

Massachusetts Department of Conservation and Recreation Lakes and Ponds Program Zebra and Quagga Mussel Education, Monitoring, and Outreach Western Region, Massachusetts

ESS Group, Inc. worked with the Lakes and Ponds Program of the Massachusetts Department of Conservation and Recreation (MassDCR) to develop and implement a comprehensive zebra and quagga mussel monitoring and prevention program. Over the last two decades, these exotic invasive mussels have spread across much of the country, smothering aquatic habitat, altering food webs, and fouling underwater structures. Zebra and quagga mussels have expanded their range to the waters of surrounding states, including New York, Vermont, and Connecticut. Consequently, the primary stages of this program are focused on preventing the spread of these mussels into at-risk waters of western Massachusetts.

As part of the invasive mussel prevention program, ESS designed and produced educational brochures for outreach to boaters, anglers, and residents. These full-color brochures contained Geographic Information System (GIS) maps of current zebra and quagga mussel distribution as well as tips for preventing the spread of invasive mussels. Additionally, the ESS project team developed full-color educational signs for MassDCR, which will be posted at strategically targeted water bodies.

ESS and MassDCR also conducted a training session for volunteers from the Lakes and Ponds Association of Western Massachusetts (LAPA-West). Volunteers were trained to collect and process invasive mussel samples using kits developed and provided by ESS. Each kit contains sampling and processing tools that target early life stages of zebra and quagga mussels, including both the planktonic (veliger) stage and the newly settled stage. This focus should allow early detection and assessment of zebra or quagga mussel invasions before these species become firmly established in a water body.



Relevant Services Include:

- Invasive Species Early Detection Program Development
- Volunteer Training
- Design and Production of Educational Signage and Brochures
- Development of Monitoring Kits
- GIS Mapping