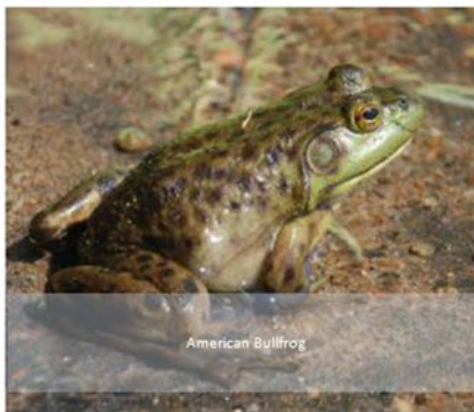
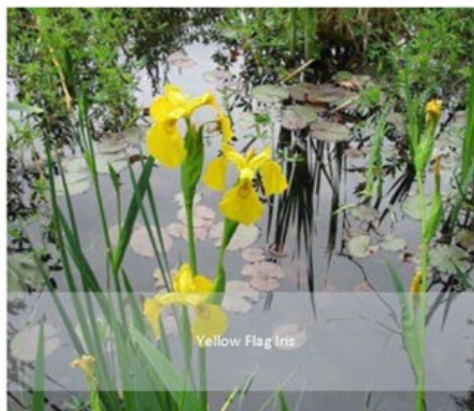


May 2015

CANADIAN COLUMBIA BASIN REGIONAL
FRAMEWORK FOR AN AQUATIC INVASIVE
SPECIES PROGRAM: 2015 TO 2020



Revised December 2017
Columbia Basin Aquatic Invasive Species Steering Committee




Aquatic invasive species (AIS) are non-indigenous species that impact, or have the potential to impact, the ecology, economy, and social opportunities of the Columbia Basin. In recognition of these concerns, the Columbia Basin Trust and the four regional invasive species organizations¹ operating in this region have developed or expanded their current aquatic invasive species programs since 2015. The primary focus of the Canadian Columbia Basin Regional Aquatic Invasive Species Program (hereafter referred to as the “Program”) is to promote a proactive, strategic, collaborative, and coordinated approach to aquatic invasive species prevention, response, and management. This Program applies to the Canadian Columbia Basin in south-eastern British Columbia where waterbodies drain into the Columbia River prior to it flowing into the United States.

The Program is guided by a framework that was developed by an *ad hoc* committee comprised of provincial, First Nation, state, and regional representatives. The committee identified over six dozen action items that reflect shared goals and priorities under five areas of focus: coordination and collaboration, education and outreach, watercraft inspection and decontamination, monitoring and research, and response and management. While activities focus primarily on south-eastern B.C., they are designed to be consistent with broader initiatives of the Province of B.C. and the Invasive Species Council of B.C., and may be undertaken by regional invasive species organizations and partner organizations.

This report is intended to provide a status update on activities related to the Program since its inception in 2015. Many action items have been completed, some are in progress or are on-going, while others will be delivered in the future as opportunity or need arises. The implementation status of select action items are highlighted in this report, and completed and on-going actions may be followed by examples of outcomes in italics. Much has been accomplished since 2015, however, continued and consistent efforts are essential in order to protect Columbia Basin waters from the negative impacts caused by aquatic invasive species.



COORDINATION AND COLLABORATION

ESTABLISH A COORDINATED AIS PROGRAM IN THE BASIN, BUILDING ON EXISTING EFFORTS AND INTRODUCING NEW ONES



-  Form and maintain a basin-wide AIS Steering Committee to oversee implementation of this Program
-  Maintain communication, and participate as required, with species-specific working groups established for priority AIS and identify opportunities to participate: *Columbia Basin Cooperative Weed Management Area, focus is flowering rush; northern pike working group; American bullfrog action team*
-  Maintain a webpage for the Columbia Basin AIS Basin-wide program

¹ Central Kootenay Invasive Species Society (<https://ckiss.ca/>), East Kootenay Invasive Species Council (<https://www.ekisc.com/>), Northwest Invasive Plant Council (<http://nwipc.org/>), Columbia-Shuswap Invasive Species Society <https://columbiashuswapinvasives.org/>



FACILITATE COORDINATED PRIORITIES AND ACTIVITIES FOR MAXIMUM EFFICIENCY AND EFFECTIVENESS

-  Develop collaborative actions between agencies and organizations, including cross-border initiatives: *American bullfrog action team; 100th Meridian Initiative Columbia River Basin Team*
-  Maintain communication with provincial and province-wide programs to align with provincial priorities

IDENTIFY MODELS AND OPTIONS FOR LONG-TERM STABLE FUNDING





-  Bring four regional invasive species organizations together to identify collaborative funding opportunities: *meet annually to work on fund development strategies to continue to seek long-term, sustainable funding*
-  Identify, seek and acquire a range of funding models, partners, and opportunities

EVALUATE AND CELEBRATE SUCCESS


-  Monitor success of AIS Program and associated activities through a twice annual review of committee and partner achievements: *spring and autumn steering committee meetings*
-  Develop and utilize a method of evaluating the outreach program by creating a baseline survey to measure change in knowledge and/or behaviour: *developed surveys for Clean, Drain, Dry; Don't Let it Loose; PlantWise*

EDUCATION AND OUTREACH

IMPLEMENT SUCCESSFUL BEHAVIOURAL CHANGE PROGRAMS WITH CONSISTENT AND PROVEN MESSAGES THAT TARGET KEY PATHWAYS

-  Utilize community-based social marketing and social networking tools (Facebook, website) and other appropriate approach (e.g. Clean, Drain, Dry; PlantWise; Don't Let it Loose): *inclusion of Best Management Practices for AIS prevention in environmental management plans and training modules*
-  Install signage by identifying existing and potential locations of signs, kiosks, and billboards: *over 58 signs with AIS messaging installed*
-  Coordinate the development of a Columbia Basin AIS brochure that is consistent between regions
-  Provide training workshops to relevant audiences: *Train the Trainer sessions*

REDUCE THE POTENTIAL FOR AIS-FOULED BOATS AND EQUIPMENT TO ENTER LOCAL WATER BODIES THROUGH EDUCATION

-  Partner with the province-wide Clean, Drain, Dry program

- ★ Maintain a handout of boat and car wash stations available that do not drain into natural water bodies and advertise these to boaters
- ▲ Promote training on disinfection protocols to relevant audiences

ENGAGE STEWARDSHIP GROUPS, COMMUNITY ORGANIZATIONS, EDUCATIONAL INSTITUTIONS, AND INDUSTRY FOR AIS OUTREACH

- ▲ Coordinate with and provide training (when required) to stewardship groups and others who do aquatic outreach to facilitate incorporating AIS messaging into programs
- ▲ Promote AIS education in elementary and secondary schools and post-secondary institutions by providing guest speaker programs or “train the educator” opportunities: *“Teaching about Native & Invasive Species” train the educator workshops*
- ▲ Work with hydro electric utilities to conduct mail-outs, sponsor signs, and develop a mussel-impact on hydro-power awareness campaign: *internal and external AIS messaging developed for Columbia Power*

ENGAGE LOCAL GOVERNMENTS AND INDUSTRY IN AIS ISSUES

- ▲ Write letters, conduct follow-up phone calls, and provide presentations to elected officials about the importance of AIS prevention and programs: *AIS presentations for local MP, MLA, district and municipal staff*

WATERCRAFT INSPECTION AND DECONTAMINATION (WID)

REDUCE THE POTENTIAL FOR AIS-FOULED BOATS TO ENTER LOCAL WATER BODIES THROUGH WATERCRAFT INSPECTION AND DECONTAMINATION

- ▲ Identify opportunities to collaboratively support watercraft inspection and decontamination stations in the region: *raise awareness of through traditional and social media spots/posts*
- ▲ Coordinate to have WID stations demonstrated at high priority events: *annual fly fishing symposium; marina owner’s education event*






INCREASE DETECTION OF MUSSEL-INFESTED WATERCRAFT

- ▲ Promote the Report All Poachers and Polluters line for mussel-reporting






MONITORING AND RESEARCH

DEVELOP A COORDINATED, SPATIALLY COMPREHENSIVE MONITORING PLAN TO MONITOR AREAS AT HIGH RISK OF AIS INTRODUCTIONS


- ★ Identify high priority sites for monitoring by developing Basin-wide criteria for prioritizing waterbodies: *ranking matrix for monitoring priority of waterbodies*

-  Coordinate monitoring activities with provincial government and regional organizations: *Dreissenid mussel early detection lake monitoring program*
-  Conduct inventories for AIS, including aquatic and riparian plants and zebra and quagga mussel veligers, at high priority water ways: *yellow flag iris, flowering rush, American bullfrog, Dreissenids, New Zealand mudsnail*
-  Contribute monitoring location data to the Columbia River Basin Aquatic Invasive Species Database: *regional invasive mussel monitoring uploaded to database*
-  Identify natural colonization pathways of high priority AIS across the borders²
-  Work with Provincial Government to identify experts in identification of species as required



PROMOTE AND UTILIZE STANDARDIZED MONITORING, DATA SHARING, AND REPORTING

-  Promote and utilize a centralized database for AIS including Invasive Alien Plant Program until Invasive Alien Species Program is available
-  Promote and distribute BC AIS Monitoring protocols: *British Columbia Dreissenid Mussel Lake Monitoring Field Protocol; British Columbia Aquatic Invasive Species Survey Methods*
-  Develop expertise within regional invasive species organizations to identify provincial Prohibited and Controlled Alien Species as well as regional priority species
-  Report Provincial Early Detection Rapid Response species to the Provincial Government
-  Where applicable, pilot novel monitoring options

INCREASE OPPORTUNITIES TO PARTICIPATE IN AIS MONITORING


-  Provide training workshops to relevant regional groups on AIS identification, monitoring standards, and disinfection protocols

PROMOTE AND FACILITATE AIS RESEARCH


-  Identify, support, and partner with research projects including potential impacts, mitigation techniques, and management strategies: *Lower Columbia River Aquatic Invasive Species Reduction Program*
-  Enable communication of research activities through regional forums, basin webpage or other means: *Invasive Species Research Conference*

RESPONSE AND MANAGEMENT



FOLLOW THE PROVINCIAL RESPONSE PLAN FOR ZEBRA AND QUAGGA MUSSELS

-  Participate on the Provincial Zebra and Quagga Mussel Rapid Response Team as required





² https://ckiss.ca/wp-content/uploads/2016/02/For-Webpage_CB-AIS-List_Updated_FNL_22Apr2017.pdf

-  Report any new potential Dreissenid mussel incursion events to the Provincial Zebra and Quagga Mussel Early Detection Rapid Response Coordinator

COORDINATE WITH RELEVANT PARTNERS TO PARTICIPATE IN RESPONSE STRATEGY FOR HIGH PRIORITY AIS AS REQUIRED

-  Develop a response plan for species that are not of provincial Early Detection Rapid Response priority but are regional priority species: *Early Detection – Rapid Response Plan American Bullfrog – Kootenay-Boundary Region BC; development of a corporate Invasive Species Strategy, including species risk assessments and associated action plans*
-  Support the development of response tools that can be utilized if a high priority species is detected

CONTAIN AND MANAGE EXISTING AIS INFESTATIONS TO REDUCE IMPACTS AND SPREAD

-  Identify potential spread patterns for existing AIS infestations to determine where to monitor or contain
-  Prioritize AIS sites for management action: consider funding opportunities, jurisdiction, potential impacts, species at risk, and probability of success
-  Install signage at AIS infested sites to promote Clean, Drain, Dry; Don't Let it Loose; or PlantWise to reduce spread
-  Develop “alerts” and other tools for new invaders to prevent spread of existing infestations

REFERENCE

Columbia Basin Aquatic Invasive Species Steering Committee, 2015. Canadian Columbia Basin Regional Framework for an Aquatic Invasive Species Program: 2015 to 2020. <https://ckiss.ca/wp-content/uploads/2018/05/Canadian-Columbia-Basin-Regional-Framework-for-an-Aquatic-Invasive-Species-Program-2015-to-2020.pdf>.