Fisheries Staff Biosecurity and Disinfection Plan for Field Work.

The guidelines below are designed to provide direction to fisheries professionals working in Maine's public waters in order to minimize the potential for spread of aquatic invasive species. The guidelines have been written to separate aquatic plants, aquatic animals, and aquatic pathogens. Biosecurity is defined as, "practical steps that can be taken to minimize the spread of unwanted organisms."

- 1. Procedures to minimize the spread of aquatic plants.
 - a. Vehicles, ATV's, snowmobiles- visual inspection with hand removal of plants before leaving boat loading/unloading area.
 - b. Boats, trailers- remove drain plug and drain bilge water from boats, visual inspection with hand removal of plants before leaving boat loading/unloading area.
 - c. Personnel- visual inspection with hand removal of plants before leaving boat loading/unloading area.
 - d. Equipment- same as above.
 - e. Nets-aquatic plants must be removed from nets before they are moved between waters.
 - f. Reporting Requirements- Aquatic plants of unknown species or plants known to be aquatic nuisance species should not be transported unless placed in a sealed container. Small specimens may be transported to the Maine Department of Environmental Protection for species identification (DEP contact: John McPhedran (207) 287-2813).

- 2. Procedures to minimize the spread of aquatic animals.
 - a. Vehicles, ATV's, Snowmobiles- visual inspection and removal of all visible organisms and mud. Use lake, stream water at loading/unloading facility to rinse equipment. Trucks, ATV's, snowmobiles should be washed at car wash facilities or at the designated wash station at department offices. Washing frequency should be reasonably periodic.
 - b. Boats, trailers- visual inspection and removal of all visible organisms and mud. Use lake, stream water at loading/unloading facility to rinse equipment. Drain plug should be removed and bilge water drained. Boats and trailers can be washed at car wash facilities or at designated wash stations at department offices. Washing frequency should be reasonably periodic.
 - c. Personnel- personal equipment should be rinsed of all mud and aquatic debris. Boots/waders/gloves should be brushed clean of visible aquatic mud and debris.
 - d. Equipment
 - i. Nets- rinsed and soaked in salt brine (3%) overnight to destroy freshwater aquatic organisms. When possible, nets are to be cleaned, brined, rinsed, and dried in sunlight between uses.
 - ii. Containers- rinsed and wiped clean of mud and aquatic debris.
 - iii. Electronic equipment- carefully wiped clean of mud and aquatic debris.
 - e. Reporting Requirements- Unknown specimens and known aquatic invasive species should be transported in sealed containers for identification. Identification of invasive aquatic species should be reported to Maine Department of Inland Fisheries & Wildlife (MDIF&W contact: John Boland (207) 287-5261.)

3. Procedures to minimize the spread of aquatic pathogens

Purpose of Procedure: MDIF&W personnel working with aquatic organisms in state waters should maintain a high standard of biosecurity. Preventing the spread of aquatic invasive species and diseases of aquatic animals amongst state waters is a directive of the highest priority. A disinfecting area should be established at each office. The disinfecting area needs to have an outside water faucet and an adequate length of garden hose with sprayer. Ideally, the area should have excellent drainage or percolation.

Equipment needed:	1 large (40+ gal.) trash can
	Large stiff bristle brush
	Spray bottle
	Nolvasan disinfectant or quaternary ammonia disinfectant
	Rubbing alcohol
	Power washer
	A container large enough to hold a trapnet.

- a. Trailers, ATV's Snowmobiles- no specific disinfection suggested at this time.
- b. Boats- no specific disinfection suggested at this time.
- c. Personnel- All field equipment should be cleaned & disinfected before use between waters. Disinfection for most equipment is accomplished with a 2oz. Nolvasan/gallon water solution in the large trash can. A chlorine bleach solution of 250 ppm may also be used. Quaternary Ammonia disinfectant can also be used Equipment that comes in constant contact with stream water, such as waders, dip nets, seines, gloves, live cars, shocker wand and tail, fish boards, etc., should be allowed to set in solution for 10 minutes then rinsed thoroughly. Delicate equipment, such as electronic scales, conductivity meters, thermometers, etc., should be sprayed with alcohol and allowed to air dry. Again, be sure all equipment is rinsed thoroughly!
- d. Equipment- same as above
- e. Hatchery- Equipment taken into a MDIF&W fish hatchery will be cleaned and disinfected before use in the hatchery. Equipment stored at MDIF&W fish hatcheries will be cleaned and disinfected before it is stored.
- f. Reporting Requirements-fish encountered with lesions of reportable pathogens, or unknown pathogens should be preserved in 10% buffered formalin for storage or sent for immediate necropsy to the MDIF&W Fish Health Laboratory. Fish with obvious signs of clinical disease should be disposed of on land, rather than returned to the water to spread the pathogen.

Questions regarding proper cleaning and/or disinfection of field equipment should be addressed with the equipments manufacturer.

MAINE STATUTES

The "Invasive Aquatic Plants" provisions are codified in a number of places in Maine Revised Statutes Annotated:

<u>5 MRSA 12004-D(6)</u> -- Interagency task force expenses

12 MRSA 7791 (1-B) -- "aquatic plant" and (3-A)("invasive aquatic plant"

<u>12 MRSA 7794-B</u> -- Lake and river protection sticker

<u>38 MRSA 7794-C</u> lake and river protection sticker required

<u>12 MRSA 7801(37)-(39)</u> -- Failure to display lake and river protection sticker; launching a contaminated water craft, and operating a watercraft in a quarantined area

12 MRSA 7806 -- Lake and river protection fund

<u>38 MRSA 410-N</u> -- Aquatic nuisance species control

<u>38 MRSA 419-C</u> -- Prevention of the spread of invasive aquatic plants

<u>38 MRSA Chapter 20-A</u> -- Program to prevent infestation of and to control invasive aquatic plants

<u>38 MRSA 20-B</u> -- Invasive aquatic plants and nuisance species control

Amendments from the 2003-2004 legislative session:

<u>Chapter 627. An Act to Amend the Laws Regarding Invasive Aquatic Species</u> (effective July 30, 2004)

Chapter 655. An Act to Revise the Fish and Wildlife Laws to Complement the Recodification of those laws (IN PART) (effective April 22, 2004)

Reference:

<u>Chapter 136. An Act Regarding the Development and Implementation of an Eradication Plan</u> <u>for Invasive Aquatic Plants</u> (effective September 13, 2003).

<u>Chapter 434. An Act to Prevent Infestation of Invasive Aquatic Plants</u> (effective June 20, 2001)

Chapter 722, An Act to Prevent the Spread of Invasive Aquatic Plants (effective April 14, 2000).

The "Chapters" are in the form that a bill is enacted and signed. They contain temporary provisions, such as report and budget provisions, which are not codified into MRSA.