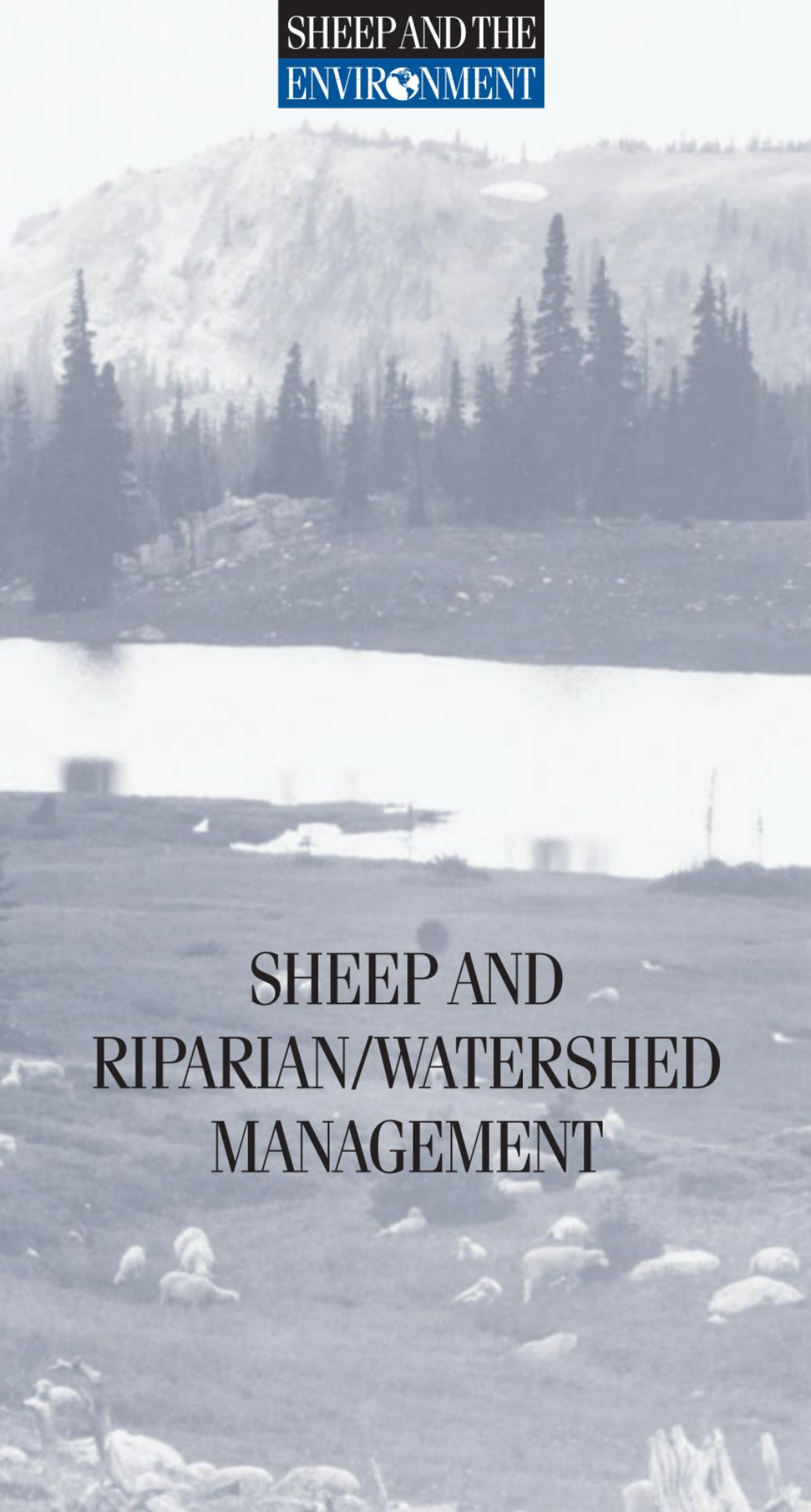


**SHEEP AND THE
ENVIRONMENT**



**SHEEP AND
RIPARIAN/WATERSHED
MANAGEMENT**



Watershed and riparian areas are among nature's most complex ecosystems. In the United States, riparian and watershed areas have been damaged by such activities as the construction of dams, roads, buildings; recreational activities; farming; mining; unregulated wildlife; brush and noxious weed encroachment; and by inappropriate livestock grazing. Land managers only recently have begun to understand how riparian areas promote high-quality water, plant diversity, crops, and healthy habitats for fish and wildlife. As a result, many riparian areas now are protected by federal and state laws and by private landowners who value them as recreational areas and wildlife habitats.

Sheep producers are taking an active role in the protection, maintenance, and restoration of these essential ecosystems through appropriate grazing management that takes into account whether, when, and how best to graze specific riparian areas. Properly managed, a riparian area can supply forage for sheep and at the same time provide an attractive recreation resource for humans, habitat for wildlife and fish, and plentiful, clean water.

- Sheep naturally prefer upland grazing and shy away from wet and marshy sites associated with riparian and wetland areas. As a result, research shows that appropriately managed sheep grazing typically has either no impact or a beneficial effect on riparian areas or stream bank vegetation critical to wildlife.
- Comparisons of pastures containing riparian areas grazed by sheep and pastures not grazed for four years reveal basically the same amount of vegetative cover and herbage yield in both.

- A recent Bureau of Land Management (BLM) study (Platt, 1989) rating the impact of livestock grazing on stream bank stability and the condition of brushy plant species found herded sheep grazing to be “the most desirable livestock riparian grazing system, second in preference only to non-use.”
- In Nevada, a state Fish & Wildlife Division study rates the impact of herded sheep grazing on riparian areas as 9 on a scale of 1 to 10 with 10 being “non-use.”
- The Environmental Protection Agency (EPA) in its publication, *Livestock Grazing on Western Riparian Areas*, credits sheep grazing with promoting better wildlife distribution in riparian areas. According to the Society of Range Management, proper grazing improves plant growth and diversity, which in turn increases wildlife species.
- Watershed deterioration occurs naturally through the succession of plant species from native annuals, which require little water, to perennials to shrubs to trees, which require substantial water. For example as junipers take over a watershed, grasses die out. This causes a depletion in watershed water storage capacity and soil erosion. Various projects show that properly managed sheep grazing can restore damaged watersheds by curtailing brushy growth and promoting perennial grasses that improve soil hydrology and reduce erosion.
 - In Montana and Utah, long-term sheep grazing at moderate levels increased perennial grasses and shrubs, promoting greater soil infiltration and reducing erosion.
 - In Texas, sheep and goat grazing helped restore perennial grasses over the Edwards Aquifer, thereby improving water supplies for the city of San Antonio.
 - Also in Texas, long-term sheep and goat grazing helped restore a riparian area that had dried up in the 1930s. By the 1960s, the riparian area had recovered and streams once again were delivering water to San Angelo.
 - In Utah, the U.S. Forest Service effectively uses sheep grazing in riparian restoration and watershed recovery projects.
- Sheep grazing is an environmentally safe way of controlling noxious weeds in riparian areas, since herbicides could contaminate water and threaten wildlife. In Colorado, sheep help control leafy spurge near Cherry Creek Reservoir, which supplies water to Metro Denver.

SHEEP AND THE ENVIRONMENT

Sheep and Riparian Management is a publication of the American Sheep Industry Association (ASI), which represents more than 100,000 U.S. sheep and angora goat producers. Sheep are a natural, low-cost means of managing rangelands, forests, and agricultural lands, even as they produce important resources, such as wool, meat, and lanolin. ASI is committed to proper grazing that benefits the environment, wildlife, the taxpaying public and consumers. For additional copies of this and other ASI pamphlets on sheep and the environment, contact the American Sheep Industry Association, 6911 S. Yosemite St., Centennial, CO 80112, (303) 771-3500.

