

**Attn: Select Standing Committee on Finance and Government Services**

September 22, 2021

**Re: Funding for Water Concerns in the Okanagan Basin**

Dear Committee Members,

On behalf of the Okanagan Basin Water Board (OBWB), I am providing the following written submission to accompany my presentation scheduled for September 29, in Kelowna. Established in 1970, the OBWB is a partnership of the three Okanagan regional districts, with additional board directors from the Okanagan Nation Alliance, the Water Supply Association of B.C., and the Okanagan Water Stewardship Council, a technical advisory body to the board. Please find our annual report included with this submission.

Today's submission regards three water funding needs in the Okanagan:

1. Funding for the review of the Okanagan Lake Regulation System and Operating Plan;
2. Funding to prevent invasion by non-native zebra and quagga mussels; and
3. Establishing a permanent Watershed Security Fund to support protection of water sources.

Each of these is essential for the sustainability of Okanagan waters, and the social and economic health of the region.

**1. Okanagan Lake Regulation System Review:** Okanagan Lake is the largest and deepest lake in the Okanagan watershed, and an important water supply for approximately half of Okanagan residents. Its level is controlled by the Okanagan Dam in Penticton, and other structures that make up the Okanagan Lake Regulation System. The infrastructure is owned and operated by the B.C. Ministry of Forests, Lands, Natural Resource Operations and Rural Development (FLNR). The operating plan was developed in 1974, primarily to manage for flood control.

As a result of climate change, Okanagan Lake level fluctuates more significantly than in the past, and the infrastructure and operating plan are no longer adequate. In 2017, we had the worst flood in living memory, and in 2021 the lake was nearly the lowest level in its historical range. Flooding is projected to become much more common in the next few decades, damaging public and private infrastructure – at great cost. Drought is also projected to become more common, challenging the agricultural economy and creating conflict between water users. Both drought and flood harm the ongoing work, led by the Okanagan Nation Alliance (ONA), to restore sockeye, chinook, and kokanee salmon.

In addition, the typical lifespan of this infrastructure is 70 – 80 years, and the Okanagan Dam is now more than 60 years old. It is inadequate for managing future floods in its current state (given the increased volume and frequency of floods as a result of climate change), and the Province of B.C. needs to begin planning for its replacement.

This year, the OBWB partnered with FLNR to develop a *Plan of Study for Modernizing the Okanagan Lake Regulation System*, including a comprehensive review of the operating plan, existing infrastructure, and needed improvements. The Plan of Study has a clear set of objectives and course of action and is anticipated to take five years to complete. The work is clearly under the jurisdiction of the Province of B.C. and requires the immediate allocation of funding to begin. The OBWB, its member local governments, and the ONA, are willing and essential partners. There is a huge return on investment for this work, as the costs to repair damage in the future – if the work is not completed – will be astronomical.

**Required Funding:** \$1,000,000/year for the next 5 years, distributed through external grants to local governments, including the OBWB, and the Okanagan Nation Alliance; as well as internal funding to FLNR. This amount is based on an estimate for the cost of all the studies, that has been shared with FLNR.

**2. Prevention of Invasive zebra and quagga mussels:** The Okanagan watershed is at very high risk for invasion by zebra and quagga mussels, non-native species that were first introduced to the Great Lakes in the 1980s, and have spread throughout most of Eastern North America. B.C., Alberta, Yukon and Saskatchewan are the only provinces that have not been affected, along with the U.S. Pacific Northwest. They are spread by hitchhiking on watercraft that have been in infested waterbodies – like Lake Winnipeg, or Lake Mead. The invasive mussels cause significant harm to native fish, cover beaches with razor-sharp shells, degrade water quality, and damage water intakes, boats, and other infrastructure and equipment in the water.

The Okanagan is at risk for invasive mussels because our relatively warm, calcium-rich waters provide ideal habitat where the mussels can rapidly reproduce. We are also at risk because, based on the Province's own mussel-inspection station statistics, we are the number one destination for mussel-infested watercraft trying to enter B.C. The only way to prevent the mussels from invading the Okanagan watershed (beyond banning the launch of any out-of-province boats) is through inspection and decontamination of affected watercraft.

The Province of B.C. has maintained inspection stations at major highways since 2015, and the Canada Border Services Agency works with B.C. Conservation Officers to flag B.C.-bound boats for inspection. However, the funding and scope of the program is inadequate to protect B.C. lakes. Our partner, the Okanagan and Similkameen Invasive Species Society found, in a 2020 boater survey, that only 67% of out-of-province boaters stopped at an inspection station. With so much at risk, the Province of B.C. must ramp up inspections to ensure that no boats enter B.C. without inspections. The OBWB has sent many letters to the B.C. Ministry of Environment and Climate Change Strategy (ENV), detailing recommended actions, including the following funding needs.

**Required Funding:** Restore core inspection program funding to ENV and FLNR to at least 2017 levels of \$3.8 million/year, and adjust for inflation going forward.

**3. Establish a permanent Watershed Security Fund:** In 2020, as part of its COVID-19 response, the Province of B.C. made \$27 million available through its Healthy Watershed Initiative, to support water and watershed protection in B.C. These funds were used by communities and not-for-profit groups to restore watersheds and undertake protection of water sources. The Province of B.C. has a long-standing policy to allow resource development and recreation in drinking water source areas (with fees and other income from these activities going to the province). At the same time, water suppliers, who draw on streams and reservoirs from these areas are required by the B.C. Ministry of Health to deliver high-quality drinking water to their communities, but are given little assistance or funding to respond to damage by resource development and recreation. Approximately half of the Okanagan's drinking water comes directly from these watershed source areas.

The Watershed Security Fund would provide funding to Okanagan water suppliers to restore damage to source areas from resource development and recreation, improving wildlife habitat as well as reversing water quality degradation. We recognize that the B.C. Watershed Security Coalition is making similar calls to government, reinforcing the importance of these issues across the province.

**Required Funding:** Create a dedicated and ongoing investment to B.C.'s watershed security, with funding of \$75 million/year, to protect water sources in the Okanagan and across the province.

Please don't hesitate to contact me with any questions.

Yours sincerely,



Anna Warwick Sears, PhD  
Executive Director  
Okanagan Basin Water Board

CC:

**Harwinder Sandhu, MLA** Vernon-Monashee;

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