The State of Montana's Invasive Species Rapid Response Guidelines

Updated September 8, 2020

Contents

Figures

The State of Montana's Invasive Species Rapid Response Guidelines

Introduction

Rapid response to invasive species is a focused, resource intensive management effort intended to prevent the target species from establishing or spreading. It is carried out to avoid future management costs created by invasive species that harm Montana's communities, businesses, and environment. A successful rapid response resulting in eradication of a new population of invasive species requires adequate resources and authorities, and above all, cooperation by partners at regional, state, and local scales.

The Montana Invasive Species Council developed their Invasive Species Framework in 2016. In this document, the Council recommended developing a generalized rapid response plan for emerging invasive species as well as species specific plans as needed. These Rapid Response Guidelines build on the recommendations from that document and add operational details based on the experience gained from the 2016-2017 Dreissenid Mussel Rapid Response and Guidelines. Where resources for rapid response are needed but require development (e.g. data coordination) the relevant element from the Framework is identified.

This document is intended to provide guidelines for rapid response activities. Through both future responses and tabletop exercises, this framework can be a tool to harmonize rapid response practices and increase communication between partners with authority over different taxa of invasive species and jurisdictions. The goals of these guidelines are to encourage:

- A well-coordinated rapid response
- Collection and sharing of data in an organized way for informed decision making
- That the extent of infestations is determined
- Consideration of all control options
- Preventing the further spread of invasive species
- Transparent decision making
- Coordinated and timely reporting, outreach and education to stakeholders and the public
- Economic and ecological damage from incident are mitigated

Detection

The detection model of invasive species within Montana is made up of the following three parts: reporting, identification, and data recording.

REPORTING

Reports of invasive species may come from a wide variety of sources, with reports from the public being a valued element for the detection of invasive species. The website https://invasivespecies.mt.gov/montana-invasive-species/report-an-invasive-species provides guidance for reporting invasive species detections. A report of a potential detection of an invasive species that is received by any local, state, tribal, or federal entity operating within the state of Montana should be recorded at the initial time of report—regardless if the initial recipient of the report is the correct entity for that particular taxa.

> **Reporting Example:** If a potential feral swine is sighted by a farmer on the Hi-line, that farmer is most likely going to call someone they already know and trust—such as a county extension agent. The agent **should take down the full report at the time of that first call.** It is then the responsibility of the agent to follow up with the Department of Livestock who has authority for the species. It is also the responsibility of the agent to educate the farmer on the presence of the Squeal on Pigs hotline for future reporting, but this should be conducted **after the initial report has been handed off to the Department of Livestock**.

Sightings or signs of potential invasive species should be documented at the time of the initial report with as much detail as available. All reports, photographs, and/or suspect physical samples should be expediently passed on to the designated state authority responsible for the given taxonomic group. (See Appendix A for authorities.)

IDENTIFICATION

The designated state authority is then responsible for all subsequent elements of the report; gathering additional samples or conducting site visits, confirming the identification, recording location of the suspected specimen, and communication with the initial reporter and necessary parties.

Generally, authorized taxonomic experts will confirm the species' identity before further action is taken. Confirmation of a listed or new invasive species will only be made by agency personnel or experts.

Based on the protocol modeled in the State of Montana's Dreissenid Rapid Response Plan, the following definitions and standards are recommended:

- Verification - the scientifically based process to confirm the presence of an invasive species as carried out by a Montana State agency with authority for the taxa under investigation or designated cooperating entity.
- Detection, detect or detected - the verified presence of an invasive species.
- Report - a sighting or collection which has not been verified.
- Minimum to verify detection - Protocols to verify a detection can vary by species. For example, two independent results from the same sample, using scientifically accepted techniques is the protocol for dreissenid mussels. A sample can include preserved adult or larval invertebrates, all or part of a plant suitable as a standard herbarium specimen, preserved water or soil samples, tissue specimens, etc. for which chain of custody can be confirmed.

For many pests, reports based on symptoms or damage may serve as the first indication of a new invasive species requiring further investigation. Remotely sensed or environmental data collection including eDNA, remote sensing, and other tools may be options for confirming the extent of a new invasive species depending on the species.

Once verification is confirmed, the designated state authority must follow up with the initial recipient and initial notification list of the report to inform them of the identification and response plans or reason for non-action. This follow-up serves to conclude the report while also building transparency and accountability in the process.

If the potential invasive species is confirmed with the designated state and/or federal authority, the report must be recorded in the state's natural resource information database managed by the MT Natural Heritage Program.

DATA RECORDING

Data from confirmed detections should be properly recorded and shared securely with cooperating entities. Key stakeholders should be notified prior to a public release of information (press release, publication on publicly accessible databases, etc.) to accommodate preparation by public information officers and, as possible, a unified public message.

Assessment

Once the identification is confirmed, assessment determines the appropriate response to a particular invasion[1]. An assessment of the risk posed by the species in question, its distribution and population density, and the likely pathway(s) by which it was introduced should be considered for species that have not been previously identified as high priorities for response. Once the risk posed by a new species is assessed, the feasibility of control is considered.

1. **High-priority species**: A small set of species that have already been assessed, pose a high risk, and which are likely to be introduced can be prepared for in advance through planning, exercises, and participation in regional partnerships.
2. **Extent delimitation**: Unless the new potential invasive species has been included in state or regional surveys and its distribution is known with reasonable confidence, the extent and population density should be determined before management begins.
3. **Risk Assessment**: If new to Montana, is the detected species likely to cause harm to natural and cultural resources, the economy, and or human health? The entity with the authority to make this assessment should be identified in advance for each taxa and a consistent framework for assessing each taxa group established.
4. **Risk Management**: Not all new species will be candidates for rapid response. The feasibility of eradication, containment, and the suitability for a species led as opposed to a site led management should be evaluated and the recommended actions and reasons clearly communicated to stakeholders.

HIGH-PRIORITY SPECIES

A small number of invasive species that are not known to occur in Montana are clear candidates for immediate action and have been documented as threats on a regional level. Response planning has been done in advance for some of the species that both pose a high risk to Montana and are likely to be introduced and have their own species-specific response guidelines. For example, The State of Montana's Dreissenid Rapid Response Guidelines[2] identifies the specific protocols and contacts for an invasive mussel detection in Montana's waters and has been tested using tabletop exercises.

Regional plans are an important component of planning and preparedness. The 2016-2017 mussel response actions were based on local preparation and on protocols included in the Columbia River Basin Interagency Invasive Species Response Plan: Zebra Mussels and Other Dreissenid Species[3]. An important

recommendation from the 2016-2017 dreissenid mussel rapid response was that regional plans are helpful in framing a response but lack the detail required for the local operations. Developing a catalogue of relevant regional plans and practicing with collaborators is beneficial but does not replace the need for a local planning and training. If an invasive species has been identified as a regional threat, developing a state level plan should be considered. These plans can anticipate the issues that should be considered in a species-specific response and proactively include stakeholder input from tribal, federal, local government, and residents.

Examples of existing state plans for high-priority species

- List and control requirements: County Weed Control Act[4]
- The State of Montana's Dreissenid Mussel Rapid Response Guidelines
- Agricultural Pests and Disease: Statewide Animal Disease Response Plan5
- Wildlife: Chronic Wasting Disease6

For high-priority species to Montana that do not have a regional plan or similar coordinating document in place, a preliminary risk assessment should be conducted. Identifying the priority for action, response options, and cooperators in advance will facilitate response.

EXTENT DELIMITATION

Active detection efforts for known invasive species include regular surveys for a known target by trained observers to record both presence and absence data. For a species that is new to Montana, unless it is one of a very small number of high-risk species like dreissenid mussels or a federal noxious weed that has been the target of State Cooperative Agricultural Pest Surveys (CAPS), it is unlikely that detailed, reliable data will exist for the specie's distribution. Hopefully, the new invasive species has been detected early, but unless active surveys are conducted for the species, additional populations may be found once control has begun, which will influence management options.

If the species is detected or reported after optimal detection conditions have passed for the year (e.g. swimming veligers for dreissenid mussels require water temperatures above 10°C, flowers for identification on terrestrial plants, etc.) the decision on how to proceed should consider the risk of delay compared to the cost of aggressive management. Survey work should continue concurrently with verification and risk assessment.

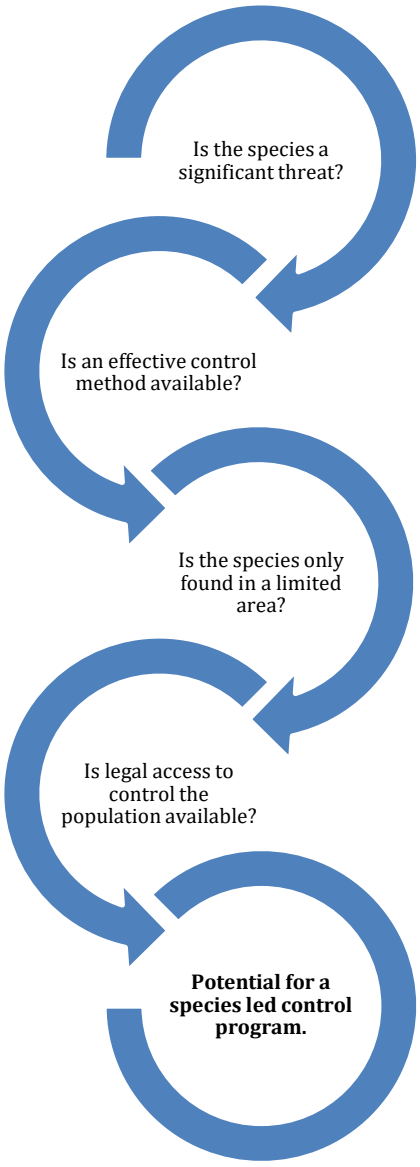

Figure 1. Assessment questions to determine if a species is a good candidate for a control effort. If any of the answers are "no", rapid response is not recommended.

RISK ASSESSMENT

For invasive species that are not already identified at a state or regional level, an evaluation of each species prior to notification and response provides critical background information and informs management decisions. For some taxa an assessment process has been established and is associated with a regulatory listing mechanism. For example, the Montana Department of Agriculture has both the authority and a process in place to designate new noxious weeds. Listing authority is distributed across agencies and an additional consideration is the time lag between the discovery of a new species and whether or not control can be successful without the authorities granted by inclusion on an official prohibited or control list. The process of assessing new species can be generalized across taxa and is generally compatible with existing ranking metrics that consider impact, distribution, and feasibility of control.

The New Zealand Department of Conservation[7] summarized the invasive species assessment process into six steps which can be adapted for local use as:

1. Is the new invasive species a good candidate for a species-led program? (Figure 1)
2. Is the species likely to establish and spread in Montana?
3. Does the species have a high impact on the natural and constructed systems likely to be invaded?
4. How invasive is it?
5. How practical is control?
6. What priority should this species have compared to others?

L20

	A	B	C	D	E
1	*Assumptions: Threat=high, range=incipient and landowner has granted access.*				
2	**Threat Description**				
3	Fire adapted, forms monotypic swaths.	Serious invader on BI and undercontrol by NARS on BI. Impedes growth of native plant seedlings, esp. koa on Hawaii Island. Increases fuel loads for wildfire.	May increase fire threat, even though other fire adapted species are present because it is one of the only species that can grow on bare rock....	....Where there would be fire breaks without vegetation, with fountain grass there will be a continuous chain of fuel leading to summit or residences.	
4	**Range Description**				
5	Incipient in Waianae Kai FR.	Established populations in Diamond Head, Lanikai, Palolo, Ohikilolo Ridge.	No evidence of established populations in adjacent watersheds, only established Waianae population is along Ohikilolo Ridge.	Pops up on Schofield, MCBH and other random areas on the island. It is still occasionally seen as an ornamental planting.	
6	**Decision Factors:**				**Ideal answer to initiate control program:**
7	Control method available? = **Yes**	OISC has had good results and eradicated small populations with Round Up and Oust. A fairly large population at Bellows was also eradicated so it can be done.	During the last spray, the pilot thought the fountain grass that was growing on the sides of the box canyons was too dangerous to get with a line sprayer, may need HBT if available.	Another pilot thought is was doable with a long-line.	**Yes**
8	Field and Outreach Costs= Affordable? **(Not for OISC, but maybe for DOFAW)**	2-3 days to aerially spray 1x a quarter for 2-3 years	At least one full day of aerial survey a year to map and monitor. 2-3 days to spray 1x a quarter for 2-3 years. And monitoring after that.	Outreach necessary as people may object to herbicide use. If HBT is employed it will look like a mammal eradication. Would public notice be necessary?	**Yes**
9	Seedbank longevity = **Short**	2-3 treatments of oust and Round Up can remove an infestation, so likely short. But MISC thinks 6 years.			**Short**
10	Likelihood of re-introduction = **Medium**	Established populations not known to be in the adjacent watersheds, although they haven't been thoroughly surveyed.	Species gets around and is dispersed by air and on clothing, established infestations at two trails (DH and Lanikai)		**Low**
11	If not island incipient, under control program by partner agencies = **Yes**	KMWP working on removing in Wailupe, KMWP, OANRP and OISC sprayed rogue patch in Aiea.	MCBH removes at Bellows and MCBH, ANRP controls on their land.		**Yes**

Figure 2. Example risk management decision matrix for a species led rapid response campaign demonstrating qualatitive, structured decision making.

RISK MANAGEMENT

Management recommendations for newly identified invasive species begin with determining if the candidate is a good match for a species-led response like eradication or containment, or is a site-led response that adds management for the new target species to ongoing actions that protect agricultural productivity, ecosystem services, rare species, access, or other site specific values. Generally, range expansions of established invasive species will not warrant a statewide response but local jurisdictions such as Weed Districts should be notified of new occurrences as local containment can provide benefits. Rapid response using a species-led approach is beneficial if containment or eradication provide additional benefit above incorporating a new invasive species into existing management operations.[8] For all other species, a site-led approach is indicated:

> *Draft management plans to support control of established invasive species where reducing their impact provides measurable benefit.*

There are both quantitative and qualitative approaches for evaluating the level of risk posed by an invasive species and the feasibility of control. When the suitability of an invasive species is assessed for rapid response a structured but qualitative approach best captures the questions that will impact management. Even with a careful framework for evaluation, some species will receive more support from stakeholders to either proceed with or suspend control efforts. To anticipate some of these influences, questions to consider include:

- Does the species directly affect human health?
- Is the species a quarantine or trade regulated taxa?
- Has the invasive species been found in an area with threatened and endangered species?
- Is the invasive species difficult to detect or is it easily confused with another species?
- Is it a vertebrate?
- Does it occur on private lands or other jurisdictions with different management goals?
- Does the species occur in or near an urban area?
- Does the species have commercial, recreational, religious, or cultural value?

Notification

Rapid response to high-priority species that require the resources or authorities of an emergency declaration should notify leadership immediately after verification. For species that require assessment, a briefing and summary of the assessment and risk management options should be prepared prior to notification. Establishing clear lines of authority to act, sufficient resources to succeed, and broad, open external communications with affected parties are all necessary for successful rapid response operations.

1. **Leadership**: Within 24 hours or within three (3) days of official state verification for high-priority species, the lead responding agency will notify the Governor's office and the Montana Invasive Species Council member agencies via their respective Director's offices. All communications outside the agency will be at the direction of the responding agency. Other proposed rapid responses will proceed with a briefing once risk assessments and risk management options have been completed and approved by the responding agency.

2. **Establish Incident Command**: Incident command is recommended during the rapid response phase of management. The scope of the operations can be determined and approved once a command team is in place.

3. **External Communications**: Following the initial leadership notifications, notification will be made to the public. The responding agency, and ideally the Joint Information Center, 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.

LEADERSHIP

Phase 1: Within 24 hours or within three (3) days of official state verification of a high-priority species, the responding agency will notify other parties as follows:

- Governor's Office
- Department of Natural Resource Conservation (DNRC) Director
- Fish Wildlife & Parks (FWP) Director
- Department of Agriculture (DOA) Director
- Department of Transportation (MDT) Director
- Tribes in the affected region
- Montana Invasive Species Council (MISC)
- Other designated state authorities responding, e.g. Department of Livestock

All communications outside the responding agency will be at the direction of that agency's Director's Office.

Phase 2: Those entities that are directly impacted or with jurisdiction in the region (tribes, counties, state and federal agencies) will be notified immediately once outside communication is authorized by the responsible agencies Director's Office. State leaders including legislators (House and Senate leadership) will be contacted at this time.

- Legislators (House and Senate leadership)
- Other impacted state agencies
- Impacted counties, local government, and sheriff's office
- Federal agencies including United States Department of Agriculture Animal and Plant Health Inspection Service (USDA-APHIS), United States Fish and Wildlife Service (USFWS), Bureau of Reclamation (BOR), United States Army Corps of Engineers (USACE), Forest Service(FS), and National Park Service (NPS).
- Impacted industry representatives and stakeholders

ESTABLISH INCIDENT COMMAND

The Montana Invasive Species Framework recommends using incident command System (ICS) for rapid response management. This can flexibly accommodate Unified Command in which multiple agencies share incident management responsibilities or a scaled-back version led by a single agency assisted by cooperators. Incident command is a standardized on-scene emergency management process designed to provide an integrated organizational structure that can address the complexity and demands of an emergency without being hindered by jurisdictional boundaries. Once a high-priority species is found, the responding agency should begin with the assumption that ICS will be used to organize the rapid response. Not all invasive species response actions will require the use of an ICS, but the following elements indicate that the use of ICS is appropriate:

- The invasive species is found across multiple state, tribal, and federal jurisdictions.
- Resources beyond those available within the responding agency are needed for a rapid response.
- Multiple stakeholders and interests are impacted by the response and the outcomes.

EXTERNAL COMMUNICATIONS

Following the initial leadership notifications, the announcement of the invasive species detection will be made to the public. The first round of communications should be directly with impacted stakeholders and local officials. Then, the responding agency, or the joint information center if established, will initially notify the public using a press release and briefing (Appendix C). The press release should go out as soon as possible following personal calls and emails to known stakeholders by agency staff.

The response team is responsible for communicating early and often with the public and stakeholders during the rapid response. The external communications plan is the responsibility of the response team or public information officer (PIO) designated by the responding agency and the communications plan should be commensurate with the scope and scale of the incident. For responses that are likely to take place over a longer span of time, establishing general lines for communication (like an incident specific 1-800 number) can be useful. If ICS is established, the incident commander will provide instruction on approval process for communications, and all communications will be coordinated with the Governor's Office.

The following key activities should be considered by the response team once the initial notification has taken place:

1. Issue press release using pre-approved template.
2. Coordinate with interagency public information officers (PIOs) and liaison officers (LOFR). Establish joint information center (JIC) 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. Prepare response communication plan, talking points, incident timeline, and FAQs.
6. Establish online communication resources and inform stakeholders, e.g.:
    - gov delivery
    - lead agency response specific website
    - ensure lead agency existing social media accounts are used to communicate response information
7. Establish dedicated response phone line, e.g. Google Voice
8. Consider weekly teleconferences for stakeholder briefings.
9. Issue press releases for major milestones and response activities.

Rapid Response

Rapid response is more disruptive and resource intensive than other forms of invasive species management. The decision to proceed should be made only after careful evaluation of the benefits and evaluation of available resources needed to successfully complete the goals of the response. If eradication is the goal for a rapid response effort, the likelihood of reintroduction should be estimated, and creation of reinvasion response programs should be included in planning.

1. **Funding and Authority**: The use of an emergency declaration will provide a limited amount and duration of funding. Rapid responses conducted without the use of an emergency declaration will draw on existing resources which will constrain the extent and duration of the response.
2. **Scope**: The scale and duration of the response should be assessed by the responding agency.
3. **Treatment**: The responding agency will establish a containment plan then evaluate the species and site-specific treatment options and seek permitting advice from other agencies.

FUNDING AND AUTHORITY

If the goal of the rapid response is eradication, the authority and resources to complete the management action through the period when viable propagules will be present should be identified prior to taking action. For plants, this may be many years. Gaps in resources during an eradication attempt will result in failure.[9]

State agencies in Montana fund invasive species management differently. Even with adequate funding, managers must be able to access the populations targeted for control. The authorities required for access may include the authority to enter private property for survey and control work and manage the likely pathways for introduction (Appendix A). Temporary emergency declarations for closure may augment standing authorities if quarantine or closure if necessary.

SCOPE

The partners participating will vary both by the taxa of organism and the location where the response is taking place. This interaction of participants and jurisdictions will include regional partnerships, state agencies, tribes, and federal agencies further divided over management units. Coordinating across these entities and the local stakeholders including local governments, landowners, industries, and technical experts benefits from structured command and communication and incident command is recommended for setting up a successful initial response.

For some species, national programs or regional partnerships may be available to support operations. For example, 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 an infestation of dreissenid mussels. Because Columbia River Basin 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 and support a given infestation will be activated for this group. Support may be available for pest and disease outbreaks through United States Department of Agriculture Animal and Plant Health Inspection Service (USDA APHIS) Plant Protection and Quarantine's (PPQ) Emergency and Domestic Programs unit, which provides staff and resources for plant health emergencies. Similarly, Veterinary Services Surveillance, Preparedness and Response Services (SPRS) mission includes preparing and practicing animal health and all-hazard response plans.

TREATMENT

Permitting

The responding agency and their legal council will prepare and submit the appropriate permits. For some actions, this could include a delay that will substantially impact the timeline of the response. Anticipating control options for high-priority species and obtaining necessary reviews, categorical exclusions, and approvals may reduce regulatory delays.

Science Advisory Panels

The use of a technical advisors to inform the operations of an incident can be beneficial for complex situations and can be drawn from experts in the discipline on an ad hoc basis. Formation of a technical advisory group or science advisory panel also strengthens ties to key stakeholders. The 2017 legislature directed the Montana Invasive Species Council (MISC) to identify and form independent scientific advisory panels. Through MISC, science advisory panels can be formed to address/explore scientific questions.

Quarantine and Emergency Containment

Once a new invasive species has been identified as a rapid response target, containment is the top priority. The risk of spread should be weighed with the impact of restricting access. If alternatives to closing or restricting access are available and effective, these should be considered and the overall cost and impacts of each option are weighed.

1. Initiate mandatory inspections, decontaminations, quarantines, or closures.

2. Utilize existing GIS layers, inventory, or survey access points in affected area and coordinate with neighboring jurisdictions.
3. Identify government or private entities with management authority over potential pathways.
4. Contact management authorities and advise of potential mandatory inspections or closures.

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
- Impact on native species
- Existing user-movement patterns to determine areas at risk for spread
- Inventory impacted infrastructure and resources

The duration of the closure will last until a prevention or containment plan is implemented. If closure is untenable, inspection teams must be on hand for inspection and, if necessary and possible, decontamination.

Transition to Management

Invasive species rapid response efforts may not result in eradication, which requires the removal of all propagules of the target invasive species from the area. Inaccessibility of some areas, a seed bank (including dormant eggs), or difficulty in detecting remaining individuals will require either a longer term "mop up" or more likely, ongoing management. To successfully establish continuity with local managers and transition from a response scenario to ongoing monitoring and management requires planning and communication.

Response team transition tasks:

- Planning chief prepares a transition plan to step down from ICS.
- Incident commander and leadership team meet with the responding agency leadership to review the transition plan.
- A transition date, revised schedule of activities, and press release are drafted.
- The incident commander requests and establishes a review team for an after action report.

The transition from rapid response to management will require defining new clear goals and working with the local managers or groups tasked with ongoing management if the target invasive species is not eradicated. Communicating the new longer-term goals and setting new expectations in line with management should proceed through stakeholder meetings, regional working groups, and updates from the agencies.

One issue in establishing an incident command-led response is that relationships and trust are built with command staff who rotate through their positions. The command staff should be thinking of the demobilization or transition plan and not become irreplaceable. The decision to transition back to local managers from an ICS structured rapid response will depend on many factors based on the scale of the response, whether or not the population has been contained, whether or not the response has stabilized, if the objectives for control have been met, and local factors. 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. When 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 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 PIO assigned to the response as the final press communication by the ICS team.

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 and include all longer-term goals in a set of management recommendations.
- Determine the need for long-term funding for the ongoing 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 administrator from the responding agency and request and establish a team to conduct an after action review (AAR).
- Ensure post action review is conducted, and lessons learned are captured and incorporated into training and guidelines revisions and updates (after action report).
- Disseminate "lessons learned" to other interested organizations (e.g., regional partnerships and invasive species councils).
- 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).

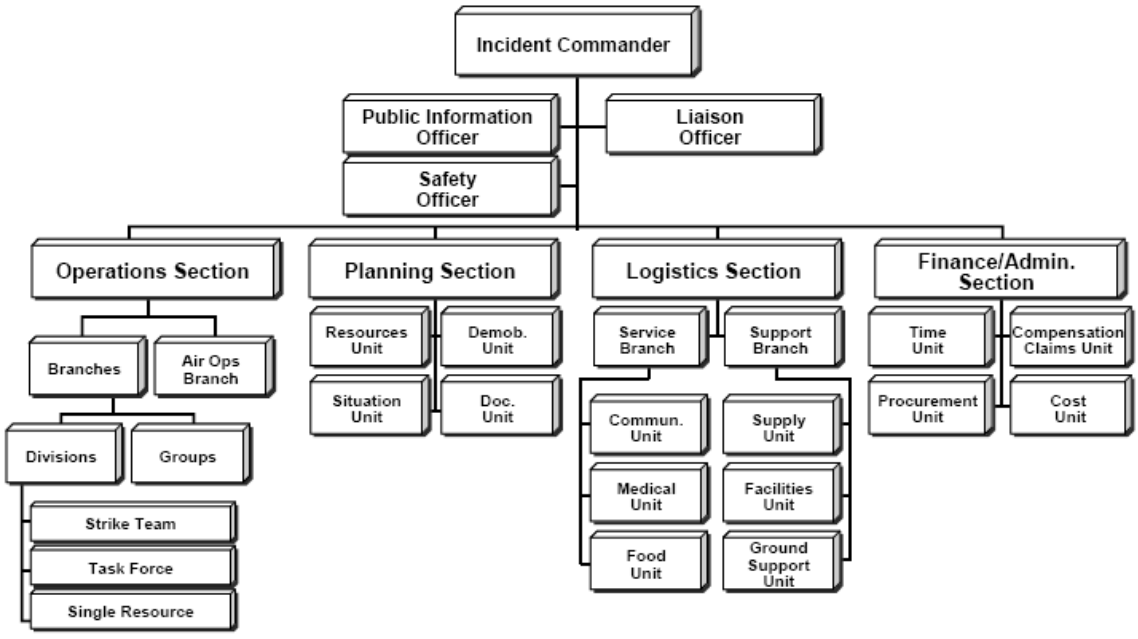

Figure 3 The Incident Command System (ICS) structure that allows for a cooperative response by multiple agencies, both within and outside of government, to organize and coordinate response activities without compromising the decision-making authority of local command.

References

[1]The U.S. Department of the Interior. 2016. Safeguarding America's lands and waters from invasive species: A national framework for early detection and rapid response, Washington D.C., 55p.

[2] Montana Fish, Wildlife & Parks. 2018. The State of Montana's Dreissenid Mussel Rapid Response Guidelines Updated: 6/28/2018. http://fwp.mt.gov/fwpDoc.html?id=86844.

[3] Columbia River Basin Team, 100th Meridian Initiative. 2014. Columbia River Basin Interagency Invasive Species Response Plan: Zebra Mussels and Other Dreissenid Species. https://www.100thmeridian.org/columbia-rbt/

[4] State of Montana Department of Agriculture. 2015. Montana County Weed Act and Administrative Rules. https://agr.mt.gov/Portals/168/Documents/Weeds/County%20Weed%20Act.pdf?ver=2017-07-24-082331-400&timestamp=1503640096122

[5] Montana Department of Livestock. 2018. Statewide Animal Disease Response Plan (referenced via press release). https://liv.mt.gov/Portals/146/news/FMD%20exercise%20pr.pdf

[6] Montana Fish, Wildlife & Parks. 2017. Montana CWD Management Action Plan. https://leg.mt.gov/content/Committees/Interim/2017-2018/EQC/Meetings/Sept-2017/cwd-management-plan-draft.pdf

[7] New Zealand Department of Conservation. 1999. Eradicate this weed or not? Science Poster 21.

[8] National Invasive Species Council. 2003. General Guidelines for the Establishment and Evaluation of Invasive Species Early Detection and Rapid Response Systems. Version 1. 16pp.

[9] Glen, Al & Atkinson, Rachel & Campbell, Karl & Hagen, Erin & Holmes, Nick & Keitt, Bradford & Parkes, John & Saunders, Alan & Sawyer, John & Torres, Hernán. 2013. Eradicating multiple invasive species on inhabited islands: The next big step in island restoration?. Biological Invasions. 15. 10.1007/s10530-013-0495-y