

# The Catastrophic Foam Spill of July 3, 2024



## Part I - Foam in the Creek



On the evening of July 3, there was a pollution crisis. Masses of foam were streaming down the Creek. Above, the sight at Broken Bridge 5.

I was first made aware of the incident by Kelly Perrin shortly after 7 PM on July 3rd. I provided him with the phone numbers for the provincial RAPP and the federal ORR hotlines. He also called the media.

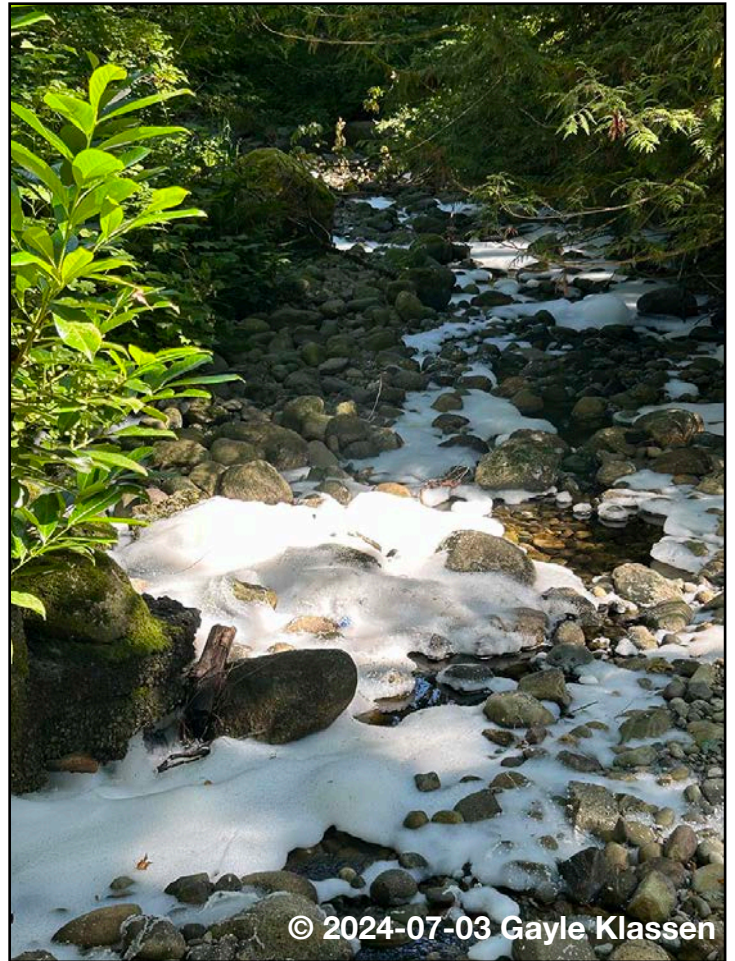
Masses of foam could be seen from Palfy Park down past Bridge 6 to the Pond at Bateman Road. At that time we had no idea what it was or where it was coming from. We assumed that it was from a detergent.

The photo below shows the outfall in Palfy Park, weeks after the spill. This is where the foam was discharged into the Creek.



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***Palfy Park storm drain outfall***



© 2024-07-03 Gayle Klassen

***Creekbed in Palfy Park***

There was almost immediately a die-off of the fauna in the Creek. Hundreds of fish, crayfish and lampreys had perished.

The following series of photos was taken around 8 AM, Thursday the 4th, going from below Bridge 5 all the way down to the Pond.

Where there were obstacles to the water flow, the foam collected and formed large heaps. One such heap, below Bridge 2, was a metre thick.



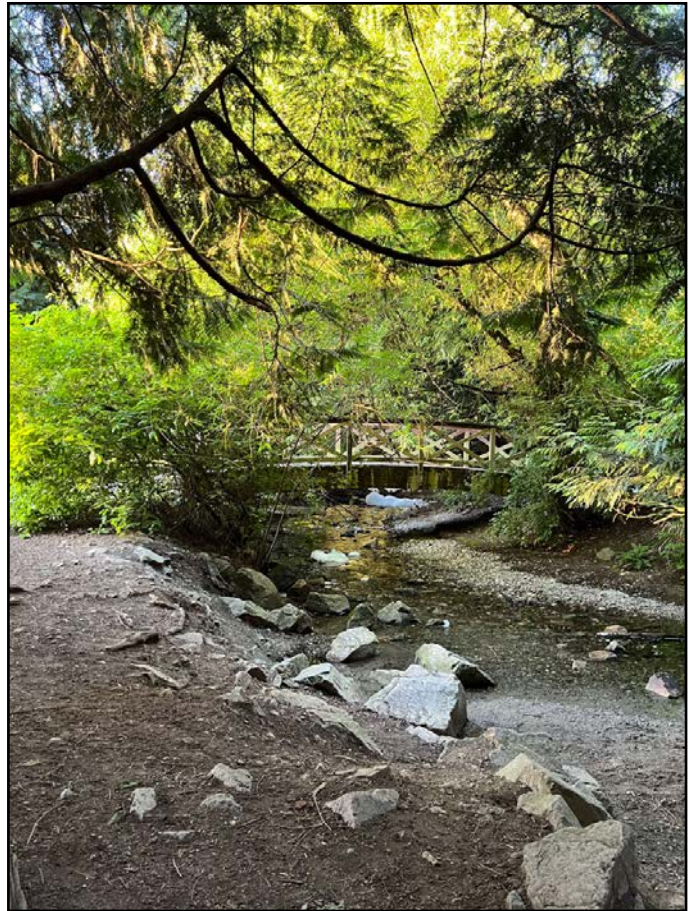
*Sadie's Pool*



*Bridge 4*



*The Glade*



*Bridge 3*



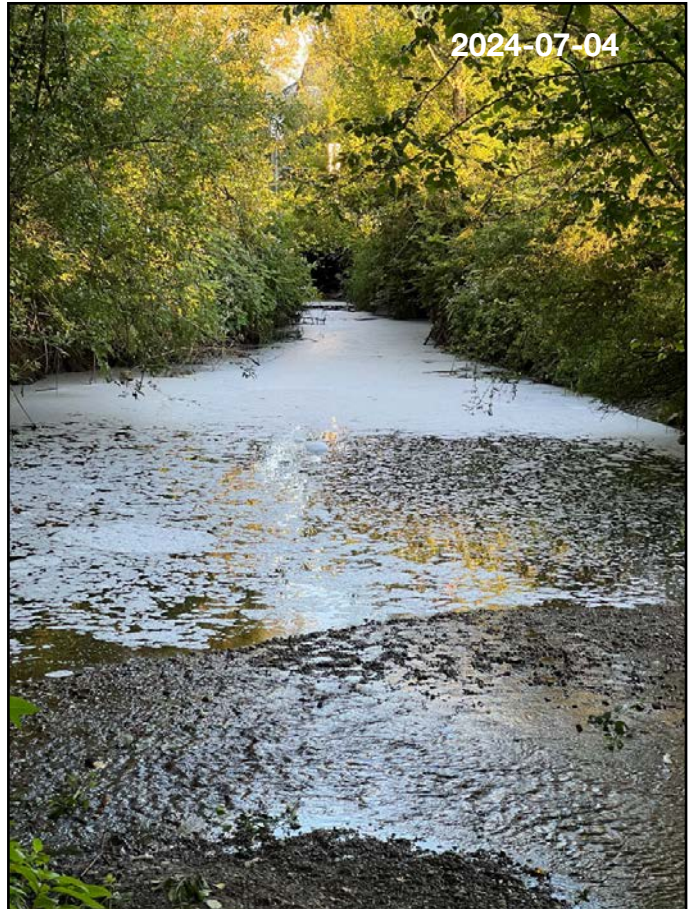
***Bridge 2***



***Bridge 1***



***The Pond***



***The Pond***

## Part II - Fish Deaths

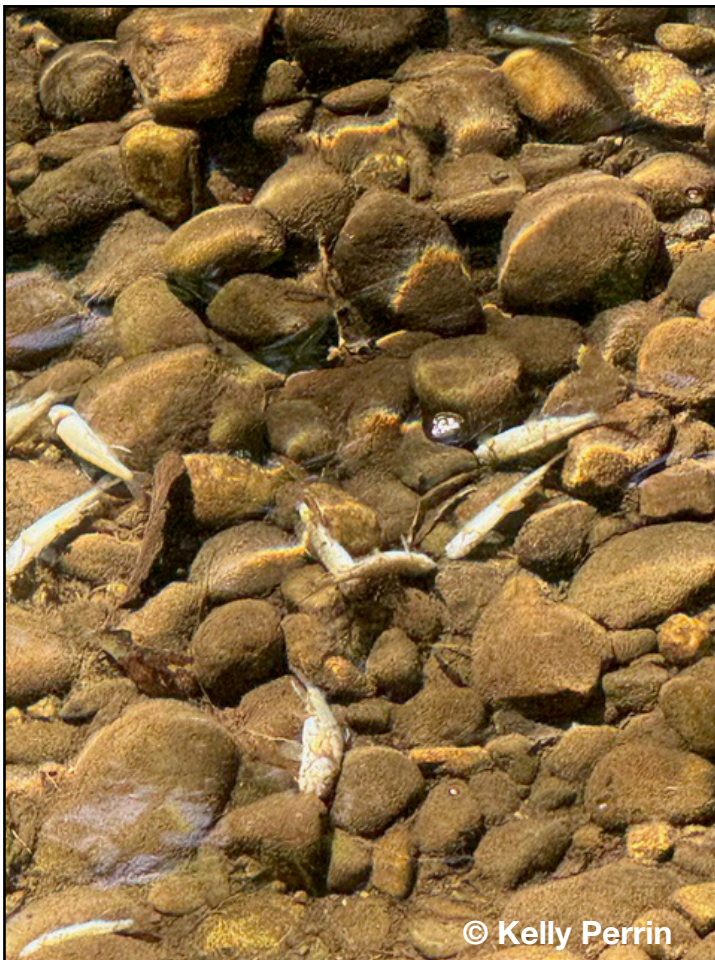


© 2024-07-05 Kelly Perrin

At Sadie's Pool, upstream from Bridge 4. a juvenile Coho and a Pacific lamprey.

The City of Abbotsford was notified late Tuesday, July 3, of a foaming substance in Stoney Creek and immediately sent City crews to investigate, determine the source, restrict further contamination, and assess a response. They contacted the Ministry of Environment and Department of Oceans and Fisheries as well.

At 6 AM on Wednesday the 4th, the foam was still coming downstream. It was clear that there were great numbers of dead fish everywhere.



© Kelly Perrin



© Kelly Perrin

## Part III - Response



Trucks from Firehall 3 arrived at the parking lot on the morning of Thursday the 4th.



The first sign of action by the City was the arrival of members from Fire Hall No. 5. Because it was assumed that the water would be harmful to people and dogs, they were tasked with putting up yellow warning tape at access points along the Creek. Employees from Guardteck showed up and began patrolling the Trail.

Quantum Murray Environmental (QM) had been contracted to create a response plan. Their sub-contractor, GHD Environmental, began placing more effective barriers consisting of plastic cloth supported by wood stakes at all access points to the Creek.



On July 5th. The City announced firefighting foam concentrate, PHOS-CHEK 1%, had been released from a disconnected hose at Firehall 7. It had “accidentally” entered a storm drain which emptied into the Creek.

The manufacturer’s SDS (Safety Data Sheet) warns that in case of a spill, this hazardous product should first be contained and prevented from entering storm drains. Then it should be absorbed using inert material such as sand or vermiculite and transported in containers for disposal. The personnel at the firehall had obviously been ignorant of the safety guidelines.

## Part IV - Salvage Operation



GHD employees and First Nations people worked together in a rescue operation.

Because Stoney Creek is part of the Sumas First Nation's traditional lands, their Emergency Department responded immediately after being notified. They collaborated with the City, Leq' á:mel and Matsqui First Nations to address the urgent need for water treatment, fish testing and salvage, and sampling of water and sediment.



Over a three day period, representatives from Semá:th First Nation, Stó:lō Guardians, Lower Fraser Fisheries Alliance and GHD conducted a salvage operation to remove the remaining live fish from the contaminated water.

As of Monday the 8th, a total of 1,448 live fish were collected and moved to clean water at Clayburn Creek. A total of 922 dead fish were counted.

Up to 300 fish were also salvaged from a portion of Stoney Creek upstream of Palfy Park, where they had been stranded due to seasonally low water levels.

## Part V - Mitigation



A pump truck was set up above the culvert on Bateman Road.



Vacuum and flush trucks worked on the storm drain to remove remaining residue. It was reported that QM somehow rinsed the rocks and banks of Stoney Creek from the point of the spill downstream to remove any residue that may have been left behind.

A water treatment system consisting of a series of container-sized tanks was set up by QM in the parking lot to continuously monitor and treat the water sucked out of the Pond. The treated water was then piped back to the top end of the Pond to continue downstream out of the Park. It operated 24 hours a day.

Monitors patrolling the Trail asked residents with pets to stay away from the area while the clean-up crews were at work and the water treatment facility was operating. A dog bathing station was set up.





By July 8th, more than 211,000 gallons of water had been treated. At the same time, fish, sediment, water and surrounding vegetation were also tested to ensure containment of any contaminants.

By Friday, July 12th, the large-scale environmental spill response was winding down. The City of Abbotsford, Semá:th and Matsqui First Nations, and the Ministry of Environment and Climate Change Strategy felt that mitigation efforts had been successful. They concluded the relocated fish as well as those remaining in the Creek were no longer at risk as the foam chemicals do not accumulate in their flesh.

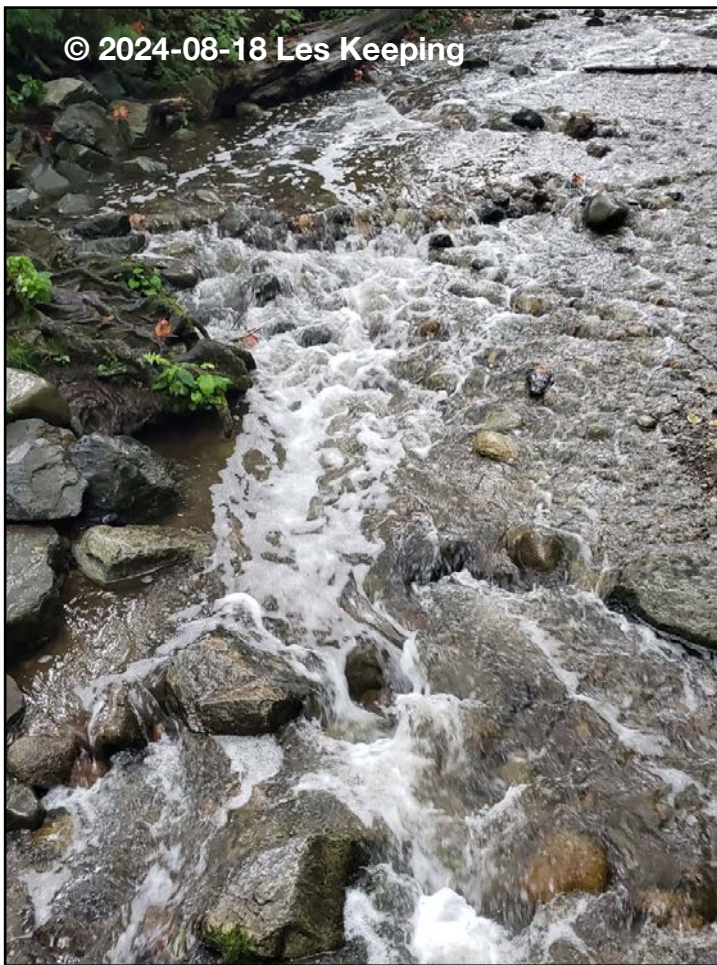
Based on the belief that the firefighting foam is highly soluble, biodegradable and of low toxicity, and after making a cursory survey of benthic invertebrates, the environmental experts determined there remained negligible risk to aquatic life.

QM began dismantling the water filtering apparatus. On Saturday morning, July 12th, the strings of mylar bird-scaring strips over the Pond were taken down. The whole operation was wrapped up and gone by the end of Monday the 15th.

Abbotsford City News Release, July 12th: "The City will continue to investigate this incident and will adjust procedures as required, to safeguard against a similar accident from happening in the future."



## Foam Repeat



It was obvious to people who frequent the Trail and are familiar with the behaviour of the creek that the first water surge after rain on July 18th carried more foam than normal. One cannot help but conclude that, contrary to a statement by the City, Phos-Chek is still present in the Creek channel.

The annual salmon run will begin in October. Hopefully, there will enough rain before then to clean the creek so when the eggs hatch next winter, the salmon fry will survive.

