Dear Mr. Chabot,

I am writing on behalf of the Osoyoos Lake Water Quality Society to to discuss moorage availability for our water monitoring boat. Attached is our presentation for the Mayor and Council along with some supporting photographs.

Good morning, your worship, Mayor McKortoff and Councillors. My name is Birgit Arnstein, I am the President of the Osoyoos Lake Water Quality Society. I, along with Iain Fraser, our Boat Manager would like to discuss the need for moorage at the Sunrise Marina for our boat.

The Osoyoos Lake Water Quality Society (OLWQS) has been monitoring Osoyoos Lake since the early nineties. We are a wholly volunteer-driven organization. The data we collect goes to the Ministry of Environment and Climate Change. Our data has been used to determine the health of the lake and evaluate what effects climate change may have on this lake. Our sensitive Hydrolab 4 (sonde) is connected to a computer and a long cable. The sonde is attached to the cable and put into the lake, descending at 2 meter intervals. It provides data at various depths in 4 specific locations of the lake - 2 south of the bridge and 2 north of the bridge. We monitor pH, temperature, dissolved oxygen and specific conductance with this instrument. We also monitor water clarity with our secchi disc. In past years, we also participated in collecting water samples to test for veligers (larval forms of zebra and quagga mussels). Our data manager, John Gates is being awarded Volunteer of the Year Award by BC Lake Stewardship Society ( BCLSS) for his excellence in data collection and management.

For several years, Walnut Beach Resort has generously provided us safe moorage. Recently, they advised us that they are no longer able to offer moorage or storage of our equipment.

We have very much appreciated the ongoing support the Town of Osoyoos has provided us through grants, winter storage of our boat at the Public Works yard, storage of printed matter, life jackets and other equipment in the Sonora Community Centre basement and enabling us to occasionally hold meetings in the Sonora Community Centre.

We have specially trained volunteers who carry on the biweekly tests. Since COVID we have reduced our volunteers on board to 4 or 5 volunteers. Our captain, data manager and other volunteers who handle the specialized cable and sonde need to be able to board the boat safely while safely loading all of our equipment including a gas tank, computer, sonde (in a rifle case), cable (on a heavy rack transported on a trolley), GPS, depth sounder and secchi disc. Providing a convenient location for our volunteers to park their vehicles, load and board the boat will enable us to keep our volunteers. Certainly, the more difficult it is for our volunteers the less likely they will continue to volunteer.

I’d like to introduce **Iain Fraser**, our **Boat Manager** to speak to the specifics of operating our boat:

We own a 19 foot aluminum pontoon boat and trailer.

Without safe, secure ongoing moorage at the Sunrise Marina over the summer months we would have several options:

**1. To launch the boat every two weeks** - This would require:

 -A competent, skilled driver with boat launching and retrieval experience

 -A truck capable of hauling our boat to and from Public Works (assuming the use of the Public Works yard would be possible twice a day every 2 weeks)

 - two skilled people/volunteers would be needed to pick up and return the boat every 2 weeks

 - added costs, wear and potential damage of tow vehicle, trailer and boat for 22 trips instead of the current 2 (assuming 11 testing runs from May to October)

 \*Normally the boat is launched in the spring, securely moored all summer and taken out in the fall

**2. To attach the boat to a buoy** – There are several challenges for this option:

 - Finding a safe location for a buoy and gaining permission for its placement following current Federal and Provincial regulations for mooring buoys

 - Need for dingy to take captain to the boat along with the gas tank

 - attaching the summer cover and removing it while the boat is tied to a buoy (this procedure requires at least 2 volunteers to fasten the cover) thus requiring the dingy to be big enough for two volunteers

 - wind and waves – could play havoc on boat

 - we would need a storage location for the dingy

 - without a dingy: the captain would need to wade out around 8am,( the lake and air are often cool at that hour) –the captain, after wading out to the boat, would need to work in wet clothes for at least 4 hours

**3. Private lake front dock** – If the dock is located in a wind and wave exposed area of the lake, including large waves created by certain wave generating boats:

 -this could expose the boat to severe weather and security issues

and may pose challenges for volunteer and equipment access including volunteer parking

 -for the safety of both boat and dock- a boat lift might be needed

 - the lift would ideally be electric (solar power & batteries are usable but would require maintenance). The cost of a lift would be a minimum of $10,000.(used)

 - A hand crank to operate the lift is possible but more challenging for some of our volunteers to operate

 - a lift would require a major fundraising campaign

 - the lift would need to be serviced

 - insurance costs would go up to cover increased liability on an uncontrolled dock

We have put out a wide public appeal for moorage and have approached many businesses and private homeowners with no success to date.

We are requesting moorage at the Towns’ Sunrise Marina for our boat from May to October. We understand there is a waitlist but we would like to appeal to the Town to prioritize moorage for the OLWQS boat. Without safe, easily accessible moorage for our boat the important work of the Society would likely have to end. We recommend that the Town of Osoyoos consider our request so the continuity of lake monitoring and resultant lake management may continue.

 I have provided you with some photographs of our boat, instruments and crew(this photo is from 2019 – pre-COVID we do not have a current photo of all ofour current volunteers) . I am also including a recent report from BCLSS which sites the importance of our data collection.

Thank you, I appreciate having had the opportunity to address you and Town Council.

Respectfully submitted,

Birgit Arnstein

President OLWQS