

The State of Montana's

DREISSENID

Mussel

RAPID RESPONSE

GUIDELINES

Updated: 9/4/2018

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State of Montana Statement of Commitment and Adoption

Montana is a headwater state for three water basins and is on the last line of defense to block dreissenids (invasive mussels) from spreading to the west side of the Continental Divide and into the Columbia River Basin. Montana's invasive mussel rapid response efforts in 2016 and 2017 and the recent legislative actions to enhance invasive species management demonstrate Montana's commitment to the protection of the waters of the state and the region.

For every year the spread of the mussels is delayed, the state realizes cost savings from not having to manage additional infested waterbodies. Delaying the spread also allows time for treatment technology to advance, improving the chances for the development of effective control technologies for dreissenid mussels.

The rapid response guidelines herein are intended to direct the process, protocols, and coordinated effort the State of Montana will employ to respond to new dreissenid mussel detections. These guidelines were built from best management practices and the direct experience and the lessons learned during Montana's first dreissenid mussel detection in 2016. It is intended to ensure an orderly, efficient, and effective response.

While response activities are site specific, a response to a detection of mussels must be undertaken immediately. We adopt these guidelines and direct agency staff to follow these protocols in responding to dreissenid mussel detections in the State of Montana.

Signed:

Martha Williams, Director
Fish, Wildlife and Parks

John E. Tubbs, Director
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The State of Montana's Dreissenid Rapid Response Guidelines

Introduction and Purpose

These Dreissenid Rapid Response Guidelines (guidelines) and supplementary documents identify the State of Montana's role, response procedures, and operational needs in the event dreissenid mussels are verified in waterbodies in the state (beyond where currently confirmed). These guidelines provide guidance and instruction for a variety of responses from an emergency declaration for a large high-risk waterbody to responses for isolated, lower risk waters. The guidelines address rapid response activities. Longer-term shifts in management towards suppression, local exclusion, and adaptation are not considered here.

The purpose of the guidelines is to guide the State of Montana's response to the detection of dreissenid mussels in a new waterbody in order to define the scope of mussel distribution, reduce the risk of further spread to other waterbodies, and where feasible, eradicate them from the waterbody. Actions identified herein will ensure:

- A well-coordinated rapid response
- Data and information are collected and presented in an organized way for informed decision making
- The extent of dreissenid mussels is determined
- All control options are considered and implemented, if feasible
- The further spread of invasive mussels is prevented
- Decisions are made in a transparent manner.
- Coordinated and timely reporting, outreach and education to stakeholders and public
- Economic and ecological damage from incident are mitigated

Coordination and Alignment

These guidelines are a supplement to the **Montana Aquatic Invasive Species Plan**.

The rapid response guidelines align with the Montana Invasive Species Strategic Framework and the **Columbia River Basin Interagency Invasive Species Response Plan: Zebra Mussels and Other Dreissenid Species**. Montana is a signatory to this plan. (http://www.100thmeridian.org/Columbia_RBT.asp)

Support for these guidelines and measures for improved early detection and rapid response for invasive mussels was provided by the legislature in 2017 through HB 622.

1. Verification

PURPOSE: Confirm suspected identification of the Dreissenid species.

LEAD: Montana Fish, Wildlife & Parks (FWP)

STEPS:

1. Send suspect samples for independent verification.
2. As soon as feasible, collect and analyze additional samples from the waterbody with a suspect mussel identification. Ensure a rapid turnaround time for sample analysis.
3. Assemble and prepare data for initial report if verification identifies the waterbody as suspect.

Detection

FWP has established both a monitoring program for Montana's waters and watercraft inspection stations program as part of a broader perimeter defense system to reduce the spread of mussels into the state. Maps, monitoring reports, and monitoring protocols are posted to the agency website:

<http://fwp.mt.gov/fishAndWildlife/species/ais>

In addition to the state's early detection monitoring program, reports of suspected aquatic invasive species sightings from external sources are evaluated by FWP staff. Reports can be submitted to a web form

<http://fwp.mt.gov/doingBusiness/contactUs/aisSighting>

phone calls to the local FWP offices, or TipMONT 800-TIP-MONT (800)-847-6668.

Verification

Definitions from the **Western Regional Panel's 2014 meetings** developed standard definitions and criteria that are used here:

- Verification – the scientifically based process to confirm the presence of Aquatic Invasive Species (AIS).
- Detection, detect or detected – the verified presence of AIS.
- Minimum to verify detection: 2 independent results from the same sample, using scientifically accepted techniques.

When a sample or report of a dreissenid mussel detection is received by FWP, verification proceeds through established protocols. Official verification for the presence of dreissenid mussels in a waterbody is under the jurisdiction of the State of Montana. Following additional sampling, or re-testing existing samples, a waterbody will be identified as "Suspect" for dreissenid mussels if:

Dreissenid mussel veligers are found and confirmed utilizing **BOTH** of the following methods:

- Microscopy identification of a sample from a qualified expert and concurrence from a second qualified expert. (Montana FWP Aquatic Invasive Species Laboratory, Bodega Labs, Northwest Biological Services, EcoAnalysts Labs, Bureau of Reclamation (BOR), Portland State University (PSU) or other qualified lab) **AND**
- PCR (genetic) identification of a sample by a qualified expert and concurrence from a second qualified expert: (Bodega Labs, Pieces Labs, USGS, BOR or other qualified lab).

Additional **laboratories around the west** have been identified by the Western Regional Panel and are included in the Columbia River Basin Plan if needed.

A waterbody will be considered "Positive" for dreissenid mussels if specimens are verified through the above protocol during two separate sampling events **OR** if live adult mussels are found.

NOTE: The State of Montana does not use eDNA as a primary early detection method for dreissenid mussels and eDNA results are currently not used to determine dreissenid status for waterbody classification.

Waterbody definitions:

- Status Unknown – Waters that have not been monitored.
- Undetected/Negative - sampling/testing is ongoing and nothing has been detected, or nothing has been detected within the time frames for de-listing.
- Inconclusive (temporary status) - Water body has not met the minimum criteria for detection.
- **Suspect – Water body that has met the minimum criteria for detection (MANAGEMENT TRIGGER)**
- Positive – Multiple (2 or more) subsequent sampling events that meet the minimum criteria for detection.
- Infested – A water body that has an established (recruiting or reproducing) population consisting of multiple age classes of dreissenid mussels.

A sample is considered "inconclusive" if it fails to meet minimum criteria for detection. FWP will communicate internally and as necessary with outside labs and experts to evaluate additional samples for inconclusive sites. Once a waterbody is declared

“suspect” the Director of FWP will be briefed immediately and notification outside the agency will proceed as described in the next section on notification.

Delisting “Suspect” and “Positive” waterbodies follows standards established by the Western Regional Panel for Aquatic Invasive Species. “Suspect” waters can be delisted following 3 years of intensive sampling with no verified detections. “Positive” waters can be delisted following 5 years of no verified detections.

Investigate and report

Following the identification of a suspect waterbody the following steps are taken by FWP staff:

- Proceed with notification.
- Deploy field crews to take additional water samples
- Prepare for emergency closure
- Deploy visual inspections for adult mussels: scuba, snorkel, sniffer dogs
- Take additional veliger samples and inspect shoreline/hard substrate
- Prepare data and assemble an initial report on the specifics of the detection including a draft press release and talking points for the notifications.
- Prepare for containment efforts.

2. Notification

PURPOSE: Ensure that all parties that have jurisdiction in response decisions are informed of a suspect or positive identification within 24 hours. Notification of all parties will occur as soon as possible following a suspect detection.

LEAD: Montana Fish, Wildlife & Parks (FWP)

STEPS:

1. Notification of Governor’s Office, FWP, DNRC
 - If initiating the incident command system (ICS) is determined to be necessary, an incident command (IC) is designated
2. Initial notification
3. Public notification

Leadership notification

TIER 1: Within 24 hours of official State verification (confirmation of a suspect or positive detection by the procedures identified in the previous section) of dreissenid mussels in a new waterbody, FWP will notify other parties as follows in this section. If

Incident Command is initiated for the response during this process, communication responsibilities including notification are transferred to the Joint Information Center (JIC). The initial report will be the basis of the press release; the draft press release should be prepared along with the briefing for the leadership notifications.

Following a "Suspect" or "Positive" identification of dreissenid mussels in the waters of Montana, FWP will conduct the following notifications. All communications outside the agency will be at the direction of the FWP Director's Office:

Leadership notification:

- FWP Director
 - FWP Invasive Species Program and Management Staff
 - FWP legal counsel
- Department of Natural Resource Conservation (DNRC)
- Governor's Office

Determination made on establishing Incident Command:

On notification of a new mussel detection, the Director of FWP or their designee(s) approves initiating IC. Joint command will be established for a response involving a waterbody where there are multiple jurisdictions. Response team contacts will be identified. The process for setting up IC and initial tasks for the Incident Commander follow in section 3.

Initial Notifications

TIER 2: Those entities that are directly impacted and/or entities with jurisdiction (Counties, State agencies, Federal agencies, Tribes, power companies, irrigation districts, etc.) will be notified immediately once outside communication is authorized by the Director's Office. State leaders including legislators (House and Senate Leadership) will be contacted at this time.

DIRECTLY IMPACTED PARTIES

- Legislators (House and Senate Leadership)
- State agencies
- Impacted counties, local government and sheriff's office
- Federal agencies including United States Fish and Wildlife Service (USFWS), Bureau of Reclamation (BOR), United States Army Corps of Engineers (USACE), US Forest Service and National Park Service (NPS).
- Tribes in the affected watershed
- Power companies
- Relevant water delivery agency (irrigation districts and canal companies)

TIER 3: Given the potential for regional spread, agencies handling preliminary reports of dreissenid introductions need to consider the importance of alerting all vulnerable jurisdictions including those outside of the Columbia River Basin (e.g., other Western states) and all other parties with jurisdiction in response decisions. During the first Montana dreissenid rapid response in fall 2016, a stakeholder list by user type was developed and is maintained by FWP.

Unless unique law enforcement or other conditions warrant extreme caution, the Columbia River Basin plan recommends that an initial alert message be communicated via email (and phone if possible) as soon as possible to all state invasive species coordinators in the West.

REGIONAL AND STATEWIDE PARTNERS

- Columbia River Basin Rapid Response Team
- Downstream hydropower facilities
- All Tribes in the state
- Western Aquatic Invasive Species Coordinators

Public Notification

Following the initial notifications, notification will be made to the public. FWP, or the JIC if established, will notify the public using a press release and briefing. The press release should go out as soon as possible following the personal calls and emails to known stakeholders.

3. Activate Mussel Response Incident Command Team

PURPOSE: If determined necessary by the FWP Director, activate the Mussel Response Incident Command Team (Response Team) to lay the ground work for coordination, communication, and on the ground response.

LEAD: FWP, Response Team

STEPS:

1. Depending on location of the incident, the western, central, or eastern Incident Command Team will be activated. Helena Multi Agency Command (MAC) Team will also be activated.
 - Each area team has designated team members and roles.
 - Incident Command Team members will include staff from FWP, DNRC, and other relevant agency staff.
2. Develop cooperative agreements, if needed, with cooperating agencies, tribes and other water / land management entities.

If determined necessary by the Director, FWP will initiate the Incident Command System upon official verification of a suspect detection of dreissenid mussels. The scope, scale and function of the ICS shall be determined based on the circumstances of the detection. FWP may request assistance from other governmental and tribal partners.

A rapid response may have several possible outcomes, such as quarantining the area, containing the dreissenid mussels to a given area, suppressing population densities to reduce the rate of spread or prohibiting high-risk transport vectors. Based on the evolving situation for new detections, the Incident Commander will set the objectives for each response.

In addition to the numerous options that can be considered as part of any rapid response, there are key steps integral to any such effort, including: (1) responding to and minimizing impacts of dreissenid mussels including containment / quarantine; (2) providing timely and accurate information to managers, stakeholders and the general public; (3) providing for the safety of the public as well as all personnel involved at any stage of a response; and (4) coordinating with neighboring and regional jurisdictions on immediate response and long-term management, as appropriate. Developing a shared understanding of these important steps prior to a response is critical to effective containment efforts, and greatly enhances the ability of jurisdictions to coordinate and cooperate.

PROCEDURE FOR ESTABLISHING INCIDENT COMMAND TEAM

1. FWP Director activates Incident Command
 - FWP Director is briefed on the mussel detection and reviews the initial report available information. Based on the circumstances of the detection,

approval of activating the response team is given (section 2 of the guidelines).

2. FWP identifies candidates appropriate to the situation from the pre-identified list of staff.
 - State agencies and local entities with jurisdiction in the incident area will identify staff willing to serve as Incident Commanders and response team staff. AIS staff with scientific and operational knowledge of AIS will also be included.
 - Joint command will be established for a response involving a waterbody where there are multiple jurisdictions including waters with joint tribal or federal management.
 - The Incident Commander nominates and requests Command General Staff to fill out the leadership team.
 - Incident Commander and initial leadership team receives briefing from FWP staff on the status of the detection, current actions, and communication needs.
3. The Incident Commander appoints a response team appropriate to the scope of the anticipated response.
 - Incident Commander appoints the Command General Staff from list of pre-approved department employees and/or qualified employees from other agencies per established cooperative agreements.
 - Incident Commander initiates communications team and regional partners. Engages the Columbia River Basis Interagency Response network as appropriate (section 4).
 - Establish Joint Information Center (section 6): prepare second press release.
 - Initial tasks include establishing initial containment, drafting a response plan, drafting a communications plan, and setting up an operations base.

The coordination structure described in these guidelines are designed to comply with the requirements of the National Incident Management System (NIMS). This structure focuses on interagency decision-making and communication.

4. Activate Appropriate Organizational Elements of the Columbia River Basin (CRB) Interagency Response Plan

PURPOSE: To coordinate a rapid, effective, and efficient interagency response in the CRB in order to delineate, contain, and when feasible, eradicate dreissenid mussel populations if they are introduced in CRB waters. Montana is a signatory to the plan and has agreed to implement these guidelines as appropriate, consistent with Montana's laws, policies, and authorities in the event that zebra mussels or other dreissenid species are detected in Columbia River Basin waters

LEAD: Response team and CRB MAC Group

STEPS:

1. Make initial notifications.
2. Activate appropriate organizational elements of the **CRB Interagency Response Plan**.
3. Proceed following elements of the CRB Plan.

The 100th Meridian Initiative's Columbia River Basin Team is responsible for activating and implementing the management structures necessary to respond to and support efforts to contain and control dreissenid mussels. Because CRB member agencies do not share a standard organizational structure on a day-to-day basis, the Team has adopted the ICS organizational structure as its emergency response structure. The organizational elements are divided into two groups: coordination (policy and communication) and incident management (tactical). The structure is designed to be flexible. Only those elements needed to respond to and support a given situation will be activated. Note that personnel of 100th Meridian Initiative Columbia River Basin Team member agencies may be assigned to any or all of the described organizational elements, depending on their organizational role, expertise, and management requirements of the specific situation.

Contact with the Columbia River Basin (CRB) Team is via US Fish and Wildlife 877-STOP-ANS hotline. http://www.100thmeridian.org/Columbia_RBT.asp

5. Define Extent of Dreissenid Distribution

PURPOSE: Establish physical range of dreissenid mussel distribution.

LEAD: FWP, Response team

STEPS:

1. Lead responder assesses the current situation status to determine probable scope and impact of dreissenid mussel distribution.
2. Lead responder determines quarantine measures.

Following the return of a positive sample, FWP shall conduct an initial assessment of the affected waterbody and prepare a report for review by the agency directors and the Incident Commander similar to the leadership briefing described in Section 2. The Incident Commander, in cooperation with participating agency staff, will direct further assessment of the waterbody to gauge the scope and scale of the incident and to identify resource needs. The response team reviews the current situation status to determine probable scope and impact of dreissenid mussels. The early goal will be to contain the invasive mussels and prevent further spread.

The following sampling efforts and tasks should be considered:

1. Intensive plankton tow sampling for microscopy analysis for dreissenid veliger identification.
 - Sampling in the area where mussels were detected.
 - Sampling downstream of the mussel detected area.
 - Sampling upstream of the mussel detected area.
2. Obtain necessary permission from property owners to survey infrastructure.
3. Check existing substrate samplers for mussel adults region-wide including:
 - Water delivery agencies and companies
 - Utility companies with hydro power infrastructure
4. Check exposed infrastructure for adults, utilizing divers, snorkeling, ROV's, or other appropriate methods belonging to the following entities:
 - BOR/Corps of Engineers
 - USFWS
 - Hydropower infrastructure
 - Relevant water delivery companies and agencies (irrigation districts, canal companies, etc.)
 - Local/regional law enforcement agencies
5. Conduct shoreline surveys, wading and searching rocks and bottom substrates for adult mussels. In exposed shoreline areas, explore deploying mussel sniffing dogs to facilitate adult mussel detection.

6. Explore removing existing infrastructure from the water for enhanced adult mussel survey (moored boats, docks, buoys).
7. Explore collection of eDNA samples in the suspected mussel area, upstream and downstream.

6. Establish External Communications System

PURPOSE: Ensure consistent and effective communication to external stakeholders, including the media and public.

LEAD: Response team

STEPS:

1. Issue press releases using pre-approved templates.
2. Coordinate with interagency public information officers ("PIOs").
3. Establish point of contact ("POC") for media.
4. Prepare for daily briefings to facilitate information sharing.

The response team is responsible for communicating **early and often** with the public and stakeholders during the response. The external communications plan is the responsibility of the response team or PIO and should be commensurate with the scope and scale of the incident. If ICS is established, the IC will provide instruction on approval process for communications, and all communications will be coordinated with the Governor's Office. A segmented stakeholder list for external communications was developed for the 2016 mussel response and is maintained by FWP's AIS program. Local stakeholder groups like the Central and Eastern Montana Invasive Species Team (CEMIST) and the Upper Columbia Conservation Commission (UC3) will also be utilized to help inform local stakeholders.

The following list includes key activities that were undertaken during the fall 2016 response and should be considered by the response team:

1. Issue press release using pre-approved template.
2. Coordinate with interagency public information officers ("PIOs"). Establish Joint Information Center if ICS is established.
3. Establish ONE public information officer as the main point of contact for all incoming and outgoing communications.
4. Prepare response daily briefings to facilitate information sharing.
5. Establish online communication resources:
 - gov delivery,
 - <http://musselresponse.mt.gov/>,
 - <https://www.facebook.com/MTMusselResponse/>
6. Establish dedicated response phone line.

7. Consider weekly teleconferences for stakeholder briefings.
8. Prepare response communication plan, talking points, incident timeline, and FAQs.
9. Issue press releases for major milestones and response activities.

7. Prevent Further Spread

PURPOSE: Minimize spread along all pathways.

LEAD: Response team

STEPS:

1. Initiate mandatory inspections, decontaminations or closures.
2. Utilizing existing GIS database, inventory boat launches in affected area (including those upstream and downstream, regardless of state boundaries).
3. Identify government or private entities with management authority over potential pathways.
4. Contact management authorities and advise of potential mandatory inspections or closures.

Emergency closure

Preventing spread of an introduction is crucial to the success of a response. The initial goal will be to identify response alternatives to contain the population as quickly as possible. The use of a quarantine or temporary closure of the mussel detected waterbody to watercraft, withdrawals for irrigation or allocation, or diverting flow may be necessary until other techniques can be implemented to manage the pathways. The duration of the closure will last until a prevention / containment plan is implemented for the water body. If closure is untenable, watercraft inspection teams must be on hand for inspection and, if necessary, decontamination.

FWP has the authority to adopt an emergency rule closing the waterbody to all surface occupation or use. Emergency rulemaking authority is to be used carefully and must involve the FWP Legal Unit at the beginning of the process.

Ensure that an emergency declaration is forwarded to impacted County Emergency Manager(s) and Federal partners. Consider:

- Current priorities
- Impact on commercial and recreational activities.
- Existing boater movement data to determine water bodies at risk for spread
- Inventory impacted infrastructure and resources

Brief regional partners on closure actions and ensure that all county, state and federal agencies impacted by the dreissenid detection are notified (review section 2). This is a time to actively coordinate and engage stakeholders.

Containment actions to be considered

- Quarantine dreissenid detected waterbodies as needed to prevent spread by watercraft.
- Close boat ramps and access points and/or decontaminate watercraft.
- Identify dispersal vectors (including movement by humans, fish and wildlife, water traffic, water flow, and other processes). Assume measures are needed to prevent release of veligers as well as movement of adult mussels.
- Assess the likely movement of boats and other watercraft that recently used the mussel detected water body to identify inspection needs in other water bodies.
- Develop and implement **Hazard Analysis and Critical Control Point (HACCP)** plans to ensure that response personnel do not further spread the original introduction. The **five steps to implement HACCP** planning to control a pathway from spreading dreissenid mussels and other AIS are available on line and should be assigned to the plans section.
- Quarantine operations (e.g., hatcheries, aquaculture) that are likely to spread the species outside the affected watershed(s).
- Consider and implement any needed prevention of overland or aerial transport to other water bodies.
- Stop or slow water release to potentially uninfested sites.
- Consider special management measures for operations of locks and commercial vessel traffic, if appropriate.
- Draw water from below thermocline.
- Install physical barriers, if appropriate.
- Stop all sanctioned water related events on the waterbody until appropriate containment protocols can be established.

Watercraft inspection and decontamination stations

- Establish wash and inspection requirements on boats and equipment (following WRP Uniform Minimum Protocols (UMPs), and provide for associated logistical support (e.g., decontamination kits).
- Initiate a post haul-out inspection of boats and equipment in the waterbody where mussels were detected.
- Coordinate with land management authority to implement mandatory inspection and decontamination of boats upon entry and exit of water body.

- Utilize watercraft inspection system to track compliance for new waterbody inspection regulations.
- Ensure decontamination units are available at water body.

Additional Resources

Based on the current situation status, it is important to assess what resources may be needed for the response e.g., staffing, operations budget, and equipment. If additional staff are needed, the first step should be to deploy employees preapproved for rapid response efforts. It is important to communicate with the FWP Chief of Administration regarding additional fiscal resources that may be needed for the response.

MONTANA:

Montana Invasive Species Council

The 2017 legislature directed the Montana Invasive Species Council to identify and form an independent scientific advisory panel. Once assembled, that panel will be available for technical consultation.

Upper Columbia Conservation Commission (UC3)

The 2017 legislature created the UC3 to protect the aquatic environment from the threat of AIS in the upper Columbia River Basin. This group encourages cooperation and coordination for AIS monitoring and education and is a resource for AIS information in the Columbia River Basin portion of Montana.

REGIONAL:

Columbia River Basin (CRB) Interagency Rapid Response Team (IRRT) team

The Columbia River Basin (CRB) **Interagency Rapid Response Team (IRRT)** team includes interagency personnel that may be assigned to provide on scene technical support or incident management support at the request of FWP and the approval of the CRB Multiagency Coordination (MAC) Group. They also can assist in confirming the presence and determining the scope of the dreissenid mussel distribution, as well as identifying and implementing appropriate containment, control, and eradication efforts. Team members will be selected based on the technical and management needs of the specific situation. This team is contacted by the CRB Notification Coordinator (USFWS) at the initiation of the response when informed by the Montana Invasive Species Coordinator.

8. Activate Available/Relevant Control Measures

PURPOSE: Proceed with either Early Detection Rapid Response (EDRR) eradication efforts or containment and mitigation activities.

LEAD: Response team

STEPS:

1. Convene an expert panel for consultation on treatment & containment options.
 2. Response team identifies steps to implement preferred control or eradication actions.
 3. Initiate control or eradication action.
 4. Team to present alternative control strategies based on situation review and identify targets for incident conclusion.
-
1. **Convene an expert panel for consultation on treatment & containment options. See the "Additional Resources" listed under Section 7.**
 - Evaluate management options given the nature of the population (veligers only, adults and veligers, isolated population vs. widespread population, etc.).
 - Evaluate complicating factors involved with treatment in the waterbody (water movement, subsurface flow, water volume, ESA species, water use).
 - Evaluate feasibility and effectiveness of eradication methods for the dreissenid detected location. These methods include:
 - Waterbody drawdown.
 - Chemical treatment.
(option examples, see Appendix D for a complete list)
 - ♦ Chem One (copper sulfate crystals)
 - ♦ EarthTec (copper sulfate pentahydrate)
 - ♦ Hydrothol 191 (endothall-amine)
 - ♦ Natrix (copper carbonate)
 - ♦ Potassium chloride (potash)
 - ♦ Other effective products
 - If eradication is recommended, evaluate feasibility and probability of success of control tools
 - Capacity and timing for drawdown.
 - Evaluate and assess water movement and subsurface flow in the treatment area.
 - Calculate area for chemical treatment (acre feet) to determine the amount of chemical required.
 - Determine availability and lead time required to obtain the amount of chemical needed for treatment.

- Determine availability and lead time for silt curtains to contain/restrict water movement in treatment areas.
 - ♦ Identify construction contractors, USACE, BOR to carry out control actions.

2. Response team identifies steps to implement preferred eradication or control actions

- Preferred action(s) are fully documented.
- Engage regulatory authorities to obtain permitting and regulatory approval for eradication action. (EPA, USFWS, DEQ)
- If needed, draft MOUs or cooperative agreements with entities participating in eradication.
- Engage stakeholders on details and impacts of eradication action.
- Identify and contract with a pesticide applicator to conduct treatment, following applicable purchasing and contracting laws. Determine the lead time needed to mobilize the contractor in order to conduct the application.

3. Initiate eradication or control action.

- Evaluate in-water target concentration rates following treatment.
- Evaluate treatment efficacy and continue monitoring for evidence of surviving mussels.

4. Team to present alternative control strategies based on situation review and identify targets for incident conclusion. Proceed to Section 9 for incident conclusion.

9. Response conclusion if ICS is initiated

PURPOSE: Establish continuity with local managers to transition from a response scenario to ongoing monitoring and management

LEAD: Response team

STEPS:

1. Plans Chief prepares a transition plan to step down from ICS.
2. Incident Commander and leadership team meet with the FWP AIS Bureau Chief to review plan.
3. A transition date, revised schedule of activities and press release are drafted.
4. The Incident Commander requests and establishes a review team for an after action report.

The decision to transition back to local managers from an ICS structured rapid response will depend on many factors from the size and location of the waterbody involved, locally available resources, and the time of year. The final duties of the Incident Commander include reviewing the incident with the Planning Section Chief to determine if objectives for the response have been met. If this is the case, a transition plan should be developed and final report on the status of the response prepared.

The Incident Commander will meet with local managers and agency leadership including the Fish, Wildlife & Parks, Aquatic Invasive Species Bureau Chief to review the final report on the incident status and transition plan. Outcomes of this meeting should include a transition date for operations and communications functions. Once these tasks have been agreed to, a final press release should be prepared and released by the Public Information Officer assigned to the response as the final press communication by the ISC team.

Once the transition has been successfully completed, the Incident Commander will document all significant actions & information on Unit Log (**ICS214**). They will forward copies of all documentation to the Planning Coordinator and the FWP AIS Bureau Chief and request an after action review.

The task list for the final phase of the response for the Incident Commander includes:

- Assess incident plan objectives and prepare to transition to ongoing management as objectives are met.
- Ensure post action review is conducted, and lessons learned are captured and incorporated into training and guidelines revisions and updates. (After action report.)
 - Conduct a follow-up evaluation of response organizations and other interest groups to identify opportunities for improving rapid response

capacity. Disseminate “lessons learned” to other interested organizations (e.g., regional ANS panels).

- Revise the Rapid Response Guidelines and associated documents/guidelines based on evaluation and long-term monitoring results.
- As resources allow, develop and implement a research plan that evaluates the associated ecological and economic impacts of the invasion, the effectiveness of management interventions, and negative consequences of management interventions (beyond that required by permits).
- Determine the need for long-term funding for the current management effort and seek this funding as warranted.
- Document all significant actions, information on Unit Log ([ICS214](#)). Forward copies of all documentation to the Planning Coordinator and the FWP AIS Bureau Chief.