

FORESTRY FACTS



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Wisconsin's Forestry Best Management Practices for Water Quality Riparian Management Zones ... RMZs

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Riparian management zones (RMZs) are land and vegetation areas next to lakes and streams. Forestry practices in RMZs may need to be modified to protect water quality, fish and other aquatic resources.

RMZs help to:

- Filter sediment and nutrients from runoff.
- Allow water to soak into the ground.
- Stabilize streambanks and lakeshores.
- Shade streams.
- Provide food & habitat for aquatic organisms.

Important Definitions

To use best management practices (BMPs) for riparian management zones, you need to know a few important definitions.

Perennial streams flow throughout most (i.e., >50%) of the year. **Intermittent streams** flow only after rainfall or snowmelt and, therefore, are dry most of the year.

A stream is **navigable** if it has bed and banks, and it is possible to float a canoe or other small craft in the waterway on a regular reoccurring basis - even if only during spring runoff.

The **ordinary high-water** mark is the point on the bank or shore where the presence and action of the water is so continuous as to leave a distinct mark either by erosion, destruction of land vegetation, or other easily recognized characteristic.

Note: *Lakes and streams (perennial and intermittent) identified on current USGS topographical maps should be considered navigable although field checks are necessary to confirm. If you have a question, contact a Wisconsin DNR water management specialist.*

Existing Regulations

All timber harvesting practices next to lakes and navigable streams must be consistent with local county shoreland and wetland zoning ordinances. A special permit may be required to harvest next to lakes and navigable streams. When planning to harvest within the RMZ, contact your county zoning office.

BMPs for RMZs

There are three categories of riparian management zones for BMPs:

- Lakes and navigable perennial streams;
- Navigable intermittent streams; and
- Non-navigable streams.

BMPs Common to All RMZs

- ▲ Locate roads outside the RMZ unless necessary for stream crossings.
- ▲ Locate log landings outside the RMZ.
- ▲ Do not move slash into or pile slash within the RMZ. Keep slash out of lakes & streams and away from areas where it may be swept into the water.
- ▲ Minimize soil exposure and compaction to protect ground vegetation and duff layer.

Note: On **steep slopes** or on highly erodible soils, you should widen the RMZ.

BMPs for Lakes & Navigable Perennial Streams

*The RMZ for these waters is a strip of land running along the shoreline of lakes and on each side of streams. It begins at the ordinary high-water mark and extends a minimum of **100 feet** landward.*

- ▲ Don't operate wheeled/tracked harvest equipment within 50 feet of ordinary highwater mark except on roads or at stream crossings.
- ▲ Use selective harvesting and promote long-lived tree species appropriate to the site.
- ▲ Harvest intervals should be at least 10 years.
- ▲ When harvesting, leave at least 60 sq.ft. of basal area/acre in trees 5" DBH & larger, evenly distributed.
- ▲ Develop trees 12 inches DBH and larger.

BMPs for Navigable Intermittent Streams

The RMZ for these streams is a strip of land on each side of the stream, beginning at the ordinary high-water mark and extending a minimum of **35 feet** landward.

- ▲ Operate wheeled or tracked harvest equipment within 15 feet of the ordinary high-water mark only when ground is frozen or dry.
- ▲ Use selective harvesting and promote long-lived species appropriate to the site.
- ▲ Harvest intervals should be at least 10 years.
- ▲ When harvesting, leave at least 60 sq.ft. of basal area/acre in trees 5" DBH & larger, evenly distributed.

BMPs for Non-Navigable Streams

*Non-navigable streams are found in the field but may not show up on current maps. The RMZ for these streams is a strip of land on each side of the stream, beginning at the ordinary highwater mark and extending a minimum of **35 feet** landward.*

- ▲ Operate wheeled or tracked harvest equipment within 15 feet of the ordinary high-water mark only when the ground is frozen or dry.

Forestry Facts on BMPs are for information only. For details on specific BMPs and their implementation, see the BMP field manual, *Wisconsin's Forestry Best Management Practices for Water Quality*, DNR Pub. FR-093 2010.