**SUMMARY REPORT** 

APRIL 2016



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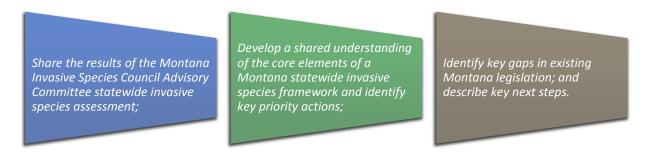
### **TABLE OF CONTENTS**

BACI	ACKGROUND	
	SUMMIT PRESENTATIONS	3
	PREVENTION	
	EARLY DETECTION AND RAPID RESPONSE	
	CONTROL AND MANAGEMENT	
	ORGANIZATIONAL COLLABORATION	
	ONGANIZATIONAL COLLABORATION	10

#### **BACKGROUND**

The Montana Invasive Species Advisory Council (MISAC) was established to advise the Governor on a science-based comprehensive program to identify, prevent, eliminate, reduce, and mitigate the impacts of invasive species in Montana. The three priorities it seeks to address, by January 2017, are to conduct an assessment and gap analysis of Montana's invasive species programs, host an invasive species summit to develop a shared invasive species strategy for Montana, and develop a comprehensive statewide Montana Invasive Species Strategic Framework, highlighting priority existing and emerging invasive species issues as well as effective, collaborative prioritized strategies to address those issues.

MISAC completed the statewide management assessment of invasive species in February of 2016. On April 12–13, 2016, MISAC hosted the Governor's Summit on Invasive Species in Helena, Montana. The goals of the two-day summit were to:



#### SUMMIT PRESENTATIONS

A total of 178 people participated in the summit, representing federal, state, and local governments, tribal sovereign nations, industry, nonprofit organizations, and private landowners.

Montana Governor Steve Bullock kicked off the summit describing the environmental, economic, and social threats of invasive species, encouraging participants to think about the future of addressing invasive species as a tide change, and noting participants should build on the momentum the Montana Invasive Species Advisory Council has started and create new ways for Montana to think about how to deliver an invasive species framework using a more effective, efficient, and collaborative approach. Governor Bullock's remarks were followed by comments from state agency directors and representatives, including Department of Natural Resources and Conservation (DNRC) Director Tubbs, Department of Transportation Director Tooley, Department of Agriculture Administrator Ames, and Fish, Wildlife and Parks Chief of Operations Volesky. All expressed their support for collaborative efforts to improve Montana's ability to address existing and emerging invasive species issues.

Barry Gibbs from the Canadian Council on Invasive Species provided an international perspective on invasive species, asking attendees to consider incorporating provincial partner mutual goals and priorities in elements of a Montana invasive species framework, noting collaborative efforts have occurred to date between Canada and the United States. Mike Ielmini from the US Forest Service provided a national context for

Montana to consider as it develops its invasive species framework, citing the threats of invasive species and the collaborative and persistent work that needs to occur to address those threats. Jerry Marks from Missoula Extension/Weed District described the history of invasive weeds in Montana, from Montana's Noxious Weed Law in 1895 to the comprehensive education, research, prevention, and management efforts that have defined Montana's weed programs.

A panel discussion occurred focusing on case studies to expose summit attendees to different models used to advance invasive species efforts. Mike Ielmini showcased the Western Association of Fish and Wildlife Agencies Wildlife Working Group, a collaborative of federal and state stakeholders dealing with the crisis surrounding the Greater sage grouse. Barry Gibbs talked about how the Invasive Species Council of British Columbia partnered with the Pacific Northwest Economic Region on an aquatic invasive species workshop that convened government and industry representatives and resulted in a jointly funded \$2 million investment in permanent watercraft inspection stations. Rachel Frost, Coordinator for the Missouri River Conservation Districts Council (MRCDC), talked about the Montana Saltcedar Team and the power of these types of partnerships to identify focus areas for invasive species control as well as securing and maintaining funding. Karen Laitala, Weed Coordinator for the Blackfoot Challenge, a community-based conservation initiative in the Blackfoot watershed, described collaborative efforts to manage natural resources while maintaining and fostering a rural way of life.

Lisa DeBruyckere, President of Creative Resource Strategies, presented the results of the Montana statewide assessment of invasive species. A total of 126 individuals representing 85 entities in Montana completed a survey to provide information about fiscal year 2015 efforts associated with invasive species biology, prevention, control, management, research, and outreach and education in Montana. The results of the survey indicated that lack of funding is the most significant obstacle Montana entities face relative to invasive species program implementation. Political will, public awareness, coordination, and landowner involvement, respectively, were the next four obstacles Montanan's face relative to implementing invasive species activities. Montana entities that participated in the survey invested about \$27 million in 2015 invasive species activities. Resources are lacking to fully implement appropriate and effective monitoring, prevention, control, outreach and education, and research to prevent both new introductions and the spread of existing introductions. Respondents invested the most resources in terrestrial plants, followed by aquatic plants, aquatic invertebrates, fish, terrestrial invertebrates, micro-organisms, mammals, birds, reptiles, and amphibians. The top 10 invasive species entities worked on in 2015 represented all taxa, and aligned well with the priority species on the Montana Noxious Weed List as well as the top priority aquatic plant and invertebrate species designated as Montana AIS Grant Program priorities. Early detection/rapid response and coordination ranked as the most important invasive species activity, followed by prevention, management/control, outreach and education, monitoring, coordination, research, and policy. More than 30 different criteria informed prioritization of invasive species efforts, from availability of funding and legal authorities, to management plans, risk assessments, and focused efforts on vectors and pathways. Effectiveness monitoring was the most commonly used tool to evaluate program effectiveness, followed by "met the requirements of a contract/agreement," outcome-based performance objectives, and compliance monitoring. The majority of respondents identified three or more methods used to evaluate program

effectiveness. A total of 55% of respondents rated the effectiveness of the laws and regulations that govern their invasive species work/programs in Montana as excellent or good; a total of 45% rated them as fair or poor. The majority of those who ranked laws and regulations as fair or poor provided specific recommendations to address perceived deficiencies in programs, authorities, funding, enforcement, and management. Respondents also provided recommendations to improve the overall efficiency and effectiveness of invasive species program implementation.

A panel consisting of six Montana legislators (Rep. Janet Ellis, Rep. Mark Noland, Rep. Mike Cuffe, Rep. Ray Shaw, Sen. John Sesso, Sen. Pat Connell) shared their perspectives on invasive species, and discussed with attendees the hurdles and challenges of passing legislation. They provided the following guidance to summit attendees:

- Stay the course with one work force—don't create a separate bureaucracy.
- Get a head start on any legislation, well in advance of each legislative session.
- Establish a need for legislation and clearly articulate that need to legislators and all Montanans.
- Focus on one or two priorities for each legislative session.
- Ensure each bill sponsor thoroughly comprehends each issue, is committed, and can articulate the need for the legislation in the context of the many issues legislators address.
- Know the cost to implement legislation, and ensure legislators understand the value of the program and the specifics.
- Each bill has to make a difference, be worthwhile, and have support.
- The upcoming legislature will be comprised of about 40% freshman—invasive species don't fit in the "normal" pigeonholes—begin talking with people now for the upcoming session.

The remainder of the time spent at the summit involved attendees working in breakout groups to address the issues and questions related to invasive species funding, regulations, species prioritization, outreach and education, the framework moving forward, and working with private landowners.













(Left to Right): Rep. Janet Ellis, Rep. Mark Noland, Rep. Mike Cuffe, Rep. Ray Shaw, Rep. Pat Connell, and Sen. Jon Sesso

- What are key funding gaps?
- What can Montana do to improve the amount of funding available to address invasive species?

### Funding



- What are the key gaps in Montana's invasive species regulations?
- What key regulatory changes should be implemented within the next 2 years to improve Montana's ability to effectively deal with invasive species?
- The next 5 years?

### Regulations



- What gaps and challenges occur in Montana's ability to prioritize invasive species?
- What needs to occur to implement a systematic approach to prioritizing invasive species (terrestrial and aquatic) (consider a variety of scales, e.g., county, statewide, watershed)?

### Species Prioritization



- What gaps and challenges exist in invasive species outreach and education efforts?
- What can we do to improve public awareness, appreciation, and understanding of the importance of invasive species issues?

# Outreach and Education



- What key coordination gaps and challenges exist in the delivery of invasive species programs in Montana?
- What core elements of a statewide framework would address existing gaps and challenges and result in a systematic, comprehensive, tiered, all-taxa approach to addressing invasive species? (e.g., countybased, watershed-based, etc.; funding, coordination, etc.)

# Framework Moving Forward



- What are the barriers to the public participating in invasive species programs?
- What solutions would improve public engagement in invasive species prevention, early detection, rapid response, and control efforts?

### Private Landowners



This report documents the key challenges and recommendations from each of the summit breakout sessions, which were compiled and incorporated into four primary invasive species categories (modeled after the National Invasive Species Management Plan):

- Prevention—Prevent the introduction and establishment of invasive species.
- **Early detection and rapid response**—Identify, report, and effectively respond to invasive species.
- Control and management—Contain and reduce the spread of invasive species.
- Organizational collaboration Maximize organizational effectiveness and collaboration on invasive species.

### **PREVENTION**

<u>Key gaps and challenges:</u> There is inadequate funding for perimeter defense efforts, aquatic invasive species, invasive species programs on state lands, and new and emerging invasive species programs. A **statewide all-taxa risk assessment is a key gap**—it could help to identify those species that present the greatest economic, environmental, and social risks to Montana. **Executive-level agency support** is needed. **Communication**, **audiences**, **and messaging** are key challenges associated with outreach and education prevention efforts. **Invasive species messages lack clarity**, and **it is uncertain if current messaging changes public behavior.** 

- Assessment Conduct a statewide all-taxa risk assessment (potentially conducting a county-by-county risk assessment for all taxa), including a cost-benefit analysis that leads to a taxa-specific, one-stop shopping, tiered priority list with defined criteria for prioritization. Conduct site-based prioritization versus species-based prioritization, i.e., watersheds/districts that would protect resources from all-taxa threats, rank species based on risk for established species versus prevention of new invader species, and align priority species with vectors.
- Outreach Better coordinate and communicate among government agencies and stakeholder groups, improve internal education within agencies, build on existing education programs, expand the role of the state weed education coordinator to include all taxa, individualize outreach by region and audience, cultivate and support local leadership, educate influential community members, and include tribal partners in invasive species efforts. Improve audience-specific approaches, such as working with legislators, focusing on desired public behaviors, using consistent branding, expanding training of seasonal employees, and making more and better use of social media. Streamline and unify invasive species messages, enlist the help of professionals to develop and implement an outreach campaign, incorporate all taxa in messaging, ensure messaging promotes a culture of stewardship to support generational ownership of land and rural lifestyles, emphasize the potential costs if action is not taken, promote successes, avoid the use of scare tactics, use numerous forms of media and approaches as well as partners to convey messages, and incorporate an evaluation component into all outreach initiatives.
- Funding—Provide sustainable long-term funding for a Montana invasive species framework.
- Pathways—Clarify internet purchases, keep watercraft inspection stations open year round, tighten illegal fish introduction regulations, make it illegal to transport live fish, enact firewood transport legislation, eliminate boats launching from out of state without inspections, work more closely with the aquarium and nursery trade, prioritize enforcement/regulations toward new invasions, and identify strategies to address multi-jurisdictional gaps.<sup>1</sup>

<sup>&</sup>lt;sup>1</sup> Regulatory changes that summit attendees recommended be implemented within the next two years.

### **EARLY DETECTION AND RAPID RESPONSE**

Key gaps and challenges: There is inadequate funding for monitoring and inventory, data management and sharing, and a dedicated source of rapid response funds for all taxa. Enforcement, and consistency of enforcement, is critical to effectively responding to invasive species. Counties seek more "teeth" for enforcement, desiring to change the county weed law from "may" to "shall" enforce, adjusting enforcement to meet priorities, adding capacity to implement enforcement, implementing a tiered approach to compliance based on species priority, and ensuring existing laws are enforced. Improvements in existing regulations are desired, including providing clarifying language and improving simplicity, improving the strength and unity of state statutes, adding local regulations, regulating aquatic invasive plants that are noxious weeds, developing a more defined rapid response plan for aquatics, and regulating utilities and railroads for management/fee assessment. There is a need to establish authorities to stop and inspect non-water vehicles and equipment for invasives as well as quarantine authority on boats, docks, and equipment coming into and leaving the state. There is a **need for pathway-specific regulations** for firewood and aquatic harvesting machines, fire season helicopters, feral swine, and absentee landowners as well as mandatory requirements to decontaminate equipment and mandatory boat inspections for all out-of-state boats prior to launch. There are deficiencies associated with invasive species research, including lack of knowledge about the synecology of species (how species are adapting in a changing world with a changing climate), the desire for research priorities to match the priorities of the state, and lack of taxonomic specialists to address species other than plants. There is a lack of awareness of invasive species and their effects as well as the need for cross-taxa education.

- Enforcement—Enforce punitive measures and penalties for the introduction and spread of invasive species, ensure consistency with enforcement, enact an all-taxa transportation regulation, implement aquatic inspection stops for all taxa, and increase funding for law enforcement.<sup>2</sup>
- Regulations—Better use and regulate existing authorities (develop a rapid response/regulation plan), compile a list of existing authorities for all agencies managing invasive species, update the Montana State Seed Act, provide agencies with authorities they need to control or interdict species and/or vectors of introduction, open the noxious weed law to match enforcement capability to regulation and tie timeline to efficacy, increase fines/penalties for "bucket biology", work cooperatively to review and update MCA and ARM Rules in relation to invasive species (e.g., applicator licensing (private,

<sup>&</sup>lt;sup>2</sup> Regulatory changes that summit attendees recommended be implemented within the next two years.

public, and commercial), and provide **quarantine authority** on boats, docks, and other equipment, coming into and leaving the state.<sup>3</sup>

### **CONTROL AND MANAGEMENT**

Key gaps and challenges: There is **inadequate funding** for cost-share with private landowners, **resources** at the local level to assist landowners, restoration and revegetation after management, evaluating success via monitoring, and target-based funding (e.g., x acres to treat). Working with private landowners is integral to all aspects of invasive species program implementation. Many landowners don't understand the potential ecological and economic impacts of invasive species, fail to access needed technical expertise and equipment, can be intimidated and overwhelmed by the scope of the issue, absentee landowners can be difficult to contact and fail to understand the issue or their obligations, mistrust exists between landowners and those with the authority and capability to control invasives, invasive species are perceived as a "government" issue, landowners can be resistant to new programs and do not like to be told what they need to do on their land, landowners lack the financial resources to deal with invasives, numerous requests for private landowners to provide resources (both time and money) to issues of importance cause "exhaustion," some landowners perceive the cause of their weeds are the access they are providing to their land, there is an imbalance of incentives and enforcement, assistance to landowners is limited or unavailable to landowners because of lack of local resources, there is resistance to treatment if neighboring landowners are not controlling invasives, some landowners are apathetic, landowners are concerned about litigation associated with impacts to neighbors if they do treat (e.g., spray drift), there can be disagreements among organizations about what constitutes an invasive species, and landowners do not want information about their land to be public knowledge.

- Build relationships—Establish trust among individuals within a community, identify and recognize their values, and understand different emotional connections people have to invasive species to cause them to act. Implement community-based management processes, cultivate watershed groups, create a Master of Invasive Species Management modeled after the Master Gardener program, use incentives wherever possible, and build personal accountability.
- Messaging—Move from general awareness of invasive species to what people can do to make a difference for their land and their community, and the state as a whole. Inform landowners of a menu of available programs to assist them. Educate absentee landowners and offer training to realtors to reach small property landowners. Raise awareness of existing programs (e.g., Play, Clean, Go, weed seed-free forage program, Adopt a trailhead program). Conduct a "Protect Yourself From Invasion" program. Modernize and improve online invasive species messaging and information within Montana

<sup>&</sup>lt;sup>3</sup> Regulatory changes that summit attendees recommended be implemented within the next two years.

state agency websites. Join the existing three states (WA, OR, and ID) *Squeal on Pigs* hotline. Provide a consistent series of newspaper/ social media articles/series on specific invasive species topics. Use a spokesperson that landowners relate to (i.e., has similar values, challenges, and interests).

- **Funding**—Funding to private landowners should include stipulations on how it can be used and ways to manage the land in the future to achieve long-term benefits.
- Capacity—Hire full-time county weed coordinators, provide grant writing training, provide property weed assessments for people buying and selling property, enter into cooperative agreements among all levels of government to address invasive species on private land, encourage land trusts to work with landowners, share statewide lists of priority invasive species, offer economic analyses of prevention/EDRR versus inaction,
- Public engagement—Use citizen science, including training, monitoring efforts, and reporting mechanisms. Engage the public through hands-on activities, implement a block weed management program modeled after hunting block management program, promote cooperative weed management areas, offer a Welcome Wagon packet for new landowners through realtors, encourage use of online databases by private landowners (incorporating viewing permissions), celebrate success stories through awards and other venues, use demonstration sites and case studies as examples of how invasive species can be managed, and promote the use of best management practices as well as protocols and standards.

### ORGANIZATIONAL COLLABORATION

### Key gaps and challenges:

There is inadequate funding to conduct effective and comprehensive outreach and education campaigns and monitor outreach effectiveness, implement taxa-specific priorities, enhance leadership capacity and partnership building on the local level, conduct adequate enforcement, create an adequate personnel infrastructure (insurance for weed district employees, sustained coordinator positions for volunteer groups, etc.), conduct high priority research, and address emerging issues (e.g., eDNA). There is a need for improved coordination for available funding, consistency among federal agencies, promoting Montana interests to downstream partners, and sharing the process the state has used to list noxious weeds as a model for other taxa to assign priorities. Support is needed for invasive species awareness, particularly with urban audiences and the diversity of landowners that exist with differing priorities. There are gaps in communication and coordination (including across borders), duplication of effort, lack of a statewide communication and outreach plan, lack of involvement by the Department of Education, and lack of a clearinghouse for information and access to technical support. Lack of clarity exists on what people can and cannot do with

funding. There is a disconnect that exists with policy makers and legislators as well as the need to engage industry as stakeholders for funding and collaboration. Five areas of improvement are needed in grant administration, including streamlining and expedition of federal grants, grants that align with the biology of invasive species, less cumbersome contracts, contracts that include administrative costs, and the transparent disbursement of funds. There is a need for improved coordination and collaboration relative to a regulatory framework, lack of a comprehensive strategy to inform available funding, the need to compare Montana invasive species legislation with neighboring states and provinces, the desire to improve working relationships between legal staff and technical staff, lack of a venue to address jurisdictional issues among tribal sovereign nations and other entities, and the need to review and update existing invasive species rules (e.g., applicator licensing for private, public and commercial entities). Enhanced coordination and collaboration is needed to improve efforts to prioritize species, including improving communication among regulatory agencies and management, repairing the disconnect between prevention and management, bridging the gap between researchers and land managers across landscapes and watersheds, improving clarity on how aquatic weeds are addressed, implementing ways to enforce on federal properties, and giving local entities authorities to establish priorities specific to counties and regions within the state. There are challenges associated with data sharing, and lack of a coordinated response mechanism (e.g., Incident Command System) as well as lack of rapid response exercises and plans.

- Funding—Identify where funds exist to support invasive species efforts, invest in a strategic plan to avoid needing additional funds to address an introduction, collectively prioritize invasive funding needs, and better align appropriations to priorities. Explore opportunities to attract new sources of funds via watercraft, licensing, outfitters, box stores, a framework for planned giving, a check-off donation box to invasive species on all licenses, power companies, homeowner associations, out-of-state recreationists, a park decal, user fee, raffle programs, an Aquatic Trust Fund, some semblance of marijuana legalization, dedicated and permanent state funding, federal funds, nonprofit organizations, corporate funds. Seek legislative champions, address the Equal Access to Justice Act, develop a constitutional amendment to fund invasive species trust fund through license fees⁴, and fund a partnership/philanthropy position.
- Infrastructure and Capacity—Institutionalize MISAC<sup>5</sup>, clarify relationships between principal state agencies and county weed districts, consider establishing a task force similar to the noxious weed task force, initiate a dialogue with legislators to enhance the regulatory framework<sup>6</sup>, consider hiring a statewide data coordinator, task the Environmental Quality Council (EQC) to address invasive species

<sup>&</sup>lt;sup>4</sup> Regulatory changes that summit attendees recommended be implemented within the next five years.

<sup>&</sup>lt;sup>5</sup> Regulatory changes that summit attendees recommended be implemented within the next two years.

<sup>&</sup>lt;sup>6</sup> Regulatory changes that summit attendees recommended be implemented within the next two years.

issues<sup>7</sup>, develop working agreements (MOU's) with neighboring states, tribes, and provinces<sup>8</sup>, develop incentive programs (e.g., landowners, tribes, other stakeholders).<sup>9</sup> Collaborate with other enforcement entities (e.g., Highway Patrol) to implement invasive regulations that currently exist.

Organize/streamline human resources to increase capacity, create more education-specific positions, map existing infrastructure to identify key gaps, leverage the efforts of groups currently in existence, and hire a statewide data coordinator position as part of MISAC.

- Create a tiered, all-taxa statewide invasive species list and conduct an internal review to create a black
  list for invertebrates. Create a prioritization system for all-taxa species based on cost-benefit analysis.
   Implement an interagency agreement that identifies criteria for prioritization.
- Outreach and Education Provide funding to support educational programs for youth, make invasive species a required course of study K-12, coordinate the production and distribution of consistent educational materials, demonstrate the need and value of invasive species programs, create a communication and outreach plan, and host a legislative event.
- Coordination Institutionalize coordination, host annual meetings on invasive species, develop taxa working groups or working groups organized by elements of invasive species management, host a meeting with tribal sovereign nations and agency leaders to work through jurisdictional issues, describe clear authorities associated with invasive species goals, responsibilities of all agencies, create a comprehensive all-taxa statewide priority list of new invaders and make it accessible, and create a comprehensive all-taxa statewide invasive species plan.
- Regulations—Study other states' invasive species laws and correct any deficiencies in Montana laws. Explore the potential for a State Invasive Species Act that sets minimum priorities for statewide management.<sup>10</sup>



<sup>&</sup>lt;sup>7</sup> Regulatory changes that summit attendees recommended be implemented within the next five years.

<sup>&</sup>lt;sup>8</sup> Regulatory changes that summit attendees recommended be implemented within the next five years.

<sup>&</sup>lt;sup>9</sup> Regulatory changes that summit attendees recommended be implemented within the next five years.

<sup>&</sup>lt;sup>10</sup> Regulatory changes that summit attendees recommended be implemented within the next five years.