

Invasive Species Prevention Measures for Woody Biomass Projects

MN DNR Division of Ecological and Water Resources

OVERVIEW

Minnesota DNR Operational Order 113 sets forth policy and procedures to prevent or limit the introduction, establishment and spread of invasive species and implement site-level management to limit the spread and impact of invasive species. This operational order applies to all DNR resource management activities by employees and non-DNR individuals or organizations on DNR-administered lands and public waters; AND activities the DNR regulates, permits, or funds (grants).

This document describes standard best management practices for all activities that involve intentional movement of vehicles, equipment, gear and/or other project-related materials onto or off of woody biomass project site(s). These practices must be considered during project planning and incorporated into the Harvest Implementation Plan and subsequent Service Contract(s) and implemented, as appropriate, before, during, and after actual project work.

Timing of the actual harvest of the woody biomass material (i.e. during frozen ground conditions and with adequate snow cover) may reduce the measures needed to prevent the spread of invasive species.

Appendix A is the list of invasive aquatic and terrestrial species from Operational Order 113 that are prohibited, regulated, restricted, considered a threat or are of concern to native plant communities in Minnesota.

STANDARD BEST MANAGEMENT PRACTICES

Intentional movement of woody biomass material:

1. Per MN Statutes Chapter 18, Sections 18.82, obtain a written permit to transport propagating parts of restricted noxious weeds in infested material or equipment by contacting the local weed inspector or county agricultural inspector for all counties affected. Currently listed Restricted Noxious Weeds are: 1) Common or European Buckthorn (*Rhamnus cathartica*); 2) Glossy Buckthorn (and all cultivars) (*Frangula alnus*); and 3) Multiflora Rose (*Rosa multiflora*). NOTE: For projects receiving woody biomass program grants, this will be done by the MN DNR Woody Biomass Project Coordinator.
2. Ensure all woody materials removed from the project site are secured before transport (e.g. truck is covered or invasive materials are wrapped). NOTE: This will be coordinated by the MN DNR Woody Biomass Project Coordinator and/or project manager in cooperation with the woody biomass transport operator(s).

Intentional movement of vehicles, light and heavy equipment (chainsaws, brush saw, trucks, tractors, ATV's, trailers, etc.) and personal gear (boots, clothing, personal protective equipment (PPE), Velcro straps, Kevlar chaps, backpacks/sprayers, utility bags, etc.) to/from project site(s):

1. Survey site(s) before harvest/management treatment, note/record locations of existing patches of terrestrial invasive species (see Appendix A) or insect or disease infestations,

- and either avoid moving through these patches, or treat them prior to moving through them.
2. Identify the cleaning site to be used to clean all vehicles, equipment and gear. Alert all parties involved in project activities. Treat the site as needed during and after project completion.
 3. Inspect all vehicles, equipment and gear and remove vegetation, soil, and organisms prior to entering and leaving site(s). Ensure items are free of visible plants/plant parts, seeds, mud, soil and animals, etc. Try to avoid trapping plant material when you close the car door.
 4. Use a stiff bristled brush, shovel, boot brush, power washer or air compressor, or other appropriate tool to remove potentially infested materials.
 5. For chainsaws, remove chain to clean out clutch and clean out saw carrier.
 6. Clean Velcro areas and straps on Kevlar chaps and backpack sprayers or other equipment, such as camera cases and tick chaps.
 7. When possible, designate specific vehicles, equipment and gear for use on uninfested vs. infested sites.
 8. Do not work under wet conditions to minimize rutting and other soil disturbances.
 9. Minimize number of access points to site(s).
 10. Minimize area of vegetation and soil disturbance with equipment by utilizing designated access roads and skid trails.
 11. Avoid working, parking, or storage in patches of invasive species. When unavoidable, treat area before using.
 12. Power spray vehicles and equipment after returning from a project site. Dry before next use if from worm-infested sites.
 13. On sites that are known to be infested with species such as garlic mustard, spotted knapweed, leafy spurge, etc (species with small seed that can collect on cloth material) wash clothing after work is complete.

Intentional movement of materials (soil, rock, gravel, straw, mulch, seed, plants, etc.) in the process of constructing or improving access roads or skid trails:

1. Inspect outside of transport equipment, storage containers and materials for visible presence of invasive species.
2. If possible, use seeding material, plants, fill, straw, gravel, and mulch that is certified as uninfested.
3. Monitor areas of soil disturbance and where materials listed above are added for evidence of invasive species germination or resprouting and treat if found.
4. Minimize the use of outside/offsite materials.

Procedures to minimize the risk of increasing the dominance of invasive species. In addition to those already listed above:

1. If working on multiple sites, work in uninfested sites first and end in infested sites. Clean equipment before moving between sites.
2. Treat invasive species stumps to avoid stump sprouting.
3. If possible work, on frozen ground and with adequate snow cover.
4. Minimize access roads, skid trails and staging areas.
5. Monitor access roads, skid trails, and staging areas for evidence of invasive species germination or resprouting and treat if found.
6. Use appropriate chemical, application rate, applicator, spray head and technique for targeted invasive species and avoid overspray on to non-target native species.
7. When practicable, stage woody biomass material on already disturbed site(s).

8. Reduce ground disturbance as much as possible during staging of woody biomass materials.
9. Re-seed with cover crop or treat areas that have exposed and disturbed soil immediately following harvest/removal.
10. Consider timing of project-related activities so that invasive species are not bearing seed/fruit.

Biomass Removal and Collection. In addition to those already listed above:

1. Ensure all materials removed from the site are secured before transport (truck is covered or invasive materials are wrapped, etc).
2. Be aware of and abide by all quarantines, regulations, and restrictions involving the transportation of regulated articles as defined by the current state and federal quarantines.