

Water Portfolio report dated November 19th, 2015

While my portfolio is “Water”, I also assumed the **administrative role** of chairing monthly board meetings; preparing the agendas; and producing the minutes afterwards. The agenda is published on our website 5-7 days before the meeting, and the minutes are produced and published within 2 days after the meeting.

Under the **Water portfolio...**

1. I work closely with the **Basin Society**, primarily **Kelly Musselwhite** and **Dr. Bruce Fraser** on a number of projects including:
 1. **Foreshore restoration** which started at our lake front property by knocking down a rock wall and replacing it with local vegetation. This initiative was under the direction of David Polster, a plant ecologist who specializes in environmental restoration. Several volunteers were involved including local students and band members. Aside from natural vegetation acting as a filter for harmful, or excessive nutrients entering the lake, it is also seen as a way of mitigating the effect of larger waves from boating activities. This foreshore initiative is now under the Basin Society's broader initiative referred to as “Foreshore to Forest”, which will hopefully grow and involve the participation of other property owners throughout our watershed.
 2. also under the “ **Foreshore to Forest**” initiative, I assisted **Jenny Berge**, a student working for the Basin Society, by taking her out in my boat, allowing her to photograph, i.e. **map the entire shoreline** of the lake including all the islands.
 2. I continue to take **sechi disk readings** (a device that helps measure the turbidity in the lake). Last year I completed a 3 year commitment to the **BC Lake Stewardship Society** by taking readings every two weeks from April to November. I was assisted by **Scott Noble**, an instructor at Shawnigan Lake School, and some of his environmental students. The data was also provided to the CVRD and **Dr. Mazumder** at UVic... and anyone else who wanted it. The BC Lake Stewardship Society, committed to using the data and provide SRA with a report on the health of our lake. We are still waiting on this report. I also participate in the annual cross provincial sechi disk test in July which allows the BC Lake Stewardship Society to compare the relative health of lakes across the province...at least from the perspective of turbidity.
 3. Over the last couple of years I have worked with the MoE, CVRD and other volunteer residents, **collecting water samples** from numerous sites on and around the lake, watershed, down to the ocean. The MoE have provided their preliminary findings, but a comprehensive report, which is to include recommendations, is still outstanding. This report will be valuable for assessing the relative quality of our water in compare it to a similar MoE survey conducted in 2009. The preliminary results suggest the quality of the lake water is still acceptable, but steadily deteriorating under the influence of mining activities; forestry practices; farming practices; faulty septic systems; over use of fertilizers, pesticides, and other chemicals; development in sensitive areas...not to mention climate change with dryer summers and more run-off from wetter winters. Things need to change if we want to stop this downward trend, and the SRA is committed to doing all we can, in cooperation with the Basin Society, CVRD and any other public or private body with a common goal.

4. Brent Beach, Graham Ross-Smith and myself **installed 5 gauges on the outlet creek** of Shawnigan Lake, at the north end. The purpose was to assess the flow rates and determine where bottlenecks may create flooding in high water situations. These studies continue, but so far in the last few years since we put the gauges in, the lake hasn't risen to a point we can effectively make use of the gauges. But nevertheless, they are still there are ready when needed.
5. The SRA promoted the "creek clean-out function" (an amount up to \$18,000 annually) towards cleaning out the north outlet creek, and minimizing the possibility of the lake flooding causing uninsured damage to private and public property, plus excess nutrients leaching into the lake from septic systems temporarily underwater. It should be noted that in the first year the full \$18,000 was used by the CVRD to clean out the creek in front of the William Rivers Park, but since then the annual usage has been much less, and involved:
 1. The SRA pressed the CVRD for a **survey of the creek**, so we could compare it to a similar survey done by MoE on Oct 1980....and determine where sediment build up may need to be removed, and
 2. Pressed the CVRD to replace the **log boom in front of the Haled Bridge**, to prevent debris (e.g. logs or broken up pieces of wharfs), which could jam against or under the bridge...or even down stream (e.g. against the train trestle footings)
6. I work with the CVRD on the management and monitoring of the weir (and the effectiveness of the current "rule curve"). While I pay close attention to the level of the lake and the operation of the weir, since joining the board over 4 years ago I've been impressed with Jeralyn Jackson, a CVRD employee, and her effective operation of the weir...which can be as much of an art as a science, given the constraints of an ageing "rule curve", competing demands and often unpredictable effects of weather and weather change.
7. The CVRD and I **installed 2 gauges** on the lake (one at the north end near Decca Rd, and the other on a pilings in the middle Strathcona Bay...where the marina is). This was done to promote a common language and understanding at what the actual level of the lake is...in terms of "**meters above sea level**". The lake it's most fashionable is near 116 meters above sea level. When it gets close to 115 the CVRD hears complaints of the lake being too low. When it gets above 117, people get concerned about potential flooding, especially in low lying areas. At 118 lots of flooding would occur.
8. We worked with the **RCMP** on promoting a **closer boathouse** for their zodiac to improve response time to issues on the lake. The new RCMP boathouse is now located beside Shawnigan Lake School's large boathouse. The SRA promotes and encourages the RCMP (in discussion with Sgt Scott Stephen) to regular patrol the lake to help deal with issues like excessive noise, alcohol consumption; dangerous behaviour and education...as in the case of boaters boarding and surfing near shore or sensitive areas...causing erosion and property damage... which they could be liable for.
9. I participated in several workshops sponsored by the CVRD to promote a comprehensive look at the whole **governance issue of water under the new Water Sustainable Act**. The purpose to gain better control of resources and authorities which affect our lake water and watershed. I also wanted to plug an upcoming event on **Wednesday Dec 2nd at 7pm at the Shawnigan Lake Community Centre**. At that time the Basin Society will highlight "the state of the basin" presented by Herb Hammond, an ecologist; Mar Martinez, a biologist; Dr Bruce Fraser, an ecologist and Chair of the Basin Society; and Kelly Musselwhite, the executive director. At this meeting the finds of a great deal of work will be shared in detail, around the health of our watershed. I don't know all the details but I do know it will show the results of Jenny Berge's

mapping of the shoreline , and Herb Hammond's mapping of the watershed. Both suggesting areas that need to be protected, and those that need attention...and everything between.

Lastly, on behalf of the SRA I wanted to encourage residents to complete the **CVRD water survey**, which help guide their actions.

Any questions?

Grant Price, Director Water