

Welcome to the first status report for the 2021 season of the B.C. Invasive Mussel Defence Program (IMDP) for the period of April 1 to July 28, 2021. The goal of the IMDP is to mitigate the risk of zebra and quagga mussel introduction into British Columbia (B.C.).

Piloted in 2015, the program consists of three main components: watercraft inspections, lake monitoring, and public outreach and education. The program is carried out by staff from the B.C. Conservation Officer Service (COS) and the Environmental Sustainability Division (ESD) within the Ministry of Environment and Climate Change Strategy. The COS enforces the program and has two detection dogs, Kilo and Major.

We would like to recognize the ongoing funding provided by BC Hydro, the Columbia Power Corporation, and the Columbia Basin Trust that makes this program possible. For more information about the IMDP, please visit <https://www2.gov.bc.ca/gov/content/invasive-mussels> Suspected invasive mussels should be reported to the COS Report All Poachers and Polluters (RAPP) hotline at 1-877-952-7277.

Program Operations

Throughout the 2021 season, program operations have continued to adapt to reflect the latest COVID-19 provincial health guidelines.

In late March, 29 new COS Aquatic Invasive Species (AIS) inspectors underwent training following strict pandemic safety protocols.

This in-person training is essential for AIS inspectors to be posted to watercraft inspection stations at key border crossings along the Alberta and U.S. border.

The newly trained inspectors enabled the program to open several of the southern inspection stations on April 1st.

A second round of training for 15 additional AIS inspectors was completed in late April, which allowed additional stations to open in mid-May.

During the peak season from mid-May to late August, 45 inspectors operate across seven inspection stations, which includes two roving crews. Most stations will be operational until late October.

The two roving inspection crews are in the Okanagan and Fraser Valley. These crews are re-deployed as necessary to help cover key border crossings.

Staff retention during the ongoing pandemic was challenging this year. In particular, the most northern station in the remote location of Dawson Creek was especially difficult to staff.

Program operations were also adjusted to ensure the health and safety of staff during extreme heat.



Above: Kilo, one of two COS detection dogs, checks a kayak for invasive mussels.

Below: An AIS inspector checks a boat at an inspection station in Golden.





The watercraft inspection station in Fernie.

Watercraft Inspection Stations

As of July 28, 2021, crews have completed 17,600 inspections and have interacted with approx. 32,400 people to promote Clean, Drain, Dry practices – a preventative step all boaters should take when moving between lakes in B.C.

During the inspections, 182 watercraft were identified as high-risk, 52 decontamination orders were issued, and 11 watercraft were issued quarantine periods to meet the required drying time. To date, 74 decontaminations have been performed.

Of the 17,600 inspections, 13 were confirmed to have adult invasive mussels. These watercraft came from: Ontario (6), Manitoba (2), Michigan (1), Illinois (1), Ohio (1), Wisconsin (1) and Minnesota (1). The watercraft were destined for: the Okanagan (7), Kootenays (1), Vancouver Island (2), Lower Mainland (2) and Skeena (1) regions.

The IMDP received advanced notification on 7 of the 13 mussel-fouled boats, either from another jurisdiction or by the Canada Border Services Agency (CBSA).

Despite stations opening six weeks earlier this year, there hasn't been a significant increase in inspections. The decrease in boater traffic is reflective of provincial travel restrictions that were in place at the start of the season.

Although boater traffic was down, the number of mussel-fouled boats crews intercepted is higher than last year over the same time.

TOTAL WATERCRAFT INSPECTED	17,600
NUMBER OF PEOPLE INTERACTED WITH TO PROMOTE CLEAN, DRAIN, DRY	32,400
HIGH-RISK WATERCRAFT IDENTIFIED	182
DECONTAMINATION ORDERS ISSUED	52
QUARANTINE PERIODS ISSUED	11
MUSSEL-FOULED WATERCRAFT	13

*Statistics accurate as of July 28, 2021

Lake Monitoring

In 2021, a total of 12 grants were administered by the Habitat Conservation Trust Foundation for the collection of water samples in priority waterbodies across the province.

Funding is provided by the Ministry of Environment and Climate Change Strategy and Fisheries and Oceans Canada.

Lake monitoring is a critical step for early detection of invasive mussels. Sampling for invasive mussels is conducted following the [British Columbia Dreissenid Mussel Lake Monitoring Field Protocol](#). All samples are analyzed for the presence of invasive mussel larvae by a designated lab.

Lake monitoring began this season in early June, with 213 plankton samples collected so far. All samples have tested negative for the presence of invasive mussels.

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



To date, 74 decontaminations have been done by crews.