

Welcome to the first status report for the 2022 season of the British Columbia (B.C.) Invasive Mussel Defense Program (IMDP) for the period of April 1 to August 22, 2022. 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 lead for IMDP's delivery was transferred to British Columbia's new Ministry of Land, Water and Resource Stewardship (LWRS) on April 1, 2022. The program will continue to be implemented in collaboration with the Ministry of Environment and Climate Change Strategy's Conservation Officer Service (COS).

The IMDP would like to recognize the ongoing funding provided by BC Hydro, the Columbia Power Corporation, Fortis BC 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

A total of 32 inspectors are operating six watercraft inspection stations at key border crossings along the Alberta and U.S. border, including: Dawson Creek, Mt. Robson, Golden, Radium, Olsen and Osoyoos.

Sixteen new COS Aquatic Invasive Species (AIS) inspectors underwent training in mid-March 2022. The newly trained inspectors helped the program open several of the southern inspection stations on April 1.

A second round of inspector training took place mid-May, with additional inspection stations opened later that month.

During the peak season from mid-May to late August, inspection stations, including two roving crews, were fully operational.

The two roving inspection crews are in the Lower Mainland and Penticton. The roving inspection crews support the program's capacity to respond to the high-risk watercraft notifications coming from other inspection stations in B.C. (such as Golden), other jurisdictions (AB, SK, ID, OR, MT, WA) and CBSA. These crews are re-deployed as needed to help cover necessary border crossings. Most stations will be operational until late October.

Staff recruitment and retention remain ongoing challenges for the program, particularly in the more remote locations of Dawson Creek and Mt. Robson. Across the Pacific Northwest, other inspection programs have indicated similar challenges.



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

Below: An AIS inspector at a decontamination demonstration in Osoyoos in August.



TOTAL WATERCRAFT INSPECTED	16,700
NUMBER OF PEOPLE INTERACTED WITH TO PROMOTE CLEAN, DRAIN, DRY	30,600
HIGH-RISK WATERCRAFT IDENTIFIED	113
DECONTAMINATION ORDERS ISSUED	60
QUARANTINE PERIODS ISSUED	29
MUSSEL-FOULED WATERCRAFT	10

**Statistics accurate as of August 22, 2022*



To date, crews decontaminated 61 vessels

Watercraft Inspection Stations

As of August 22, 2022, crews completed 16,700 inspections and interacted with about 30,600 people to promote Clean, Drain, Dry practices – a preventative step all boaters should take when moving between lakes in B.C.

During the inspections, 113 watercraft were identified as high risk, 60 decontamination orders were issued, and 29 watercraft were given quarantine periods to meet the required drying time. To date, 61 decontaminations were performed.

Of the 16,700 inspections, 10 watercraft were confirmed to have adult invasive mussels. These watercraft came from: Ontario (9) and Quebec (1). The watercraft were destined for: the Okanagan (4), Lower Mainland (4), Thompson-Nicola (1) and Vancouver Island (1) regions.

The IMDP received advanced notification on 5 of the 10 mussel-fouled boats, either from another jurisdiction or by the Canada Border Services Agency (CBSA).

Lake Monitoring

The Province continues to partner with the Habitat Conservation Trust Foundation (HCTF) to administer grants to community organizations to support invasive mussel lake monitoring sample collection. The grants are funded by the Province and Fisheries and Oceans Canada. Grant applications for the 2022 season closed early February and successful applicants were notified in the spring.

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 at a designated lab.

Sampling started in June for the 2022 season, but there were some delays due to high water flows and cold spring temperatures. To date, all samples have tested negative for the presence of invasive mussels and there have been no reported introductions of live zebra or quagga mussels in B.C. waterways.

Highlights

In June 2022, a massive mussel-fouled barge from Lake Ontario, destined for industrial use in a Lower Mainland waterway, was tracked down in B.C.

It was the largest, most significant discovery and decontamination of zebra mussels on a watercraft since IMDP's inception in 2015.

The Province collaborates with Alberta, Saskatchewan, Manitoba and the Yukon on enhanced coordination for preventing and managing priority aquatic invasive species. Several western provinces notified IMDP about the contaminated barge.

The successful decontamination of the barge before it reached B.C. waters highlights the effectiveness of tackling the threat of invasive species through a coordinated approach with our neighbouring provinces.

COS aquatic invasive species inspectors quickly mobilized from the Okanagan and the Lower Mainland to decontaminate the barge.

Using specialized equipment, teams removed thousands of invasive mussels over two days. Many of the mussels were viable, meaning they were capable of establishing and subsequently invading B.C. waters if given the chance.

The barge was issued a mandatory 30-day quarantine period, which ended early July 2022.



In June 2022, the COS achieved its largest ever invasive mussels decontamination after a massive mussel-fouled barge was tracked down.

