Welcome to the interim report for the 2019 season. The Invasive Mussel Defence Program (IMDP) is a shared delivery between staff from the B.C. Conservation Office Service (COS) and the Environmental Sustainability & Strategic Policy Division (ESSPD) within the Ministry of Environment and Climate Change Strategy (ENV). The Program would like to recognize the ongoing funding provided by BC Hydro, Fortis BC, Columbia Power Corporation, and Columbia Basin Trust to support the delivery of the program. For more information about the Program please visit www.gov.bc.ca/invasivemussels. Suspected invasive mussels should be reported immediately to the Conservation Officer Services Report All Poachers and Polluters: 1-877-952-7277 (RAPP).

**Program Operations**

**Watercraft Inspection Stations**

Invasive mussel inspection stations were operational from April 1 to October 26 2019. For the 2019 season just over 52,000 inspections were performed and crews interacted with approximately 95,000 people to promote Clean, Drain, Dry.

Of the total watercraft inspected, 1,290 were identified as high risk, 86 Decontamination Orders were issued, and 79 watercraft were issued quarantine periods to meet the required 30-day drying time. A total of 348 decontaminations were performed by provincial inspectors.

Of the 52,000 inspections performed, 22 watercraft were confirmed to have adult invasive mussels. These watercraft came from Ontario (16), Michigan (3), Utah (2) and North Carolina (1) and were destined for the Lower Mainland (9), Vancouver Island (4), Okanagan (3), Kootenays (3), Thompson-Nicola (1), Skeena (1) and Alaska (1). The Program received advanced notification on 17 of the 22 mussel fouled boats either from another jurisdiction (e.g., AB, MT, ID, WA) or by Canada Border Services Agents (CBSA).

A total of 307 watercraft were inspected at night (10 p.m. to 5 a.m.) at the Golden inspection station on Hwy 1. Of those, 20 were identified as high risk and one of the mussel fouled watercraft was intercepted between 10 p.m. and 5 a.m. (the program received advanced notification from Alberta).

<table>
<thead>
<tr>
<th></th>
<th>2018 End of Season</th>
<th>2019 End of Season</th>
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</thead>
<tbody>
<tr>
<td>Total Watercraft Inspected</td>
<td>40,700</td>
<td>52,000</td>
</tr>
<tr>
<td>People Interacted with to promote CDD</td>
<td>78,000</td>
<td>95,000</td>
</tr>
<tr>
<td>High Risk Inspections</td>
<td>1,652</td>
<td>1,290</td>
</tr>
<tr>
<td>Decontamination Orders Issued</td>
<td>288</td>
<td>86</td>
</tr>
<tr>
<td>Quarantine Periods Issued</td>
<td>228</td>
<td>79</td>
</tr>
<tr>
<td>Mussel fouled watercraft</td>
<td>25</td>
<td>22</td>
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</tbody>
</table>

Comparison of watercraft inspection totals for the 2018 and 2019 seasons.
Program Effectiveness

To date, of the boaters whose watercraft were inspected, approximately 63% had previous knowledge of Clean, Drain, Dry and/or aquatic invasive species. A total of 190 people without boats voluntarily stopped at the watercraft inspection stations to get more information about invasive mussels and other aquatic invasive species (AIS). The Program also received 87 inquiries from members of the public about bringing their boat into BC and to learn more about the watercraft inspection stations.

Average compliance at the inspection stations for the 2019 season was 83% which represents an increase from 81% in 2018. Of the watercraft that failed to stop at the inspection station, 79% were non-motorized watercraft such as canoes, kayaks, and paddleboards which pose a much lower risk than motorized watercraft. For 2019, a total of 116 violation tickets and 114 warnings were issued by Conservation Officers to motorists for failing to stop at inspection stations.

The Program continues to work with the CBSA in a training capacity and to receive notifications of high-risk watercraft at the southern border crossings. The Program also participated in several multi-agency enforcement road checks this fall (i.e. with Department of Fisheries and Oceans, Environment Canada, RCMP, and Commercial Vehicle Safety and Enforcement staff). This allowed our Program to work together with other agencies to educate government staff and the public about AIS and the need to Clean, Drain, Dry, all watercraft after each use. It also allowed our Program to reach out to inspect watercraft in different parts of the Province by participating in these events.

Lake Monitoring

For the 2019 season, sampling was carried out by both partner organizations and Ministry staff from early June to October. Grants were administered by the Habitat Conservation Trust Foundation (HCTF) to partner organizations to fund sampling efforts in high priority waterbodies across the province. Sampling is conducted following the provincial lake monitoring protocol and sent to a designated lab for analysis. Approximately 892 water samples were collected and 83 substrate samplers were deployed across 79 lakes. All samples have come back negative for invasive mussels. The complete results from the 2019 sampling season will be released in the year-end report in spring 2020.
Highlights

The Program piloted nighttime operations at the Olsen station on Hwy 3 over the July and August long weekends. During this pilot a total of 102 boats were inspected at night (10 p.m. to 5 a.m.) of which 6 were identified as high risk.

Staff Sergeant Major Lockwood and K9 Kilo attended the Union of BC Municipalities (UBCM) Convention in September. As per usual, Kilo worked his magic and become the most popular member there. Program staff (Inspector Canuel and Staff Sergeant Major Lockwood) and K9 Kilo attended the First Nations Leaders Gathering on Nov 5th and 6th 2019 in Vancouver.

Ecosystem Branch staff (Martina Beck) attended the Western Regional Panel on AIS meeting in Missoula Montana in October along with representatives from across the western states. Branch staff (Brett Van Poorten) also attended the International Conference on Aquatic Invasive Species (ICAIS) in Montreal and presented on the unique model of bridging science and enforcement through the IMDP. These meetings are important opportunities for cross-border collaboration and partnerships on AIS prevention and research efforts.

The Program partnered with the Okanagan Similkameen Invasive Species Society (OASISS) to conduct a training session with marinas and boat retailers in the Okanagan in October. Staff Sergeant Major Lockwood, Kilo and the Penticton inspection crew provided education and a decontamination demonstration to the participants.

Upcoming dates:

Nov 25-Dec 13th 2019 - AIS inspector job posting on BC Government website

Feb 5-9th 2020 - Exhibitor booth at the Vancouver International Boat Show

March 6th-8th 2020 - Exhibitor booth at the BC Sportsmen's Show in Abbotsford

March 23rd-27th 2020 - First round of AIS inspector training at the Pacific Region Training facility in Chilliwack, BC.

April 1st 2020 - Watercraft inspection stations open

Early May 2020 - Second round of AIS inspector training.

May 2020 - Northern watercraft inspection stations open