The Williams Lake Watershed in crisis

Report by Melanie Dobson and Cathy Vaughn

Catamaran Ponds – powerful providers

What connects the Long Lake Village on Dunbrack Street in Spryfield with the Shaw Wilderness Park on the Purcells Cove Road? The Catamaran Ponds.

Well hidden, in the scrub brush and alders, the two ponds are close to the busy traffic intersection of Dunbrack and Old Sambro Road in Spryfield. The ponds are gaining notoriety as the HRM rezoning application of 48 - 50 Old Sambro Road enters its "Public Engagement" phase.

Spryfield residents and neighbourhoods surrounding the ponds are being asked to provide HRM with their input about the proposed 13-unit, 3-storey apartment complex to be built on the small lot next to the stream that supplies water to the Catamaran Ponds.

The stream, ponds, and adjacent wetlands will be dramatically impacted by the earth-moving machines, rock-breakers, and potential blasting needed to build the proposed 3-storey apartment building with underground car parking on such a small site. The proposal places the driveway for the 13 units along the border of the property above, and running parallel to, the Catamaran Pond feeder stream in the gully below which would have longterm consequences for the stream.

Citizen action groups have circulated information on the importance of the Catamaran Ponds to the local ecosystem, the threats the development poses; destruction of existing wildlife corridors and negative impacts on the movement and quality of water provided to the local streams, brooks and lakes.

Long Lake Village is on a hill on Dunbrack Street. Water from rain and melted snow stream off this elevation and fill the ditches along Dunbrack Street. You can see the stream surging downhill toward the Old Sambro Road. A culvert then directs the stream under the busy traffic intersection into the two Catamaran Ponds.

The slow transit of the water through the ponds and wetland gives time for contaminants from road run-off to be cleared while the water and surrounding area provides nourishment and shelter for the wildlife that move through the natural corridors in these wetlands. But the water course doesn't stop there. The pond waters just keep on moving under the Herring Cove Road and into Governor's Brook.

Governor's Brook splashes into Colpitt Lake which in turn delivers water to Williams Lake, both of which are part of the Shaw Wilderness Park. Swimming, canoeing, paddle boarding and recreation can only happen with a fully functioning watershed providing water to top up the rivers, streams and lakes. The Catamaran Ponds are the powerful providers of the headwaters of the William Lake watershed.

You may not see the connection with the Catamaran Ponds and floating on your favourite lake-lounger at the Shaw Wilderness Park, but it's all connected, and it all needs to be protected.

Past. Present. Future. Impact of developments on the Williams Lake Watershed



protected. This western part holds several smaller water courses (some seasonal) and wetlands. These feed into the Colpitt Lake-Williams Lake connector stream and into Governor's Brook, an important source of water to Colpitt Lake. Undisrupted water flow from the Church of Christ lands is essential for the health of Governor's Brook, Colpitt Lake and Williams Lake. **Future** An important rezoning application is before HRM. Councillor Shawn Cleary has submitted a motion to rezone the Church of Christ lands to Urban Reserve. This is just a first step in preventing major development in such a sensitive portion of the Williams Lake Watershed. In the long term, these lands need to be rezoned as open space protected area. This will ensure no future development is allowed to directly impact the health of this significant urban lake.

Our generation needs to protect this land for our future generations.

Which way does the water flow? Follow the arrows.



Water Flow in the Williams Lake Watershed. For more detail see the Williams Lake Water Flow Report, 2020 (www.williamslakecc.org).

The Williams Lake Watershed is surprisingly extensive, reaching from far north along Northwest Arm Drive (now named Dunbrack Street), west and south into Spryfield and beyond the Shaw Wilderness Park on the south and east end of the lake.

Key sources of water are shown with the arrows indicating the direction of water flow. Water courses directed through culverts/underground pipes are indicated with grey rectangles.

Multiple significant housing developments have been built in the Williams Lake Watershed in the past 20 years, many of which have altered natural water courses. Others are proposed. **Red Line:** The boundary of the Williams Lake Watershed, indicates the land where precipitation would normally be fed towards Williams Lake through streams and other water bodies and by percolating through the ground. **Black Lines:** The lands owned by the Church of Christ Development Corporation recently removed from real-estate market.

Green Lines: Shaw Wilderness Park. Tipping Point!

A tipping point has been reached. Any further development would likely push the lake past its capacity to survive as a lake.

The creation of the Shaw Wilderness Park has secured a kilometre of the shoreline on Williams Lake and much of Colpitt Lake, but not the critical water flow between the two. All efforts must be made to ensure there is no further development in the Watershed. We need to act now to protect Williams Lake.

Williams Lake – less water in, more water out

Williams Lake is an urban lake that gives more than it gets. Water levels in

This summer the lake was down almost 5 ft, a record-breaking low.



Williams Lake Watershed - sites of recent development and zoning of undeveloped land. For more detail see the Williams Lake Water Flow Report, 2020 (www.williamslakecc.org).

Past

Multiple significant housing developments have been built in the Williams Lake Watershed in the past 20 years (positions circled on the map), many of which have altered natural water courses. The amount of development has had a severe effect on Williams Lake. A tipping point has been reached. Any further development would likely push the lake past its capacity to survive.

These developments represent a significant loss of permeable surface in the Watershed due to the addition of driveways, roads and parking lots. Instead of rainwater being retained and percolating slowly through the ground, water captured by storm drains moves rapidly through the Watershed. Sediments do not have time to settle and hydrocarbons do not readily evaporate in closed systems, making the water that is delivered into streams and lakes more highly contaminated - an added threat to water quality.

Present

The Church of Christ Development Corporation (C of C) lands (outlined in black on the map) are of particular concern. These lands hold the major stream connecting Colpitt Lake to Williams Lake - a vital supply of water to Williams Lake.

Currently, the eastern portion of the Church of Christ land has an Urban Reserve zoning which limits development for a number of years. However, the western portion is not similarly the lake have been getting lower over the past 20 years. The Williams Lake Conservation Company (WLCC), a non-profit volunteer community-based organization, has had a stewardship role with the lake for the past 50+ years, which includes monitoring lake levels

and water quality. Recent summers have seen Williams Lake water levels fall lower than ever before. Lake levels are lower in summers with less rain. However, in recent years levels have also been falling significantly lower than in past. Compromised watershed, developments encroaching on streams, rerouting of runoff to the lake, and a leaky dam are factors that threaten the lake.

Below: Williams Lake water levels, 2002- 2020. For more detail, see the Williams Lake Water Flow Report, 2020 (www.williamslakecc.org).

