

By Email

November 18, 2022

Kevin Cricchio, Senior Planer Skagit County Planning and Development Services 1800 Continental Place Mount Vernon, WA 98273 kcricchio@co.skagit.wa.us

## Re: File No. PL16-0056 -- Lake Erie Pit LLC Gravel Mine Expansion Special Use Permit

## Dear Mr. Cricchio,

I'm writing on behalf of Evergreen Islands ("Evergreen") to address the inapposite Geologic Hazard Site Assessment ("Assessment") that Wood Environment & Infrastructure Solutions, Inc. submitted on behalf of the Lake Erie Pit 1 Expansion in August 2022. As explained in the attached letter from Dan McShane, a licensed engineering geologist, the Assessment did not provide the analyses requested by Skagit County Planning and Development Services ("PDS") in its March 21, 2021 letter to Lake Erie LLC. It is frustrating that a year after the Hearing Examiner granted an extension on the permit application, these analyses have not yet been conducted. But given the lack of new, applicable information, Evergreen requests that PDS set aside the Assessment and reiterate its requests to Lake Erie.

As you will see in the comments from Mr. McShane, he determined that the Assessment did not address the central question posed to Lake Erie after the Board of Commissioners remanded the application decision – would it impact groundwater that decreased bluff stability for the residential neighborhoods to the west and northwest of the mine site? Mr. McShane's review found that "[t]he potential groundwater flow direction was not analyzed in the report" and that "[t]he springs on the shoreline bluffs to the west and northwest of the pit were not analyzed." He concludes that, "[r]egrettably, the geology hazard assessment does not address the groundwater flow and slope stability of the nearby shoreline bluff as requested by Skagit County."

It is possible that Lake Erie would have been able to supply PDS with the requested analysis if it had continued to engage Canyon Environmental Group ("Canyon") for the work they proposed in September 2021. At that time, Lake Erie supplied the Hearing Examiner with a Proposed Hydrogeology and Groundwater Characterization Timeline from Canyon that expressly stated that the scope of the services was to "help characterize the groundwater and groundwater flow directions related to existing conditions and the proposed mine expansion." That proposal was signed by a hydrogeologist/wetland ecologist/environmental geologist. Yet the Assessment was authored by a different consultant--geotechnical engineers who conducted a more generic geologic hazard site assessment that did not acknowledge the documented shortcomings of the prior reports, and instead relied on them for the same unsupported assertion that groundwater at the site does not flow toward the nearby marine bluffs.

Because the Assessment does not offer information responsive to PDS' requests, it thus does not provide information necessary to determine the mine's risks on the residential neighborhood to the west and northwest of the proposed mine. Consequently, Evergreen is forced to request that PDS reiterate its request to Lake Erie to investigate groundwater flow at the site and its potential impact on the bluffs' slope stability.

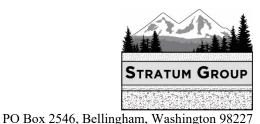
If you have any questions, please do not hesitate to contact me at 360-622-8060 or kyle@loringadvising.com.

Sincerely,

Kyle A. Loring

Cc: Marlene Finley

Attachment: Stratum Group Comments Regarding Geologic Hazard Site Assessment



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** 

Dan McShane, L.E.G., M.Sc. Licensed Engineering Geologist

