



February 8, 2021

CRD Board  
625 Fisgard Street  
Victoria, British Columbia  
Canada V8W 1R7  
crdboard@crd.bc.ca

RE: Proposal to widen and add artificial lighting to the Galloping Goose and Lochside Trails

Dear CRD Board,

I am writing on behalf of Swan Lake Christmas Hill Nature Sanctuary to recommend that you reconsider the current plans for the Galloping Goose and Lochside Trails. Widening trails and adding artificial lighting negatively impacts the integrity of our region's path-side natural habitats.

As a biologist interested in conserving biodiversity in the face of a climate crisis, I feel it is critical that you are aware of some of the damaging effects of artificial light pollution.

1. **Many species, particularly songbirds, lose their ability navigate via starlight without dark skies.** This is specifically concerning for us at the Nature Sanctuary, as we are a crucial resting place for many species of migratory birds.
2. **Nighttime light exposure disrupts the circadian rhythm of animals.** Melatonin production becomes altered and there are downstream behavioural and physiological effects. In some experiments, disruption with even low light levels has been shown to suppress the immune systems and increase tumour growth rates in small mammals.
3. **Light pollution contributes directly to insect declines as artificial lighting is mistaken for moonlight.** Insects are critical for pollination, soil health, and natural pest control (e.g. lady bird beetles and lacewings). Additionally, insects are a vital part of the food chain for other animals, such as fish and birds.

If adding lighting has become a requirement, I suggest that you first consider offering a rebate program for residents who travel the trails to purchase their own lights. This would not only put the emphasis on individuals, their personal use, and increase the amount of darkness overall, but it would also be less expensive for the CRD to maintain in the longer term.

If any permanent, artificial lighting must be installed on the trails, it should be done in consultation with biologists, be motion-sensor activated, focused with directional covers, and in longer wavelengths that are less disruptive to nocturnal wildlife.

Finally, I find this proposal surprising given that the region has specifically expressed commitments to ameliorating climate change in the current [priorities and strategic plans](#). The [UN has recently declared](#) a challenge to everyone to “massively scale up restoration efforts that breathe new life into our degraded ecosystems.” Being deliberate and more ecologically-savvy about the region's trail designs is an important way to honour these commitments.

Sincerely,

A handwritten signature in black ink, appearing to read 'Cara Gibson', with a long horizontal flourish extending to the right.

Cara Gibson, PhD (Entomology)

*Fostering understanding and appreciation of nature through direct experience.*

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