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Hon. Joyce Murray
Minister of Fisheries, Oceans, and the Canadian Coast Guard
House of Commons
Ottawa, Ontario
Sent by e-mail to Joyce.Murray@parl.gc.ca

26 November 2021

Re: Urgent need to prevent the spread of aquatic invasive mussels to British Columbia

Dear Minister Murray,

Congratulations on your recent appointment as the Minister of Fisheries, Oceans, and the Canadian Coast Guard.

We are writing to you on behalf of the Shuswap Watershed Council (SWC), Shuswap Waterfront Owners Association (SWOA), and Columbia Shuswap Invasive Species Society (CSISS) to express our concern about the threat of Zebra and Quagga Mussels (ZQM) to British Columbia waters. Although BC does not presently have any known infestations of these invasive mussels, an introduction would have devastating ecological and economic impacts. BC, and Western Canada, need much stronger protection measures against ZQM.

Zebra and Quagga Mussels have colonized in lakes in Manitoba, Ontario, and many states including as far west as California. ZQM move from one watershed to another primarily via watercraft: either as adult mussels attached to watercraft, or as larvae trapped in standing water inside watercraft compartments. The Shuswap, in the Interior of BC, is a popular tourist destination and it receives a huge influx of watercraft each summer - and each year, watercraft contaminated with invasive mussels arrive in BC¹. Furthermore, our water's warm temperatures and high calcium content, and our mild winters make our region even more vulnerable to a mussel infestation because these conditions increase the chance of the mussels' survival. A single contaminated watercraft from an infested lake could start an irreversible infestation in BC. There is no method of eradicating Zebra or Quagga Mussels from an ecosystem as large and complex as the Shuswap.

Once established, ZQM would have devastating and costly impacts to water quality, fish populations and habitat, hydro-electric facilities, water utilities, beaches, and property values. A 2013 Okanagan Basin Water Board (OBWB) study conservatively estimated an infestation at \$42 million annually in direct costs and lost revenues in the Okanagan alone. What's more, if ZQM colonize in Shuswap or Okanagan Lakes, they would move downstream to the Fraser and Columbia River systems that are so

¹ The Province of BC Invasive Mussel Defence Program reported that it intercepted 17 mussel-fouled watercraft at their watercraft inspection stations in 2021. Provincial reports available here: <https://www2.gov.bc.ca/gov/content/invasive-mussels/invasive-mussel-defence-program>.



important to Pacific salmon and for hydro-electric power generation. Estimates from the Pacific Northwest Economic Region (PNWER) peg the costs of an invasive mussel infestation at \$500 million annually to the region.

We have shared our concerns with your predecessors, and with provincial counterparts, through previous correspondence on several occasions. Unfortunately, we feel that the federal government still has not taken sufficient action on the issue nor has it provided equitable funding to British Columbia to stop the spread of ZQM. A report on Aquatic Invasive Species (AIS) by the Commissioner of the Environment and Sustainable Development² (April 2019) notes that Zebra mussels are “one of the most destructive invasive species ever to have invaded North American fresh waters...” and the report is consistent with our concerns about the lack of urgency and intervention by the Department of Fisheries and Oceans. Additionally, a report from the Standing Committee on Fisheries and Oceans (June 2019) found that the federal government’s protection of Canadian lakes and waterways against aquatic invasive species is inadequate.

The Shuswap Watershed Council (SWC) takes this issue seriously and is invested in keeping invasive mussels out through funding public awareness campaigns in our region to ‘Clean-Drain-Dry your watercraft’ and ‘Don’t Move a Mussel’ since 2018. To date, the SWC has spent \$92,000 in local taxpayers’ dollars on these campaigns; it’s spent an additional \$45,000 supporting early detection monitoring in the Shuswap watershed which is carried out through a partnership with the Columbia Shuswap Invasive Species Society (CSISS). In 2021, the SWC is spending \$57,000 on these activities. While we feel that preventing the spread of ZQM should be handled by senior governments, we also are compelled as a regional watershed partnership not to be idle on this issue; our local residents are part of the defense against ZQM and they need to be informed and engaged.

Despite current efforts by the SWC, CSISS, and the Province’s Invasive Mussel Defence Program, the threat of a mussel infestation continues as demonstrated by the interception of mussel-fouled watercraft every summer at our provincial borders. We would like to see more leadership, action, and funding from the federal government. A new federal investment in our province could go toward the following:

- Expansion of the provincial watercraft inspection program that’s run by the BC Conservation Officer service to allow for the establishment of additional inspection stations and longer hours and seasons of operation. No entry-point to BC should be open to un-checked watercraft.
- New measures to ensure aircraft (i.e., floatplanes) aren’t transporting aquatic invasive species
- Early detection monitoring programs, complementing what’s already underway in BC by regional groups and the Province of BC
- Education and outreach, to expand and compensate existing campaigns in BC including “Clean Drain Dry” and “Don’t Move A Mussel” campaigns.

Furthermore, the Department needs to take stronger action on containing mussel infestations and fully enact the *Aquatic Invasive Species Regulation* of the Federal Fisheries Act. Prevention efforts in the west must be met with robust measures for containment in eastern and central Canada. Simply put,

² Source: https://www.oag-bvg.gc.ca/internet/English/parl_cesd_201904_01_e_43307.html



watercraft should not be able to leave lakes or rivers known to have ZQM infestations without being inspected, decontaminated, and issued a quarantine period if necessary.

Considering all that is at risk in the Shuswap, and indeed British Columbia in general, the likelihood of an introduction of Zebra and Quagga Mussels to British Columbia, and the projected on-going costs and lost revenue associated with any new ZQM infestation in BC, collectively we call on the Government of Canada to take a more active role by helping us defend BC's waters against ZQM and by containing existing infestations. We thank you for your attention and swift action on this matter.

Sincerely,

Paul Demenok, Chair
Shuswap Watershed Council
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CC:

- North Okanagan - Shuswap MP and Deputy Shadow Minister for Fisheries, Oceans and the Canadian Coast Guard, Mel Arnold
- Shuswap-area MLAs: Greg Kylo (Shuswap), Harwinder Sandhu (Vernon - Monashee), Todd Stone (Kamloops - South Thompson), Peter Milobar (Kamloops - North Thompson)
- Secwepemc Chiefs: Lynn Kenoras-Duck (Adams Lake Indian Band), Oliver Arnouse (Little Shuswap Lake Band), Judy Wilson (Neskonlith), Wayne Christian (Splatsin)
- Shuswap Local Government Chairs and Mayors: Kevin Flynn (Columbia Shuswap Regional District), Ken Gillis (Thompson-Nicola Regional District), Kevin Acton (Regional District of North Okanagan, Village of Lumby), Alan Harrison (City of Salmon Arm), Terry Rysz (District of Sicamous), Rod Crowe (Village of Chase), Greg McCune (City of Enderby)
- Shadow Minister for Fisheries, Oceans, and the Canadian Coast Guard, MP Rick Perkins
- Critic for Fisheries, Oceans and the Canadian Coast Guard, MP Lisa Marie Barron
- Shuswap Area Chambers of Commerce Presidents: Mark Thio (Salmon Arm Chamber), Lynn Ewart (South Shuswap Chamber), Angela Lagore (North Shuswap Chamber), Victoria Cameron (Sicamous and District Chamber)
- Okanagan Basin Water Board, Chair Sue McKortoff
- Invasive Species Council of BC, Executive Director Gail Wallin



About the Shuswap Watershed Council

The Shuswap Watershed Council (SWC) was established in 2014 as a watershed-based partnership that enhances water quality and safe recreation in the Shuswap. There are up to 18 SWC members that represent three regional districts, two municipalities, the Secwepemc Nation, two provincial government agencies, and Shuswap communities. The SWC is a collaborative, non-regulatory group. It works alongside organizations that have regulatory roles in managing the Shuswap watershed, complementing their work and carefully avoiding duplication. Its primary mandate is to enhance, protect, and advocate for water quality in the Shuswap watershed.

About the Shuswap Waterfront Owners Association

The Shuswap Waterfront Owners Association communicates with and advocates for the rights of waterfront property owners with the goal of protecting lakeshore environment and fostering respect for, and quiet enjoyment of, all beachfront areas on the Shuswap and surrounding lakes. SWOA has a membership of over 1350 representing 568 properties.

About the Columbia Shuswap Invasive Species Society

The Columbia Shuswap Invasive Species Society (CSISS) is a non-profit organization dedicated to preventing and managing the spread of invasive species within the Columbia-Shuswap region. We work with government partners, non-profit organizations and interested parties to document, control and educate the public about the seriousness and impact of invasive species.