Early Detection and Response Procedures

Feb 2008 Draft #2

Purpose: Provide procedural guidance for Aquatic Invasive Species (AIS) Control grants awarded under NR 198.30 Early Detection and Response Projects**.** These projects are intended to control pioneer populations of aquatic invasive species before they become established.
"Pioneer population" means a small population of aquatic invasive species in the early stages of colonization, or re-colonization, in a particular water body or portion thereof. For rooted aquatic plants, a pioneer population is a localized bed that has been present less than 5 years and is less than 5 acres in size or less than 5% of lake area which ever is greater.
"Sponsor" means a grant-eligible organization or local unit of government.

Sponsor

1. Contacts the department after finding suspected AIS in a waterbody.
2. Collects an entire intact adult specimen and submits it to the department within 3 days or otherwise facilitates department verification.
3. Works with department staff to develop a response plan.
4. Applies for permits if required.
5. Conducts or contracts for control of the aquatic invasive species through means authorized by the department in the response plan.
6. Completes grant application requirements for the project and submits it to the department.
7. Pays all costs of the control as defined in response plan, reports to the department the r esults of the completed project and request s reimbursement for the state's share of the project.

Region Staff

1. Advises the sponsor on how to collect and voucher specimen and makes arrangements for its delivery or conducts onsite visit.
2. Verifies the species is an invasive.
3. Visits site and determines that it is a pioneer population and that an early response is appropriate.
4. Consults with sponsor and appropriate expertise within and outside the department and writes or facilitates development of response plan. Determines appropriate control method including pre- and post-control monitoring, follow-up control and reporting requirements.
5. Determines sponsor eligibility for AIS Early Detection and Response grant.

6. Authorizes project verbally and sends confirmation email to the Bureau of Community Financial Assistance and copies regional Environmental Grant Specialist.
7. Follows up in writing prescribing the control response, specifying the conditions and procedures under which the project may take place, issues any required permits and includes grant application and guidance.
8. Provides on-site supervision/observation of control treatments and provides technical assistance as needed throughout the project.
9. Reviews report and authorizes grant reimbursement.

Response for Early Detection of Eurasian Water milfoil
Field Protocol

A. PRETREATMENT

1. Visual concurrence by trained DNR staff that it is Eurasian Water milfoil (EWM). If there is doubt, proceed quickly with Herbarium or DNA verification but authorize project to proceed regardless. Collect voucher specimens and send to the U.W. Stevens Point Herbarium and notify SWIMS data manager in Central Office or enter information into SWIMS for statewide listing of existing populations.

2. Use GPS and rake throws to precisely define the location of the colony or plants following the established infestation sampling protocol.

3. Consider need and ability to quarantine the area - mark beds with buoys - to help prevent spread from boating activity in consultation with area Conservation Warden and Water Management Specialist.

4. Visually survey entire lake littoral zone from a boat. Throw rakes at random points. If possible, deploy underwater survey, either SCUBA or video. This effort is best targeted after surface survey.

5. Contact Bureau of Integrated Science Services and request point/intercept grids for entire lake. Deploy DNR survey crew, or sponsor retains qualified consultant, to survey and map aquatic plants during summer peak growing season (mid June to mid Sept).

6. Sign boat landings, recruit/establish CBCW boat landing inspection program, inform and educate lake residents to recognize EWM and recruit volunteers or retain qualified consultant for ongoing monitoring.

B. TREATMENT

1. Determine if herbicide is the appropriate tool. Scattered plants may be better dealt with through hand pulling. Hand pulling in conjunction with herbicide treatments has proven the most effective way to manage and possibly eliminate pioneer infestations over time. Hand pulling can be done throughout the season and should be integrated into all post-herbicide treatment monitoring efforts. Bottom barriers may be an effective, though

untried, method for control of small isolated beds. A chapter 30 permit is required for bottom barriers.

2. If early season and plant is still actively growing, use pretreatment mapping (A2) to apply for NR 107 permit and conduct treatment using a systemic herbicide such as 2,4-D.

3. If mid to late season and plants are topped out (flowering) and reached mid-season dormancy, map bed following pretreatment protocol (A2) and prepare for spring or, fall and spring, treatment with a systemic herbicide. The decision to delay treatment needs to consider location - isolated vs. near boating traffic - the ability to quarantine and other factors that may enhance or help inhibit spreading.

   3.1 Hand pulling plants with SCUBA or snorkel divers collecting all plant fragments and disposing them inland on the shore is highly recommended at this stage.

   3.2 A contact herbicide can be used to kill apical tips /condemn fragments. This will eliminate/reduce plant biomass. Follow up treatment with systemic herbicide or hand pulling will be required to eliminate regrowth. Careful consideration of formulation and dose is needed to limit impacts to non-target native plants.

   3.3 The effectiveness of herbicide treatments on compact, small beds may be enhanced by deploying a barrier or curtain to help “hold” the chemical on plants. Most appropriate in flowing or large open water especially adjacent to deep water drop offs. (This is not an established procedure at this time - EXPERIMENTAL.)

C. POST TREATMENT

1. Following initial treatment, repeat all steps above as necessary until at least one season year after plant is no longer detected.

2. Maintain monitoring/surveillance, education and CBCW efforts indefinitely.

3. Obtain plant survey results and develop an aquatic plant management plan.