Alberta

Aquatic Invasive Species Early Detection Rapid Response Plan

OCTOBER 2019

Alberta

Alberta Aquatic Invasive Species Contact Information	
AIS 24 hour line (Reporting and Inquiries)	1-855-336-2628 (BOAT)
24 Hour Environmental Emergency/Complaint (ASERT)	1-800-222-6514
Alberta Support & Emergency Response Team Office	780-643-1151
Aquatic Invasive Species Program	780 427-7791
Alberta Environmental Monitoring, Evaluation & Reporting Agency	780-229-7200
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Alberta Irrigation Projects Association	403-328-3063
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Emergency Management Services, Agriculture and Forestry	780 638-3204

Environment and Parks, Government of Alberta
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Contributors

Aquatic Invasive Species Rapid Response Task Team Regular Members

Representatives from ministries, companies and organizations that regularly participate in the ongoing business of the team.

- Ministry of Environment and Parks (AEP) – Fish and Wildlife Policy Branch, Alberta Support and Emergency Response Team, Operations, Infrastructure and Parks Division.
- Ministry of Agriculture and Forestry
- Science and Monitoring
- Eastern Irrigation District (EID)
- TransAlta
- Alberta Irrigation Projects Association (AIPA)
- Ministry of Justice and Solicitor General

Introduction

Aquatic invasive species (AIS) are species not indigenous to a particular region or body of water that can impact or pose threats to the environment, the economy or human health. The Alberta Ministry of Environment & Parks has developed a Provincial AIS Program to address aquatic invasive fish, invertebrates and plants. This effort is being led by the Fish and Wildlife Policy Branch and includes the following elements: (1) watercraft inspections, 2) education and outreach, (3) monitoring, (4) response planning, and (5) policy & legislation. Currently efforts are focused primarily on prevention and monitoring, which is essential and the most cost-effective management strategy given the high costs of long term maintenance and control. The Alberta AIS Program is the result of a collaboration of many different ministries, including Environment and Parks (Policy & Planning, Operations, and Parks Divisions); Agriculture and Forestry; Justice and Solicitor General; and Science and Monitoring. In addition to cross-ministry partnerships, the Department also works collaboratively on AIS with other jurisdictions including: the National Aquatic Invasive Species Committee (NAISC), the Pacific Northwest Economic Region (PNWER), the Columbia River Basin AIS Working Group/100th Meridian, the National Aquatic Invasive Species Committee, the Western Regional Panel, the Western Provinces AIS Working Group, and the Council of State Governments West.

Currently, western provinces of British Columbia, Alberta, Saskatchewan, Manitoba and Yukon Territory are working on an agreement to ensure dialog and unified action on invasive species issues; the initial focus is on zebra and quagga (Dreissenid) mussels. The provinces have committed to ongoing collaboration and activities that will lead to AIS prevention across jurisdictional boundaries. The aforementioned Western Provinces AIS Working Group will be accountable to the intent of the agreement.

In Alberta, as the AIS Program is maturing, it is becoming more comprehensive and addressing threats posed by other AIS. In 2015, we have seen a rise in the number of public reports of AIS in waterbodies, including prussian carp, flowering rush, goldfish (in urban storm-water ponds) and just recently, black bullhead, a species closely related to catfish that is prohibited in Alberta. These reports demonstrate that the public is becoming more knowledgeable about the issue and the harmful threats posed by AIS.

The Government of Alberta has a significant stake in this issue, with responsibility for approximately $8 billion of water management infrastructure at risk, an extensive irrigation program and accountability for “Healthy Aquatic Ecosystems” under the Water for Life Strategy. And with the inclusion of private irrigation infrastructure, the value is over $14 billion.

Prevention is regarded as the best and most cost-effective means of addressing potential new infestations of AIS. However, if prevention efforts fail, the Province of Alberta must be prepared to respond rapidly and effectively to minimize environmental and economic impacts and reduce the risk of spread. According to the book ‘Invasion Ecology’ by Lockwood *et al* (2007), monitoring programs are only as useful as the rapid eradication response system that they inform Rapid response is an integral component of AIS management programs being developed in many countries including Canada, Australia, New Zealand, and the United States

of America (Locke 2010, McEnnulty *et al*. 2001; NEANS 2003; NEANS 2006; NISC 2003; WANS 2003; and Wotton and Hewitt 2004). The Aquatic Invasive Species Rapid Response Task Team was formed in 2014 to develop a plan that would provide detailed direction on the decisions and actions required to identify, assess and respond to AIS anywhere in Alberta. The focus of the team has been on developing a Dreissenid mussel Early Detection and Rapid Response (EDRR) Plan, given the urgency of the threat. The Alberta AIS EDRR plan is designed to complement international and federal initiatives and commitments like the Canadian Rapid Response Framework for Aquatic Invasive Species, Invasive Species Early Detection and Rapid Response Plan for BC, and the Columbia River Basin Interagency Invasive Species Response Plan. The Alberta AIS EDRR Plan is also designed to provide a template and a guide for species/taxa-specific plans as needed; this will ensure consistency and a streamlined approach to response activities.

Purpose of the Plan

The purpose of the Alberta EDRR Plan is to provide a consistent framework to guide response actions needed to detect, assess and respond to an AIS introduction anywhere in Alberta. The plan clearly identifies the roles and responsibilities of different levels of government and stakeholders and how they may be involved in a rapid response including monitoring, detection, containment, and treatment procedures. The plan also identifies relevant legislation and authorities as it applies to potential jurisdiction and inter-jurisdictional response scenarios.

The ultimate goal of rapid response is the elimination of the target species and any risks associated with its presence. However, rapid response must encompass a range of goals, from containment and suppression through eradication and long-term infestation management (Myers et al. 2000). Species-specific EDRR plans and site-specific plans can be developed under the overarching provincial plan, to provide species and site-specific information aiding an effective response, which is outside the scope of this document. This plan will remain in effect indefinitely and will be reviewed and updated as required.

Rapid Response Coordination

The Alberta Ministry of Environment and Parks (AEP) oversees all aspects of an environmental incident from initial emergency response, cleanup and containment, to long-term monitoring and remediation activities. The Alberta Support and Emergency Response Team (ASERT) is a group of highly trained individuals that lead AEP's environmental response during an emergency event 24 hours a day, 7 days a week, anywhere in Alberta. ASERT is responsible for leading and coordinating a response with existing regional AEP staff as well as industry and municipal partners. They have expertise in all aspects of response, recovery and remediation techniques, risk analysis, training, communications and exercise simulation with other government departments and first responders, focusing on the environment. ASERT uses the Incident Command System (ICS) during environmental incidences which is critical to the framework for AIS response in Alberta. Partner agencies will be organized into this framework in funding, resources, expertise and support (see description in Appendix A).

Authorities

Effective legislative frameworks take into account the varying needs and priorities of different jurisdictions. Although there are several pieces of relevant legislation, there is a need for integration and all aspects should be considered during an event.

The *Fisheries (Alberta) Act* was recently amended (March 2015) to better address the ecological and economic threats posed by AIS and enhance the prevention, detection, suppression, and elimination of AIS. This included mandatory watercraft inspections, the listing of 52 prohibited species, enhanced authority over conveyances and authority to quarantine in the event of an AIS detection.

The Aquatic Invasive Species Regulations under the federal *Fisheries Act* came into force in June 2015. These regulations strengthen the prevention and management of AIS in Canadian waters by providing the following measures:

- Prohibit the import, possession, transport of zebra and quagga mussels as well as four species of Asian carp (silver, black, bighead and grass) in Canada with the exception of Ontario and Quebec for mussels and Alberta for grass carp (where already present);
- Prohibit the release of all aquatic species into natural/public waters; and
- Enable the Minister of Environment and Parks to authorize the deposit of deleterious substances or fishing measures to control AIS (defined here as “non-indigenous to the particular region or body of water” of interest).

In the future, other species may be added or removed through regulatory amendments when necessary. All of the new regulations can be enforced by any federal Fishery Officer or Fishery Guardian (including all provincial Fishery Officers and Fishery Guardians). Alberta is the first province to exercise this authority, addressing a recent detection of black bullheads (a prohibited fish species) in a pond near Fort McMurray in 2015. The prohibition on importation can be enforced by the Canadian Border Services Agency as well.

The *Species At Risk Act* (SARA) is federal legislation intended to protect endangered or threatened organisms and their habitats. SARA also manages species that are not yet threatened but whose habitat is considered threatened. This legislation may become relevant for AIS management if treatment or monitoring is planned in a waterbody that has a reported SARA listed species.

The Pest Management Regulatory Agency (PMRA), under Health Canada, is the federal permitting agency responsible for pesticide regulations in Canada. Pesticides are regulated in Canada to ensure they pose minimal risk to human health and the environment. Permits and agreements related to any treatment products need to be in place before any control activities can occur on a waterbody. The provincial government is responsible for administering the use of treatments in Alberta. Under the *Pest Control Products Act*, PMRA:

- Registers pesticides after a stringent, science-based evaluation that ensures any risks are acceptable;
- Re-evaluates the pesticides currently on the market on a 15-year cycle to ensure the products meet current scientific standards; and
- Promotes sustainable pest management.

Currently, very few pesticides are registered for the control of AIS. AIS Program staff are currently exploring options to pursue registration of products that may be needed for control of invasive species in Alberta. Pesticides must be registered (for use) in Canada prior to use. A full registration is ideal, however the PMRA provides several mechanisms to research the efficacy of products not currently registered, including:

- Research Permit for bonafide researchers to gather efficacy data in support of a registration. This application is not geared towards total control of the AIS, but doing research and exploring options to get a registration that will control the pest.
- Emergency Use Registration. This registration allows applicants to use products registered in the United States for the control of AIS to determine if those products also control pests in Canada. The registrant must be willing to support the use of their product (or active) in the manner to which it is applied to the PMRA and must also generate a label for the uses.

Pesticides in Alberta are regulated by the *Environmental Protection and Enhancement Act*, the Pesticide (Ministerial) Regulation, the Pesticide Sales, Handling, Use and Application Regulation, and by the Environmental Code of Practice for Pesticides (referenced within both regulations). Part 8 of the Act deals generally with pesticides and gives AEP powers to control all aspects of pesticide use in Alberta through regulations.

The Pesticide (Ministerial) Regulation provides for the classification of pesticides, and also deals with certification of pesticide applicators and registrations for pesticide vendors and businesses offering pesticide application services and approval requirements for use of pesticides in and near an open body of water. The Pesticide Sales, Handling, Use and Application Regulation regulates the sales, handling and use of various schedules of pesticides. Handling, storage, transportation and disposal of pesticides are also covered by this regulation. Pesticide applicators, services and vendors are further regulated by the Environmental Code of Practice for Pesticides referenced within both of the regulations. Section 9 of the Pesticide (Ministerial) Regulation specifies that anyone conducting an application in or within 30 metres of an open body of water requires a Pesticide Special Use Approval (SUA) or is an applicator working in

accordance to the Environmental Code of Practise for Pesticides. There is also a provision for the Director of Fisheries Management to provide an authorization (in lieu of a SUA) to use a fish toxicant to control AIS.

The *Navigation Protection Act* is administered by Transport Canada. The act regulates any works that may affect navigation on navigable waters in Canada. The only waterbodies listed as navigable in the schedule in Alberta are the Bow, Peace, Athabasca, North Saskatchewan and South Saskatchewan Rivers. Whether or not a waterway is included on the schedule a proposed work may be submitted to Transport Canada to transfer the liability. This could include submerged curtains or berms used during containment or treatment of an AIS. The public's right to use navigable waters as a highway is protected in Canada by Common Law regardless whether the waterway is listed on the schedule to the Act or not.

In the Vessel Operation Restriction Regulations an enforcement officer may prohibit the movement of any vessel or direct it to move as specified by the enforcement officer. An enforcement officer in Alberta includes the Royal Canadian Mounted Police, a member of any provincial, county or municipal police force, a Park Warden, a conservation officer, forestry officer, wildlife officer, and a bylaw officer employed by the Town of Chestermere, a peace officer employed by Leduc County or Parkland County, or a firefighter employed by the City of Calgary. The local authority can also seek the imposition of a restriction on a certain waterbody.

Section 105(1) of the *Water Act* allows an inspector or investigator or the Director the ability to take any emergency measures that (s)he considers necessary to prevent immediate and significant damage to the aquatic environment, human health, property or public safety. This applies regardless, of whether the activity, diversion of water or operation is authorized by an approval, licence or registration or the approval holder, licensee or traditional agriculture user is or was in compliance with the approval, licence, registration or this Act. This could potentially be used for immediate containment and treatment of an AIS if required. However, long-term measures would require consultation and support from licensee's and/or users.

Memorandum D8-1-1 outlines amendments to Temporary Importation (Tariff item No.9993.00.00) Regulations and states that in the event of an environmental emergency and rapid response situation, the Provincial government can request emergency service providers and equipment be permitted to enter Canada without the normal work permits, taxes and duties.

Alberta AIS Early Detection and Rapid Response Plan

This is the first formal rapid response protocol for AIS in Alberta. The Alberta AIS EDRR Plan builds on existing rapid response frameworks in Canada, the Canadian Rapid Response Framework for AIS from the Department of Fisheries and Oceans Canada (Locke et al 2011), the Government of Alberta public safety system and the Invasive Species Early Detection and Rapid Response Plan for BC (IMISWG 2014).

Roles and Responsibilities

The success of the EDRR requires coordination among all levels of government in partnership with industry, water managers and communities. The leadership and administration as well as the inter-agency committees are essential in the overall success and functioning of the AIS program and the successful delivery of a rapid response. Table 1 lists key participants who contribute to the plan and their roles in the process.

Table 1: Roles and Responsibilities of Principal Agencies and Participants

Participant	Role
AIS Standing Committee (Lead Agency – Ministry of Environment and Parks, Fish and Wildlife Policy Division)	Provides provincial leadership, program coordination, policy direction and collaborative approaches to preventing invasive species from establishing in Alberta and managing any that are present.
AIS Rapid Response Advisory Committee Ministries of AEP, Agriculture and Forestry, Justice and Solicitor General. EID, Transalta, Science and Monitoring and AIPA.	Provides directions and decision-making on planning, delivery, monitoring, and reporting on EDRR activities.
AIS Specialist(s) (Ministry of AEP, and Fish and Wildlife Policy Branch)	Provincial AIS Program Coordinator, facilitates delivery of program elements. Acts as Provincial EDRR Coordinator. Coordinates and collaborates in delivering the Alberta EDRR Plan. Participates on advisory committee.
Alberta Science and Monitoring	Provides verification sampling and identification of invasive aquatic invertebrates. Provides bathymetric surveys of waterbodies. Provides ongoing sampling of lakes and reservoirs for Dreissenid mussels and other non-fish biota.

Participant	Role
Taxonomic Group Network (Taxonomic group experts from government, universities, or private citizens)	Provides expert advice in species identification, verification and biological considerations. Participate on advisory committee as needed.
Subject matter Expert(s) (e.g., Government specialists, universities, international experts)	Contributes special expertise and consultation in the biology and ecology of AIS, habitat, site factors, treatment, and inventory and monitoring for specific species or taxonomic group.
Rapid Response Team (Lead - ASERT)	ASERT coordinates the rapid response, emergency phase, using the incident command system (ICS) framework. Core team members may include the Provincial AIS Specialist, Subject Matter Expert(s), operational staff/contractors, and land managers.
Regional Government of Alberta Staff (Ministry of AEP)	Assist in response to AIS incident as necessary. Provide, but not limited to, sampling, containment, treatment, and monitoring.
Communications Director (Ministry of AEP)	Assist in information dissemination to media.
Land Manager(s) (e.g., First Nations, federal, provincial, local government staff, non-government organizations, private land owners)	Participate in finding and reporting new invasive species and liaising with the Rapid Response Team.
Observer(s) (e.g., Subject Matter Expert(s), AIS inspectors, government employees, consultants and public)	Reporting new AIS in Alberta.
Provincial Operations Centre (All affected GOA stakeholders e.g., Alberta Emergency Management Agency, Ministries of AEP, Agriculture and Forestry, AEMA, Health etc.)	Coordinates large, multijurisdictional emergency response when a community or municipality is overwhelmed by an emergency event such as a large scale aquatic invasive species infestation.

Rapid Response Framework

The Alberta EDRR Plan is structured around five steps and processes (Figure 1) for dealing with the introduction of new AIS into Alberta. These steps describe the response components of a successful program; early detection, identification, risk assessment, management and monitoring and reassessment. Regardless of whether the EDRR plan is exited and considered for regional management or carried through to the monitoring and reassessment stage all circumstances of the reporting, identification, verification, risk assessment, management and monitoring and reassessment must be documented to assist in handling future incidences.

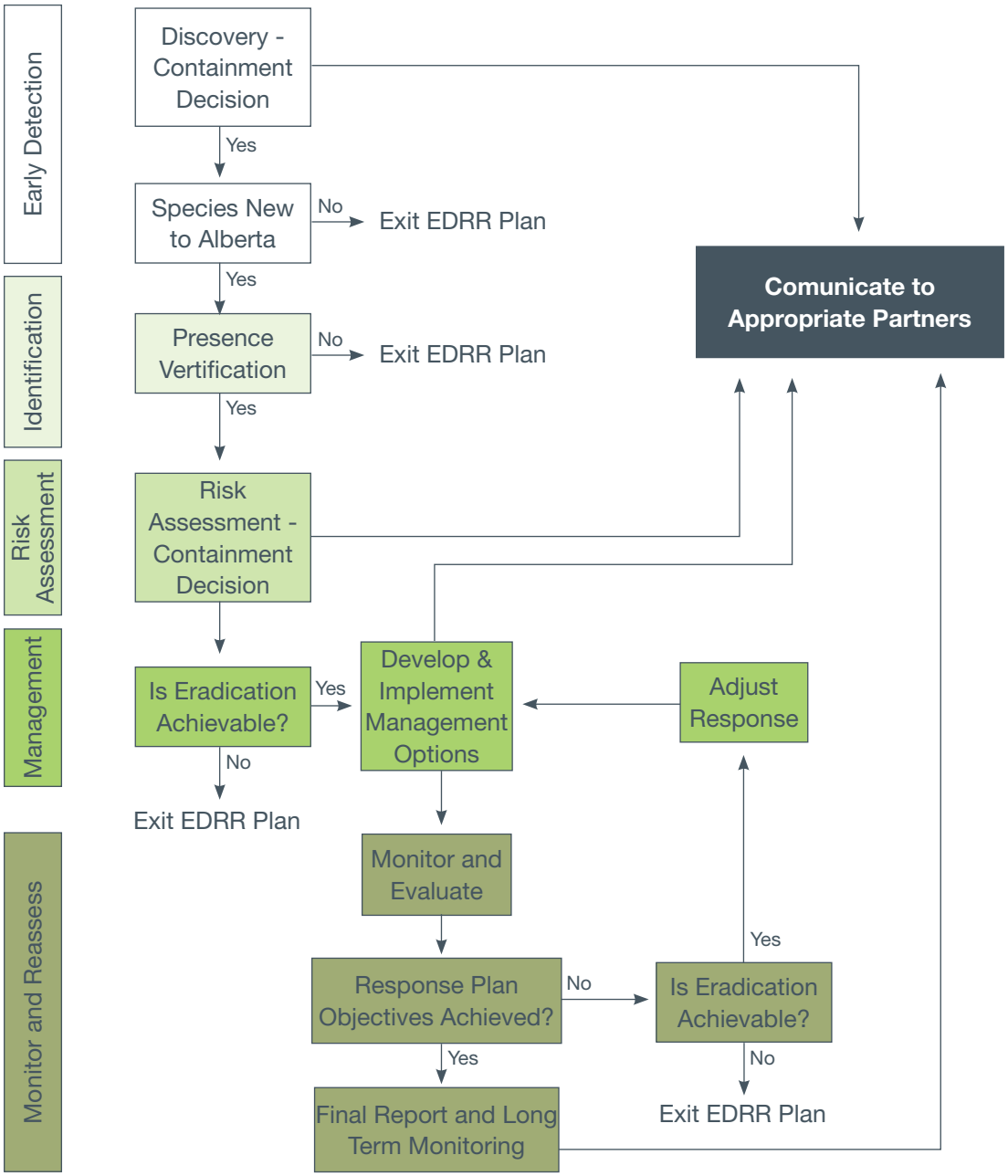
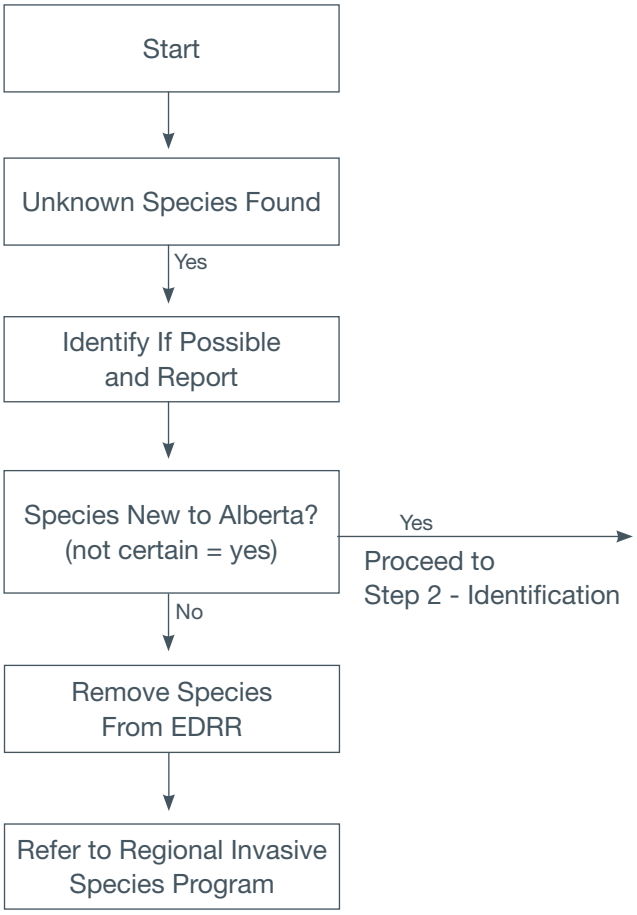


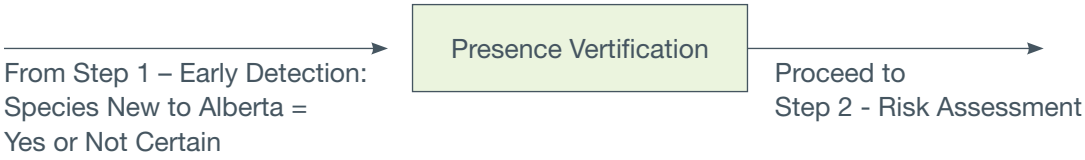
Figure 1: Overview of the Alberta Early Detection and Rapid Response Plan for AIS

Step 1
Early Detection



The key to an effective rapid response plan is early surveillance and detection. Aquatic invasive species can be intercepted via road side inspections of vessels, discovered through formal monitoring surveys or detected or incidentally by an observer. Suspected AIS should be reported immediately through the AIS 24 hour line, 1-855-336-2628 (BOAT). An on-call Emergency Response Officer (ERO) with ASERT receives the report and activates the EDRR Plan. Even if the information is limited or incomplete the initial steps in this process need to happen very quickly. There are several opportunities throughout the response process to modify the size or direction of the response. Early response with limited information outweighs the risk of a lack of response to serious AIS threats early in the invasion cycle. In the discovery phase, it is important to gather critical information and take steps to verify or determine the identity of a species and at the same time determine the potential for containment. If an identified specimen is not a new invasive species to Alberta, then it is removed from the EDRR and considered for regional management.

Step 2
Identification

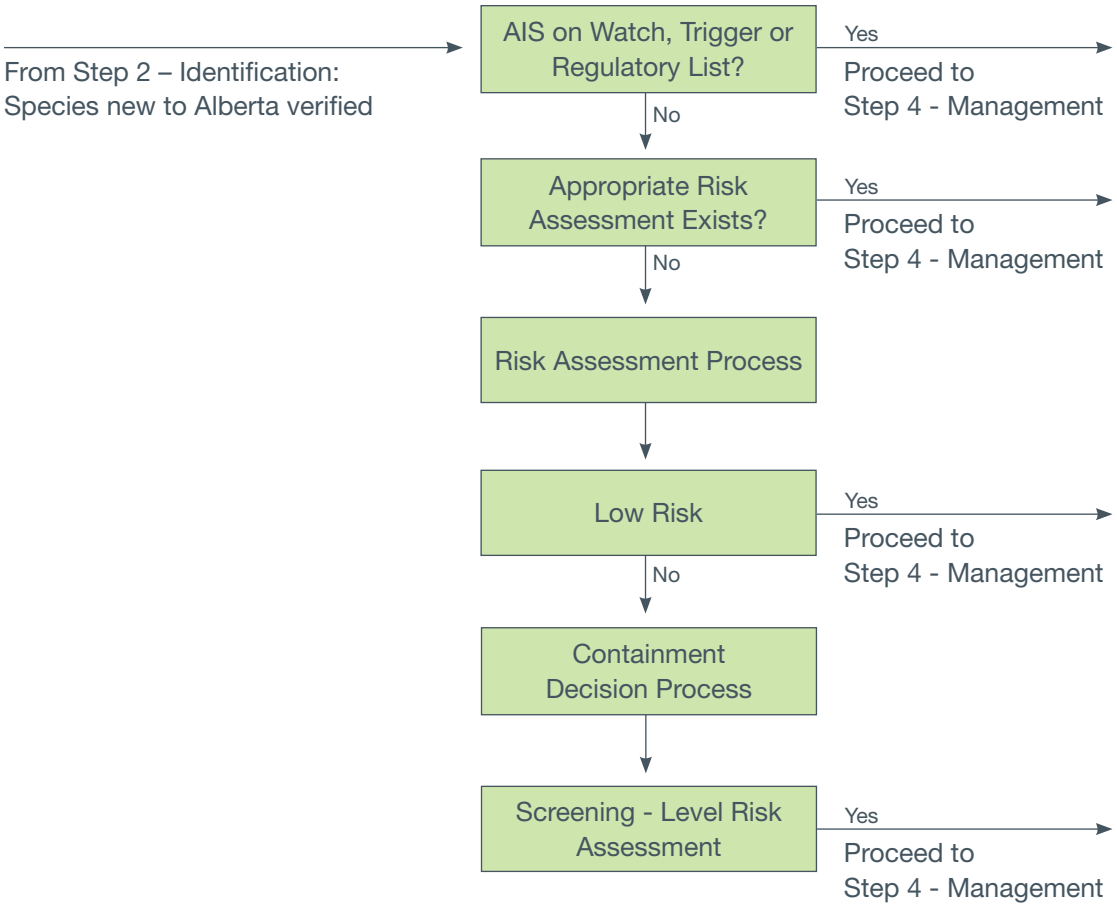


Early Detection and Verification Process

Early Detection Source	Actions
Routine Sample Analysis	The laboratory notifies the AIS program staff immediately of the results of the analysis. If specimen is identified as a prohibited species or species of concern, the AIS program staff will engage ERO to move forward on Management (Step 4) of the rapid response. If not the species exits the EDRR process. If the verification results are contradictory or vague the status of the waterbody will remain "inconclusive" until further verification results are available from additional sampling the following season or re-evaluating the held samples. EMSD begins secondary sample collection (triplicates composite samples) • Negative/Negative – continue with routine sample analysis and do not continue with EDRR • Negative/Positive – send in sample 3 for DNA analysis, if this returns positive, continue with Monitor and Evaluate • Positive/Positive – continue with Monitor and Evaluate
Environmental DNA	A detection using environmental DNA will not be considered a positive sample until detection can be confirmed through routine sample analysis. Analysis will need to be under a commercialized primer to be considered for further exploration.
Report on EDDMapS or Hotline	AIS program staff is contacted and coordinates regional staff/stakeholders to attend site and confirm/deny presence. If positive AIS program staff will engage ERO to continue with the EDRR plan.
Roadside Watercraft Inspections	Samples collected and tested by EMSD or subject matter expert. AIS program staff track intercepted occurrences for reporting purposes. Does not trigger EDRR plan.

If a reported species is suspected to be new, the risk assessment process must be initiated immediately. The species identity will be confirmed by the Provincial AIS Specialist in cooperation with subject matter experts and taxonomists. If a species is confirmed to not be 'new' to the province/range, is not a priority or is not an AIS then the EDRR process is exited and considered for regional management. Notification of species identification is immediately made by the Species Specialist or the Provincial AIS Specialist to the Emergency Response Officer with ASERT.

Step 3
Risk Assessment



Risk assessment of AIS is a determination of the probability of introduction and the severity of the consequence of its establishment and dispersal. This can be done during phases of quick determination with limited information to a more thorough assessment using detailed information. Essential information includes species biology, potential adverse ecosystem, infrastructure, and human health effects and the potential to contain and/or eradicate the species. During this phase, surveys by Subject Matter Experts and possibly Land Manager(s) will be completed to determine location, spread, vectors, dispersal pathways and size.

DFO Science prescribes a three-step risk assessment process for AIS (Locke *et al* 2011):

1. Rapid assessment process to quickly (within 48h) assess species using limited information;
2. Screening-level risk assessment to assess (within seven days) and prioritize species using additional information that is readily available and summarized in a spreadsheet; and,
3. Detailed-level risk assessment to assess (within several months) species using detailed, often modeled, information summarized in biological synopsis. (Beyond the temporal scope of a rapid response but important for long-term management decisions).

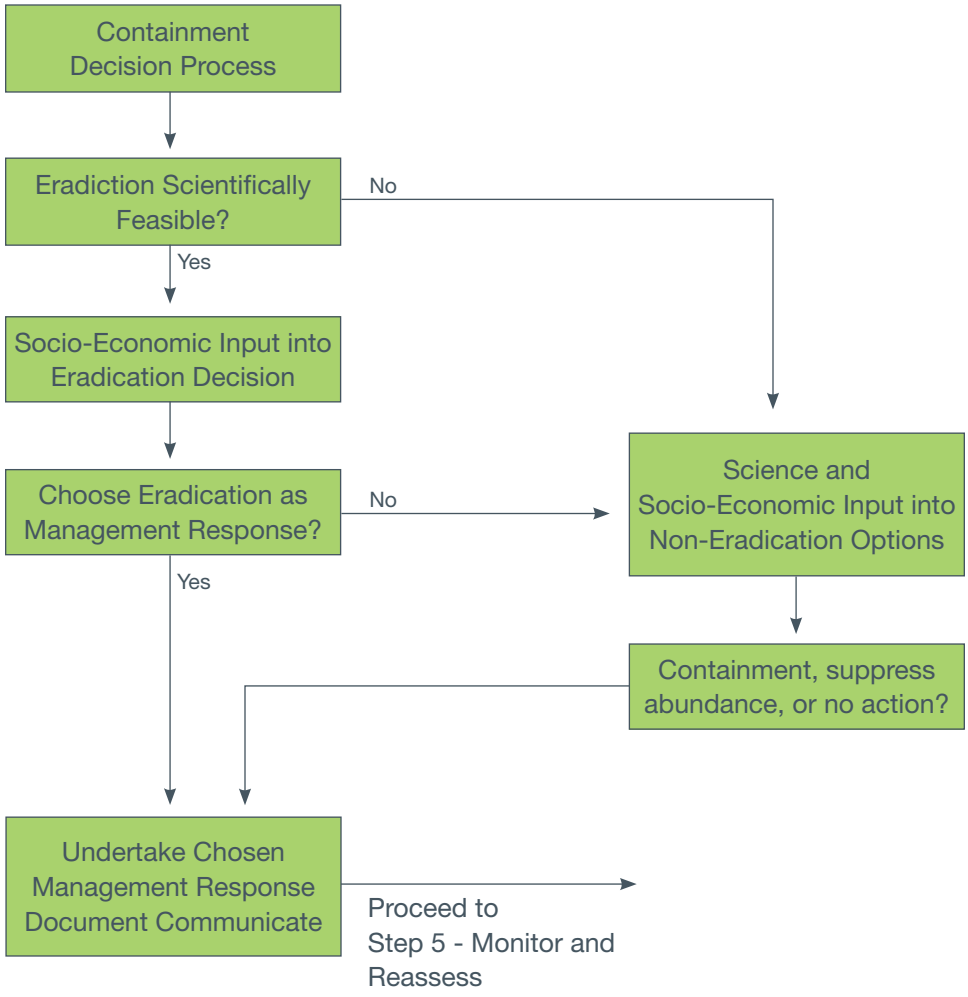
These three steps can be used to develop:

- An AIS watch list for species deemed to be low risk and would guide early detection and monitoring efforts,
- A trigger list for species deemed to be high risk, prioritizing species for detailed level risk assessment, and
- A regulatory list for species deemed to be high risk with mandated responsibilities ie, species that should be regulated to control their potential introduction.

The results of the **existing** risk assessments are essential to the rapid-response decision making process. If the species is not listed and there is no appropriate risk assessment then the rapid assessment process should be conducted. If the species is considered to be high risk, the containment status should be assessed and a screening-level risk assessment undertaken, followed by subsequent management actions (Locke et al 2011).

The Provincial AIS Specialist notifies and/or creates a Rapid Response Advisory Committee to develop a risk assessment through an analysis of treatment availability, consequences and cost. The ASERT ERO and the Provincial AIS Specialist coordinate communication of the risk assessment and recommendations to the appropriate partners. The ASERT ERO coordinates all aspects of containment, surveying and response activities.

Step 4
Management



Rapid response entails an analysis of management goals that will most likely be successful. This may range from providing stakeholders with information and monitoring an event, suppressing population abundance to slow spread, supressing population abundance below an economic or ecological threshold, or commencing a full-scale containment and/or eradication program (Myers et al. 2000 and Wotton and Hewitt 2004). The optimal goal of the management option is to be selective to the target species, cost-effective, easy to administer, and have little to no negative effects on the environment or human health (Locke *et al* 2011).

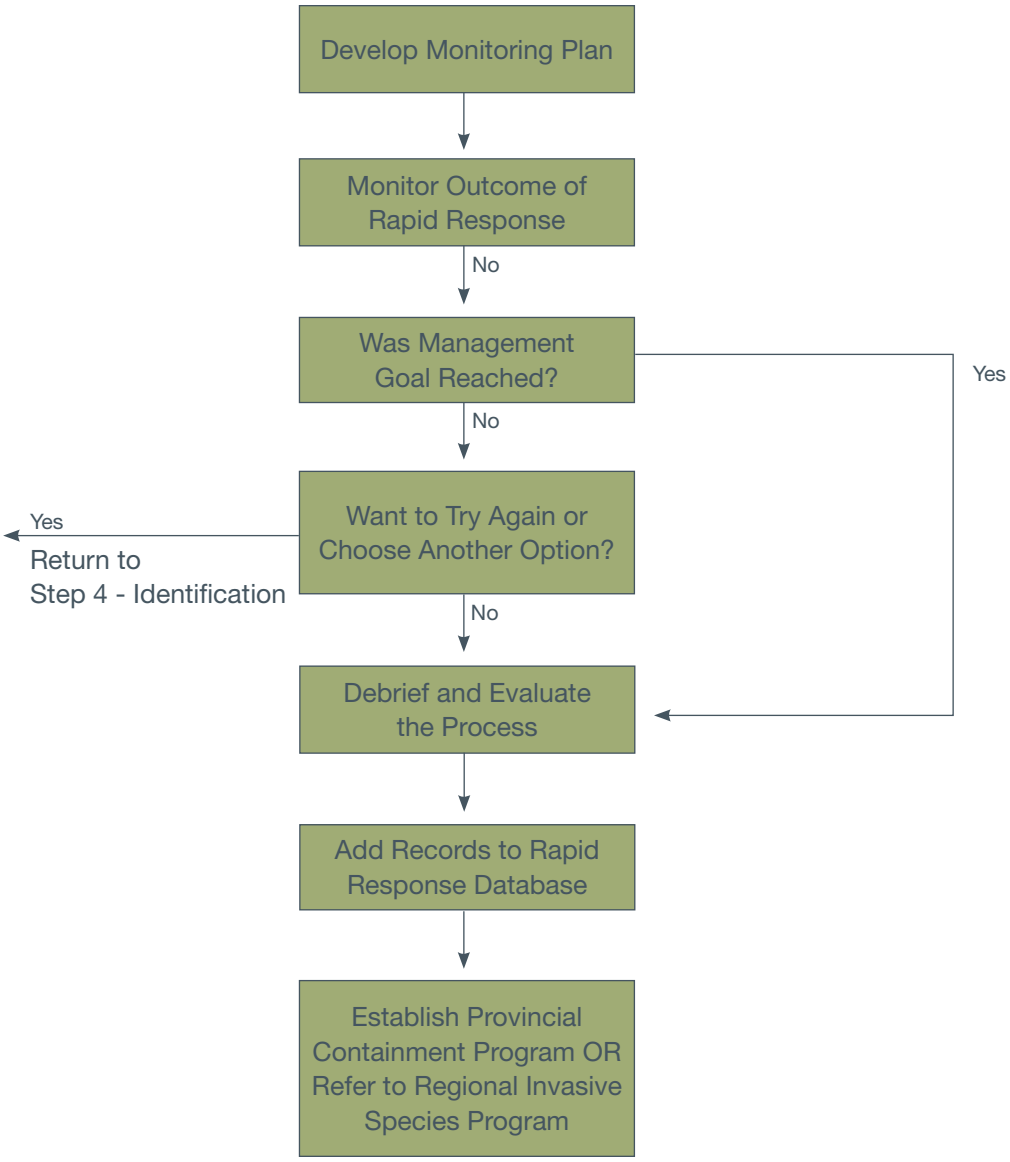
If eradication is achievable the response plan objectives and treatment are established, land access, permits, and authorizations are obtained and the response plan implemented. If eradication is not achievable, the EDRR plan is exited and a provincial or regional containment, management or tracking program is established.

According to Wotton and Hewitt (2004) surveillance and response programs need to be designed to target the greatest threats by:

- Identifying any available control methods,
- Equipment required,
- Contain a list of relevant scientific and technical experts, and
- Information on the species' invasion history, biology, distribution and potential vectors.

The development and implementation of management options must also include a stakeholder communication and consultation strategy as these decisions must consider biological, ecological, technical, economic and social factors (Lock *et al* 2010 and Wotton and Hewitt 2004).

Step 5
Monitor and Reassess



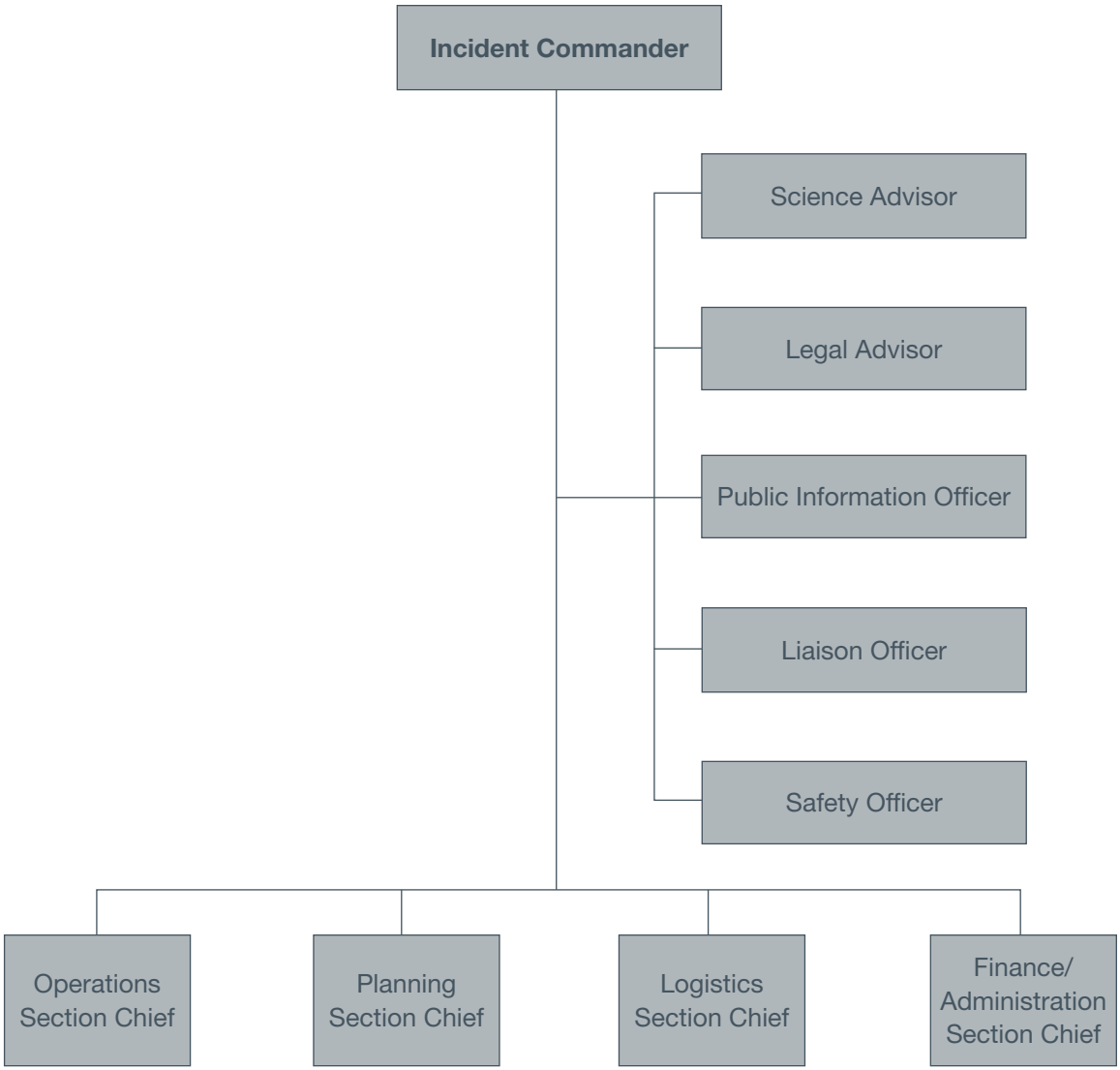
Monitoring must be conducted during and after the treatment to determine if desired targets are reached. Data from monitoring and review(debrief) of a response must be used to determine: (1) if objectives were achieved; (2) if initial actions were (in)effective; (3) if eradication is achievable; (4) what alternatives exist; and, (5) depending on the organism, what frequency and duration of future monitoring may be.

The rapid response phase is complete if the species is found to be non-invasive, the species has been eradicated, all actions have proven ineffective or arrangements are in place for long-term management, tracking, and/or monitoring.

Documentation of the rapid response including failures, is essential. This includes situational reports, operational, monitoring and treatment plans, and post incident assessments. Communicating responses (for example publishing in scientific literature), is a valuable learning tool for partners, managers and researchers.

Appendix A: Incident Command Structure

All AIS rapid responses will be handled using the Incident Command System (ICS). The major concept behind ICS is that every emergency, regardless of size requires certain tasks, or functions, be performed allowing for a coordinated response, integration of facilities, equipment, personnel and procedures between jurisdiction and functional agencies. It also uses common terminology allowing response agencies to communicate and function more effectively.



Below are the five major ICS Management Functions as well as a description of how they are represented in the framework of an AIS rapid response.

Incident Command: This function establishes clear command and works to protect life and property, directs overall management of emergency response activities, develops objectives, sets priorities, delegates and oversees key management functions. The Emergency Response Officer or Director (ASERT) will assume Incident Command at the established Incident Command Post. The incident commander must have a firm grasp of the policies and direction of AEP. The incident Commander's responsibility will be to determine the Incident objectives and lay them out in an incident action plan.

Provincial AIS Coordinator and Science Advisor

The Provincial AIS Coordinator and science advisor are very knowledgeable regarding AIS, knowledge of environmental implications of all eradication and/or control option and communicate with the AIS Advisory Committee.

Legal Advisor

The legal representative from EAP provides environmental law and permitting advise and oversight.

Liaison Officer

The liaison officer has excellent interpersonal skills, highly organized, and knowledgeable of the issues and the affected stakeholders.

Public Information Officer

The public information officer will be from the AEP communications branch and is responsible for communications dissemination between internal response teams, with the media and the public.

Safety Officer

The safety officer is responsible to identify and mitigate hazards associated with the incident, can stop or prevent unsafe tactics, and aid in developing appropriate safety plans for the response.

Operations

Conducts front line/tactical operations to carry out the plan, develops the tactical objectives, organization and directs resources.

Planning

Under this function, the action plan is developed to accomplish objectives. Planning incorporates collection and evaluation of information and intelligence, maintaining resource status. The function also seeks to establish plans for return to normal operations and recovery.

Logistics

Provides support, resources and other services to meet the needs of the incident organization. As in planning, the function of logistics occurs out at the Regional level as well as in the POC.

Administration/Finance

This function is too often overlooked, but is of paramount importance for a successful AEP operation. The Administration/Finance function is critical for monitoring costs related to the incident, provides accounting, procurement, time recording and cost analysis.

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