on drilling in crucial winter range. There is potential for energy activity to displace these highly migratory animals into less preferred habitats according to the Sawyer's study. Here are some excerpts from the Sublette Mule Deer Study, 2005 Annual Report.

Evidence of displacement

"Although this study is proposed to run several more years, results to date suggest that winter habitat selection and distribution patterns of mule deer have been affected by well pad development. Changes in habitat selection by mule deer appeared to be immediate and through three years of development, we found no evidence they acclimated or habituated to well pads. Rather, mule deer had progressively higher probability of use in areas farther away from well pads as development progressed."(page 44)

Habitat selection patterns

"The avoidance or lower probability of use of areas near wells creates indirect habitat losses of winter range that are substantially larger in size than the direct habitat losses of winter range that are removed during construction of the well pads. Habitat losses, whether direct or indirect, have the potential to reduce carrying capacity of the range and result in population-level effects (i.e., reduced survival, reduced reproduction, or emigration)." (page 45)

"The lower levels of deer use within 2.7 to 3.7 kilometers of well pads suggested indirect habitat losses may be substantially larger than direct habitat losses." (page 47)

Mule deer numbers in decline on the Mesa

"Of particular concern is the decreasing abundance estimates in the treatment area [the Mesa], dropping from 5,228 in 2002 to 2,818 in 2005. This 4-year, 46 percent reduction in deer abundance is disconcerting because there is no concurrent evidence of a population decline in the control area [the Wind River Front]. ... Following the severe winter and associated high mortality rates in 2003-04, we expected deer abundance to increase the following year in both treatment and control areas, given the exceptionally mild 2004-05 winter. While an increase was evident in the control area, abundance continued to decline in the treatment area." (page 45)

Migration routes

"Deer in the treatment area continued to utilize the TPB [Trapper's Point Bottleneck west of Pinedale] as a migratory route between winter and spring/fall transition ranges. Deer movements through the TPB were quick (< 2 hours), but the TPB continued to function effectively during 2004 and 2005. Agencies, industry, NGO's and the public recognize the value of maintaining

this movement corridor for the Sublette deer herd. Land-use decision in and adjacent to the TPB should consider the migration routes and seasonal ranges of the Sublette deer herd.” (page 42)