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Strategies for managing grazing allotments on public lands

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Most ranches in Arizona are dependent, in one way or another, on federal and/or state grazing permits. The U.S. Forest Service (U.S.F.S.), Bureau of Land Management (B.L.M.) and the Arizona State Lands Department (A.S.L.D.) administer 28.6 million acres in Arizona that are grazed by livestock. Public and state land grazing permits and leases account for over 85 percent of the state's grazing land outside of Indian reservations. Approximately 63 percent of the beef cows raised in Arizona graze at least part of the year on public lands.

Public land grazing allotments are increasingly under the scrutiny of the regulatory agency involved and the general public, primarily through the vigilance of individuals from various environmental organizations. Restrictions imposed by legislation have also increased, influencing ranchers flexibility to manage livestock on these allotments. Often, grazing permits are reduced where conflicts have arisen over real or perceived resource damage.

Generally, these conflicts can be mitigated through an organized approach to grazing allotment management planning. This effort may be initiated by the permittee and requires the same level of attention that other aspects of the ranching business demand.

We have identified six general areas that provide ranchers a process to improve range management and their ability to reduce and/or mitigate public land management conflicts. Many of the suggestions or scenarios discussed are obvious or common-sense approaches. Nonetheless, allotments targeted for administrative action often lack many of these characteristics.

1 - Maintain open lines of communication with the agency personnel associated with your grazing allotment.

Communication with the land management agencies is essential. To communicate you need to speak the same language. Increased attention to multiple range resources is often warranted in addition to discussions about livestock. Interest in soils, vegetation, wildlife and watershed values may be a common ground for further discussions. Learn what range condition means and how grazing influences range trend. Grazing can have both positive and negative effects on plants and management can have a direct bearing on these processes. Application of range management principles can directly influence permitted livestock numbers.

Listen carefully to what the agency people and others think are the problems on your allotment. Often these perceptions can be resolved with little change to management but they have to be identified before they can

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be addressed. Future management strategies can be developed to cope with current and developing conflicts as perceived by agency personnel and others.

2 - Gather and organize available information.

Organizing and studying key information will enable you to become the expert on all aspects of your grazing allotment. These documents and data provide the framework for future planning and management decisions as well as a foundation for defending your actions. A place to begin is by requesting copies of your allotment files from the respective agencies. These files contain much outdated and obscure information, however, and a better approach might be to go to the office and look at the files, then request copies of specific documents. Usually these are easily obtained but in the unlikely event that there is resistance to your request you can also invoke the Freedom of Information Act. Under this Act, there are strict deadlines and requests will elicit prompt responses although it is not a very friendly approach.

Agency maps will also be available and should be obtained. There will likely be a number of different kinds of maps, each focused on specific types of information. Maps should delineate specific land status and locate all range improvements. Soils and vegetation type maps are also often available. Other maps might report range condition and trend as well as grazing utilization levels on a periodic basis. Maps such as these are key to allotment management and should be updated periodically or developed if they are not available. Many agency maps will be out of date but will nonetheless be provided to any permittee.

Although they are not critical, aerial photos may be available and are very useful. These may have vegetation types delineated. They may also show locations of study plots. Data from any study plots that may exist for an allotment should be located and reviewed. These may include transect records and photos from permanent range trend plots or fenced exclosures. Dates of data collection should be clearly indicated.

A documented history of ownership and stocking records for the allotment should also be obtained where available. Records of past livestock use, both permitted and actual along with any reductions or increases in permitted numbers are useful for future management and to show a history of beneficial resource use in a legal sense.

Additional records on the history of the ranch may include related deeds that reference range rights, water rights, permits or other documents. The more complete the record of range use the better.

Documentation of water rights is a complicated topic not to be addressed here. Suffice it to say that water rights should be properly filed in your name and the chain of title brought to current ownership. The Arizona Cattle Grower's Association can help with these procedures.

Finally, all range improvements should be recorded and mapped. Kinds of improvements, locations, and dates built and/or maintained should be recorded. Records of the expense of the improvements should also be kept. Agency records of costs, private contributions and other improvement related data are only kept for a limited number of years so it is helpful for permittees to maintain permanent records.

3 - Design and implement a monitoring plan to document vegetation changes over time.

Vegetation changes on rangeland grazing allotments are due to a complex interaction of events that include environmental and management factors. Natural fluctuations in climate, plant population cycles, fires, insect manifestations and grazing ani-mals are some of the major influences on vegetation changes. Many procedures are available to keep track of these changes.

Specific objectives for the use of the vegetation monitoring data will determine the kinds of data to collect and are not discussed in detail here. Certain procedures however are useful to design and implement vegetation monitoring in most situations. The first decision is the location of study areas. These are usually located according to key areas and critical areas. Key areas are representative of conditions over most of the allotment and should be located on soils or sites of major importance to forage production. Critical areas need not be extensive but are important to monitor for specific resource values or because they may be more sensitive to grazing damage than is typical. Additionally sites expected to show changes due to management should be monitored. Historical study plots should also be considered for a renewed monitoring effort.

Transects can be established at each selected area depending upon the sampling design. A typical layout for monitoring range trend might consist of 10 transects, running perpendicular to a baseline. Data for plant frequency, density and ground cover or other attributes may be collected by locating a series of quadrats along each transect. Forage utilization data should also be collected at these sampling areas.

Establishing a photographic record of vegetation changes is also important. Photographs repeated over

the years display vivid evidence of vegetation changes. Specific details on vegetation monitoring are available in other publications.

Again, communication with management agency people is important. They will usually accept a rancher's data, but need to know what monitoring is being done and may desire to be actively involved in the data collection.

4 - Locate and study problem areas.

Any allotment management plan will probably have one or more of the following goals.

a. To maintain or increase the proportion of certain plant species by regulating the intensity, frequency and/or season of grazing on those plants. Specific goals might be to increase the proportion of cool season grasses or forbs or simply increase the diversity of plant species present, or improve ground cover on an allotment.

b. To prevent accelerated erosion or allow present erosion to heal.

c. To avoid excessive conflict between livestock and other uses, such as wildlife, riparian zones, etc. This has become a primary motivating force for public land grazing management.

Any part of the allotment where these goals are not being met can be identified as a problem area. Problem areas will primarily center around plant species composition, soil protection and critical wildlife habitat. You can identify problem areas through analysis of agency maps plus your own knowledge of the allotment.

Study agency maps of range condition and/or utilization in addition to whatever study plot data which are available. Look for areas in poor range condition and areas of heavy utilization (in excess of 50 percent). These are likely to be areas identified as problems. Keep in mind that condition reflects management in the past. Trend should indicate what is happening under current management and should be related to current utilization patterns.

Problem areas that are visible to the traveling public can create a bad impression of the entire allotment. These areas should be identified and consideration given to their improvement. Most allotments will contain only localized overgrazing or heavy use.

Several common scenarios that may need attention are listed below.

a. Condition is poor, trend is down or stable and utilization is high. This is sure to be a problem area and your objective should be to reduce use in such an area, perhaps initially providing for growing season rest.

b. Condition is poor but current utilization is low. This may be due to heavy stocking for prolonged periods in the past which has been changed by reducing livestock numbers and/or the timing of use. In this case trend should be up and the objective should be to keep it improving. If you have no evidence that there was ever heavy stocking in the area, or if the trend is not upward, then the "poor condition" is probably due to invasion of brush or trees or to a naturally poor site potential. Present procedures may not adequately distinguish between poor condition caused by overgrazing and lack of forage or ground cover caused by poor soil, low precipitation or brush invasion. In these cases it is important to document that these areas of poor condition are not due to improper grazing management.

c. There may be areas of fair to good condition which are currently receiving heavy use. Trend on these areas will go down if excessive use continues without any timing considerations. Changes in management or new improvements such as fences or water development may cause such a situation. The objective in these situations should be to lighten use or change the timing of grazing by altering season of use or shortening grazing periods and providing adequate rest periods in order to maintain good range condition.

d. Other problem areas are those which are especially important for wildlife (critical browse areas or antelope kidding grounds for example), heavily grazed areas along streambanks or near campgrounds, and where active gullies are present.

5 - Evaluate alternatives for management.

Once you have identified, from available maps, data and your own observations, where your real problems of poor condition and overuse are, you can start looking for ways to alleviate the pressure on these areas. Since no two allotments are alike in either problems or opportunities, there are no formulas for how to do this. The key is your ability to identify where the problems are and your imagination in looking for feasible changes in management to reduce the problems.

An important step is to watch utilization patterns carefully. Keep in mind that annual plants, plants that live for only one growing season, contribute little, if any, to most ratings of range condition or utilization. Therefore, look carefully at the condition and use on palatable perennial grasses and browse.

Identify areas which are not getting much use. If there are not any such areas or there is no feasible way to get use on them, a reduction in numbers may be

necessary and beneficial to both range and livestock conditions. However, on many allotments the problem is not so much one of too many cattle but of the timing and distribution of grazing. Often allotments show overuse of some areas and underuse of others.

The main objective is to reduce use in problem areas and increase it in areas of light use unless there are specific reasons to do otherwise. One or more of the following strategies to improve grazing distribution or management may work.

a. Move salt and supplemental feeding locations to areas with light use or, at least, move these locations frequently and keep them away from water.

b. New waters can be developed to serve lightly or unused areas. Care should be taken not to overstock these new grazing areas.

c. Herding may also keep cattle distributed. Riding can change natural grazing patterns and introduce animals to new waters and salting areas.

d. New or relocated fences or drift fences can keep cattle off of problem areas. These may also be necessary before grazing management can be effectively implemented.

e. Controlled burning or other brush control measures and/or reseeding also may improve the condition of problem areas or provide enough extra forage to take pressure off problem areas.

f. Finally, grazing management can change the timing of grazing by changing the frequency or season of use. Some type of rotational movement of cattle may give grazed plants a chance to recover and speed improvement of concentration areas. A workable system must be designed to meet the needs of both vegetation and livestock management. Remember that when trying to improve beat-out or critical areas, all livestock must be removed during the recovery periods. Leaving a few bulls or horses or whatever may be enough to prevent any positive response on these areas.

Grazing management need not be complicated or require a lot of new water development and fences. Herding, controlling access to available water and relying on natural behavioral instincts of your livestock may be enough to get started.

6 - Know your legal rights, responsibilities and appeals procedures.

Grazing permits carry with them both legal rights and responsibilities. Read your permit and understand the requirements. Access and wildlife regulations should also be known and followed, as failure to do so may invalidate grazing privileges.

Where management and communication fail, understand how to use the appeals process. There are a number of alternatives available depending upon the agency and level of your dissatisfaction. You can challenge agency decisions without a lawyer using procedures by the agencies and their parent agencies; the U.S. Forest Service and the U.S. Department of Agriculture; the Bureau of Land Management and the U.S. Department of Interior.

For example, for BLM decisions there are two different kinds of administrative remedies: protests and appeals. A protest is a formal request for reconsideration by a BLM official of any proposed or final decision. An appeal is a formal request for review of final BLM decisions by either an Administrative Law Judge (ALJ) or the Interior Board of Land Appeals (IBLA). The Interior Department has established the IBLA and ALJs to review disputed agency decisions. Certain decisions can only be appealed to ALJs or IBLA while others can only be protested.

The kinds of decisions than can be appealed in the National Forest System are called planned actions. These are written decisions governing plans, projects, and activities to be carried out on the National Forest System that result from analysis, documentation and other requirements of the National Environmental Policy Act and the National Forest Management Act. To appeal a decision a person must file a written notice of appeal with the next higher line officer and simultaneously send a copy of the notice of the appeal to the Deciding Officer (the line officer whose decision is being questioned). Decisions subject and not subject to appeal are listed under 36 C.F.R. Part 217 of the Federal Register, Vol. 54, No. 13, as are definitions, time limitations and details for filing appeals of Forest Service decisions.

Many unfavorable agency decisions can be forestalled using the recommendations set forth in this paper. It all begins with open and honest communication, setting reasonable resource objectives and then monitoring progress. As responsible land stewards it is up to you to take the lead in communication with land management agency personnel, stressing proper resource management, documenting results and creating a positive image with the non-ranching public.

Working out solutions

If management changes are warranted and the allotment is not scheduled for a new Allotment Management Plan, request general planning guidelines from the appropriate range management personnel and use these to write your own proposals. Further technical assistance can be obtained from the Natural Resources Conservation Service, Cooperative Extension, private consultants and other sources.

Before formal appeals, always consider further communication and consensus. Often, an informal meeting with the Forest Supervisor, BLM District Manager or State Land representative will solve the problem.

Methods exist to organize people and efforts to solve range management or other natural resource management issues. These consensus-building procedures have a number of similarities. The appropriate interests must be identified and must have the opportunity to be involved in the process. Allotment management plans are increasingly developed in conjunction with interested groups and individuals in addition to the permittee and the appropriate agency personnel. The Forest Service has formalized this process with their Integrated Resource Management procedures.

In any process, goals and objectives must be agreed to, while considering available resources and land potentials. Management recommendations should then be tied to stated goals and monitoring methods developed to determine whether or not goals are being reached. Finally, there should be procedures that allow corrections to the plan when needed.

Arizona has a memorandum of understanding to participate in the Coordinated Resource Management (CRM) procedure, signed by an executive group comprised of members from the U.S. Forest Service and Bureau of Land Management, Arizona State Land Department and Game and Fish Departments, and University of Arizona Cooperative Extension. Coordinated Resource Management is often used to identify goals and priorities for planning, managing and monitoring grazing allotments, especially where more than one public agency is involved. Participation in the CRM process begins at the field group level and is a means to provide not only technical expertise but maintain communication among interested parties. The organization of a CRM group can facilitate the development of an allotment management plan.

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