

Scoping Draft AIS Strategic Plan Objectives, Strategies and Actions

October 30, 2020

The Aquatic Invasive Species (AIS) program in Montana has undergone significant changes in recent years and the state's AIS Strategic Plan (Plan) is now out of date. Montana Fish Wildlife and Parks (FWP) and partners from around the state have identified a number of needs and initiatives for future program development. To help inform this process, an AIS Summit was convened in late 2019 to identify needs for the AIS program and to help inform an updated AIS Strategic Plan. Input from partners who attended the AIS Summit is included in the following objectives, strategies and actions that will be evaluated for inclusion in the updated Plan.

State Plans are guided by the Aquatic Nuisance Species Task Force (ANSTF) and the US Fish and Wildlife Service (USFWS) <https://www.anstaskforce.gov/stateplans.php>. The ANSTF provides a framework for Plan development and provides funding through the USFWS to help implement the Plan.

Partner and public input are important for the development and implementation of the Plan. This draft is a first step to solicit partner input on the objectives, strategies and actions. Feedback on these items will inform the drafting of the full Plan which will be made available for public scoping during the 2021 season. Meetings to discuss updating the Plan will be held with interested partner groups to ensure concerns and needs are addressed.

Please provide feedback, ideas and input here: <https://www.surveymonkey.com/r/FQJVTML>

If you have any questions, contact Tom Woolf, AIS Bureau Chief. Thomas.woolf@mt.gov. 406-444-1230.

Program Objectives

Montana's original Aquatic Nuisance Species Management Plan was completed in 2002 to guide how the state addressed AIS prevention, early detection and management. That Plan served as a guiding document for Montana for over 18 years as the program developed and evolved.

The AIS Program in Montana underwent significant expansion in 2017 following the detection of Dreissenid veligers in Tiber and Canyon Ferry Reservoirs. The 2017 legislative session provided staff and funding to expand capacity to address AIS issues. The AIS program tripled in size with expanded watercraft inspection, early detection monitoring and outreach. New requirements were established for watercraft inspection including (1) mandatory inspection for watercraft entering the state (2) mandatory inspection for watercraft crossing west over the Continental Divide, and (3) mandatory inspection for watercraft exiting Tiber and Canyon Ferry. The 2017 legislative session also expanded AIS responsibilities for DNRC by establishing the Upper Columbia Conservation Commission (UC3) and providing AIS funds to support the AIS Grant Program. These changes along with the expansion of the program highlighted the need for a revision of the Montana Plan.

This document establishes goals, objectives and actions that will be incorporated into an updated Plan that will help guide the future development of the AIS program. The Plan seeks to achieve the following objectives:

- Maintain and expand AIS coordination
- Prevent the introduction of AIS
- Early detection of AIS

- In the event of a new AIS detection, be prepared to respond quickly to ensure containment or eradication.
- Provide outreach and education to expand public involvement with AIS prevention and early detection.
- Evaluation of AIS laws and rules.

Strategies and actions for implementation

The following strategies have been identified to address the objectives of the plan and to provide a framework for the actions to be implemented. The strategies are intended to be addressed within a 5-year implementation timeline and are considered dynamic and achievable. Each objective and strategy will be outlined in the implementation table with information on the responsible entity, actions, funding and level of priority. Strategies contain an evaluation component in order to effectively gauge progress.

Objective A: Maintain and Expand AIS Coordination

AIS threaten not only our water resource but everyone living in Montana. Managing invasive species is complex and requires support and cooperation among partners working together at the local, regional and national level. Regional partnerships between state, provincial and federal agencies have built strong regional coordination and have developed standard protocols for AIS inspection and early detection monitoring. Montana is fortunate to have many partners working together to address AIS issues. Close coordination and communication among these partners promotes an all-hands-on-deck approach and maximizes our chance of success addressing AIS issues.

Strategy A.1: Maintain an engaged and effective AIS program for the state of Montana.

A.1.1 Action: Continue to staff, fund and support AIS efforts to protect Montana's water resources from the impacts of AIS.

Strategy A.2: Implement Montana's AIS Plan.

A.2.1 Action: Review Plan progress and action items annually.

Strategy A.3: Continue direct coordination, communication and engagement between state, federal, tribal, and local agencies, non-governmental organization and interested public on AIS issues.

A.3.1 Action: Regularly engage with partners to identify program needs, gaps, and additional coordination opportunities. Provide regular program updates and participate in regional AIS meetings. Host AIS focused meetings to provide information, receive feedback and discuss program development.

A.3.2 Action: Clearly establish and communicate state agency roles and responsibilities for AIS coordination and program implementation.

Strategy A.4: Increase capacity for state, federal, tribal, and local agencies to support AIS efforts.

A.4.1 Action: Continue to engage with partners to identify new coordination opportunities and resources.

Strategy A.5: Submit annual program progress reports to the legislature, funding entities and partners.

A.5.1 Action: Submit AIS program reports quarterly.

Strategy A.6: Coordinate AIS efforts at the state, regional, national, and international level to ensure continuity and consistency to maximize efficiency and efficacy and to prevent the movement of AIS into Montana.

A.6.1 Action: Participate in leadership roles with regional and national AIS groups including the Columbia Basin Team (CRB), the Missouri River Basin Team (MRB), the Western Regional Panel for AIS (WRP), the Pacific Northwest Economic Region (PNWER), and the Western Governor's Association (WGA).

A.6.2 Action: Continue to engage nationally and internationally to advocate for improved containment at mussel impacted waters.

A.6.3 Action: Coordinate with mussel impacted states and provinces to identify strategies to address high risk vectors transporting AIS into and through Montana (including internet boats sales in the Midwest, commercial boat transports).

A.6.4 Action: Promote sustained federal funding to support AIS efforts in Montana and regional prevention and containment efforts.

A.6.5 Action: Coordinate with regional partners to evaluate and improve watercraft inspection and monitoring protocols.

A.6.6 Action: Coordinate with regional partners to evaluate and improve AIS outreach and education efforts, improve efficacy evaluation for influencing behavior change.

A.6.7 Action: Coordinate with regional partners to identify and address research gaps to improve prevention and early detection methods and protocols.

A.6.8 Action: Continue to coordinate with regional partners to promote the regional defense strategy. Investigate and establish permanent inspection stations at strategic locations to prevent mussel introduction.

Strategy A.7: Formalize an AIS Advisory Group to provide input, feedback and recommendations on AIS activities.

A.7.1 Action: Identify a strategy to bring together state AIS partners and groups (UC3, CEMIST, tribes, conservation districts, NGO's) into a state-wide advisory group to collectively help guide AIS activities.

Objective B: Prevent the introduction of aquatic invasive species

Preventing the introduction of AIS is the most effective and efficient way to address the threat of aquatic invasive species. Controlling AIS once they are established is difficult and often impossible. Therefore, investing time and resources into prevention efforts is critical for the protection of water-based infrastructure, recreation, and the environment.

AIS introduction is limited to specific pathways. Addressing pathways rather than specific species is the most effective method for preventing AIS introduction.

Strategy B.1: Prevent the movement of AIS on watercraft:

B.1.1 Action: Continue operation of watercraft inspection stations on high-risk corridors.

B.1.2 Action: Evaluate inspection data to improve data collection and data analysis to determine better ways address risk of AIS transport.

B.1.3 Action: Evaluate and update the WID app to improve data collection.

- Evaluate using bar-code readers, receipt features, RFID technology and other potential strategies to improve data collection and risk evaluation.

B.1.4 Action: Identify partners to assist with management watercraft inspection stations at high risk locations currently managed by FWP staff.

B.1.5 Action: Evaluate and Implement protocols to continually improve quality control for watercraft inspections.

- Explore strategies to improve watercraft inspection staff recruitment and retention.
- Explore strategies to improve training and reinforce protocols.
- Identify strategies to improve hands-on training for ballast boat decontamination.
- Explore strategies to improve station oversight and reinforce QA/QC protocols.

B.1.6 Action: Evaluate watercraft inspection protocols to ensure AIS risk is addressed in the most efficient and effective manner possible.

B.1.7 Action: Explore opportunities to establish permanent inspection facilities at the highest priority locations (Wibaux, Hardin, Dillon) to support a regional defense strategy.

B.1.8 Action: Explore the use of technology to improve station oversight and compliance including cameras and time tracking apps.

B.1.9 Action: Explore night operation of inspection station at locations that see the highest risk boat traffic.

B.1.10 Action: Identify strategies to improve compliance at inspection stations with improved signage, increased enforcement, and outreach.

- Engage and educate enforcement entities state-wide to increase their involvement with AIS enforcement.
- Explore funding from federal sources to support focused county AIS enforcement.

B.1.11 Action: Evaluate new technology that can improve inspection and decontamination efficiency and efficacy (on demand hot water units, improved signage).

B.1.12 Action: Coordinate with and train private entities to provide inspections so to address gaps (example: Ballast boat mechanics, boat rental businesses)

Strategy B.2: Prevent the movement of AIS on water-based equipment and other sources.

B.2.1 Action: Regularly review 310 permit language to ensure it addresses AIS risk.

B.2.2 Action: Provide targeted outreach to address potential AIS transported on used irrigation equipment.

B.2.3 Action: Continue to coordinate with MDT and contractors to ensure construction equipment (barges, dredges, etc.) are inspected prior to use in Montana waters.

B.2.4 Actions: Continue to work with DEQ to ensure out of state mining equipment is inspected and follows dredging permit requirements.

B.2.5 Actions: Continue to work with Seaplane pilots on regional efforts to assess and address the risk of AIS transport on sea planes.

B.2.6 Actions: Continue to work with manufacturers, retailers, anglers, outfitters, and guides to promote cleaning of waders, boats, and gear to prevent the movement of AIS.

- Improve coordination with guides and outfitters to promote educating their clients on AIS issues and gear decontamination.
- Explore establishing wading gear decontamination stations at strategic locations.

B.2.7 Actions: Expand the Don't Let it Loose message to prevent AIS releases from aquariums and ornamental ponds.

B.2.8 Actions: Develop and implement an AIS risk assessment for fish hatcheries and holding facilities.

B.2.9 Actions: Develop and implement standard AIS survey protocols based on risk assessment evaluation for in state and out of state fish hatcheries. Develop these protocols in coordination with the regional effort to standardize hatchery AIS survey and reporting requirements.

B.2.10 Actions: In coordination with DNRC, continue to refine and integrate AIS prevention protocols for fire suppression operations.

B.2.11 Actions: In coordination with DNRC, identify a strategy to address AIS transport on water trucks who transport surface water for construction, drilling and other commercial operations.

Objective C: Early detection of aquatic invasive species

In the event that prevention efforts fail, it is critical to detect new introductions of AIS as soon as possible. Doing so will minimize the chance of spread and maximize the chance for successful eradication. Early detection methods vary depending on the species

Strategy C.1: Continue a thorough AIS early detection and monitoring program.

C.1.1 Action: Continue high level of multi taxa AIS early detection sampling and surveys state-wide.

C.1.2 Action: Annual evaluation of the AIS sampling plan and prioritization of waters for early detection sampling.

C.1.2 Action: Annual evaluation of emerging AIS threats to identify new species to target for survey and sampling.

C.1.4 Action: Annual evaluation of sampling methods and protocols to ensure protocols maximize the likelihood of AIS early detection.

C.1.5 Action: Coordinate efforts of interested parties to expand comprehensive statewide sampling and early detection efforts.

- Meet annually with partners to coordinate efforts for the next sampling season.
- Train volunteer-monitoring networks and other interested parties to work in cooperation with FWP AIS early detection efforts.
- Expand use of the FWP AIS monitoring app.

C.1.6 Action: Evaluate equipment decontamination protocols to ensure they are as effective and efficient as possible.

C.1.7 Action: Evaluate the use of eDNA for AIS early detection. Coordinate with researchers to develop and define eDNA into an AIS early detection tool.

C.1.8 Action: Maintain the FWP AIS Dive Team to serve as a resource to conduct targeted AIS survey and removal.

C.1.9 Action: Continue operation of FWP's AIS Lab to process samples for mussel veligers and diagnostic services for aquatic plants and animals. Explore other early detection and diagnostic services the lab can provide.

C.1.10 Action: In Cooperation with the Montana Heritage Program; collect, review, and maintain AIS sampling databases in a manner to be used effectively by state, federal, and other interested parties.

Objective D: Rapid response preparedness. Responding quickly to the detection of a new AIS introduction is critical for containing spread or facilitating eradication. Response planning and the incident command system (ICS) are key tools for response preparedness.

Strategy D.1: Maintain response preparedness.

D.1.1 Action: Annual evaluation of the Dreissenid Rapid Response Guidelines and update if needed.

D.1.2 Action: Develop response guidelines for other high risk AIS species.

D.1.3 Action: Annually provide staff with Incident Command System (ICS) training and hold refresher training to ensure a base level of response preparedness.

D.1.4 Action: Conduct annual ICS exercises with FWP and partners to maintain preparedness for a quick response to a new AIS detection. Explore training exercises for response to dreissenids and other high priority AIS species.

Objective E: Control and eradicate established aquatic invasive species where feasible. In the event of an AIS introduction, viable treatment options for containment or eradication are an important component for mitigating AIS impacts.

Strategy E.1: Prepare treatment strategies for new AIS detections.

E.1.1 Action: Compile response strategies for treatment of new AIS detections.

E.1.2 Action: Identify funding sources for rapid response treatment actions.

E.1.3 Action: Identify and preemptively address rapid response treatment regulatory requirements.

E.1.4 Action: Proactively develop Environmental Assessments (EA) for treatment of high-risk species.

○ Conduct an EA for copper sulfate treatment for starry stonewort or dreissenid.

E.1.5 Action: Continue ongoing training and preparation of the AIS dive team for rapid response survey and treatment.

Strategy E.2: Control or eradicate existing AIS population where reasonable

E.2.1 Action: Conduct eradication projects on existing high-priority AIS populations within the state.

E.2.1 Action: Provide sampling or control support and expertise to partners who are engaged in AIS treatment projects.

Objective F: Outreach, education and behavior change to minimize the spread of aquatic invasive species: It is imperative that boaters and the public are aware of AIS issues and what they can do to help prevent the introduction and spread of AIS. Changing habits, attitudes and behavior is difficult, but to be successful, every boater, angler, water user and pet owner needs to do their part to help protect Montana waters.

Strategy F.1: Provide outreach and awareness about AIS through diverse efforts.

F.1.1 Action: Hold an annual AIS meeting to update partners on AIS outreach efforts and program achievements. Coordinate new initiatives and projects.

F.1.2 Action: Develop and maintain an AIS outreach plan that will target information to boaters, anglers, other water users, the general public, agencies and private industry. Develop strategies for targeted outreach to ballast boat owners, wading anglers, waterfowl hunters, aquarium pet owners, and ornamental pond owners.

F.1.3 Action: Evaluate the AIS outreach plan and update as needed.

F.1.4 Action: Provide training for FWP personnel and other interested parties to prevent the spread of AIS during field work or other activities.

F.1.5 Action: Provide easy public access with up to date AIS distribution information in the state.

F.1.6 Action: Facilitate the dissemination of information, research, and data on AIS.

F.1.7 Action: Expand and identify new approaches for web-based information on AIS in Montana.

F.1.8 Action: Explore expanding the use of Geofencing to better target AIS messages to specific areas.

F.1.9 Action: Continue to engage and involve partners to deliver accurate and consistent AIS information at the local level.

F.1.10 Action: Create targeted community based social marketing campaigns to reinforce the “clean-drain-dry” and “don’t let it loose” messages.

F.1.11 Action: Explore outreach methods that are most effective to reach specific audiences including print, radio, tv, social media, video segments and other targeted media approaches.

F.1.12 Actions: Provide “train the trainer” instruction to natural resource professionals, educators, conservation districts, NGO’s, etc., to expand the reach of AIS outreach and awareness state-wide.

Objective G: Evaluation of Laws and Rules: Montana’s existing AIS statutes and rules were enacted over many years. This has helped to build a strong and effective program to address the AIS issue, however gaps and needs still remain.

The Montana Invasive Species Council (MISC) conducted an invasive species law review in 2019 which identified several gaps and needs related to AIS. These issues were discussed at the AIS Summit and these changes were supported by Summit participants. The UC3 selected several of these items and identified strategies to address them. These items represent potential opportunities to strengthen specific areas and the overall AIS program for Montana. Each change requires careful evaluation of impacts and practical on-the-ground application.

Strategy G.1: Regularly review laws to determine gaps and needs that could be changed to improve the efficacy and efficiency of the AIS program.

G.1.1 Action: Review feasibility of legislative action to more clearly define roles and responsibilities between state agencies responsible for AIS through Title 80 to ensure effective and efficient program coordination and implementation.

G.1.2 Action: Review feasibility of creating an AIS species list that would provide a single list of aquatic invasive plants and animals that provides clear management authority.

G.1.2.1: Identify additional species to be added to the prohibited species list.

G.1.3 Action: Review the feasibility and need for a pull the plug requirement for watercraft.

G.1.4 Action: Review the feasibility and need for increased penalties for watercraft that fail to stop at inspection stations.

G.1.5 Action: Evaluate the effectiveness and utility of the AIS Trust Fund.

G.1.6 Action: Evaluate the feasibility and need for a decal associated with the out of state vessel AIS prevention pass.