





Department of Forest and Wildlife Ecology

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## Wisconsin's Forestry Best Management Practices for Water Quality Site Preparation and Tree Planting

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Site preparation prepares the land for planting, direct seeding and/or natural tree regeneration. Using machinery to prepare sites and plant trees often exposes soil. Therefore, you need to proceed carefully to avoid adverse impacts on water quality from these forestry practices.

Common site preparation techniques include scarifying, shearing, raking, disking and roller chopping. The technique used on your land should be based on specific site characteristics including soil, topography, vegetation, access and distance to surface waters.

Prescribed burning and various herbicides are also used to prepare sites for tree planting. The BMPs for these management tools are discussed in Forestry Facts No. 9, *Prescribed Burning and Wildfire*, and No. 10, *Chemicals*.

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.

## BMPs for mechanical site preparation and tree planting

- ▲ Avoid operating mechanical site-preparation and tree-planting equipment on slopes greater than 30 percent where the slopes drain directly into a lake or stream.
- ▲ Operate mechanical site-preparation and treeplanting equipment on the contour where necessary to minimize soil erosion into water bodies.
- ▲ Minimize raking in areas, or under conditions, in which soil could erode and enter lakes or streams. Two preferred practices are: (a) shearing and raking when soil is frozen; and (b) raking lightly to remove slash only.
- ▲ Suspend operations during wet periods if equipment begins to cause excessive soil disturbance that will increase erosion into water bodies.
- ▲ Deposit site preparation residues in stable locations outside riparian management zones.
- ▲ Use patch scarification or low-intensity prescribed burns on sites that have steep slopes, erodible soils or saturated soils, and on sites that drain to surface water.