

DEQ Procedures for Decontamination of Monitoring Equipment

Invasive species are a serious ecological and economic threat to Idaho. Monitoring activities have the potential to spread non-native noxious weeds, pathogens, and exotic flora and fauna among water bodies. Therefore, DEQ has instituted decontamination procedures to prevent the spread of invasive species. These procedures must be followed by all DEQ personnel monitoring surface waters. Monitoring crews should be familiar with the risks of invasive species and should be trained on DEQ's decontamination procedures. Proper sanitation and increased awareness of the risk of invasive species will help to prevent DEQ from spreading these pests.

The following procedures shall be included in all surface water monitoring activities, regardless of location or frequency. They shall be performed after every outing, no matter when the next outing is planned.

Vehicles:

A vehicle can act as a vector for noxious weeds and other invasive plants. All vehicles used for monitoring activities shall be inspected before going into the field and between sites. Any attached plant material shall be removed immediately to prevent transfer. Vehicles shall be periodically washed at commercial car wash facilities. Keeping vehicles and equipment clean and free of mud and debris will aid in preventing the spread of invasive species.

Boats and Rafts:

Monitoring of lakes, reservoirs, and large rivers requires the use of boats and whitewater rafts. Boats and rafts have the potential to act as vectors for aquatic nuisance species (ANS) as well as terrestrial invasive species. It is not always practical to allow boats and/or rafts to dry completely between sites; therefore, it is essential that all boats and rafts used for monitoring are thoroughly cleaned and decontaminated following monitoring activities and before travel to another site.

1. Prior to leaving a site, inspect the boat and trailer and clean off any plant and animal material. Drain all bilge water or live wells in the boat. Inspect, clean, and handpick plant and animal remains from vehicle, boat, oars/paddles, anchors and anchor lines, motor, and trailer. Inspect and remove any remnants of vegetation or animals prior to leaving the site. Drain or otherwise remove any standing water from the boat and trailer.
2. Before moving to the next site, wash the boat and trailer at a self-serve (coin-operated) car wash facility until it is thoroughly clean (hot water, high pressure rinse, no soap). Give extra care to laces, anchor lines, and other small spaces where organisms could hide. Allow boats and gear to air-dry overnight.
3. After being washed boats shall again be thoroughly inspected; including running your hands up and down the hull and feeling all around for any attached organisms. If necessary, re-wash and re-inspect the boat. Be especially aware of small mussels that can simply feel like small rough spots on the hull, motor mounts, trailer, etc. These could be Dreissenid mussels (Zebra/Quagga) that are particularly dangerous ANS. If you find something that appears to be a mussel, capture it in plastic bag or jar and give it to your supervisor. Supervisors should forward such samples to Mark Shumar, State Technical Services Office of DEQ, as soon as possible.

Boats and rafts shall always be properly decontaminated and cleaned before being stored or parked after every use, following the procedures listed above, regardless of the next planned field outing.

Waders, nets, and other monitoring equipment:

Many ANS and other invasive species can be transferred via wading gear and other sampling equipment. Nets, felt-soled wading shoes, and waders can provide conditions and habitat that will allow organisms to survive between sampling events. DEQ staff shall use a combination of proper sanitation and chemical decontamination to prevent survival and subsequent transfer of invasive species on monitoring gear.

Equipment needed:

- 5-gallon bucket with lid (or comparable container) of Sparquat 256 solution (4-6 ounces of Sparquat Germicidal Cleaner per gallon of water) (ISDA Registration No.: 19993 with a product registration expiration date:12/31/2009)
- 5-gallon bucket with lid (or comparable container) of clean rinse water
- Stiff-bristled brush
- Latex gloves
- Eye protection

Procedure:

1. Before leaving a site, use a -bristled brush to remove mud, plant material, and debris from boots, nets, and any other monitoring gear that has come in contact with the stream.
2. Remove wading gear immediately after exiting the stream and make sure gear does not come in contact with other equipment. If you use separate wading boots, remove the insoles from the boots (these procedures also apply if wet-wading in shoes or sandals).
3. It is recommended that you wear latex gloves and eye protection when using Sparquat 256. This product is an industrial cleaner and standard safety precautions should be followed.
4. Place waders, boots and insoles, sandals, etc. and any other sampling equipment that has come in contact with the stream into the Sparquat 256 solution for a minimum of 10-15 minutes (the solution may be reused several times).
5. Remove the gear from solution and inspect it to make sure all organisms have been removed.
6. Rinse by immersing and agitating the gear in the bucket of clean rinse water. Do not use stream water to rinse gear or you may reintroduce organisms.
7. Do not discard the Sparquat 256 solution or the rinse water in the field; dispose of the liquid down a drain that is routed to a wastewater treatment plant.

Use waders with attached boots whenever possible (as opposed to stocking foot waders with separate boots), as organisms can easily get trapped in laces and inside of boots. In addition, it is preferred that personnel do not use boots with felt soles.

Wading gear and monitoring equipment shall always be properly decontaminated and cleaned after every use, before being stored, following the procedures listed above, regardless of the next planned field outing.