



PO Box 2546, Bellingham, Washington 98227

November 15, 2022

Re: **Proposed Lake Erie Pit Expansion**
Comments Regarding Geologic Hazard Site Assessment

I reviewed the Wood Geologic Hazard Site Assessment for the proposed Lake Erie Pit expansion (dated August 11, 2022). The assessment does not address any of the areas outlined in the Skagit County Planning and Development Services (PDS) letter to Lake Erie LLC (dated March 21, 2021).

PDS requested that the assessment include three specific items:

1) “Analyze the landslide risk arising from the potential for increased groundwater migration to the west/northwest of the mine due to the proposed expansion and attendant removal of soil and vegetation which could alter groundwater behavior in the vicinity of the mine.”

The potential groundwater flow direction was not analyzed in the report. The report only references the previous reports that also did not analyze the groundwater flow direction towards the shoreline bluff.

2) “Analyze the presence of springs on the coastal bluff to the northwest of the mine that are at an elevation down gradient of the inferred groundwater level.”

The springs on the shoreline bluffs to the west and northwest of the pit were not analyzed. There is no discussion that the elevation of the springs are estimated to be at elevations that are lower than the groundwater measured near the pit and thus are likely down gradient to the pit such that groundwater from the pit area will flow towards the springs.

3) “Respond to the testimony of the professional geologist who identified that the proposed mine expansion will create an increased landslide risk.”

My testimony was never referenced and the report is not responsive to the issue of increased groundwater flow towards the shoreline bluff.

No where in the report is the stability of the shoreline bluff assessed and no bluff observations were made. The potential for altering groundwater, and the stability of the shoreline bluff from that alteration, have not been addressed.

Stratum Group appreciates the opportunity to comment on the adequacy of the geology hazard assessment. Regrettably, the geology hazard assessment does not address the groundwater flow and slope stability of the nearby shoreline bluff as requested by Skagit County.

Sincerely yours,
Stratum Group



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