

GAO

Testimony

For Release  
on Delivery  
Expected at  
10:00 a.m. EDT  
Tuesday,  
August 2, 1988

Management of Public Rangelands by  
the Bureau of Land Management

Statement of  
James Duffus III, Associate Director  
Resources, Community, and Economic  
Development Division

Before the  
Subcommittee on National Parks  
and Public Lands  
Committee on Interior and Insular Affairs  
House of Representatives



Dear Mr. Chairman and Members of the Subcommittee:

I am pleased to be here today to discuss our views on how the Bureau of Land Management (BLM) is administering the public rangelands. My remarks today are based largely on findings set forth in two of our recently issued reports to this subcommittee<sup>1</sup> and are consistent with earlier reports we have issued dating back to 1977. Our work leads us to conclude that BLM has allowed and continues to allow livestock grazing that is damaging a large amount of the public's land, in some cases irreversibly. Unless BLM assumes a more effective stewardship role, there is little reason to believe that the overall condition of the public rangelands will markedly improve.

NATURE OF PUBLIC RANGELANDS AND  
THE ROLE OF BLM

As you know, BLM administers about 165 million acres of federally owned rangelands in the West. Much of this land is fragile and can be seriously damaged by misuse. Moreover, because of the generally arid condition of much of the public rangelands, recovery from past damage can often be slow and in some cases never occur. During the late 1800s and early 1900s, unrestricted grazing on the public rangelands resulted in widespread deterioration.

Beginning in 1934, with the passage of the Taylor Grazing Act, the Congress began to take action to restrict overgrazing on public lands and to halt the resulting deterioration. In 1976, recognizing the sensitivity of the resource and the need to take

---

<sup>1</sup>Rangeland Management: More Emphasis Needed on Declining and Overstocked Grazing Allotments (GAO/RCED-88-80, June 10, 1988).

Public Rangelands: Some Riparian Areas Restored but Widespread Improvement Will Be Slow (GAO/RCED-88-105, June 30, 1988).

additional steps to protect it, the Congress passed additional legislation. For the first time, the landmark Federal Land Policy and Management Act of 1976 mandated that the public rangelands under BLM's jurisdiction be managed under the principles of multiple-use and sustained-yield. The multiple-use principle requires BLM to manage the land for the benefit of all uses including not only those of livestock permittees, but also those associated with outdoor recreation, fish and wildlife, and other conservation-oriented purposes. Just as importantly, the sustained-yield principle requires BLM to ensure that the land's condition be maintained so that future generations will be able to enjoy a vibrant land resource.

#### CURRENT CONDITION OF THE RANGELANDS

Despite these various congressional initiatives, much of the public rangelands remains in unsatisfactory condition. Consistent with our findings in previous reports, BLM range managers told us during the development of our most recent reports that almost 60 percent of those grazing allotments for which they had current status information were in only poor or fair condition. Equally significant, only one fourth of the allotments whose status was known were improving while three fourths were either stable or declining further.

The condition of riparian areas--those ecologically critical zones bordering rivers, streams, lakes, and bogs--is even worse. We found that there are many thousands of miles of streams with degraded riparian areas needing improvement. BLM has issued a policy statement supporting riparian area improvements and has conducted a number of well-publicized demonstration projects. These relatively few successful projects have been implemented largely as a result of the commitment of individual BLM field staff members.

However, these efforts represent only a small fraction of the restoration work needed. For example, while precise inventory data is generally not available, in Colorado 90 percent of BLM's riparian areas along its 5,300 miles of streams are either in poor or fair condition. Similarly, about 80 percent of BLM's riparian areas along Idaho's nearly 12,000 miles of streams is estimated to be in some stage of degraded condition.

Throughout the public rangelands, and in the riparian areas in particular, the primary cause of degradation is poorly managed livestock grazing. When more livestock are allowed to graze in an area than the land can support, forage consumption exceeds the regenerative capacity of the natural vegetation. When this carrying capacity of the land is exceeded, vegetation is lost resulting in erosion, watershed damage, and other deterioration.

Despite the historically recognized significance of overgrazing, range managers told us that about 20 percent of grazing allotments continue to be overstocked--that is, BLM allows more livestock to graze than range managers believed the land could support. These managers further believed that declining range conditions were more prevalent on overstocked allotments than on other allotments. Specifically, they told us that four times as many overstocked allotments have declining range conditions than other allotments.

The impact of poorly managed livestock grazing is even more dramatic in riparian areas. Because of the availability of water, livestock tend to congregate in riparian areas for extended periods, eating most of the vegetation and trampling the streambanks. This results in badly eroded streambanks, radically altered streamflows, increased siltation, decreased shrub and grass growth, and lowered water tables. Further, contrary to multiple-use principles, the poorly controlled livestock grazing in riparian

areas destroys fish habitat and reduces water, cover, and forage for other wildlife.

#### BLM'S PERFORMANCE AS PUBLIC RANGELAND MANAGER

Given the generally unsatisfactory condition of the range resource over which BLM exercises stewardship responsibilities, it is difficult to assign a passing grade to BLM's performance. In a number of respects, BLM has not demonstrated a willingness to act in the broader public's best interest in managing the rangelands. Instead, contrary to the mandates of multiple-use management, our work and the opinions expressed by many BLM field staff lead us to believe that BLM has oriented its activities toward avoiding conflict with the ranchers permitted to graze their livestock on the public's land.

This management pattern is reflected in a number of ways. First, BLM has done little to reduce authorized grazing levels in areas its range managers believe to be overgrazed. On 75 percent of the allotments that managers told us were threatened with further damage because of overgrazing, BLM had not scheduled any action to reduce authorized grazing levels. Among the reasons for not taking action, according to BLM managers, were permittee resistance and insufficient monitoring data. Second, and relatedly, we found that BLM has generally not taken aggressive steps to assess the carrying capacity of allotments to establish appropriate grazing levels. For example, carrying capacity has not been assessed for 30 percent of BLM's grazing allotments for at least 20 years, and for those believed to be overstocked, 37 percent had not been assessed within the last 20 years.

Third, many of BLM's own staff members responsible for improving riparian areas told us that their efforts will not be supported by top managers if such efforts are opposed by permitted

ranchers. In this connection, while a number of ranchers have come to recognize the merits of intensive livestock management and have cooperated with riparian improvement initiatives, many continue to oppose such initiatives. We were told of numerous specific instances when riparian improvement efforts proposed by field staff were undercut by BLM headquarters or local managers in response to the wishes of affected permittees. A number of these efforts simply involved enforcing established trespass requirements. While our observations and statements by BLM field staff demonstrate that livestock trespass in riparian areas was frequent, we did not identify any instances where effective sanctions were implemented.

Finally, BLM has drastically reduced staffing levels for those specialist positions necessary to achieve range management goals. For example, nationwide staffing levels for wildlife biologists and fisheries biologists--disciplines necessary to design, implement and monitor riparian improvements--have been reduced by 34 and 55 percent, respectively, since 1980. Additionally, range management positions have been reduced 28 percent during roughly the same period.

#### SUMMARY AND CONCLUSIONS

In summary, poorly managed livestock grazing is inflicting serious and sustained damage on the public rangelands. While achieving some improvements, BLM is generally not administering the public lands in a way that effectively deals with the overgrazing problem. It has not taken steps to reduce allowed grazing levels on deteriorating allotments and, according to its own field staff, has failed in a number of locations to enforce trespass requirements or take other needed steps to restore critically important riparian areas. Although BLM is assigned as the steward of much of the public rangelands, our analysis and statements made by a number of BLM field staff suggest that the agency is often more concerned with meeting the immediate needs of its livestock

permittees than with ensuring the longer-term, broader-based viability of the resource.

Our recent reports made a number of recommendations to BLM directed toward focusing attention on grazing allotments that are overstocked and/or declining. We also recommended that BLM demonstrate a serious commitment to restoring grazing-damaged riparian areas by establishing finite goals for riparian-area restoration, annually measuring the progress made toward achieving those goals, and justifying instances where proposed restoration efforts are seriously thwarted. We believe that substantive action along the lines we have recommended will go a long way toward improving the quality of the public rangelands.

- - - -

Mr. Chairman, this concludes my prepared statement. I would like at this time to submit for the record a copy of my statement with executive summaries from our two most recent reports attached. I would be pleased to respond to any questions you or members of the Subcommittee may have.

---

# Executive Summary

---

## Purpose

The federal government allows private interests to graze livestock—primarily cattle and sheep—on over 70 percent of the 367 million acres of land the government owns in 16 western states. Because most of these lands are arid, overuse can seriously, and even permanently, damage the land. Past overgrazing has resulted in soil erosion, watershed destruction, and the loss of native grasses and other vegetation that provide food for livestock and wildlife.

The Chairmen of the House Committee on Interior and Insular Affairs and its Subcommittee on Public Lands, which is now the Subcommittee on National Parks and Public Lands, asked GAO to assess the progress that the Department of the Interior's Bureau of Land Management and the Department of Agriculture's Forest Service are making to improve public rangeland conditions. Specifically, GAO addressed, among other issues,

- condition of the public rangelands (see ch. 2),
- whether livestock grazing levels are based on recent and accurate rangeland assessments (see ch. 3),
- whether range improvement funds are used on the most beneficial projects (see ch. 4), and
- the adequacy of rangeland management and monitoring (see ch. 5).

---

## Background

Raising cattle and sheep on western rangelands is an American tradition. In the 1800s, grazing livestock on such lands was uncontrolled and livestock numbers were not regulated. The Forest Service began regulating grazing around the turn of the century, and the Bureau began in the mid-1930s.

Today, federally owned western rangelands are divided into 31,000 livestock grazing allotments (designated areas of land available for grazing specific numbers and kinds of livestock) covering about 268 million acres. The average grazing allotment is over 8,500 acres—about 13 square miles. Given the vastness of the area to be assessed, GAO developed a detailed questionnaire that asked Bureau and Forest Service range managers their opinions on the issues GAO was addressing.

The information presented in this report was largely obtained from about 800 questionnaire responses of Bureau and Forest Service range managers. GAO verified and supplemented the information provided by the range managers by visiting 20 Bureau and Forest Service field offices.



---

**Executive Summary**

---

**Results in Brief**

The Bureau and the Forest Service are required by law to maintain a current inventory on range conditions and trends. However, GAO found that much of the data in both agencies' inventories were more than 5 years old and may no longer represent current conditions. Both agencies' most recent reports showed that over 50 percent of the public rangelands remained in either poor or fair condition (the lower two of four categories).

GAO's survey of range managers' professional opinions showed that 19 percent of the Bureau and Forest Service grazing allotments may be threatened with further rangeland damage because authorized livestock grazing levels were higher than the land could support. The survey also showed that the condition of about 8 percent of the grazing units was actually declining. Furthermore, neither the Bureau nor the Forest Service was concentrating its management attention or resources on those grazing allotments that their range managers believed were threatened with further deterioration.

---

**Principal Findings**

---

**Rangeland Overgrazing**

Available trend information indicated that although most of the public rangelands were either stable or improving, one out of five Bureau and Forest Service grazing allotments may be threatened with further damage because more livestock were being permitted to graze than the range managers believed the land could support. However, the range managers reported to GAO that for a number of reasons no adjustments in the authorized livestock grazing levels were scheduled in 75 percent of these cases. For example, many range managers cited insufficient data as a reason for not scheduling grazing reductions.

---

**Grazing Levels**

To establish proper grazing levels, accurate assessments of the number of livestock the land can support are needed. However, GAO found that Bureau and Forest Service assessments are often old and may be outdated. For example, allotments with 20-year-old assessments are not uncommon.

---

**Range Improvements**

An alternative to reducing grazing levels is to increase the capacity of the land to support livestock through range improvements such as water

---

**Executive Summary**

---

development, fencing, and seeding. GAO found that many of the range improvements funded by the Bureau and Forest Service went to projects on grazing allotments with low usage and stable-to-improving range trends. At the same time, projects on overused and declining allotments remained unfunded. The criteria for selecting which range improvements to fund include a number of factors, but neither agency was emphasizing funding for projects on declining and overstocked allotments.

---

**Rangeland Planning and Monitoring**

Both agencies prepare allotment management plans for individual allotments. These plans provide a framework for managing each allotment, identifying objectives for the allotment, determining grazing practices to be followed and needed range improvements, and establishing monitoring and evaluation schemes. GAO found that 66 percent of the Bureau and 27 percent of the Forest Service grazing allotments did not have allotment management plans. Many allotment plans were over 10 years old and may not have been sufficiently current to properly manage the allotments. GAO also found that neither agency was focusing priority attention on declining and overstocked allotments. For example, the Forest Service had a higher rate of plan development for all grazing allotments in general than it had for declining and overstocked allotments.

---

**Recommendations**

GAO recommends that the Secretaries of Agriculture and the Interior focus attention on grazing allotments that are overstocked and/or in decline when

- conducting the assessments needed to establish appropriate grazing levels,
- funding range improvement projects, and
- developing allotment management plans.

Specific details on these recommendations, as well as others, are contained in the body of the report.

---

**Agency Comments**

The Department of Agriculture's Forest Service said that it shared the concerns discussed in the report and that additional direction is being developed to ensure consistency in evaluating funding priorities and to emphasize correction of unsatisfactory range conditions. (See app. II.)

---

**Executive Summary**

---

The Department of the Interior, on the other hand, was generally critical of the report. The Department stated that it firmly believed that techniques used by GAO did not support its conclusions, that GAO failed to recognize the Bureau's existing policy and program direction that address the issues and recommendations in the report, and that GAO often used a negative tone in presenting its findings. The Department acknowledged that it needs to more effectively communicate current policy and program direction to its field offices and that it is dedicated to taking steps needed to achieve this goal.

GAO believes the research techniques employed were methodologically sound and fully support the report's conclusions and recommendations. The methodology and approach used by GAO incorporated the views of Bureau officials and other rangeland professionals. GAO also believes the report appropriately recognizes the Bureau's policies and program direction and that the results of the work are presented fairly. The report recognizes that most of the Bureau's rangeland is generally stable or improving. GAO points out, however, that the report's focus is on that part of the rangeland that is declining and/or overstocked, because this is the part that is susceptible to serious and even permanent damage if corrections are not made. (See app. III.)

---

# Executive Summary

---

## Purpose

Riparian areas—the narrow bands of green vegetation along the banks of rivers and streams and around springs, bogs, lakes, and ponds—are widely recognized as crucial to the overall ecological health of western rangelands. However, many of them are in degraded condition, largely as a result of poorly managed livestock grazing.

In recognition of the need to improve the condition of riparian areas on public lands in the West, the Chairman of the House Committee on Interior and Insular Affairs, and the Chairman of its Subcommittee on National Parks and Public Lands asked GAO to determine (1) whether degraded riparian areas can be successfully restored, (2) how any successful restorations were achieved, (3) whether the techniques used can be applied to the restoration of other riparian areas, and (4) the extent of riparian areas still needing improvement.

---

## Background

Riparian areas represent only about 1 percent of the more than 250 million acres of federally owned rangeland. The areas, however, have ecological importance far beyond their relatively small acreage because they have a greater quantity and diversity of plant species than adjoining land. They provide food, water, shade, and cover for fish and wildlife, and forage for both wild and domestic grazing animals. They remove sediment from the water flowing through them, act as sponges to hold water in streambanks to provide a higher water table and a more stable stream flow, and help dissipate the energy of flood waters. The riparian areas also provide many recreational opportunities.

Livestock tend to congregate in the riparian areas for extended periods, eat most of the vegetation, and trample the streambanks. Such consumptive use can eliminate the benefits provided by the riparian areas to other users.

The Department of the Interior's Bureau of Land Management (BLM) and the U.S. Department of Agriculture's Forest Service are the agencies primarily responsible for managing federal rangelands.

---

## Results in Brief

Over the last 20 years, BLM and the Forest Service have restored a number of degraded riparian areas on public rangelands in the West. The successes, achieved primarily by improving livestock management, demonstrate dramatically the extent of improvement that is possible. They also demonstrate that there are no technical barriers to improving

---

**Executive Summary**

---

riparian areas and that the basic restoration approaches used on successful projects can essentially be applied to all riparian areas on federal rangelands.

While successes have been achieved, their number is very small compared with the areas still needing restoration. The pace of restoring the large number of degraded riparian areas that remain is likely to be very slow for two reasons. First, the number of skilled staff available to plan, implement, and monitor riparian improvements has been substantially reduced in recent years. Second, many of the field staff responsible for riparian improvement work, primarily in BLM, do not believe their work will be supported by agency management if it is opposed by ranchers using the public rangelands.

---

## Principal Findings

---

### Limited Number of Areas Have Been Restored

GAO reviewed 22 riparian areas spread throughout 10 western states that had been restored by BLM and the Forest Service. Although specific approaches to restoring riparian areas varied with the characteristics of the land, GAO noted that the overriding factor in achieving success was improving the management of livestock to give the native vegetation more opportunity to grow. In some cases, fences were built to keep the livestock out of the area, either permanently or until the vegetation had recovered and streambanks were stabilized. In others, livestock continued to graze in the area, but their use was restricted by herding, or fences, or a combination of both to a shorter period of time, a specific season, or only part of the area.

Because livestock management is the key to restoring riparian areas, the ranchers holding permits to graze their livestock on federal rangelands play an important role in the restoration process. In this connection, GAO found that while an increasing number of ranchers are coming to accept the benefits healthy riparian areas provide their ranching operations, many continue to oppose restoration initiatives.

The projects GAO examined demonstrate that no major technical impediments need to be overcome in order to improve riparian areas. They also show, however, that successful restoration involves specific solutions that take into account the type of ranching operation and such characteristics of the area as temperature, rainfall, and soil type. Developing

---

**Executive Summary**

---

the specific solutions, carrying them out, and monitoring the results require the knowledge and skills of specialists such as wildlife and fisheries biologists, hydrologists, range conservationists, and soil scientists.

The number of successes is small compared with the area still needing restoration. BLM and the Forest Service do not have complete inventories of the amount and condition of riparian habitat. While the agencies have plans to develop such inventories, the partial information now available shows that there are many thousands of miles of riparian areas and that only a very small portion of the total is in good condition. (See ch. 2.)

---

**Barriers to Further Success**

While recognizing the successes of the past, GAO believes that widespread repetition of the successful riparian area improvements is not likely in the foreseeable future for two primary reasons. First, while BLM and the Forest Service have issued policy statements that endorse restoration of riparian areas, both agencies—because of budgetary restrictions—have substantially reduced the number of skilled staff essential to carrying out these policies. Second, some of the field staff, especially at BLM, believe that if their proposed actions for restoring riparian areas are opposed by ranchers, managers will not support the field staff. Until these staffing and institutional barriers are overcome, the pace of riparian area improvements is likely to be slow.

With respect to personnel shortages, staff positions and funding for activities related to riparian improvements have been substantially reduced over the past 8 years. During this period, for example, nationwide staffing levels of BLM wildlife biologists and fisheries biologists were reduced by 34 and 54 percent, respectively. The Forest Service had a 15-percent nationwide reduction in riparian-related staff positions from 1982 to 1987.

GAO found that management support could also affect the extent of restoration. In this respect, the differences between BLM and the Forest Service are considerable. According to most of the Forest Service field staff GAO visited, essentially all levels of management are willing to support them in making difficult riparian management decisions. This was not the case at BLM, however, where many of the field staff believed agency management does not support them in implementing decisions that are opposed by local ranchers. These staff members recounted specific instances where their riparian improvement initiatives were subsequently undercut by BLM headquarters and local management responding to ranchers' objections. This perception could inhibit or discourage

---

**Executive Summary**

---

field staff from taking the actions necessary to restore riparian areas in cases where they face an uncooperative rancher or when tough decisions, such as reducing the level of authorized grazing use, may be needed. (See ch. 3.)

---

**Recommendations**

BLM and the Forest Service should take several steps to enhance their riparian area improvement efforts, including establishing measurable goals for miles of riparian areas to be restored and measuring progress made toward those goals. (See ch. 4.)

---

**Agency Comments**

The Forest Service endorsed the report's findings and conclusions and said it would implement GAO's recommendations. BLM agreed with the recommendations in principle and said the report should help improve its management efforts. However, it raised two basic concerns about GAO's review methodology. First, BLM said that the report's conclusion that widespread riparian improvements are unlikely was based on personal opinion rather than quantitative analysis. Second, BLM expressed surprise that field staff perceived a lack of management support for riparian initiatives and suggested that this conclusion was based on anecdotal information rather than on a scientific survey of agency staff.

GAO believes that its methodology was sound and its conclusions appropriate. With respect to BLM's first concern, the report notes that BLM has not developed the comprehensive inventories of riparian areas that would be necessary to perform the complex quantitative analysis it suggests. However, GAO's review of available partial inventories and staffing trends, its visits to many restored and degraded riparian areas, and its interviews with dozens of experienced BLM experts in the field makes it clear that an enormous amount of work remains to be done.

With respect to the second concern, GAO visited BLM installations in 10 states and conducted interviews with dozens of BLM staff. The depth and breadth of the opinions expressed to GAO indicates that the perception GAO reported is widespread. The views expressed were also consistent with those reported in a 1987 BLM study of its wildlife and fisheries biologists. (See ch. 4 and apps. II and III.)