

Welcome to the summarized report for the 2023 season. The goal of the IMDP is to mitigate the risk of introducing zebra and quagga mussels into British Columbia.

Piloted in 2015, the program consists of three main components: watercraft inspections, lake monitoring, and public outreach and education. The program is delivered through the Ministry of Water, Land and Resource Stewardship in collaboration with the Ministry of Environment and Climate Change Strategy's Conservation Officer Service (COS).

The IMDP would like to recognize funding provided by Columbia Basin Trust, Columbia Power Corporation, BC Hydro, and Fortis BC for the 2023 season. For more information about the IMDP, please visit www.gov.bc.ca/invasivemussels. Suspected invasive mussels should be reported to the COS Report All Poachers and Polluters (RAPP) hotline at 1-877-952-7277.

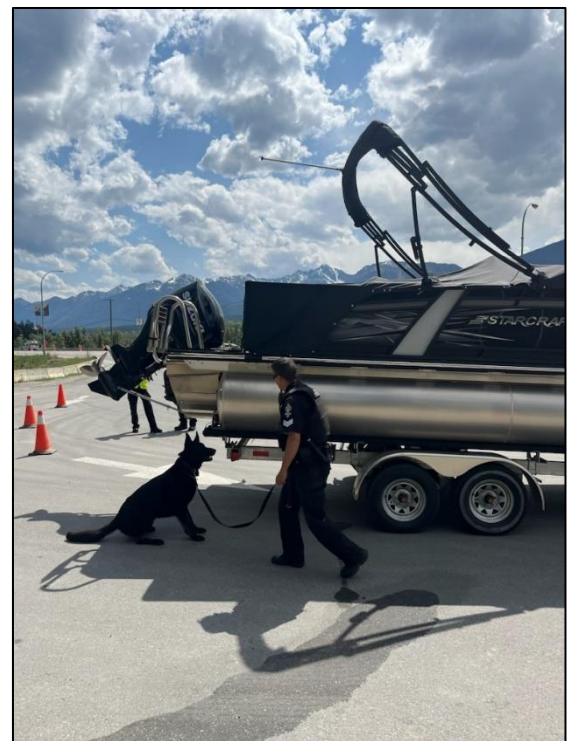
Watercraft Inspection Stations

For the 2023, season inspection crews completed approximately 20,900 inspections and interacted with more than 39,200 people to promote Clean, Drain Dry practices – a preventative step all boaters should take when moving between lakes in B.C.

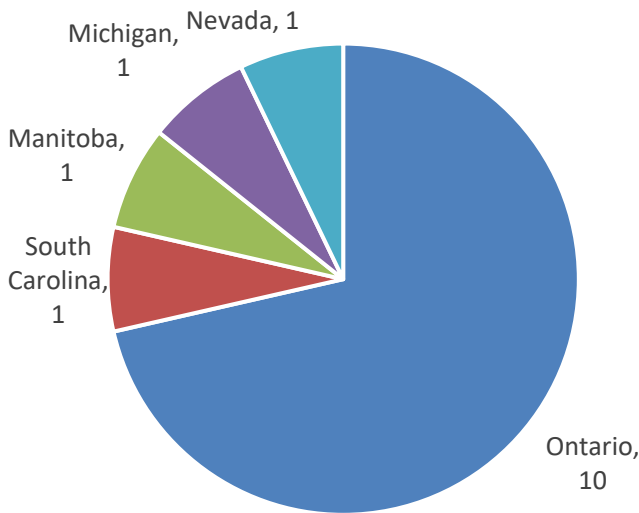
During the inspections, 155 watercraft were identified as high risk, 66 decontamination orders were issued, and 36 watercraft were issued quarantine periods to meet the required drying time. The COS Aquatic Invasive Species inspectors completed 79 decontaminations.

Fourteen watercraft were confirmed to have invasive mussels. These watercraft came from: Ontario (10), Manitoba (1), Michigan (1), Nevada (1) and South Carolina (1). The watercraft were destined for: Thompson-Okanagan (8), Lower Mainland (4), Kootenay–Boundary (1) and Northeast (1) regions.

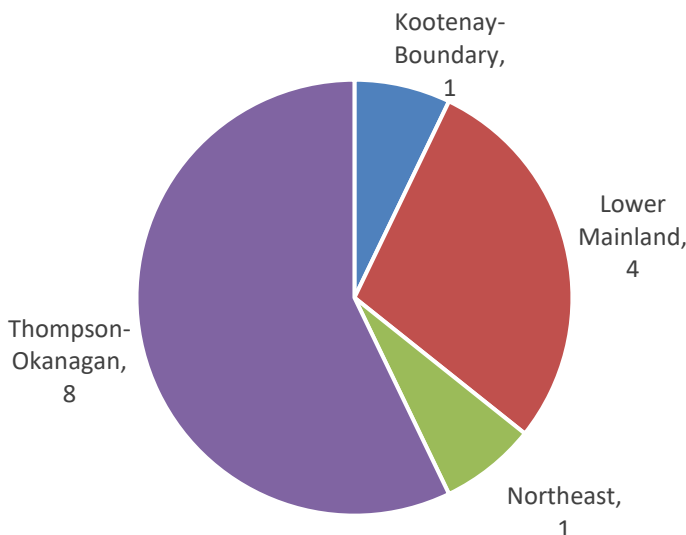
Most inspection stations were operational from April 1 to October 31, 2023. However, several inspectors extended their service into November and December following the detection of quagga mussels in Idaho, USA (see below for further information). This monitoring provided additional capacity to respond to notifications from CBSA at the priority border crossings with Idaho. COS field officers also provided enforcement support throughout the year to address blow bys at inspection stations and responded to watercraft notifications.



K9 Kilo and his handler Sgt. Dan Bartol inspect a watercraft at the Golden inspection station



The source (above) and destination (below) of the 14 mussel fouled boats intercepted during the 2023 season



Program Effectiveness

In addition to the 14 mussel-fouled boats intercepted this season, another 5 watercraft were identified as being mussel fouled by another jurisdiction; and the boats were decontaminated prior to arriving in B.C. Upon inspection by the IMDP these additional 5 boats coming from Ontario (3), Manitoba (1) and Quebec (1) were confirmed to be Clean, Drain, Dry. They were destined for the Thompson-Okanagan (4) and Vancouver Island/Pacific Ocean (1). This highlights the effectiveness of the perimeter defence approach and of having multiple layers of protection through the ongoing collaborations with neighbouring jurisdictions across western Canada and the United States.

This year, the average compliance rate across all inspection stations was 88%, which is consistent with the 2022 season and it is encouraging to see that compliance levels have remained stable (or increased slightly) in recent years.

Lake Monitoring

Lake monitoring is a critical step for the early detection of invasive mussels.

In 2023, grants were administered by the [Habitat Conservation Trust Foundation \(HCTF\)](#) to partner organizations to collect water samples in priority waterbodies across the province.

From June until October, ministry staff and partner organizations carried out water sampling for invasive mussels. Sampling is conducted following the [Provincial lake monitoring protocol](#) and waterbodies identified in the Provincial priority list. All samples are analyzed by a Ministry-designated lab.

Despite some challenging conditions due to wildfires and drought in many parts of the province, a total of 867 water samples were collected from 83 priority waterbodies across the province. All samples tested negative for invasive mussels.

To date, there has been no reported introduction of live zebra or quagga mussels in B.C. waterways.

Idaho Quagga Mussel Detection

Quagga mussel larvae were detected in Snake River, Idaho in September 2023. This marks the first detection of these invasive mussels in the Pacific Northwest.

Immediately following the announcement of the positive detection of quagga mussels in Idaho, the BC Invasive Mussel Defence Program (IMDP) triggered operational changes to treat all boats coming from Idaho as high risk. This is consistent with the response plan for boats from any other mussel-positive jurisdiction.

IMDP program staff continue to work closely with the Canadian Border Services Agency (CBSA) regarding the critical importance of coverage at the U.S.–Canada border crossings. IMDP staff follow up with each notification from the CBSA and conduct necessary inspections and decontaminations when required.

In October 2023, IMDP staff traveled to Twin Falls, Idaho, to observe the quagga mussel response and treatment firsthand. This was a unique learning opportunity, and lessons learned will help inform rapid response planning and preparedness.

In addition, the IMDP is exploring next steps for rapid response training and exercises with our United States counterparts in the Columbia River Basin. This was chosen as the initial action area, as these partners have been running rapid response exercises for many years, and the IMDP can learn from their experience.



BY THE NUMBERS	2022	2023
TOTAL WATERCRAFT INSPECTED	20,100	20,900
NUMBER OF PEOPLE INTERACTED WITH TO PROMOTE CLEAN, DRAIN, DRY	36,400	39,200
HIGH-RISK INSPECTIONS	122	155
DECONTAMINATION ORDERS ISSUED	66	66
QUARANTINE ORDERS ISSUED	29	36
MUSSEL-FOULED WATERCRAFT	13	14