RIPARIAN MANAGEMENT FIELD KEY

FILTER STRIP WIDTH GUIDE	
Slope of Land Between activity and water body	**Recommended width of filter strip (slope distance)**
0 - 10 %	50 feet
11 - 100 %	50 ft + 2 ft for every 1% increase in slope over 10%

*For example, for a 27% slope the filter strip should be 84 feet wide (50 feet + (17 x 2 ft)) = 84 ft.

FILTER STRIP

- An area of land adjacent to a waterbody that acts to trap and filter out suspended sediment and chemicals attached to sediment before it reaches the surface water. Forest management activities are permitted in a filter strip as long as the integrity of the filter strip is maintained and mineral soils exposure is kept to a minimum.
- Filter strips should border and parallel the edge of all water bodies.
- Apply filter stripes independently of the width of the RMZ.

Minnesota Forest Resources Council

RIPARIAN AREA

The area of land and water forming a transition from aquatic to terrestrial ecosystems along streams, lakes and open water wetlands.

RIPARIAN MANAGEMENT ZONE (RMZ)

That portion of the riparian area where site conditions and landowner objectives are used to determine management activities that address riparian resource needs. It is the area where riparian guidelines apply.

RECOMMENDED RMZS FOR NON-TROUT WATER BODIES		EVEN-AGE MANAGEMENT			UNEVEN-AGE MANAGEMENT	
Water body	**Size**	**Recommended minimum**		**Adjacent area leave tree recommendation**	**RMZ width (feet)**	**Residual basal area (ft^2/acre)**
		RMZ width (feet)	**Residual basal area (ft^2/acre)**			
Non-trout streams (perennial and intermittent)	> 10 feet wide	100	25 - 80	5% patch	200	80
Non-trout streams (perennial and intermittent)	3 - 10 feet wide	50	25 - 80	5% patch	100	80
Non-trout streams (perennial)	< 3 feet wide	50	25 - 80	Not applicable	50	80
Non-trout streams (intermittent)	< 3 feet wide	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
Non-trout lakes and open water wetlands	≥ 10 acres	100	25 - 80	5% patch	200	80
Non-trout lakes and open water wetlands	< 10 acres	50	25 - 80	5% patch		

RECOMMENDED RMZS FOR DESIGNATED TROUT STREAMS AND LAKES (and their designated tributaries)		
Management objective	**Recommended minimum RMZ width (feet)**	**Recommended minimum residual basal area (ft^2/acre)**
Even-age management	150	60
Uneven-age management	200	80

DOCUMENTATION

It is acceptable to vary above or below recommended width and residual basal area guidelines, including those situations in which the management objective is to mimic natural processes. Landowner management objectives, long-term silvicultural goals, and management recommendations for the RMZ should be documented during the planning process.

July 2009

Situations where you might want to establish a **wider** RMZ and/or retain a **higher** level of residual basal area	**Things to Think About**	Situations where you might want a **narrower** RMZ and/or retain a **lower** level of residual basal area
• Much of the watershed has been cleared, roaded, or paved. • The watershed has been developed or cut reducing connectivity within the forest canopy.	**Conditions outside of the RMZ**	There are few road crossings, forest roads, or other impervious surfaces found within watershed and harvest area.
• Soils adjacent to waterbody are erodible and have low infiltration rates. • Slopes adjacent to waterbody are > 5%. • Bank stability is low (e.g., high banks present, bank overhangs waterbody).	**Threat of erosion**	• Soils adjacent to waterbody and have high infiltration rates. • Slopes adjacent to waterbody are < 5%. • Bank stability is high.
• No (or little) other vegetation or surface irregularities present within RMZ to trap sediment or to maintain infiltration rates. • To provide coarse woody debris and organic matter inputs (leaves, needles, bark, fruit) to waterbody.	**Other vegetation**	• Other vegetation or surface irregularities will be retained within RMZ to trap sediment or to maintain infiltration rates.
Windthrow is a concern (e.g., shallow rooting depth to water table, hard pan layer near surface, open exposure from the west or north, windthrow-prone species present).	**Windthrow**	• Windthrow is unlikely. • Salvage harvest of windthrow or damaged timber
• Little shading is present along the water's edge. • Harvest segment along water's edge > 600 feet. • Harvesting occurs on the south and/or west side of a waterbody. • Trout stream water is primarily from surface flow.	**Water temperature**	Harvesting occurs on the north and/or east side of a waterbody.
• Riparian area contains cultural resources, endangered, threatened, or special concern species or special wildlife habitat (e.g. Super-canopy trees especially pines, long-lived tree species, snags, conifer understory, mast trees and shrubs, and downed logs). • Growing white pine in the understory partial shade can reduce white pine blister rust and white pine weevil damage	**Important features**	Insect and/or disease problems are present
Harvest site has high visual quality sensitivity rating.	**Visual quality**	Harvest site has low visual quality sensitivity rating.