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V8N 2N6

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Re: Lehigh Texada South Quarry – Need for the Environmental Impact Study

Proposed quarry would have an immense impact on the area in the middle of Texada Island and a detailed environmental impact study is needed before the project is being considered.

The foreshore islands host numerous vascular plant species that are at their northern limit of distributions. A newly described coastal juniper (*Juniperus maritima*) is BLUE-listed and it is considered relatively rare local endemite. Several other vascular plants, such as brittle prickly-pear cactus (*Opuntia fragilis*) and goldenback fern (*Pentagramma triangularis*) reach the northernmost limits of their distributions in this area. Many other species that are annual and belong into a group of the so-called southern elements can be expected to show up in spring and early summer.

Forests of the area are the second-growth Douglas-fir forests typical for the Coastal Douglas-Fir Biogeoclimatic Zone. Because of the mostly calcareous substrate, they represent drier variants of the forest associations. Among BLUE-listed species, Macoun's groundsel (*Senecio macounii*) occurs in the upland area.

Limestone outcrops are potential sites for many other rare plant species. The RED-listed California holly fern (*Polystichum californicum*) was recently discovered on two sites on Texada Island and those two sites are the only localities of this species known in British Columbia. There are several other unique species of vascular plants and bryophytes that could be expected to grow on the limestone outcrops in the area.

There are several wetland areas in the vicinity of the proposed development that would be significantly impacted by any quarry development. Harvey Janszen and Patrick Williston conducted the wetland rare plant survey on Texada Island in the late 1990's and found several new occurrences of rare ferns and fern-allies (moonworts – *Botrychium* spp. and northern adder's-tongue - *Ophioglossum pusillum*) in the upland wetlands on Texada Island. Janszen & Williston did not cover any wetlands close to the development areas and more detailed botanical survey of those wetlands would be needed.

Summary

Quick botanical and vegetation survey of the Leigh Texada South Quarry area recognized two BLUE-listed species tracked by the BC Conservation Data Centre (*Juniperus maritima* & *Senecio macounii*) and demonstrates the need for more detailed botanical and vegetation surveys. Those surveys should be conducted in spring and early summer months (open areas and forests) and in summer & early fall (wetlands) in order to accurately assess vegetation values of the impacted areas.

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