

Montana faces an urgent threat: invasive species that could severely harm Montana's waters, our forests, and our prairies.

Many non-native plants and animals have established in Montana. Some have caused vast damage to our natural resources. They have imposed heavy economic burdens on agricultural producers and resource managers, who have worked tirelessly to mitigate those impacts.

But other species have not yet become established in Montana. Some, such as zebra or quagga mussels and the emerald ash-borer, could have even more devastating consequences. While we have greatly improved our ability to prevent new invasive species from establishing in recent years, gaps remain.

It is imperative that we do all in our power to better protect Montana and strengthen our ongoing management work against existing invasive species. The cost of more effective prevention, detection, response, and mitigation is significant. But this cost pales in comparison to the costs of mitigation, and most of all, destruction of our natural resources.

In 2015 the Governor's Office established the Montana Invasive Species Advisory Council (MISAC), a diverse group charged with developing "a science-based, comprehensive program to identify, prevent, eliminate, reduce, and mitigate the impacts of invasive species in Montana." The first task this Council completed in March of 2016 was a Statewide Assessment or inventory of the individuals, groups and agencies working on invasive species, their management priorities, and an estimate of their expenditures.

In April 2016, MISAC held an Invasive Species Summit in Helena that brought Montanans together to discuss the problems and explore solutions. Elected officials from all levels of government, agency heads and staff members, scientists, ranchers and farmers, sovereign tribal government representatives, business people, NGO members, and many others took part. The Summit demonstrated the importance of the issue, and the importance that Montanans place on managing invasive species.

Out of that summit, and the input and advice of hundreds of our fellow citizens, we have drafted this report: a strategic framework for statewide invasive species work. We must make the Montana Invasive Species Framework as strong, as effective, and as useful as possible. It will be crucial in fulfilling our responsibility to future generations—that they inherit a place as bountiful, healthy, and beautiful as the one we have been privileged to enjoy.

Thank you for your input and contributions,

Members of the 2014-2016 Montana Invasive Species Advisory Council

Summary:

Coordination:

- Establish forums and tools that allow all partners to share information, prioritize effort, and more effectively respond to invasive species across Montana.
- Describe a comprehensive strategy to provide and sustain invasive species funding.

Prevention:

- Develop a stronger perimeter defense system beginning with high-priority taxa for which prevention can be strengthened most quickly, efficiently, and effectively, while analyzing whether and how the program could include all taxa.
- Draft a statewide communication and outreach plan that is inclusive of important partners like the Department of Education. Use this new document as a resource for identifying existing materials (clearinghouse) and experts who can provide technical support.

Detection:

- Evaluate hiring a statewide data coordinator to address both sharing data about invasive species while protecting the privacy of landowners.
- Develop and encourage citizens to contribute to an early detection network using EDDMapS West or a Montana-based database and create incentives to share reports of invasive species.

Rapid Response

- Develop a generalized rapid response plan for emerging invasive species.
- Train staff in preparation for a rapid response.

Control

- Assess funding mechanisms for an all taxa invasive species trust fund and fully fund the established aquatic invasive species trust fund.
- Hire full-time county weed coordinators or combined county coordinators and provide these staff with training on grant writing, and property weed assessments for people buying and selling property.

Coordination

1. Goal: Coordinate invasive species efforts, focusing on common priorities, and sharing information about management outcomes to build a successful invasive species program.

1.1. Objective: Respond to invasive species as a shared responsibility and a common priority across the state by integrating and strengthening Montana's response.

1.1.1. *Task:* Extend the term of the Montana Invasive Species Advisory Council for the purpose of increasing communication, engaging stakeholders, and implementation of our shared goals and priorities.

- Identify a legislative liaison for invasive species issues.
- Utilize the Council to communicate priorities for invasive species funding to state and federal leaders.
- Improve coordination among agencies tasked with managing invasive species through working subcommittees of the Council that identify gaps, overlap, and maintain focus on common statewide priorities.

1.1.2. *Task:* Expand the sense of stewardship expressed by Montanans to include a responsibility to identify and manage invasive species that harm economic, environmental, or cultural values.:

- Host a biannual invasive species field day for legislators or provide an invasive species day at the capitol.
- Identify leaders who will provide education on invasive species.
- Engage landowners through evaluated, consistent messages and outreach efforts.
- Build stewardship among anglers to contain the distribution of introduced sport fish and aquatic invasive species.

1.1.3. *Task:* Evaluate the need for a comprehensive Montana Invasive Species Act that sets minimum priorities for state agency management of invasive species. The regulatory framework review should:

- Clarify relationships between principal government agencies and county weed districts
- Identify enforcement authority and gaps
- Create a statewide invasive species coordinator position that functions as a single point of contact for this issue.

1.1.4. *Task:* Establish a biannual summit to share knowledge, improve collaboration, and share success. Create a forum to:

- Assess the state's highest priorities for invasive species management
- Encourage researchers to present their work to managers
- Assess Montana's progress towards accomplishing statewide objectives for invasive species.
- Align statewide invasive species management priorities with research opportunities.

1.1.5. *Task:* Conduct a statewide all-taxa risk assessment and develop a cost benefit analysis that creates a comprehensive, prioritized list of invasive species for Montana. Use a cost-benefit analysis to identify species that should be top candidates for management and create a process for regulated parties to review and respond to revised control mandates.

1.1.6. *Task:* Review existing plans that include invasive species and create a comprehensive all-taxa management plan.

1.2. Objective: Support regional efforts to manage invasive species at both the multi-state and watershed scales to allow effective resource sharing and staff expertise.

1.2.1. *Task:* Encourage the establishment of cooperative invasive species management areas and support local coalitions in managing invasive species.

1.2.2. *Task:* Promote cooperative invasive species management agreements (e.g. the Western Regional Panel, 100th Meridian Initiative, the Western Weed Coordinating Committee, Pacific Northwest Economic Region; Invasive Species Council, and other collaborations). Support Memoranda of Understanding among neighboring states, tribes, and provinces, and at all levels of government and private land owners to address Montana's priority invasive species.

1.2.3. *Task:* Conduct a regional analysis to compare Montana's invasive species regulations to those of neighboring states and provinces as was completed for aquatic invasive species.

Prevention

2. *Goal- Reduce the future burden of invasive species impacts by restricting introduction of new species.*

2.1 **Objective:** Reduce the transport of invasive species into and within Montana by fully engaging existing entities and resources.

2.1.1. *Task:* Identify pathways that introduce invasive species into Montana and assess the resources and cooperation needed to reduce the likelihood of introductions.

2.1.2. *Task:* Assess funding levels required to meet enforcement goals and request authorization of stable funding levels for enforcement consistent with invasive species prevention objectives.

2.1.3. *Task:* Develop pathway specific regulations addressing:

- Firewood transportation
- Aquatic harvesting machines
- Fire suppression aircraft and equipment
- Recreational seaplanes
- Mail order and internet purchases of propagules, live plants and animals
- Live bait for fishing statewide
- Mandatory inspection of all watercraft and gear prior to launch
- Cross-border movement of hay and forage
- Feral swine
- Movement of vehicles within the state, including Off Road Vehicles at high risk of transporting weed seeds
- Felt soled waders

2.1.4. *Task:* Assess the need to revise and create regulations addressing pathways related to:

- Listing species as high risk of introduction under the Montana Seed Law
- Nursery and pet store sales
- Interstate and international import of propagative materials
- Revise permits for dredging, harvesting, and treatment of aquatic plants to improve understanding of the transport concerns and compliance
- Examine existing aquatic invasive species quarantine regulations
- Protocols relating to holds after decontamination

2.1.5. *Task:* Fully implement and enforce pathway specific regulations addressing:

- Prevention policies among firefighting agencies
- Year-round watercraft inspection stations to eliminate uninspected boats
- Mandate “pull the plug” for watercraft leaving water bodies
- Hay and forage in backcountry areas
- Weed and seed free gravel
- Prohibiting the movement of live fish

2.1.6. *Task:* Develop a stronger perimeter defense system beginning with high-priority taxa for which prevention can be strengthened most quickly, efficiently, and effectively, while analyzing whether and how the program could include all taxa.

2.1.7. *Task:* Apply consistent enforcement of penalties for the introduction and spread of invasive species.

2.2. **Objective:** Develop a shared, statewide set of priority invasive species to exclude from Montana based on their threat to economic, environmental, or cultural values.

2.2.1. *Task:* Expand authority to an all taxa list of invasive species.

2.2.2. *Task:* Assess and periodically reassess priority species to exclude from Montana.

2.2.3. *Task:* Support research on invasive species under changing climate to predict future risk.

2.3 **Objective:** Increase involvement in preventing the spread of invasive species by engaging new audiences, motivating those who can interact with invasive species pathways, and supporting existing stewards.

2.3.1. *Task:* Expand the role of the existing state weed education program to include all taxa.

2.3.2. *Task:* Evaluate, simplify, and share the messages and methods proposed for communicating about Montana’s invasive species and take advantage of regional collaborations when appropriate.

2.3.3. *Task:* Draft a statewide communication and outreach plan that is inclusive of important partners (e.g. Department of Education). Use this new document as a resource for identifying existing materials (clearinghouse) and experts who can provide technical support.

- Identify gaps in the current education effort and additional education and communication effort needed to support invasive species management.
- Support a K-12 curriculum element on invasive species and include funding for youth education in invasive species management.
- Increase discussion and understanding of the effect of invasive species to engage the public in preventing the introduction and spread of invasive species.
- Create and fund a comprehensive outreach campaign for invasive species in Montana and evaluate the effect on behavior and invasive species management.
- Include urban audiences in invasive species identification and control.

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Detection

3. Goal- Find and communicate information about small populations of invasive species so that their risk can be assessed and appropriately managed, and to ensure changes in established populations are monitored.

3.1. Objective: Identify invasive species and responsibly share the locations of high priority invasive species across jurisdictions in Montana to focus and improve management.

3.1.1. Task: Host a statewide invasive species inventory workshop and develop a plan for ongoing efforts to collect, protect, and share invasive species data.

- Evaluate hiring a statewide data coordinator to address both sharing data about invasive species while protecting the privacy of landowners.

3.1.2. Task: Develop and encourage citizens to contribute to an early detection network using EDDMapS West or a Montana-based database and create incentives to share reports of invasive species.

3.1.3. Task: Promote citizen science to record invasive species records and distribution. Identify a specific focus for target audiences in invasive species identification, reporting, and control.

3.2. Objective: Increase and improve search effort for invasive species with an emphasis on newly establishing invasive species to contain their populations to a smaller area.

3.2.1. Task: Assess and adopt a statewide list of existing and emerging invasive species priorities on an ongoing basis to inform policy, management, and research.

3.2.2. Task: Identify areas at risk of invasion by species that are established elsewhere, both within and beyond state borders.

3.2.3. Task: Develop training and educational programs to improve our ability to identify species that are spreading from landscaping and gardens.

3.2.4. Task: Establish dedicated early detection teams and funding to improve the likelihood of identifying newly establishing invasive species in Montana.

3.3. **Objective:** Standardize monitoring for invasive species population changes and control efforts to ensure that results are measured, analyzed, and evaluated for effectiveness.

3.3.1. *Task:* For groups that do not currently conduct monitoring as part of their invasive species management, assess the reasons for this and provide recommendations to improve reporting.

3.3.2. *Task:* Share and evaluate monitoring protocols and reporting of results in a way that is accessible and protects sensitive landowner data.

3.3.3. *Task:* Require standardized monitoring as part of state grant funded invasive species activities and report on results to create a shared adaptive management approach for invasive species.

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Rapid Response

4. *Goal- Build capacity to eradicate, control, or contain populations of invasive species that pose a risk to Montana.*

4.1. **Objective:** Develop a generalized rapid response plan for emerging invasive species.

4.1.1. *Task:* Summarize existing authorities and assess gaps in regulatory tools that facilitate rapid response.

4.1.2. *Task:* Identify planning needs to improve rapid response capacity.

4.1.3. *Task:* Conduct site-based prioritization on areas with high value resources and a likely source of invasive species introductions.

4.2. **Objective:** Develop the capacity to respond to new incursions of high priority invasive species to contain their spread, limiting the damage they cause.

4.2.1. *Task:* Develop necessary regulatory tools for rapid response to invasive species including rapid response authority for aquatic species.

4.2.2. *Task:* Draft formal agreements that reflect the resources needed to carry out generalized rapid response plans.

4.2.3. *Task:* Develop a cost benefit analysis that creates a comprehensive, prioritized list of invasive species for rapid response in Montana.

4.2.4. *Task:* Develop a dedicated rapid response fund and mechanism for approving rapid response actions that includes all-taxa.

4.2.5. *Task:* Establish a process for revising priority rapid response, all-taxa invasive species lists that informs and engages stakeholders, allows time for review and adoption, and clear compliance goals.

4.3. **Objective:** Prepare natural resources managers to effectively use all tools available to improve the outcomes of rapid response actions.

4.3.1. *Task:* Commit to the use of Incident Command System for invasive species rapid responses.

4.3.2. *Task:* Develop and support carrying out joint exercises and training for managers working with invasive species.

4.3.3. *Task:* Train staff in preparation for a rapid response.

4.3.4. *Task:* Develop and maintain a directory of specialists (e.g. taxonomic experts, ecologists, enforcement, commercial pesticide applicators, policy and regulatory experts) in anticipation of multi partner teams.

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Control

5. *Goal- Reduce the negative impact of established invasive species to Montana's economy, cultures, and biodiversity.*

5.1. **Objective:** Build sustainable funding for a statewide, all-taxa invasive species program with common priorities while recognizing the authorities and resources of diverse partners.

5.1.1. *Task:* Assess funding mechanisms for an all taxa invasive species trust fund and fully fund the established aquatic invasive species trust fund.

5.1.2. *Task:* Create a funders roundtable to coordinate state and federal grant programs and disbursements to focus on the highest priority invasive species.

5.1.3. *Task:* Evaluate the current distribution of funding and consider shifting the distribution to strengthen prevention and outreach efforts, evaluate the need for new funding and align with priorities.

5.1.4. *Task:* Capitalize existing Aquatic Invasive Species Trust Fund.

5.2. **Objective:** Grow both capacity and expertise in managing invasive species in Montana to improve program effectiveness.

5.2.1. *Task:* Connect current research with managing invasive species through discussions, funding, and cooperative projects on priority invasive species.

5.2.2. *Task:* Increase funding for cost-share with private landowners, tribes, and other stakeholders and use incentives to manage invasive species.

5.2.3. *Task:* Identify a library of best control practices as well as uniform standards to train partners managing invasive species.

5.2.4. *Task:* Identify, train, and support personnel who can provide invasive species control expertise (for species other than plants).

5.2.5. *Task:* Hire full-time county weed coordinators or combined county coordinators and provide these staff with training on grant writing, and property weed assessments for people buying and selling property.

5.2.6. *Task:* Expand communication with landowners to encourage invasive species management through existing programs and industry partners.

5.2.7. *Task:* Establish a process for revising lists of priority invasive species that landowners are required to control, which informs and engages stakeholders, allows time for review and adoption, and clarifies compliance goals.

5.3. **Objective:** Expand collaborative working relationships with enforcement agencies to increase compliance with existing regulations for invasive species.

5.3.1. *Task:* Provide more capacity and consistency of enforcement to implement invasive regulations that currently exist.

- Provide a mechanism to improve compliance for landowners that own property in multiple counties.

5.3.2. *Task:* Explore forming a regulatory oversight forum to provide a venue to tribal, state, federal, and local government to address enforcement issues that arise.

5.3.3. *Task:* Provide Counties with more authority to fully utilize and enforce existing weed laws including a tiered approach based on species priority level.

5.4. **Objective:** Ensure that invasive species control restores the desired ecological, economic, and cultural values to the land that is being managed.

5.4.1. *Task:* Study the impact of invasive species on the land values (productivity, wildlife, or other values) to demonstrate the value of invasive species management.

5.4.2. *Task:* Draft management plans to control established invasive species that will benefit from ongoing control efforts.

5.4.3. *Task:* Expand local expertise and capacity to carry out planning and environmental compliance for invasive species management.

5.4.4. *Task:* Recognize the priorities and challenges faced by private landowners in managing species that impact their land values and provide summaries that explain effective biological, chemical, mechanical, and cultural control of widespread species along with updates on County Weed Laws requiring control and early detection for target species.

5.4.5. *Task:* Identify incentives for encouraging required control work.

5.5.6. *Task:* Encourage land trusts and other established coalitions to work with landowners to manage invasive species.

5.4.7. *Task:* Increase capacity for restoration and revegetation after management.

5.4.8. *Task:* Celebrate success stories and make demonstration sites available to showcase how invasive species can be managed successfully.

Funding

6. *Goal: Describe a comprehensive strategy to provide and sustain invasive species funding.*

6.1.1. *Task: Increase the impact of existing funding by improving efficiency of existing grant programs:*

- Improve consistency between grant programs with similar goals by using the same criteria.
- Compile multiple small grants through cooperative agreements between state and federal funding agencies to reduce administrative costs while creating transparent fund distribution to maintain accountability.
- For small, reoccurring grants that are carried out under existing agreements, develop a simplified form and reporting process.

6.1.2. *Task: Develop revenue linked to land and water uses that is sufficient and sustainable.*

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