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Forests and Forest Health Subcommittee

of the

Committee on Resources

Hearing on H. R. 3102

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Distinguished Chair: Tom Linebery Policy Center

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Mr. Chairman, distinguished committee members, my name is John M. Fowler. I am a professor of Agricultural Economics at New Mexico State University where I have been teaching courses and conducting research in natural resource management for over 25 years. I am the Coordinator of the Interdisciplinary team of scientists known as the Range Improvement Task Force (see brochure) and occupy the Chair of the Tom Linebery Policy Center. I have a history of employment with the Forest Service, first: as a member of a Hot-shot crew stationed on the Kaniksu National Forest in Northern Idaho for two fire seasons and second: as a trainee for the Timber Management Division and the Range Management Division at the Washington office of the U.S. Forest Service.

I greatly appreciate the opportunity to provide input to the legislative hearing on H.R. 3102. This bill was introduced by Congressman Pearce. My comments deal directly with the management of National Forests and rangelands in New Mexico.

Historically, New Mexico has had close contact between the rural communities and natural resources. These natural resources served as a renewable source of food-fiber and shelter. A substantial portion of the population and rural economies remain closely tied to their “agrarian roots.” Forested landscapes have served as social, ecological and economic epicenters; the forest ecosystems represent an oasis in a semi-arid landscape. Forests provide habitat for wildlife, dependable sources of quality water and host a diversity of flora and fauna.

Increased regulation of the consumptive use of natural resources and associated joint products has placed additional constraints on New Mexicans seeking to make a living through the utilization of natural resources. I’m convinced that the unhealthy state of our forested ecosystems, woodlands and rangelands are as equally frustrating to the good stewards within the managing agencies as it is frustrating to the industry producers and economically co-dependent communities.

The special interest groups’ success at litigation and sideroom dealings has stymied the implementation of proven production practices. Their success has necessitated the scientific community redirect attention to applied research that addresses known biological relationships: that salvage cuts result in increased herbaceous forage production, increased species richness, and healthy watersheds; that forest harvest systems coupled with slash treatment bring fires back to the ground and burn with less intensity and revegetate quicker than untreated areas. That a mosaic pattern of interspersed meadows, savannahs and mature forests produces a sustainable yield of forest products, quality water, diverse species of flora and fauna including restoration of habitat for threatened and endangered species and their prey base.

Conservation practices also known as best management practices embrace the concept of MANAGEMENT. The flow of renewable resources from our national forests must be wisely managed; if we don't mange the flow then nature will do it for us. Mother nature's style of management is known as the catastrophic event; stagnation leads to disease and pestilence and wildfire. A century of fire suppression and drastic reduction of timber harvest when combined with a decade of drought has put our forest and rangeland in a state of emergency from which there is no quick fix.

In a paper addressing current issues entitled "Waters of the Sacramento Mountains Forest" by Dan Abercrombie with the Natural Resource Conservation Service, Abercrombie stated that "the most significant vegetation changes in the last 100 years have been marked by a reduction in species diversity and increase in tree density." He goes to state "Most significantly, the change from open stands of large conifer trees and associated deciduous trees to dense stands of small, monotypic conifer trees has altered the water balance in mountain watersheds." Garrett and Garrett explained that the existing forest watershed conditions have "resulted primarily from suppression of low intensity ground fires and failing to implement sufficient remedial management actions, i.e. prescribed burning, thinning, etc., to counteract the removal of fire from the ecosystem". Garrett cites numerous scientific publication as the basis of this generalization.

Garrett describes the Biophysical process as proceeding along the following sequence. Increasing tree densities increase evapo-transpiration from the increased tree leaf surface; soil moisture declines, reducing understory forage species, water recharge is diminished and sediment movement is increased reducing water quality. Tree densities increase fuel loads and fuel ladders. Insect and disease outbreaks increase. Openings are lost to encroaching trees and biodiversity declines. Eventually, the compounding impacts of the tree densities on the forest communities can cause severe die-off. Catastrophic fires often occur during this stage in many forest areas, causing extensive losses to all resources. Catastrophic forest wildfires have severe socioeconomic impacts in the southwest. Human resource losses are now a cost of wildfire .

LAWS, ACTS

Laws require that long run condition and trend data be taken on a continuous bases.

The Multiple-Use Sustained Yield Act of 1960

The Multiple-Use Sustained Yield Act of 1960 defines range and timber as bonafied uses of the National Forests, however, the 1990 communication from James C. Overbay, with limited distribution, clearly indicates that the Washington Office has aligned their priority to fish and wildlife and their habitat. "Support groups have 'gone to bat' for our fish and wildlife program and now they would like to see the results of their efforts. We owe this to them." The budget is driving resource management of the Forest Service and special interest groups are the driver and engine. (See attached communication.)
National Forest Management Act of 1976 (NFMA)

The National Forest Management Act (NFMA) of 1976 directs the Forest Service to prepare land and resource management plans (LRMP) for individual units of the National Forest System. The forest plan "provides for multiple use and sustained yield of goods and services from the national forest…..in a way that maximizes long-term net public benefits in an environmentally sound manner."

The Land and Resource Management Plan (LRMP) must contain four specific categories of findings and conclusions. This includes that the LRMP must provide "monitoring and evaluation requirements that will provide a basis for periodic determination and evaluation of the effects of management practices."

Forest and Rangeland Renewable Resources Planning Act of 1974 (RPA)

Sec. 2. Findings:

(3) to serve the national interest, the renewable resources program must be based on a comprehensive assessment of present and anticipated uses, demand for, and supply of renewable resources from the Nations' public and private forests and rangelands…..

(4) the new knowledge derived from coordinated public and private research programs will promote a sound technical and ecological base for effective management, use, and protection of the Nations' renewable resources.

Sec. 6. (g) (2) (B) “provide for obtaining inventory data on the various renewable resources, and soil and water, ……

Sec. 6 g (3) (c) insure research on and (based on continuous monitoring and assessment in the field) evaluation of the effects of each management system to the end that it will not produce substantial and permanent impairment of the productivity of the land.

Federal Lands Policy and Management Act of 1976 (FLPMA)

Sec. 102. (a) (2) The national interest will be best realized if the public lands and their (resources are periodically and systematically inventoried) and their present and future use is projected through a land use planning process coordinated with other Federal and State planning efforts.

Public Rangelands Improvement Act of 1978 (PRIA)

Sec. 2. (b) (1) inventory and identify current public rangelands conditions and trends as a part of the inventory process required by Section 201 (1) of FLPMA

Sec. 2. (b) (2) manage, maintain and improve the condition of the public rangelands so that they become as productive as feasible for all rangeland values……..
Sec. 4. (a) Following enactment of this Act, the Secretary of the Interior and the Secretary of Agriculture shall update, develop (where necessary) and maintain on a continuing basis thereafter, an inventory of range conditions and record of trends of range conditions on the public rangelands, and shall categorize or identify such lands on the basis of the range conditions and trends thereof as they deem appropriate. Such inventories shall be conducted and maintained by the Secretary as a part of the inventory process required by section 201 (a) of the Federal Land Policy and Management Act (43 U.S.C. 1711). and by the Secretary of Agriculture in accordance with section 5 of the Forest and Rangeland Renewable Resources Planning Act of 1974 (16 U.S.C. 1603); shall be kept current on a regular basis so as to reflect changes in range conditions; and shall be available to the public.

Vegetation monitoring is an absolute necessity if good stewards are to remain on the federal lands. If good stewardship cannot be documented with proven monitoring methodology then the fate of the allotment owners, known as permittees, is in jeopardy.

National Environmental Policy Act of 1969 (NEPA)

The NEPA regulations require each federal agency to develop its own set of NEPA procedures (40 CFR 1507.3)

These agency procedures identify:

a. which types of actions normally meet the criteria for preparation of EIS (i.e. – if the action is a “major federal action significantly affecting the quality of the human environment”);
b. which actions normally require EAs; and
c. which actions normally do not have a significant effect on the quality of the human environment and therefore can be categorically excluded from further NEPA review procedures

For those permit renewals which do not have a significant effect on the quality of the human environment, a category exclusion should be promulgated.

The foundation of the Forest Service for the legal framework is based on an assumption. That assumption is that “Expiring term grazing permits have no legal right of renewal”. Thus the Forest Service is presented with a clean slate and need not reauthorize the same type/level/intensity of grazing or any grazing at all. As a consequence of these assumptions, the “no-action” alternative will be one where “no grazing” is considered rather than continuing the existing level of use.

The CEQ regulations clearly state that the EA is to be a “concise” document including a “brief” discussion of: (1) the need for the proposal; (2) alternatives as required by section 102(2)(E) of NEPA; (3) the environmental impacts of the proposed action and the identified alternatives; and (4) a listing of those consulted. 40 CFR 1508.9 Moreover, CEQ’s 40 Questions emphasizes that “it should not contain long descriptions or detailed data” and indicates that EAs should be no more than 10-15 pages in length and take no more than 3 months to prepare. 40 Fed.Reg. 18037 (3-23-81)

-The U.S.F.S. carrying capacity has a long history and when determined and adjusted by vegetation monitoring. Grazing is the steady state ecological constant and should not require a major federal action to continue.

-Security of tenure: permit transfers and renewals are continuous; the permit does not evaporate for a nano-second. Without continuity there will be no range livestock sector investments in federal lands.

*Recommendation is to manage for a mid serial ecological condition; if allotment long run range condition and trend is stable or upward then renewal does not require major federal action.
*If new T&E species is listed; those allotments in mid serial range condition are in compliance. An amendment to the LRMP would not be required because range condition is static and upward with ecological integrity being met.

FOREST SERVICE HANDBOOK

The direction provided in chapter 90-Rangeland Management Decision making is inconsistent; (91) even when an area is deemed suitable for use by livestock in a LRMP, a project level analysis is required. The potential changes are being measured from a base that doesn't exist, the current management is the base for baseline data. Permit reissuance is considered an administrative action; this is circuitous logic; not issuing the permit is the change.

According to 92.23.2 of the FSH 2209.13 chapter 90. "Both the issuance of a permit and the development of an AMP that becomes a part of the permit is considered an administrative action that implements the NEPA based decision (sec. 94). The pertinent parts of an AMP include:

a. Management objectives in terms of the condition and trend of the rangeland resources;
b. Appropriate monitoring to determine if management objectives are being met or if adaptive management alterations are needed.

Adaptive Management 92.23b specifies that monitoring is necessary to set defined limits of what is allowed such as timing, intensity, frequency, and duration for livestock grazing.

Monitoring is laced through out the entire Chapter 90 Rangeland Management Decision Making.

The fundamental problem is vegetative monitoring to determine long run rangeland condition and trend is NOT OCCURING! It is required by Laws, it is written in the Forest Service Handbook (FSH) and is absolutely necessary to document stewardship. The Rapid Assessment Method (RAM) can be implemented to fill the current void; and if taken through time and coupled with the historic F.S. monitoring base, long run condition and trend data can once again be obtained to determine science based adaptive management decisions.

Santa Fe National Forest: 2002

The Santa Fe National Forest (SFNF) hosted significant controversy during the summer of 2002. Following a declaration of deteriorating range condition, and unacceptable levels of range use, US Forest Service Region 3 officials called for complete removal of all domestic livestock from a large number of SFNF allotments. Citing inadequate range surveys, a lack of quantifiable data on range condition, and broad-brush grazing decisions by US Forest Service Region 3 officials, permittees, industry representatives and community leaders requested the assistance of the Range Improvement Task Force (RITF) at New Mexico State University. Accordingly, the RITF assembled seven teams of range science technicians, agency personnel, and grazing permittees or their representatives to conduct quantitative range assessments on 25 allotments on the SFNF. (See attached News Release).

Historic records of range monitoring activities on the SFNF are intermittent (see Table #1). Generally, monitoring efforts that were conducted during the 1950's and 1960's were quite thorough. These efforts taper off into the 1970's with minimal data collection occurring in recent decades. The RITF's analysis of the most recent range monitoring data calls into question some of the methodologies that are currently being used and interpretations that are being made. They fall short of the quantity and quality of data collected during earlier years. In fairness to the agency, personnel in recent years have less time to spend in the field collecting sound monitoring data and interacting with permittees as they allocate increasing amount of time to the National Environmental Policy Act (NEPA) and responding to negotiated settlements and lawsuits. As

a result, long-term range condition and trend databases have suffered.

The RITF in cooperation with faculty from the Animal and Range Science Department at NMSU assembled a set of methodologies (RAM) designed to rapidly assess range condition to assist in making management decision regarding stocking and suitability of the range to support grazing.

The RAM methodology has been used to estimate forage availability in New Mexico during 2002 and 2003.

Table #1 Santa Fe Allotments, 2002

Allotment Name Date of Latest Monitoring

1. Barbero 1963 transect data
2. Bull Creek 1969 E.A.
3. Caja Del Rio 1962
4. Cebolla/San Antonio No historic data
5. Chicoma 1975 p/u study
6. Chiquito No historic data
7. Coyote 1959, 1970 & 1973 p/u studies
8. Cuba Mesa 1972 p/u
9. El Pueblo 1962
10. Gallina Mountain 1974
11. Gurule No historic data
12. Jarosa 1957 p/u, 1964 p/u, 1979 p/u
13. Mesa del Medio 1981 allotment analysis, 1st p/u study scheduled for 1983, not completed
14. Ojito Frio No historic data
15. Ojitos No historic data
16. Oso Vallecitos 1978 p/u & 1994 Terrestial Ecosystem Survey (TES)
17. Polvadera No historic data
18. San Diego No historic data
19. San Luis No historic data
20. San Pedro (San Padro Parks Wilderness) p/u 1963/64
21. Senorito No historic data
22. Springs No historic data
23. Vacas No historic data
24. Valle Medio No historic data
25. Youngsville 1956, 1960, 1982 p/u

There are 1,312 U.S.F.S. permits in New Mexico 484 U.S.F.S. permits in Arizona Source: U.S.F.S. 1991 Annual Grazing Statistical Summary

MANAGEMENT RECOMMENDATIONS:

Monitoring: Long-term range condition and trend data are fundamentally necessary for grazing managers and agency personnel to make comprehensive assessments of resource conditions, livestock management strategies, and wildlife numbers. Federal agency habitat responsibilities, permittee livestock management objectives, and State Department of Game and Fish objectives may all be simultaneously addressed with solid monitoring data. Without these types of site-specific data, officials and permittees cannot make informed decisions and carry out their responsibilities. Agency personnel and permittees should spend time together, “on-the-ground” conducting resource monitoring in order to open lines of communication and reestablish a working relationship. Having established this rapport, permittees and agency personnel can work together when adverse resource conditions exist and difficult decisions need to be made. The decision process needs to be as dynamic and evolving as changes in natural resource conditions. Early, incremental decisions need to be made, which can improve trust and cooperation. Proper collection and documentation of monitoring data can also solve many of the problems associated with federal agency personnel turnover and lack of accountability.

Site specific vegetative monitoring is essential
a) Agency/permittee on-the-ground together
b) Relocate “Key areas” to represent the allotment
c) RAM methodology to assess forage availability

d) Open lines of communication
e) Build on historic Parker 3 Step data base

Reduce the fuel load: Pre-commercial, commercial, thinning and fuel reduction treatment are means to reduce fuel load. Consider the concept of linking meadows with treatment to form a latitudinal and longitudinal set of barriers to bring wild fire to the ground for containment, life protection and flow of products.

Research: Cooperatively develop research partnerships between Land Grant Universities and Rocky Mountain Forest and Range Experiment Stations such as: Upland Unit in Flagstaff, Arizona.

Dr. Red Baker, “Riparian Area Response to Different Lessons and Intensities of Cattle Grazing in the Gila National Forest, New Mexico”. *Preliminary results indicate increasing use of woody riparian vegetation with increased grazing intensity – particularity during dormant season.

Dr. Red Baker, Inventory and Classification of Wildfire Occurrence in Treated Versus Untreated Forest Stands on Southwestern National Forests. *Preliminary results are highly encouraging on positive effects of silvicultural treatments on reducing fire intensity.

Dr. Jon Boren, Foraging Relationships Between Domestic and Wild Ungulates on Salvage cut Areas in Lincoln National Forest. a) Based on pellet group data, elk used logged forested areas to the same approximate extent as mountain meadow habitats during the growing season. If the objective is to decrease the use of sensitive meadows by elk, a solution may be as simple has harvesting timber or other silvicultural treatments in the uplands to increase grass production.

A monitoring basis is absolutely necessary to: reinstate objectivity and good science into forest and rangeland management, to reestablish trust into National Forest System management, and to ensure healthy forests exist for future generations to enjoy and prosper.