

## **Western Regional Panel Guidance to Prevent the Spread of AIS through Field Gear**

The Western Regional Panel of the Aquatic Nuisance Species Task Force has developed this general guidance to help professional field staff prevent the spread of aquatic invasive species (AIS) during work. Regulations and protocols vary by state; check with local or agency AIS specialists to confirm specific regulations and procedures.

AIS can be spread among lakes, streams and coastal areas by equipment, clothing, or vehicles that come in contact with contaminated water and then transported to an uncontaminated water body. During recreational or work activity, any equipment that contacts water, such as boats, paddles, lines, trailers, vehicles, food coolers, water bottles, water quality testing equipment, electro-shocking equipment, and nets, may transport AIS. Clothing worn in water, including full waders, hip waders, wading boots, wading shoes, sandals, and other apparel, may also transfer AIS. In western North America, AIS of particular concern include dreissenid mussels, New Zealand mudsnails, Asian clam, whirling disease, didymo, hydrilla, Chytrid fungus, and golden algae. To address the potential spread of AIS through field work, the Western Regional Panel of the Aquatic Nuisance Species Task Force recommends the following:

*Prevent/Minimize Contact:* Field staff should be aware of infestations in their management areas and assess whether in-water work is necessary. If in-water work cannot be avoided, identify ways to minimize contact with water, plants, or sediments, and follow the “Dedicate”, “Clean”, and “Decontaminate” protocols below. Information on distribution of some AIS can be found at: <http://nas.er.usgs.gov/> ; contact your local or agency AIS specialist for additional information. If an infestation is questionable, treat as if it is infested.

*Dedicate:* When working in infested water bodies, field staff should maintain unique sets of equipment and clothing dedicated to those to prevent the transfer of AIS to uncontaminated areas. Dedicated equipment does not need to be cleaned or decontaminated after each use, but must be labeled and kept isolated to avoid cross-contamination with other equipment. Dedicated equipment must be decontaminated prior to use in another water body.

*Clean:* Before leaving all waters, field staff should visually inspect all clothing and equipment for any foreign material, including plants, animals, or sediment. All material should be removed and properly disposed of in an upland facility. All equipment should be rinsed with potable water before entering another water body. Always re-inspect clothing and gear before entering another water body in case it was not properly cleaned after last use.

*Decontaminate:* Field clothing, equipment, and vehicles that have been used in a known infested water body should be cleaned as above AND then be decontaminated using a temperature or chemical treatment prior to use elsewhere. Recommended treatments vary by locations and species and should be obtained from local or agency AIS specialists, as follows:

- **Alaska**, Tammy Davis, Alaska Department of Fish and Game, [tammy.davis@alaska.gov](mailto:tammy.davis@alaska.gov), (907)465-6183, state AIS information including decontamination guidance <http://www.adfg.alaska.gov/index.cfm?adfg=invasive.prevention>, call 1-877-INVASIV for information or to report invasive species.
- **Arizona**: Tom McMahan, Arizona Game and Fish Department, [tmcmahon@azgfd.gov](mailto:tmcmahon@azgfd.gov), (623) 236-7271, required decontamination protocol [www.azgfd.gov/ais](http://www.azgfd.gov/ais), State AIS information: [www.azgfd.gov/ais](http://www.azgfd.gov/ais)

- **California:** Martha Volkoff, California Department of Fish and Wildlife, [mvolkoff@dfg.ca.gov](mailto:mvolkoff@dfg.ca.gov), (916) 651-8658, required decontamination protocol  
<https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=43333>, state AIS information  
<http://www.dfg.ca.gov/Invasives/>
- **Colorado:** Elizabeth Brown, Colorado Parks and Wildlife, [Elizabeth.brown@state.co.us](mailto:Elizabeth.brown@state.co.us), (303) 291-7295, required decontamination protocol under scientific collection permit, recommended protocol for all anglers, recreational and professional users, mandatory boat inspection and decontamination <http://wildlife.state.co.us/Fishing/Management/Pages/Management.aspx>
- **Hawaii:** Jono Blodgett, Department of Land and Natural Resources, [jb88@hawaii.edu](mailto:jb88@hawaii.edu), (808) 256-3095, state website forthcoming
- **Idaho:** Amy Ferriter, Idaho State Department of Agriculture, [Amy.Ferriter@agri.idaho.gov](mailto:Amy.Ferriter@agri.idaho.gov), (208) 332-8686, required decontamination protocol [http://www.deq.idaho.gov/media/457155-decontamination\\_procedures.pdf](http://www.deq.idaho.gov/media/457155-decontamination_procedures.pdf), state AIS information  
<http://www.agri.idaho.gov/Categories/Environment/InvasiveSpeciesCouncil/indexInvSpCouncil.php>
- **Kansas:** Jason Goeckler, Kansas Department of Wildlife, Parks and Tourism, [Jason.goeckler@ksoutdoors.com](mailto:Jason.goeckler@ksoutdoors.com), (620) 342-0658, required decontamination protocol  
<http://www.kdwpt.state.ks.us/index.php/news/Services/Education,-Exhibition,-Collecting,-and-Salvage-Permits>, state AIS information [protectkswaters.org](http://protectkswaters.org).
- **Montana:** Allison Begley, Montana Fish, Wildlife, and Parks, [abegley@mt.gov](mailto:abegley@mt.gov), (406) 444-1267, decontamination is required under collection permit, contact above for protocol, state AIS information <http://fwp.mt.gov/fishing/guide/ANS/default.html>
- **Nebraska:** Karie Decker, Nebraska Cooperative Fish and Wildlife Research Unit, [invasives@unl.edu](mailto:invasives@unl.edu), (402) 472-3133, required decontamination protocol  
<http://snr.unl.edu/invasives/pdfs/Nebraska%20AIS%20Decontamination%20Protocol%20April%202011.pdf>, state AIS regulations <http://snr.unl.edu/invasives/boater.htm>
- **Nevada:** Karen Vargas, Nevada Department of Wildlife, [kvargas@ndow.org](mailto:kvargas@ndow.org), (775) 588-1532, <http://ndow.org/>
- **New Mexico:** New Mexico Department of Game and Fish, (505) 476-8000
- **North Dakota:** Fred Ryckman, North Dakota Game and Fish, [fryckman@nd.gov](mailto:fryckman@nd.gov), (701) 654-7503, state AIS information <http://gf.nd.gov/fishing/aquatic-nuisance-species>
- **Oklahoma:** Curtis Tackett, Oklahoma Department of Wildlife Conservation, [ctackett@odwc.state.ok.us](mailto:ctackett@odwc.state.ok.us), (405) 521-4623
- **Oregon:** Rick Boatner, Oregon Department of Fish and Wildlife, [rick.j.boatner@state.or.us](mailto:rick.j.boatner@state.or.us), (503) 947-6308, recommended protocol for all anglers, recreational and professional users, mandatory boat inspection and decontamination at roadside inspection stations  
[http://www.dfw.state.or.us/conservationstrategy/invasive\\_species/quagga\\_zebra\\_mussel.asp](http://www.dfw.state.or.us/conservationstrategy/invasive_species/quagga_zebra_mussel.asp)
- **South Dakota:** Mike Smith, South Dakota Department of Game, Fish and Parks, [mikejo@state.sd.us](mailto:mikejo@state.sd.us), (605) 223-7706. No required decontamination protocols, state AIS information <http://gfp.sd.gov/wildlife/nuisance/aquatic/>
- **Texas:** Earl Chilton, Texas Parks and Wildlife Department, [earl.chilton@tpwd.state.tx.us](mailto:earl.chilton@tpwd.state.tx.us), (512) 389-4652
- **Utah:** Larry Dalton, Utah Division of Wildlife Resources, [larrydalton@utah.gov](mailto:larrydalton@utah.gov), (801) 652-2465, required decontamination protocol [http://wildlife.utah.gov/mussels/PDF/decon\\_protocol.pdf](http://wildlife.utah.gov/mussels/PDF/decon_protocol.pdf), state AIS information <http://wildlife.utah.gov/dwr/invasive-mussels.html>
- **Washington,** Jesse Schultz, Washington Department of Fish and Wildlife, (360)902-2184, [Jesse.Schultz@dfw.wa.gov](mailto:Jesse.Schultz@dfw.wa.gov), Intra-agency required decontamination protocols:

<http://www.invasivespecies.wa.gov/documents/WDFW%20invasive%20species%20management%20protocols.pdf>, state AIS information <http://wdfw.wa.gov/ais/>

- **Wyoming:** Beth Bear, Wyoming Game and Fish Department, [Beth.Bear@wyo.gov](mailto:Beth.Bear@wyo.gov), (307) 745-5180 ext. 256, protocol forthcoming, state AIS information <http://wgfd.wyo.gov/web2011/fishing-1000206.aspx>

Please submit updates to the Western Regional Panel:

- Contact for each state/agency: *Name, phone number, email*
- Required decontamination protocol: *y/n*
- HotLink for decontamination information:
- HotLink for state AIS program/requirements:

*Report:* If you find AIS at a new or unreported site, please contact your state AIS coordinator or AIS hotline, as referenced above.

More information about decontamination and sampling protocols can be found at:

- Comparisons of disinfection protocols  
[http://www.fs.usda.gov/Internet/FSE\\_DOCUMENTS/stelprdb5373422.pdf](http://www.fs.usda.gov/Internet/FSE_DOCUMENTS/stelprdb5373422.pdf)
- Bureau of Reclamation Equipment Inspection and Cleaning Manual  
<http://www.usbr.gov/mussels/prevention/docs/EquipmentInspectionandCleaningManual2012.pdf>
- Sea Grant Publication on New Zealand Mudsnaills and gear decontamination  
<http://seagrant.oregonstate.edu/sppubs/onlinepubs/g10001.pdf>
- Invasive Mussel Decontamination Research  
<http://digitalscholarship.unlv.edu/thesesdissertations/1008/>
- Summary of AIS Decontamination Criteria and Literature up to 2009: Request from [Allen.Pleus@dfw.wa.gov](mailto:Allen.Pleus@dfw.wa.gov)
- Recommended Uniform Minimum Protocols and Standards for Watercraft Interception Programs for Dreissenid Mussels in the Western United States, Prepared for the Western Regional Panel on Aquatic Nuisance Species  
<http://www.100thmeridian.org/Recommended-Protocols-and-Standards-for-Watercraft-Interception-Programs-for-Dreissenid-Mussels-in-the-Western-United-States.pdf>
- Hazard Analysis and Critical Control Points information from the Aquatic Nuisance Species Task Force  
<http://anstaskforce.gov/haccp.php>