

**IMPLICATIONS OF ALTERNATIVE
FEDERAL GRAZING FEES ON
REPRESENTATIVE CATTLE AND
SHEEP RANCHES IN NEW MEXICO,
WYOMING, MONTANA, AND NEVADA**

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Texas A&M University

Ronald D. Knutson
James W. Richardson
Edward G. Smith
John B. Penson, Jr.
David P. Anderson
Daniel R. Sechrist

Department of Agricultural Economics
University of Nevada, Reno

Thomas R. Harris
William O. Champney
Thomas R. MacDiarmid

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of the contributions by:

Dawne Hicks

Lisa Weiss

Merinda K. Condra

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- Each dollar per AUM increase in federal grazing fees reduces real ending net worth:
 - \$27,000 Southeastern New Mexico typical ranch,
 - \$52,400 Southeastern New Mexico ranch with 75 percent federal grazing,
 - \$2,000 Eastern Wyoming typical shed lambing ranch,
 - \$2,000 Eastern Wyoming typical range lambing ranch,
 - \$25,500 Eastern Wyoming range lambing ranch with 75 percent federal grazing,
 - \$149,000 Southwest Wyoming typical ranch,
 - \$6,700 Southeastern Montana typical ranch,
 - \$14,000 Southeastern Montana ranch with 50 percent federal grazing,
 - \$47,500 Northwest Nevada typical ranch, and
 - \$25,000 Northeast Nevada typical ranch.

- Higher federal grazing fees will accentuate the deficit cash flow situation for many ranches in the Western states. Tripling federal grazing fees to \$6/AUM results in the following decreases in net cash income for low debt ranches:
 - 121.9 percent in Southeastern New Mexico,
 - 3.2 to 9.1 percent in Eastern Wyoming,
 - 25.8 percent in Southeastern Montana, and
 - 29.2 to 108.9 percent in Northern Nevada.

Summary

This report projects the firm level economic impacts of increases in federal grazing fees. A whole farm simulation model was used to quantify the impacts on ranches in Southeastern New Mexico, Eastern Wyoming, Southeastern Montana, and Northeast and Northwest Nevada. The base grazing fee scenario was \$1.81/AUM. Five scenarios using a constant grazing fee over the 1991-1996 planning horizon analyzed alternative fees of: \$1.97, \$4, \$6, \$8, and \$10/AUM. Three scenarios simulated slow, moderate, and rapid annual increases in grazing fees. The slow annual increase scenario used fees of \$1.97, \$3, \$4, \$5, \$6, and \$7/AUM in 1991-1996. The moderate annual increase scenario used fees of \$1.97, \$4, \$5, \$6, \$7, and \$8/AUM in 1991-1996. The rapid increase scenario used grazing fees of \$1.97, \$4, \$6, \$8, \$10, and \$10/AUM in 1991-1996.

The simulation results indicate that all increases in federal grazing fees will result in slower accumulations in real net worth or losses in real net worth, and lower net cash incomes. Impacts of higher grazing fees on net worth and net cash income differ significantly by region and debt level. Within each region, the impact of higher grazing fees differ by the proportion of rangeland leased from the federal government.

- The recent increase in federal grazing fees from \$1.81/AUM in 1990 to \$1.97/AUM in 1991 is projected to have an insignificant affect on net worth (less than one percent) for the typical or panel ranches in all four states. However, percentage decreases on net cash farm income are significant and vary by state and debt level assumption.
- Tripling the federal grazing fee to \$6/AUM for typical moderate debt producers reduces net worth differently for the four states:
 - 19.1 percent in Southeastern New Mexico,
 - 1.0 to 2.2 percent in Eastern Wyoming,
 - 4.9 percent in Southeastern Montana, and
 - 8.1 to 11.9 percent in Northern Nevada.
- High debt producers are more adversely affected by increases in federal grazing fees than moderate debt producers. Tripling grazing fees on federal rangelands for typical high debt ranches reduces net worth as follows:
 - 30.4 percent in Southeastern New Mexico,
 - 1.5 to 3.6 percent in Eastern Wyoming,
 - 11.2 percent in Southeastern Montana, and
 - 17.5 to 22.6 percent in Northern Nevada.
- Increasing a ranch's dependence on federal rangeland accentuates the adverse effects of higher grazing fees on net worth. Tripling the federal grazing fee to \$6/AUM reduces net worth for moderate debt ranchers who rent a larger than average portion of grazing from the federal government as follows:
 - 82.3 percent in Southeastern New Mexico,
 - 23.5 percent in Eastern Wyoming, and
 - 15.2 percent in Southeastern Montana.