

Creating a culture of invasive species prevention

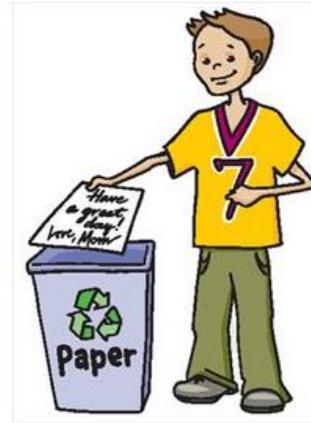


Laura Van Riper
Terrestrial Invasive Species Coordinator
Ecological and Water Resources Division
Minnesota Department of Natural Resources

Cultural Shifts



Cultural Shifts



Cultural Shifts

- Preventing the spread of invasive species during one's daily activities is a cultural change, much like getting people to buckle their seat belts or recycle.

Minnesota Department of Natural Resources

- Staff members work in the field and transition between sites with and without invasive species.
- Focus on preventing the spread of invasive species during the course of our work
 - Reduce impacts to natural resources
 - Prevention saves money that would be spent on treatments
 - Model behavior

Minnesota Department of Natural Resources

- In 2007, the DNR created a formal policy on invasive species prevention.
 - Operational Order 113
- Applies to all DNR resource management activities by DNR employees and activities DNR permits or funds (grants/contracts).

Approved by: /s/ Tom Landwehr, Commissioner Minnesota Department of Natural Resources		Date: 9 January 2013
		
Minnesota Department of Natural Resources		
Invasive Species		
Operational Order.....	113	
Policy Owner	Laura Van Riper, Terrestrial Invasive Species Coordinator, Division of Ecological and Water Resources	
Related Policies.....	Division policies (e.g., circular letters, directives) and guidelines	
Effective Date	9 January 2013	
Last Update	31 May 2007	
Next Review Date	2017	
Policy Statement		
Minnesota Department of Natural Resources (DNR) protects and manages the diverse natural resources of Minnesota. Because invasive species have the potential to adversely affect these natural resources, it is the DNR's policy to limit the introduction of invasive species onto DNR-managed lands and waters, limit their rate of geographical spread, and reduce their impact on high value resources. This operational order sets forth DNR policy and procedures to:		
<u>Prevent or limit the introduction, establishment and spread of invasive species.</u> Most of the Department's field-based inventory, management, and regulatory activities are potential pathways for the introduction or spread of invasive species. Movement of equipment, organisms, and organic and inorganic material are potential pathways. Each of these pathways must be considered and addressed where appropriate to reduce risk associated with invasive species movement.		
<u>Implement site-level management to limit the spread and impact of invasive species.</u> Invasive species are present in all types of habitats in the state. Many of the Department's field-based activities can potentially cause increases in invasive species abundance thereby negatively impacting a site. Site-level management includes planning, implementation and evaluation procedures that reduce impacts of invasive species and the risk of their spread.		
Detailed policies along with procedures and responsibilities are outlined below under categories of activity.		

DNR Invasive Species Op Order



PROCEDURES FOR INTENTIONAL MOVEMENT OF EQUIPMENT

(trucks, tractors, boats, off highway vehicles, nets, anchors, heavy equipment, tools, personal gear etc.)

- Before arriving at a work site, inspect for and remove all visible plants, seeds, mud, soil, and animals from your equipment.
- Before leaving a work site, inspect for and remove all visible plants, seeds, mud, soil and animals from your equipment.
- Before leaving an aquatic work site, drain water from any equipment, tanks, or water-retaining components of boats such as motors, live well, bilge, or transom wells onto dry land.

Culture of Invasive Species Prevention

- DNR has strived to make invasive species prevention part of its culture, similar to a culture of safety
- Discussed regularly
- Makes invasive species prevention part of the every day routine
- Op Order 113 provides the policy and guidance for this to happen



WORK. CLEAN. GO.

Give Invasive Species The Brush Off.

Help Prevent The Spread Of Invasive Plants And Animals.

- Clean your gear before entering and leaving the recreation site.
- Remove mud and seeds from clothes, pets, boots, gear and vehicles.
- Burn only local or certified firewood.
- Use only local or certified weed free hay.
- Stay on designated trails.

Play Clean Go

STOP INVASIVE SPECIES IN YOUR TRACKS.

PlayCleanGo.org



Culture of Invasive Species Prevention

- Formed the Invasive Species Op Order 113 Committee to:
 - Give staff the resources they need
 - Create new resources
 - Collect feedback from staff
 - Try various strategies to increase invasive species prevention

New Employee Orientation

Invasive Species Prevention at Minnesota Department of Natural Resources

"Come Clean, Leave Clean"



What is an invasive species? Invasive species are species that are not native to Minnesota and cause economic or environmental harm or harm to human health.

Why should I be concerned about invasive species? Invasive species threaten our natural resources. Emerald ash borer infestations can kill 99% of ash trees in an area. Zebra mussels kill native mussels and foul beaches. Eurasian watermilfoil forms dense mats in lakes, interfering with recreation and crowding out native plants. Buckthorn forms impenetrable thickets in forests, interfering with recreation and negatively impacting the ecology. Visit www.mndnr.gov/invasives to learn more.

What are my responsibilities as a DNR employee? The DNR has a policy called Operational Order 113 that outlines DNR policies and procedures to:

- Prevent or limit the introduction, establishment, and spread of invasive species
- Implement site-level management to limit the spread and impact of invasive species



A publication of the Minnesota
Department of Natural Resources

Standard DNR Practices to Prevent the Spread of Invasive Species "Come Clean, Leave Clean"



Before you arrive at a worksite and before you leave:

- ✓ Inspect all equipment (boats, trucks, gear, machinery, etc.) for and remove all visible plants, seeds, mud, soil, and animals from your equipment, boots, etc.
- ✓ Drain water from any equipment, tanks, or water-retaining components of boats such as motors, live well, bilge, or transom wells onto dry land.
- ✓ After working on infested waters or waters known to harbor pathogens of concern, clean and dry equipment prior to using in locations not known to be infested with species or pathogens present at the last location visited.
- ✓ Check work animals for plant fragments, burrs, seeds, mud, and soil and remove from paws and fur.

Day to Day Invasive Species Prevention

- ✓ Plan your day. Visit the highest quality sites (least invasives) first and save the most invaded for last.
- ✓ Minimize disturbance (stay on trails, prevent rutting, etc.)
- ✓ Consider whether the source of materials is Invasives-free.
- ✓ When loaning out equipment, loan it out clean. Expect that it will be returned clean.
- ✓ Talk with your supervisor about where you may encounter invasive species and what types of invasive species prevention measures you will need to do.
- ✓ Look at your Division's Op Order 113 Division Guidelines. Be sure to read the standard protocols and any protocols that apply to activities you do.

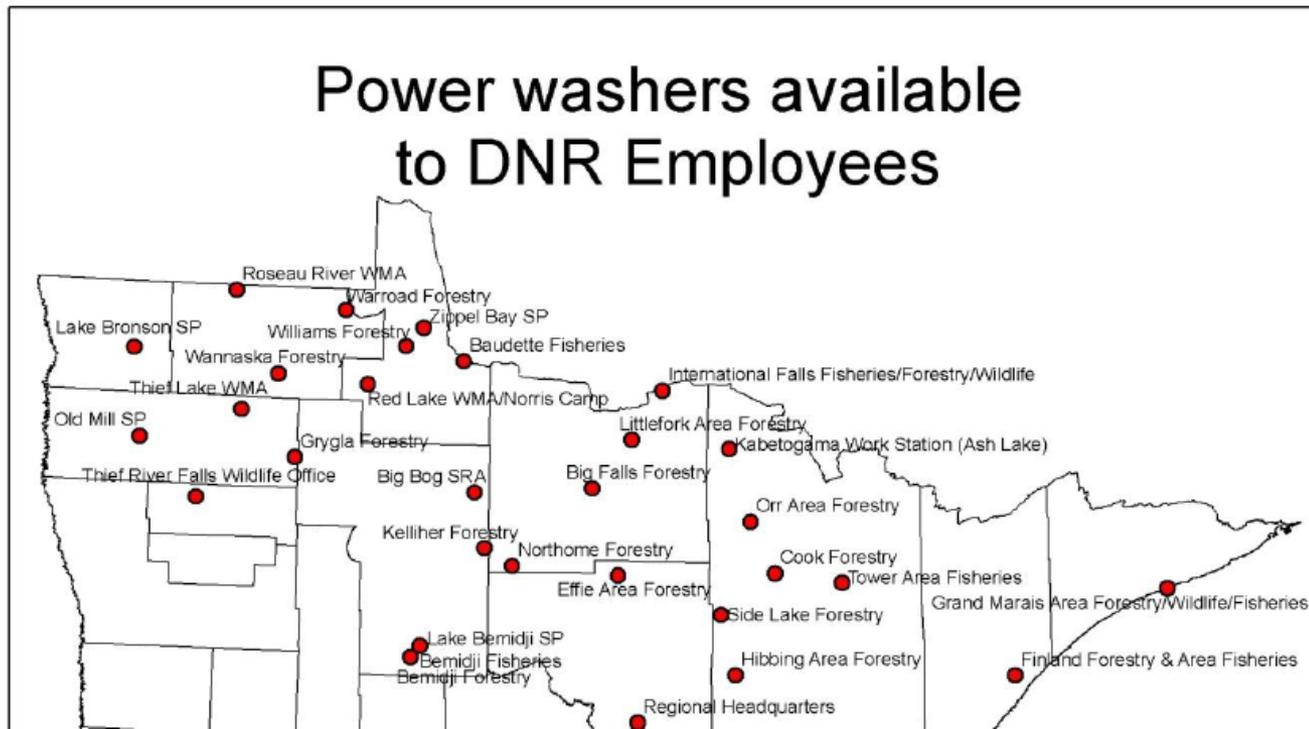


One-stop internal website with information

- Division Guidelines
- Educational Materials
- Pressure Washer Locations
- Contract, Grant, and Permit Language
- Invasive Species Identification and Info
- New Invasives to the Region
- Locations of Invasives in Minnesota
- Management Information
- Prevention
- Funding Opportunities
- Op Order 113 Contacts
- Links

Make needed equipment readily available

- Boot brushes in all DNR vehicles
- Power washers at many DNR offices
 - List of available power washers on-line



Standardized contract language

> DNRNet Home > Ecological and Water Resources > Invasive Species >

Invasive Species Contract, Grant, and Permit Language

Standard contract language related to invasive species prevention has been developed that can be used in contracts, grants, and permits. Language can be modified to change "contractor" to "grantee" or "permittee" if needed.

The following is standard language that should be in the template of service contracts:

[Contract Manager's Note: use this standard invasive species prevention language or insert language as directed by your division.]

The DNR requires active steps to prevent or limit the introduction, establishment, and spread of invasive species during contracted work. The contractor shall prevent invasive species from entering into or spreading within a project site by cleaning equipment prior to arriving at the project site.

If the equipment, vehicles, gear, or clothing arrives at the project site with soil, aggregate material, mulch, vegetation (including seeds) or animals, it shall be cleaned by contractor furnished tool or equipment (brush/broom, compressed air or pressure washer) at the staging area. The contractor shall dispose of material cleaned from equipment and clothing at a location determined by the DNR Contract Administrator. If the material cannot be disposed of onsite, secure material prior to transport (sealed container, covered truck, or wrap with tarp) and legally dispose of offsite.

[Contract Manager's Note: delete the following paragraph if the waters of the state are not within the contract limits.]

The contractor shall ensure that all equipment and clothing used for work in infested waters has been adequately decontaminated for invasive species (ex. zebra mussels) prior to being used in non-infested waters. All equipment and clothing including but not limited to waders, tracked vehicles, barges, boats, turbidity curtain, sheet pile, and pumps that comes in contact with any infested waters must be thoroughly decontaminated.

[Contract Manager's Note: Determine if additional invasive species prevention conditions as required by the type of project. e.g. using weed-free gravel, hot-water pressure washing of boats, etc. If yes, see additional information below.]

Additional invasive species language if needed:

If additional invasive species prevention conditions are required by the type of project. e.g. using weed-free gravel, hot-water pressure washing of boats, etc. use additional invasive species prevention conditions as required by the type of project.

- Additional contract language for AQUATIC SITES [PDF](#) (Word file [DOC](#))
- Additional contract language for TERRESTRIAL SITES [PDF](#) (Word file [DOC](#))

Developing on-line trainings



Work.Clean.Go.

- Consistent messaging for DNR staff and other field workers



WORK. CLEAN. GO.

Give Invasive Species The Brush Off.

**Help Prevent The Spread
Of Invasive Plants And Animals.**

- Clean your gear before entering and leaving the recreation site.
- Remove mud and seeds from clothes, pets, boots, gear and vehicles.
- Burn only local or certified firewood.
- Use only local or certified weed free hay.
- Stay on designated trails.



**STOP INVASIVE SPECIES
IN YOUR TRACKS.**

PlayCleanGo.org



Dashboard messages and Employee News articles



Did you know?

Share a tip



Did you know that gypsy moth females will lay their eggs on anything sitting outdoors? To comply with the new quarantine in Cook and Lake Counties, carefully inspect your things after visiting the North Shore and remove any egg masses found. Don't take the moth home with you!!

[Learn more »](#)

Have a great day!

Survey staff for input and to track changes

- In 2010 DNR staff were surveyed on their invasive species prevention efforts and their awareness and implementation of Invasive Species Op Order 113.
- The results provided *ideas* and *management support* for increased efforts on invasive species prevention within the DNR.
- A 2013 survey showed that we have improved our efforts to prevent the spread of invasive species during the course of our work.

Survey staff for input and to track changes

- In 2013, most staff are familiar with Op Order 113 and what it requires of them in their work.
- Many survey categories showed improvement in awareness and implementation of Op Order 113.
- Staff are regularly cleaning their vehicles, equipment, and boots.



Next steps

- Issues of time and lack of clarity of work priorities continue to be problems.
 - *Action:* Staff and supervisors can work together to clarify work priorities and how to incorporate Op Order 113 in daily activities.
- Some staff are still lacking access to cleaning equipment and supplies.
 - *Action:* Staff and supervisors can discuss cleaning needs and determine where there is cleaning equipment available and provide equipment where it is lacking.

Next steps

- Working with contractors and vendors can be improved.
 - *Action:* Staff can be sure to use appropriate invasive species language in grants, permits, and contracts.
 - *Action:* Staff can ensure vendors are informed of invasive species prevention actions and are in compliance with contract specifications on all DNR projects.
- Staff are interested in training in invasive species identification and equipment cleaning methods.
 - *Action:* Continue to work with the Regional Invasive Species Teams to identify needs and opportunities for trainings. Publicize training opportunities and create on-line tools.

What has worked for you?

- What has worked in your organization to increase invasive species prevention efforts?



Contact: Laura Van Riper, MN DNR
Laura.Vanriper@state.mn.us