

# Aquatic Invasive Species Technician: Evaluation of Boat Cleaning Technologies



**Dates:** Summer 2020. Start/end dates negotiable, with potential for extension into fall.

**Location:** Roscommon, Michigan

## Position/Project Goal:

Provide a foundation to inform relevant managers and stakeholders about the benefits and potential advantages of different types of boat washers for both decontamination efficacy and boater/angler outreach.

## Position/Project Summary:

Preventing introductions and limiting the spread of aquatic invasive species (AIS) are two of the goals of Michigan's AIS State Management Plan and are a primary focus for this project. With over 750,000 registered boats in Michigan, recreational boating remains an important pathway for AIS prevention. Boat washers for AIS decontamination continue to gain popularity in Michigan with lake users, lake associations, and organizations involved in AIS outreach. With this increased popularity comes an increase in methods and tools for implementing boat washers. There are currently questions about the efficacy of systems that use heated and pressurized water to decontaminate boats as well as waterless units such as those from CD3 Waterless Cleaning Systems. This position will implement a project to provide scientific and Michigan specific data to help answer questions about which type of washers are best for a given scenario or location and provide some baseline information about the overall usefulness of boat washers for both AIS decontamination and boater/angler outreach.

More specifically, this position and project will compare the effectiveness of two types of boat cleaning stations: 1) boat cleaning stations using heated pressurized water (sometimes referred to as "boat washes"); and 2) waterless boat cleaning stations that use compressed air, vacuums, and hand tools (such as CD3 units. See [www.cd3station.com](http://www.cd3station.com) for more information). More specifically, both types of washers will be studied for:

- AIS decontamination effectiveness (ability to remove or kill AIS on boats, trailers and gear)
- Boater/angler outreach effectiveness (ability to change behaviors and raise awareness)
- Cost effectiveness (purchase price, maintenance costs, operational costs)

**Position Description:** The project technician will be primarily responsible for project implementation to include study areas on decontamination effectiveness, outreach effectiveness, and cost comparisons. The project coordinator (Kevin Walters, EGLE) and principal investigator (Dr. Jo Latimore, MSU) will primarily be responsible for project administration, study design, and interpretation of results.

Activities may include:

- Conducting a controlled comparative study of decontamination effectiveness of boats fouled with AIS (or stand-in organisms, for example, native plants morphologically similar to invasive species) for both types of cleaning stations;
- Observing and interacting with users of both types of cleaning stations, with data collected including frequency and duration of use, and type of use (for example, are boaters washing their boats or using the washers for other purposes, such as car washing or disposing of litter). Data will also be collected from the cleaning stations themselves (hours in use, etc.), when possible, to quantify use;
- Survey boaters to determine their understanding of AIS, the purpose and use of the cleaning stations, and willingness to use them;
- Compile data on installation and maintenance costs for both types of cleaning stations;
- Provide support for data analysis from this project to the project coordinator and principal investigator;

- Partner and maintain a working relationship with the [MSU Mobile Boat Wash](#) crew, Higgins Lake Foundation, and Michigan Dept. of Natural Resources staff at Higgins Lake for use and access to their boat washes;
- Work with the MSU Mobile Boat Wash crews to deliver AIS prevention and decontamination messaging at boat wash events throughout the state as time allows.

**Qualifications:** Degree or coursework in aquatic ecology, biology, and/or natural resources. Available to work most Wednesdays through Sundays, to coincide with highest boater traffic. Knowledge of or interest in aquatic invasive species. Attention to detail and data collection experience. Experience implementing or participating in a field study is desirable. Boating experience and outreach experience are desirable, but not required. Valid drivers' license and eligibility to drive University-owned vehicles (see <http://www.rmi.msu.edu/form/employeedrivercertification.html>). Access to personal vehicle to travel to study sites (mostly local to the Roscommon area) is highly desired; reimbursement for travel expenses is available.

**Position Dates:** 30-40 hours per week, summer 2020; specific start and end dates negotiable. Extension of position into fall 2020 is possible.

**Pay:** \$13.50-\$15.50/hour. Housing not provided; however, low-cost local housing may be available through the project partners.

**To Apply:** Send your current resume and a 1 to 2-page cover letter explaining your interest in and qualifications for the position, as well as contact information for 3 references, to the contact below. Include **BOAT WASH STUDY** in the subject line.

**Application Deadline: February 29, 2020.**

**Contact:** Dr. Jo Latimore: [latimor1@msu.edu](mailto:latimor1@msu.edu), 517-432-1491