

Given my role working to support the weir project on behalf of the Cowichan Watershed Board, your note got passed on to me to respond to. I Hope you are well and had a good summer up at the lake – pretty dry where we are by the Kinsol Trestle – looks like we're losing mature cedar trees on my property that are turning brown and dying. Certainly not something we've seen in the past 30 years.

Appreciate your letter and ongoing concern about water management and, as usual, some really good questions. I've attached the lake level graph to this note as it kind of illustrates what you (and I) are saying.

You are right, the Catalyst license does not currently allow them to start storing water prior to April 1 but it's not Fisheries that provides guidance on water management but, interestingly enough, the BC water authorizations folks who work in the Ministry of Forestry

Given the way a weir works, it can't start storing before the lake level drops below the top of the weir. If the gates are up or down it doesn't' make any difference. If they close the gates before the lake is below the top of the weir it forces more water over the top – it doesn't reduce the flow out of the lake at all. And... this year the lake dropped low in March – but then went way over the top of the weir again in April and did not drop down to a level where storage could begin until well into May. At that time the gates were raised. I have attached the graph that shows this (the black line is lake level and the pinkish horizontal line the elevation of the top of the weir). If we had a higher weir – some of the "excess" of water in April and May could have been saved and let out over the summer – rather than just having it flow over the top of the existing weir until lake levels dropped enough for the weir to be a factor.

If you check it out, you'll see that the black lake level line hits the pinkish weir ht. line around the 10th of May – that's when the weir could actually store water – and that's when the gates were closed. I will say that they're not just slammed shut – the river level has to drop slowly enough for fish to get out of side channels so they're not stranded by the river dropping suddenly all at once – so that process takes a few days "wasting" some water in order not to strand fish.

The only way I can see to store more water in the spring to avoid the low flows (and the significant fish kill we experienced for the first time this year) is to have a higher weir so we can start storing earlier – as you suggest.

As always – happy to follow up on this if it would be helpful. I'm slowing down a bit these days but appreciate your interest, knowledge and long history at the lake

Tom R

Hi Scott.

One attachment • Scanned by Gmail ①

## 2023 Cowichan Lake Level - 2023 (Black) & 2021 (Blue) & 2019 (Green)

