

AFS Policy Statement #14:  
Strategies for Stream Riparian Area Management  
(Full Text)

**A. Issue Definition**

"Riparian" comes from the Latin word ripanious, which means "bank (of stream)."  
"Riparian ecosystems" are the complex assemblages of organisms and their environment existing adjacent to and near flowing water. K. L. Ewing (1978) stated that riparian ecosystems have two essential characteristics as follows:

1. "Laterally flowing water that rises and falls at least once within a growing season."
2. "A high degree of connectedness with other ecosystems."

The first characteristic is related to the fact that the riparian area is juxtaposed to the stream. The second characteristic relates to the fact that the riparian area is mainly linear in shape. Having a high ratio of perimeter to the surface area means that the streamside zone will interact extensively with adjacent ecosystems. Therefore, riparian ecosystems along streams form buffers between the stream and the adjacent ecosystem, which may be forest, agriculture, urban areas, etc. These buffers can help control nonpoint source pollution. Although riparian areas in different environments/regimes have different characteristics, they all share common functional traits. Thus, stream riparian areas are geography delineated with distinctive vegetative, fisheries, and other resource values. They comprise both the aquatic and riparian ecosystems, and provide the structural and nonstructural fisheries habitat components (i.e., streambank vegetation, channel structure, and water quality) required to sustain productive fishery resources.

More than a century of human use and development of the land along streams has brought many changes. Throughout North America, many streams no longer retain their once productive characteristics; consequently, they now support reduced fish populations. Domestic livestock grazing within riparian areas and the resulting impacts on fisheries habitat throughout North America are well documented. Livestock grazing is one of the multiple uses of riparian area rangelands; however, decades of improper grazing are primarily responsible for the poor condition of North America's public and private riparian area rangelands. Other activities that affect fisheries habitat in riparian areas are timber harvest, mineral and oil production activities, agriculture, urban development, and road construction. If these competing uses are allowed to continue without sufficient management constraints then adverse fisheries impacts will continue to occur. Although research has demonstrated that degraded riparian area fisheries habitat can be reestablished; social, political, and economic pressures often prevent this from happening. Today's managers of land and fisheries resources must not only properly manage existing resources, but must also correct past mistakes.

## **B. Course of Action**

### Policy

It is the policy of the American Fisheries Society (AFS) to aggressively foster an increased awareness of riparian area fisheries habitat values and encourage active management for these values by state, federal, provincial, and local agencies. AFS supports close coordination and cooperation among these agencies in managing and improving riparian areas on all public and private lands in North America. The Society strongly urges that, as a matter of policy, riparian areas be considered unique and distinctively valuable habitat, and that such areas be declared of critical environmental concern. AFS also advocates that riparian areas be managed with the latest scientifically based management practices and that management prescriptions be vigorously applied and enforced to protect fisheries and other resource values for the benefit of all users.

Since adequate streamflow is essential to the vegetative communities within riparian areas, AFS strongly urges that state, federal, and provincial agencies legally recognize minimum instream flows. These agencies should identify and quantify riparian area resources and instream flows in the development of land and water management plans. They should recognize that the linkages between riparian ecosystem management and upland conservation practices must be considered in watershed programs. AFS encourages continuing research and management of riparian area habitats subject to livestock grazing, mining, energy development, water storage, irrigation withdrawals, timber harvest, road construction, and other potentially conflicting land uses. Scientific studies and inventories provide the basis for restoration, maintenance, and protection of riparian area fish habitats. Therefore, AFS strongly recommends that all land managers actively work to determine and implement scientifically-supported management practices for riparian areas.

### Action Plan

The American Fisheries Society will work with all riparian area users and managers to improve riparian area management. This management will provide the riparian area fisheries habitat components (i.e., streambank vegetation, channel structure, and water quality) required to maintain self-sustaining productive populations of fish for aesthetic, recreational, subsistence, and commercial users. The following actions will be taken by AFS to increase the awareness of fisheries habitat management required within riparian areas:

1. Foster cooperative relationships between land management agencies and the private landowners who are responsible for riparian area management throughout North America.
2. Cooperate with public and private land managers in the planning and management of riparian areas to meet state, federal, and provincial land management agency mandates.

3. Insist that riparian areas receive special consideration and emphasis as unique and distinctive habitats in the planning and management of state, federal, and provincial lands.
4. Request that land managers, working with appropriate subunits of AFS, develop best management practices for riparian areas and update these practices as new research and management information becomes available.
5. Work for improved legislation and funding for restoration and rehabilitation of riparian areas on public and private lands.
6. Work towards obtaining a balance of expertise on land management advisory boards.
7. Support and encourage the Bureau of Land Management, and state and provincial agencies in stressing adherence to, and responsibility for, the management of riparian areas. Continue to work with the U.S. Forest Service to encourage adherence to riparian area policies and management prescriptions.
8. Work towards amending the Federal Land Management Policy Act, the National Forest Management Act, the Federal Land Policy and Management Act, the Public Rangelands Improvements Act, and other relevant legislation to strengthen riparian area management and restoration.
9. Continue AFS Division and Chapter involvement in achieving incentives for private land riparian restoration and management, in achieving grazing fee increases on federal lands, and in generating funds for riparian area rehabilitation.
10. Insist that riparian area management prescriptions be adhered to and implemented by state, federal, and provincial land management agencies and that they are monitored for effectiveness.

The American Fisheries Society is dedicated to addressing these action items to insure that the integrity, viability, and diversity of riparian areas are restored and maintained to enhance the quality and quantity of fisheries and aquatic habitat resources across North America.

#### LITERATURE CITED

Ewing, K. L. 1978. Riparian ecosystems: conservation of their unique characteristics. In R. R. Johnson and J. F. McCormick, eds. Strategies for protection and management of floodplain wetlands and other riparian ecosystems. Gen. Tech. Report WO-12. U.S. Forest Service.