Data Submitted (UTC 11): 4/11/2021 9:50:42 PM First name: Kate Last name: Laird Organization: Title: Comments: I am a Cordova resident. I moved here in 2013 because of the backcountry skiing access.

I do not support the large expansion of heliskiing in all the areas listed in the proposal.

Specifically, the southern half of zones 10, 11, and 12 should be excluded on a line between approximately 60 degrees 39.6 minutes North, 145 degrees 36.6 minutes West and 60 degrees 31.5 minutes North, 145 degrees 0.8 minutes West at the very minimum.

This would still allow for a significant expansion of heliskiing operations. If areas 10, 11, and 12 were reduced to half the size indicated, the expansion would still be 220% of the existing operations area.

The proposal is a blanket demand for all the space in National Forest north of Cordova, and it does not take into account the vulnerabilities of wildlife populations or existing backcountry use during that season.

## 1. Conflict with Existing Backcountry Use

The southern half of units 10, 11, and 12 are heavily used by backcountry skiers, skaters, bikers, snow machiners, and trappers and should be removed from the proposal.

Any area within a day's trip of the road should be excluded from the heliskiing permit. There is already a large, local backcountry user group, and it is increasing in size every year.

We have been assured by the head of Points North that they don't want to ski these areas where there are other people; in that case it should not be on the permit map. Points North, with its close connection to Cordova, is not the only operator applying under this permit, and other operators may not be as concerned with Cordova's good opinion.

The proposal notes that helicopters should not land above other people, but it should be noted that backcountry skiers often make their approach through the trees and are invisible to anyone flying overhead. Avalanches do run through the trees on the the edge of chutes, and just because people can't be seen from the air doesn't mean they are safe from an avalanche run.

### 2. Conflict with Mountain Goat Populations

Mountain goats are the only indigenous ungulate in this region. Work in SE Alaska has demonstrated that helicopter overflights are particularly stress-inducing to mountain goats. This happens even with helicopters that are up to 2 kilometers away, and the stress response persists for up to 48 hours after the interaction. (White and Gregovich. 2018)

There is NO baseline data available. We do not have baseline data about the winter habitats of Chugach mountain goats. We do not know their kidding areas, and we do not know their kidding dates.

There is NO serious attempt in this proposal to mitigate damage to mountain goat populations. Helicopter pilots will not necessarily see the goats they are affecting two km away.

These effects could be minimized with explicit flyways.

In my work in Antarctic tourism, we successfully balanced tourism demands and wildlife demands by denoting specific spaces and routes where tourists could access wild areas, and kept the rest off limits.

All access should continue to be made through the current routes up the Rude River drainage north of Nelson Bay, with specific flyways to access each route, with the maximum space between each flyway to preserve unspoiled habitats.

There needs to be a survey - and it would be appropriate for the heliskiing operations to contribute to the costs - to determine the winter habitat, the kidding habitat, and the kidding dates. Surveys and follow up monitoring need to be completed by independent biologists. For profit companies can never be expected to self-monitor adequately, no matter how good their intentions.

The map needs to be drawn specifically to exclude these regions, or as many as possible.

Where possible the permitted ski areas should be isolated into specific small regions, leaving some zones untouched. The current permitted areas are like this - zone bubbles or islands rather than complete access to the entire region.

# 3. Conflict with goat-hunting user group

There is a large goat-hunting user group in Cordova who will be directly impacted by any reduction in the goat population. This is another reason that the southern half of zones 10, 11 and 12 should be excluded from the proposal.

## 4. Potential for conflict with bear populations

There is no baseline data for bear populations, denning areas, or winter use in this area. Bears are frequently out of their dens during heliskiing season, and it appears that a proportion of the population is out all winter. Mitigation efforts of dedicated flyways, and islands of ski operation would benefit bears as well as mountain goats until better data is available.

#### Citation:

[White, K. S., and D. Gregovich. 2018. Mountain goat resource selection in the Haines-Skagway area: Implications for helicopter skiing management. Alaska Department of Fish and Game, Wildlife Research Report ADF&G/DWC/WRR-2018-2 Juneau.]

For example, depending on the geographic area, from 11% to 62% of mountain goat winter habitat is within one or more areas currently approved for helicopter skiing (Table 4). Such levels of apparent impact have the potential to exert negative effects on local mountain goat populations. Previous research has shown that helicopter overflights can elicit stress responses and alter movement patterns of mountain goats at distances up to 1,500-2,000 m away (Côté 1996, Côté et al. 2013), and responses may persist for up to 48 hours after the cessation of disturbance (Cadsand 2012). In addition, mountain goats avoid areas where extensive skiing activity occurs, even when ski access is non-motorized (Richard and Côté 2015).

Given these considerations, it is important to minimize the extent of spatial overlap between mountain goats and

helicopter skiing activity whenever possible. In cases where helicopter skiing is already occurring, mitigation measures can be implemented to limit the exposure of mountain goats to disturbance. These measures could include timing windows (i.e., limiting activity during biologically critical periods) or limits on the number of landings (sensu Hurley 2004). In such cases, it is also very important to carefully monitor affected mountain goat populations in order to detect and implement management responses to changes in a timely manner. Characterizing the spatial distribution and intensity of use of helicopter skiing activity is important for accurately determining the extent of overlap and projected impacts and to evaluate existing and proposed management actions.