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Management of Grazing: Where Do We Go from Here?

by

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Management of Grazing: Where Do We Go from Here?

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The proclamation that established the Grand Staircase-Escalante National Monument[1] (Monument) in 1996 addressed livestock grazing with the following statement: "Nothing in this proclamation shall be deemed to affect existing permits or leases for, or levels of, livestock grazing on Federal lands within the monument; existing grazing uses shall continue to be governed by applicable laws and regulations other than this proclamation."[2]

This statement has generated a great deal of speculation about what the proclamation and Monument status mean for the future of livestock grazing. Grazing in the Monument will be managed under the same body of law and regulation that governs grazing on public lands elsewhere. Governing regulations include the Federal Land Policy and Management Act (FLMPA) of 1976[3] and the Taylor Grazing Act of 1934,[4] which continue to serve as the primary laws governing grazing management on public lands. The Bureau of Land Management (BLM) range management regulations also govern our grazing management efforts.[5] These regulations were revised in 1995 and a new subpart was added that establishes Fundamentals of Rangeland Health and Standards and Guidelines for Grazing Administration.[6] This change, which established fundamentals of rangeland health, directs each state director within the BLM to develop associated standards. It will clearly have an impact on how grazing and other activities are managed in the Monument and throughout the BLM.

While this seems relatively clear, some people still ask, "How will the BLM be able to protect the resources outlined in the proclamation simply by applying existing laws and regulations to grazing management?" Existing laws and regulations require management of grazing in a way that protects resources.

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[1] Exec. Procl. 6920, 3 C.F.R. 64 (1996). The proclamation is reprinted at page 515.

[2] *Id.* at 65.

[3] 43 U.S.C. §§ 1701–1784 (1994).

[4] Ch. 865, 48 Stat. 1269 (1934) (codified at 43 U.S.C. §§ 315a–315r).

[5] 43 C.F.R. §§ 4100–4180 (2000).

[6] *Id.* § 4180.

FLPMA contains several rigorous resource protection provisions. It directs the BLM to manage public lands on the basis of multiple-use and sustained-yield "in a manner that will protect the quality of scientific, scenic, historical, ecological, environmental, air and atmospheric, water resources, and archeological values."[7] The scope of the multiple-use definition includes the full range of scientific and historic resources outlined in the proclamation, and it refers to the "harmonious and coordinated management of the various resources without permanent impairment of the productivity of the land and the quality of the environment."[8] FLPMA and its implementing regulations provide a clear basis for managing grazing use while protecting the Monument's resources.

The Monument management plan,[9] released in February 2000, recognized these statutory requirements. The plan directs the BLM to follow a three-step process: 1) Assess rangeland health in keeping with the Utah Standards for Rangeland Health; 2) Determine whether standards are being met and evaluate whether grazing management is a contributing factor where they are not; and 3) Develop grazing (or allotment) management plans that will ensure that grazing activities are consistent with applicable legal requirements.[10]

An environmental impact statement (EIS) has been started that will incorporate these three steps. The initial public input period took place between August and November of 2000. The EIS process is similar to the process used for developing the overall Monument management plan. Ultimately, a final EIS will be released that will govern grazing use in a manner that protects resources and rangeland health.

Grazing management is a complex issue. Any effort to develop or revise grazing management strategies is bound to be a difficult, multifaceted, politically charged undertaking that presents plenty of challenges and opportunities. These challenges and opportunities are not unique to the Monument—they are the same ones that face public land managers throughout the West. The ability to recognize, confront, and master these and other challenges and opportunities will determine the direction and success of future grazing management in the Monument.

The greatest challenge, as well as the greatest opportunity, is re-evaluating and redefining the measures by which success is gauged for grazing management specifically, as well as for landscape management and conservation in a broader sense. Should goals and objectives be defined simply on the basis of

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[7] 43 U.S.C. § 1701(a)(7)–(8).

[8] *Id.* § 1702(c).

[9] *Grand Staircase-Escalante National Monument Approved Management Plan Record of Decision*, (U.S. Dept. of Int., Bureau of Land Mgt. 2000).

[10] *Id.*

certain compositional and structural targets for biological communities and landscapes, or should the objectives focus on ensuring that important hydrological and ecological processes function well in the landscapes? Much scientific research suggests the need for greater emphasis on process, because biodiversity and desired plant communities cannot be sustained unless processes such as water infiltration and seed production are functioning. Likewise, desirable perennial grasses cannot survive drought unless the ecological and hydrological processes favoring vigorous root production are maintained.[11] The importance of this is underscored by two critical observations concerning arid and semiarid environments such as those managed in the Monument. First, precipitation is extremely variable both in space and in time, and second, annual precipitation is below average during most years.[12] Most will agree on management goals oriented towards increasing the probability that grass populations will remain healthy and vigorous through dry years. The challenge is to find a way to clearly articulate such objectives and then find a way to focus the grazing management debate on how to achieve objectives on the ground, instead of on an unproductive struggle of one group trying to win out over another.

A related challenge concerns a fundamental component of grazing management—that is, the conceptual model underlying the approach to assessing and managing vegetation. The BLM and other resource agencies have been criticized for relying on a linear model of vegetation succession that does not apply well in many arid and semiarid landscapes, including many of the landscapes in the Monument.[13] This model supposes that vegetation condition is a balance between pressures of drought and grazing on one side and above-average precipitation and overall successional tendency on the other side.[14] Simply put, the model implies that we just need a few good years of rain or reduced stocking rates and conditions out there on the range will rebound. This is an attractive idea that probably appeals to people at both extremes of the livestock grazing debate. If true, it certainly would simplify the task of grazing management. Unfortunately, there is substantial evidence to indicate that this simple, appealing model does not hold in many cases.[15]

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[11] Ray W. Brown, *The Water Relations of Range Plants: Adaptations to Water Deficits*, in *Wildland Plants: Physiological Ecology and Developmental Morphology* 291, 350 (Donald J. Bedurah & Ronald E. Sosebee eds., Socy. for Range Mgt. 1995).

[12] Thomas L. Thurow & Charles A. Taylor, Jr., *Viewpoint: The Role of Drought in Range Management*, 52 J. Range Mgt. 413 (1999).

[13] *See* Debra L. Donahue, *The Western Range Revisited* 143–60 (U. Okla. Press 1999); Guy R. McPherson, *Ecology and Management of North American Savannas* 125–27 (U. Ariz. Press 1997).

[14] McPherson, *supra* n. 13, at 126.

[15] *Id.*

An alternative conceptual model of vegetation dynamics is much more complex, and it describes a reality that is far less appealing. The model proposes that rangeland environments can be characterized by a set of soil and vegetation "*states*."[16] Factors such as climatic episodes, grazing, and weed introductions may act independently or in combination to trigger a *transition* from a desirable state to an undesirable state.[17] Once the soil and vegetation conditions on a site have crossed the *threshold* into a new state, the original conditions cannot be regained by simple management actions or a few wet years.[18] Seed banks can become depleted, soil stability and infiltration capacity can be impaired, long-lived plant species can dominate sites for decades or even centuries once established, and increased fire frequencies can promote long-term dominance by weeds. The concept that landscapes can be pushed beyond thresholds is discomforting. This significant challenge—to adopt and apply the latest scientific concepts concerning complex patterns of ecosystem dynamics—is also a significant opportunity. The state-and-transition model may assist in the understanding of landscapes managed, and it may give us important insights that can inform and improve the approach to the management of grazing and other activities on the land.

As management practices become increasingly influenced by scientific principles and knowledge, it has become clear that many aspects of rangeland ecosystems are poorly understood. It is not clear why certain species, biological communities, soil types, and landscapes are more impacted by livestock grazing than others. Nor is it fully understood how annual and seasonal climatic variations interact with livestock grazing to affect soils and vegetation. Scientists are far from a clear understanding of how increasing levels of atmospheric CO_2, higher average temperatures, and altered precipitation patterns will interact to affect Monument resources, management of grazing, and other activities.

Finally, public involvement is another challenge that must be faced when engaging in planning efforts. There are many institutional and structural barriers to collaboration and public involvement in decision making, including inflexible agency policies, constrained resources, and simple mistrust. While the management of grazing in the Monument has similar barriers, there is an opportunity to build upon what was started during the Monument planning process by looking for creative ways to emphasize collaboration and meaningful participation.

Experience dictates that getting diverse stakeholders together out on the

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[16] Mark Westoby, Brian Walker & Imanuel Noy-Meir, *Opportunistic Management for Rangelands Not at Equilibrium*, 42 J. Range Mgt. 266 (1989).

[17] *Id.*

[18] *Id.* at 268.

ground is an excellent way to foster dialogue and to define common goals. Hopefully, these kinds of opportunities will be built into the EIS process by bringing various interest groups together to participate in rangeland health assessments, or to tour allotments and discuss management scenarios. Beyond site visits, there should be more opportunities for one-on-one discussion between the public and team members. The open-house format of public meetings is one way to achieve such one-on-one discussion. To reach broader audiences, periodic newsletters with updates will be published throughout the EIS process. Data and information will continue to be published on the web site so the public can track progress and learn of opportunities for input.[19] It is important to continue to look for ways to provide interactive opportunities throughout the EIS process. After all, effective public involvement means better plans and it improves the chances that a planning document will be successful in the long run.

It is clear that existing laws and regulations, including the new Standards and Guidelines for Grazing Administration, provide a clear basis for managing grazing so that Monument resources are protected.[20] It is equally clear, however, that many challenges and opportunities exist in the development and revision of grazing management strategies in the Monument. The ability to clearly define the measures of success, to incorporate emerging and current models of vegetation dynamics, to make effective management decisions in the face of uncertainty, and to provide meaningful opportunities for public involvement will affect the ability to effectively manage grazing and meet resource management objectives.

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[19] For information, contact Bureau of Land Management, Grand Staircase-Escalante National Monument, 180 West 300 North, Kanab, Utah 84741 <http:/www.ut.blm.gov/monument/Monument_Management/News%20Archive/grazing_EIS.html> (accessed Mar. 23, 2001).

[20] 43 C.F.R. § 4180.