

Summary

AFS Policy Statement #23:
Effects of Livestock Grazing on
Riparian Stream Ecosystems
(Abbreviated)

Domestic livestock grazing occurs on approximately 500 million acres of private and public land in 11 western states. Many of these lands are considered to be in fair to poor condition; 19,000 miles of sport fishing streams have declined in quality on Bureau of Land Management land alone as a result of land management practices, including overgrazing.

Streamside vegetation is most affected by grazing because riparian-aquatic zones are usually grazed more heavily than are upland-terrestrial zones. The riparian problem is further complicated because today's range management guidelines do not call for different management strategies for upland and riparian vegetative types. Often what is good for timber and range management, particularly in the short term, is not good for riparian or stream management.

Livestock grazing can affect the riparian environment by changing and reducing vegetation or actually eliminate riparian areas as a result of channel widening, channel aggradation, or lowering of the water table. The most apparent effects on fish habitat are reductions of shade, cover, and terrestrial food supply, and the resultant increases in stream temperature, changes in water quality and stream morphology, and additions of sediment through bank degradation and off-site soil erosion.

Rangeland grazing practices can affect the water quality characteristics of runoff in a watershed, especially by increasing a stream's turbidity and sediment. Photosynthesis is decreased by stream turbidity and primary productivity is reduced. Aquatic insect food production for native salmonid species is reduced by removal of streambank vegetation. Bank erosion causes sedimentation in streambed gravel. Recreational opportunities are significantly reduced.

The AFS policy regarding livestock grazing on riparian and stream ecosystems is to:

1. Encourage agencies to conduct complete and accurate inventories of streams and riparian areas on public lands to determine their location, condition, and potential for recovery if improved livestock management were to be applied.
2. Encourage the U.S. Congress to increase grazing fees to (a) improve the management and administration of federal grazing systems, (b) restore stream-riparian resources already damaged by past grazing, (c) remove incentives for overgrazing which current low fees provide, and (e) provide a fairness to taxpayers who have provided subsidy to a privileged few.
3. Promote land manager awareness of aquatic-riparian ecosystem ecology, processes, and needs, and encourage managers to practice and maintain a land stewardship ethic emphasizing riparian-dependent wildlife resources.
4. Promote development and implementation of land use and grazing allotment management plans that provide the vegetation necessary to ensure adequate watershed protection to perpetuate vegetation, maintain and enhance plant vigor, and assure soil stability.
5. Encourage Congress and agencies to provide for standardized monitoring and habitat restoration programs designed to document and arrest the decline in stream riparian ecosystems.
6. Acquire rights-of-way across private lands owned by permittees (either

Summary

separately or as a condition of the permit) to obtain public access to streams where access is currently denied.

7. Promote an awareness in academic range science programs of the importance of riparian and streams ecosystems, so that range livestock management plans can be developed using an ecosystem (holistic) approach.

8. Encourage documentation of the economic values and benefits of restoring damaged streams and protecting those that are not damaged.

9. Promote research designed to (a) develop predictive capabilities for evaluating stream zone responses to various management alternatives for meeting fishery resource objectives, (b) accurately describe the multi-resource benefits of good stream habitat management, including water conservation and maintenance of improved streamflows, and (c) provide innovative and integrated management techniques that can be applied to achieve recovery and protection of damaged stream habitats.

10. Recognize individuals, citizen groups, and institutions that make important contributions in advancing improved management to specifically benefit grazed riparian zones and their streams.

11. Promote public awareness programs to stimulate interest and support for improved management of grazed streams, including the formation of citizens' stream protection groups.

12. Promote the capability and sensitivity of land management agencies to properly manage grazing on lands adjacent to streams, and to correct existing damages. Encourage the tailoring of grazing management systems to meet conditions, problems, site potential, objectives and livestock considerations on a site-specific basis.

13. Encourage land management agencies to provide career advancement opportunities (both line and administrative) for fisheries biologists in order to bring fisheries expertise into agency decision-making processes and enhance emphasis on the fishery resources located on public lands.