

APPENDIX 1: PHOTO CREDITS

Photo credits to be completed.

APPENDIX 2

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Synopsis of values reported in the literature, a few wildlife species require much wider riparian corridors.

Design Recommendations for Riparian Corridors and Vegetated Buffer Strips

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Table 4. General Riparian Buffer Strip Width Guidelines

Function Description Width¹

1. Water Quality Protection
 2. Buffers, especially dense grassy or herbaceous buffers on gradual slopes, intercept overland runoff, trap sediments, remove pollutants, and promote ground water recharge. For low to moderate slopes, most filtering occurs within the first 10 m, but greater widths are necessary for steeper slopes, buffers comprised of mainly shrubs and trees, where soils have low permeability, or where NPSP loads are particularly high.
 3. 5 to 30 m
1. Riparian Habitat
 2. Buffers, particularly diverse stands of shrubs and trees, pro-

vide food and shelter for a wide variety of riparian and aquatic wildlife.

3. 30 to 500 m +
1. Stream Stabilization
 2. Riparian vegetation moderates soil moisture conditions in stream banks, and roots provide tensile strength to the soil matrix, enhancing bank stability. Good erosion control may only require that the width of the bank be protected, unless there is active bank erosion, which will require a wider buffer. Excessive bank erosion may require additional bioengineering techniques (see Allen and Leach 1997).
 3. 10 to 20 m
1. Flood Attenuation
 2. Riparian buffers promote floodplain storage due to backwater effects, they intercept overland flow and increase travel time, resulting in reduced flood peaks.
 3. 20 to 150 m
1. Detrital Input
 2. Leaves, twigs and branches that fall from riparian forest canopies into the stream are an important source of nutrients and habitat.
 3. 3 to 10 m