# Station 08MH103: Creative Essay on the Chilliwack River Flood 2021

On November 13, 2021, the Chilliwack River measured between 1.6 and 1.8 metres high on the gauge: a normal medium-high reading for a soggy fall day. It was two metres the day before, a level reminiscent of spring melts, which saw brown waves carrying logs downstream.

The government of Canada operates the real-time hydrometric data graph for station number 08MH103, which measures the height of the river above Sleese Creek in metres as well as the volume in cubic metres per second ($m^3/s$). With 57 years of data, station 08MH103 shows that late spring and early summer have the highest average water levels, but short, extreme spikes tend to happen in late fall or early winter.

Weeks of cool temperature typically build up a snowpack in October and November, and then the occasional tropical storm can wallop the mountains. If the storm blows warm enough to melt the peaks, the river swells to twice as high as the annual spring melt.

My family's house sits about fifty metres back from the bank. Our dining room table looks onto the colour of the waves. Sometimes they shine clear reflecting the light of the sky or glow with an emerald tinge. Sometimes they leap, silt-brown and hungry.

The voice of the river pervades our home: a cacophony of crashing water and swirling white bubbles bursting on the surface. The burble of a regular level goes unnoticed, while droughts are loud in their near-silence, and high-water roars into every nook.

As a child on rainy nights, I would place a bag of favorite toys at the foot of my bed in case of evacuation and wish that the torrent would stop and the walls would cease rumbling. One of my first nightmares was about a flood of thick, black tar.

*1.8M*

It rains all night on November 13. The decibel level increases.

*3.0M*

I wake up on November 14 and listen. *The river's up. Way up*. Water falls thick in sheaths slashing the ground and moving pebbles. The intensity of rain must have maintained itself since the evening before. *Odd. Rainstorms usually have lighter and heavier squalls.*

Looking at the gauge, I see that the river rose from 2.0 to 2.5 metres between 3:30 and 6:00 this morning, and then reached 3.0 metres by 9:00 a.m. Anything over three metres is fairly rare and occurs every couple of years or so. Tamihi rapids become like the Zambezi River in Africa. Enormous and fast. Unpredictable. Foreign.

My mother, younger sister, and I find out about the rainfall warning for hundreds more millimetres around 9:00AM when it's already this high. *Fuck. We will have to prepare to evacuate today*.

My parents were on this property during a previous flood (my grandmother picked my sister and I up from school, and we spent the night out of harms way). My father always appears relaxed during these events. They decided to remain at the house after the fire department delivered an evacuation notice in person. He said he saw salmon swimming on the lawn. And then the river started to drop. He's away hunting without cell service this time.

Swaths of rain attack the ground and slip off the already saturated earth straight into the river's centre flow. We yell to one another to be heard over the downpour and the current that collides with roots along the shore and moves boulders underneath. *HOLY SHIT, LOOK AT THAT. HOLY. SHIT.*

*SHIT.*

My father instilled a flood plan into my sister and I from a young age that involves packing everything up in vehicles and trailers and *driving up the hill*. No assets are insured for flood damage since we live on a floodplain. As long as we save part of the business, we can restart and gain an income regardless of what happens to our home.

My mother spends the day packing irreplaceable family documents. My sister and I connect trucks to trailers and pack them full of whatever we can in the relentless crashing of water. *THAT HITCH DOESN'T FIT THE TRAILER BULB. SHOULD WE SWITCH IT? WE DON'T HAVE ONE THAT FITS? FUCK IT. UNLOAD AND BACK UP THE OTHER TRAILER.*

*3.5M*

The flow almost gets to 3.5 metres by 11:00 a.m. The caravan-sized boulder on shore next to our property goes underwater, and the river reaches around it to steal the soil from the cedar trees which grip the edge with all the tenacity they can muster. The intensity seems to drop. *This could be the peak. Please, please be the peak*. Then the power and telephone lines go dead. A mudslide destroys a couple telephone poles and covers the only paved road into town.

We have one cell phone with reception and a bit of data to look up the online river gauge and hear news updates. We check every fifteen minutes to see if the rain is predicted to slow down or if the level is dropping.

I watch my sister sink two wooden stakes with measured markings into the shore to track the rising waters. *THAT'S GOOD THERE, EH? YEAH, PROBABLY*. The river starts rising again in the afternoon. It climbs back up to 3.5M and then continues.

*3.7M.*

*3.8M.*

*3.9M.*

There is a large increase in velocity between, say, 3.7 and 3.8 metres. It takes a huge volume of water at the centre of the river to show a corresponding increase on shore. Above 3 metres, it is no longer deadfall being washed away. Every couple seconds an entire green cedar tree hits the centre speedway and hurls past the house. The current moves so fast it makes me dizzy to try to follow the waves by sight. The decibel of crashing power is a better gauge in the moment. The sound sinks into my gut and confirms what I'd imagined in childhood.

*4.0M*

Night falls. We huddle around the fireplace in the dark house and take turns monitoring the bank and wood markers every hour. Socks squish as our boots sink into the soft, sodden soil along the river's edge and drops fall unnoticed onto our faces.

We ask one another: *when do we drive up the hill*? We ought not to do so too early. Potentially disastrous if we do so too late.

At 8:00 p.m., the gauge hits 4.0 metres. The creeks that flow into the Chilliwack become rivers of their own. If you put one foot into the main flow, you'd be swept away in a second unable fight your way back to shore.

Part of the hourly surveillance starts to include walking up the driveway to make sure we could still drive up the hill. An incredible force tears at the shore directly upstream of our

property where the water banks into a sharp turn. Physics twists when I look upstream and see a two-story wall of water slam into the forest and then ricochet back into the centre flow at the height of a one-story building. The centrifugal force deepens the current along the outer edges.

Water starts to creep down our driveway. The creek and culvert above us backs up until two-feet of water covers the road and all the drainage ditches merge into one. The brave could still drive across and send huge sprays of water into the air.

*4.2M*

My sister and I duck into the sodden night to check the front once again close to midnight. Water streams in towards the garden and then, thankfully, turns to rejoin the flow. It's over 4.2 metres. *It's time. I'm ready to drive the fleet up the hill. The rain isn't stopping. I'd rather do it now rather than 4:00 a.m. in a state of emergency.* The crackling energy of the water makes it seem like the bank upstream will burst at any moment. An entire forest has been ripped out and transported downstream.

My mother, sister, and I convoy up the hill. The steep banks are slick chocolate brown oozing. They could slide at any moment.

Incredibly, as we teeter uphill in the dark with loaded trailers, my father's headlights greet us. They'd shot a deer so didn't need to be up north any longer, and he began to drive home faster after reaching the rainstorm. We leave the vehicles parked on the dirt road overnight and return to the riverside to bunker down.

*4.3M*

The river holds overnight. The rain also stays steady. Exhaustion and indifference give way to brief periods of unconsciousness. I sit on the floor hiding from the terrible sound.

*4.67M*

The storm peaks on November 15, and the river tops out at 456 $m^3/s$ or 4.67 metres high. That's like 2,500 bathtubs being forced down an area that typically has 400 bathtubs. It's a new record. Between 1963 and 2020, the highest recorded level was 415 $m^3/s$ on November 10, 1990. The lowest recorded level was 4.38 $m^3/s$ from October 5, 2017. This October got down to 0.34 metres. 4.62 $m^3/s$. Ankle-high water. No records broken yet this year.



*Figure 1 Chilliwack River the Night of November 14, 2021*



*Figure 2 Chilliwack River Flood My Parents Lived Through in 2008*