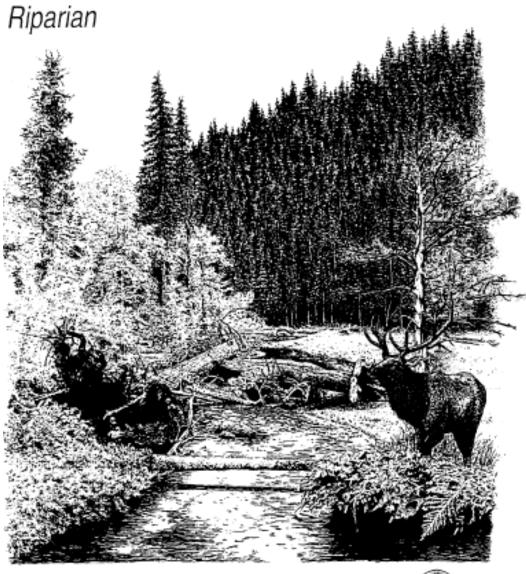
Management Recommendations for Washington's Priority Habitats



K. Lea Knutson nd Virginia L. Naef

December 1997



Table 4. Range and average widths to retain riparian function as reported in the literature (summarized in Appendix C). [From page 89]

Riparian habitat function	Range of reported widths in meters (feet)	Average of reported widths in meters (feet)
Temperature control	11-46 (35-151)	27 (90)
Large woody debris	30-61 (100-200)	45 (147)
Sediment filtration	8-91 (26-300)	42 (138)
Pollution filtration	4-183 (13-600)	24 (78)
Erosion control	30-38 (100-125)	34 (112)
Microclimate maintenance	61-160 (200-525)	126 (412)
Wildlife habitat	8-300 (25-984)	88 (287)

.

Agriculture [from pages 94-95]

Agricultural activities may contribute significantly to riparian and instream habitat degradation locally and across the landscape. A shift from conventional to sustainable agricultural practices would reduce or eliminate impacts to riparian and aquatic habitats and their fish and wildlife communities. Protection of RHAs, conservation tillage, use of cover crops, integrated pest management, use of non-chemical alternatives to pesticides, and alternative irrigation systems that reduce water use, erosion, and return flows are all techniques that should be explored and implemented across the landscape (Grue et al. 1989).

Below are recommendations for protecting riparian and stream habitat in agricultural areas. Also, see the recommendations regarding grazing (p. 97) and chemical treatments (p. 104). The Washington Department of Fish and Wildlife recommends that farmers seek further assistance from local soil scientists, fish and wildlife biologists, and agricultural professionals in order to develop more specific agricultural activity plans using the guidelines presented here.

Recommendation. Protect riparian habitat - Provide a buffer of natural vegetation between perennial or intermittent stream courses and cropland of 61 m (200 ft) or the above recommended RHA width (Table 3), whichever is greatest. If cropland currently exists within riparian areas, explore ways to cease farming in that area and pursue restoration and revegetation with native riparian plants. See the section on *Restoration and Enhancement* (p. 113) and seek assistance from the Natural Resources Conservation Service or the Washington Department of Fish and Wildlife.

Rationale. The soils and natural vegetation of riparian habitat can hold and filter significant amounts of sediments, pesticides, and nutrients generated in cropland. This filtering capacity will reduce the quantities of these substances that enter aquatic systems to the detriment of fish, wildlife, and water quality. Adequate areas of intact riparian vegetation will also provide critical cover and foraging habitat for terrestrial wildlife, enabling many species to exist in an agricultural landscape.

Consequences. Without intact RHAs in farmed landscapes, water quality is likely to continue to decline, further reducing anadromous and resident fish production. Populations of amphibians, birds, and mammals that use aquatic areas would continue to decrease because of poor water quality and loss of habitat.