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Testimony

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Restoring Degraded Riparian Areas on
Western Rangelands

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 the results of our work to date on the riparian area improvement efforts of the Bureau of Land Management (BLM). We expect to complete our work within the next few months, but we are happy to share our tentative observations at this time. In this regard, as you requested, we have focused our work on determining

- whether degraded riparian areas can be successfully restored,
- how any successful restorations were achieved and whether successful techniques can be applied elsewhere, and
- the extent of riparian areas in degraded condition and the prospects for their recovery.

Our review work has addressed the activities of both BLM and the Forest Service, but for purposes of this hearing, I will restrict my remarks to BLM, the area of interest to this Committee.

DRAMATIC IMPROVEMENTS ARE POSSIBLE

Riparian areas, those narrow bands of green adjoining rivers, streams, and lakes, are crucial to the ecological health of arid western rangelands. Unfortunately, most riparian areas managed by BLM are in degraded condition largely as a result of poorly managed livestock grazing. As our work to date demonstrates, however, with proper management and care even badly damaged riparian zones can be restored. We visited 22 riparian improvement project sites throughout the West, and in many locations saw remarkable degrees of improvement. The "before and after" photographs provided to you graphically display this improvement for two representative sites. Locations that as little as 18 months ago were essentially devoid

of vegetation with badly eroded streambanks and often only intermittent water flow had been transformed into productive areas characterized by dense vegetation, stable streambanks, and deep perennial streams often providing excellent fish habitat. These improved areas now help raise surrounding water tables, trap large volumes of sediment that would otherwise end up in reservoirs, increase the availability of forage, and dissipate the energy of flood waters.

It has taken decades of abuse to produce the level of riparian area degradation that currently exists, and not every location can rebound as quickly as some we have seen. Fortunately, however, riparian areas are generally quite resilient and, if the resources and will exist, it is apparent that over time dramatic results can be achieved.

SUCCESSFUL RESTORATION TECHNIQUES CAN BE APPLIED ELSEWHERE

There are no significant scientific or technical barriers to overcome in developing solutions to the problem of degraded riparian areas. Because the primary cause of the degraded condition is poorly managed livestock grazing, the successful restorations we saw all had one feature in common--a change in livestock management to give the native vegetation more opportunity to grow and the streambanks an opportunity to stabilize. In some cases, fences were built around the riparian areas to keep the livestock out; in others livestock grazing continued but in a more controlled and better managed fashion. Because the basic restoration requirements are so similar we feel confident that the techniques used on the projects we examined could be successfully applied to essentially all riparian areas on federal rangelands.

Although the fundamental solution--better livestock management--was uniform across all the projects we examined, the projects also demonstrate that successful restoration involves the application of site-specific approaches that take into account the type of ranching operation and such characteristics of the area as temperature, rainfall, and soil type. Developing site-specific solutions, carrying them out, and monitoring the results requires the knowledge and skills of specialists such as wildlife and fisheries biologists, hydrologists, range conservationists, and soil scientists. In this connection, we believe it is important to recognize that the successes we saw have been achieved largely as a result of the extraordinary personal dedication of individual employees serving at the project sites.

THE EXTENT OF THE PROBLEM REMAINING AND
PROSPECTS FOR INCREASED PROGRESS

While the successes to date are encouraging and demonstrate in dramatic terms what can be accomplished, these successes represent only a fraction of the areas still needing restoration. BLM does not have complete inventories of the amount and condition of riparian areas throughout the West, but the partial information that is available shows that there are tens of thousands of miles of riparian areas in the West with only a small portion of them in good condition. For example, statewide BLM assessments in Idaho have concluded that 80 percent of the nearly 12,000 miles of streams was in need of improved management. The assessment in Colorado was that 90 percent of its more than 5,000 miles of perennial streams had riparian areas in poor or fair condition.

Despite the lack of technical obstacles and the large numbers of areas needing restoration, we are not optimistic that more than isolated riparian area improvements will be accomplished in the foreseeable future. BLM has issued a riparian area policy statement that endorses riparian improvements. At the same time,

however, it has substantially reduced the number of skilled staff necessary to develop the site-specific strategies for implementing the policies. For example, between 1980 and 1986 staffing levels of wildlife and fisheries biologists were reduced by 26 and 43 percent, respectively. Moreover, two states now have no full-time fisheries biologists.

Compounding this problem, many BLM field staff we interviewed do not believe BLM management is serious about achieving broader progress. These staff widely believe that if their proposed actions for restoring riparian areas are opposed by the permitted ranchers, their managers will not support them. While some ranchers have come to realize that healthy riparian areas can, in the long run, benefit their ranching operations, many others oppose riparian improvement initiatives. This is especially the case when the number of livestock they can graze on an allotment is to be reduced or their access to riparian area project sites restricted. This opposition has helped slow the pace of riparian area restoration. In this regard, many BLM staff we spoke with recounted specific instances where their riparian management efforts were specifically undercut by BLM headquarters or local management direction after permitted ranchers raised objections. The widespread perception by BLM field staff that their efforts will not be supported is having a chilling effect on the individual initiative so necessary to successful riparian improvement efforts.

Until these staffing and institutional barriers are overcome, the pace of riparian area improvements is likely to be slow.

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In summary, although our work is not completed, we believe several overall observations on riparian area improvements can be made with the information we have developed so far. First, even badly damaged riparian areas can be restored. Second, there is no

mystery on how to achieve restoration. The solution centers on controlling grazing through improved livestock management. Third, only a fraction of the problem has been addressed. Tens of thousands of stream miles on federal rangelands remain in degraded condition. Finally, there are questions about whether BLM has the institutional commitment to make the tough decisions necessary to achieve broader progress.

Mr. Chairman, this concludes my prepared remarks. I would be happy to respond to questions at this time.