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Trans-border Grizzly Bear Project
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Re; Comments on proposed Zincton Resort

Summary of comments:

Given these cumulative facts surrounding the proposed resort area:

- **Regionally important inter-population connectivity would be compromised, negatively affecting a small population of 'conservation concern' just south of the proposed resort**
- **The entire resort area overlays, and would compromise, what is one of the very best all-season grizzly bear habitat areas that includes highly important huckleberry patches**
- **The very real potential for human safety/injury/fatal incidents with mountain bikers and grizzly bears**
- **This proposal will upend and overwhelm one of the local and regional hiking treasures in the Whitewater valley known for grizzly bear viewing**

it will likely inhibit the provinces ability to meet pre-existing conservation goals by injecting an extensive all-season recreation project right in some of the best grizzly bear habitats of the local area, and the all-season resort activities will likely challenge the already small fragmented population south of Hwy 31A in its ability to recover to a healthy conservation status.

I, Michael Proctor, am an independent biologist that have been researching grizzly bears in the Purcell Mountains since 1995 and running the Trans-border Grizzly Bear Project (TBGBP) in the Purcells and Selkirks since 2004. We research grizzly bear ecology and conservation and translate our research into practical management plans which we try to implement with the cooperation of government, regional and provincial (FLNRO and MoE). We publish our research in peer-reviewed scientific journals. In the last 2 decades, I have carried out DNA-based population surveys to estimate population size, density, distribution, and fragmentation, and radio collaring bears to understand and identify their seasonal habitat use, critical habitats, movement patterns, connectivity corridors, ecological needs, critical food patches, and relationship with neighbouring populations.

GRIZZLY BEAR CONNECTIVITY

I have serious concerns about the proposed all-season Zincton Resort interfering with the province of BC meeting its obligations to grizzly bear conservation. The area where the resort is proposed separates a small fragmented grizzly bear population in the Kokanee Glacier Provincial Park area (~30 bears, Fig. 1) as its location along the Kaslo – New Denver Highway (Hwy 31A) at the top of the pass overlaps the very best option for a grizzly bear corridor across that highway (Figs. 2 Proctor et al. 2015). The corridor is essential for the long term persistence of the bears to the south of the highway which is too small to persist without connectivity to bears to the north (Fig. 1, Proctor et al. 2012).

It is very likely that the human disturbance of an extensive all-season resort as proposed, over time will disrupt the connectivity function of this location. The fragmentation of this small population was caused by several factors. The first layer is the partial natural fragmentation from Kootenay and Slocan Lakes. The second layer is the human settlement and its accompanied historic and current bear

mortality on 3 sides of this population – the Slocan Valley to the east, the North Shore to the south, and Hwy 31 along Kootenay Lake) leaving the corridor to its north, **the only viable connectivity option**. And, the connectivity potential of that north border is concentrated near and around the pass, right where this proposed resort would sit (Fig. 2).

The fragmentation along Hwy 31A was likely caused by the combination of excellent habitat that supported many bears with easy hunter access. Data show a long-term cluster of bear mortalities from the recently closed grizzly bear hunt in that area, sufficient to fracture what was once an inter-connected population. The recent ending of the BC grizzly bear hunt would have allowed this fracture to heal, but this year-round recreation resort will likely replace this as a fracturing force, due to the greatly increased human footprint and backcountry presence.

VERY HIGH QUALITY GRIZZLY BEAR HABITAT

The proposed resort area overlaps some of the very best grizzly bear habitat in the area (Figs. 3 & 4) and that really contributes to its ideal status as a corridor. Our work, and that of others, has shown that habitat of this high quality is best left minimally disturbed (Proctor et al. 2017, Lamb et al. 2018, see review papers Proctor et al. 2018, 2019), particularly in areas with excellent huckleberry patches important for grizzly bears (Fig 3 & 4) and within this extensively fragmented area within southern BC.

PROVINCIAL PRIORITY

If grizzly bear population viability in southern BC is an important provincial priority, and I think it is, then not approving this proposal would be consistent with those provincial goals and values, and good for the local grizzly bear population's long-term persistence. It is not that grizzly bears should inhibit all backcountry recreation, as there are plenty of recreational projects across the Kootenays. It is just that an all-season resort in this location with the very best habitat **and** need for long-term corridor function for the small (~30 grizzlies), fragmented, and therefore "of conservation concern" population, will likely significantly inhibit this area's ability to function as the necessary grizzly bear corridor. This population really does need to be reconnected to the bears north of Hwy 31A for its long-term persistence, and the resort overlays and compromises the very best, and really only option for that.

This situation (a small fragmented population with a higher conservation risk) and the limited corridor potential for healing that fragmentation, is a product of the cumulative effects of long-term patterns of human settlement in our region's valley bottoms, very few of which are open for wildlife connectivity. If this proposal were in northern BC, there would likely be no issue, but in the midst of southeastern BC, where grizzly bears are extensively fragmented into several unsustainably small subpopulations (Fig. 1), it is a serious issue. More consistent with provincial policy to protect identified and important natural values **and** human economics, would be proposals with less of a natural-system detriment than this one.

GRIZZLY BEAR CONFLICTS WITH MOUNTAIN BIKERS

Another concern is that mountain biking in excellent grizzly bear habitat is particularly hazardous in its potential for injurious and/or fatal human-bear conflict. Fast quiet mountain bikers can approach unsuspecting bears with the risk of surprise-induced defensive attacks, sometimes as a result of a collision. Incidents are becoming increasingly common across western North America. As Steve Michel, the National Human Wildlife Conflict Management Officer for Parks Canada, and past Wildlife Conflict Specialist for Banff National Park put it:

"grizzly bear-human encounter risk is greatly increased when we introduce people on mountain bikes into grizzly bear habitat. The probability of encounter is much higher for those travelling quickly and quietly, and the serious consequences of surprise encounters with grizzly bears is well-documented. We have several examples of incidents and close calls within the Central

Rockies, and one only needs to look to the Montana fatality in 2016 as the perfect example of what happens when it all goes wrong...”

The US IGBC (Interagency Grizzly Bear Committee) Board of Review on that incident mentions that **mixing mountain bikers and late summer berry patches may be a bad mix** (Figs. 3 & 4)

(http://igbconline.org/wpcontent/uploads/2016/03/160629_BOR_Recomm_Treat_NCDE.pdf).

This proposal is possibly doing just that, and the grizzly bear habitat here is much better and holds more grizzly bears than found in Banff NP, elevating the risk of these incidents.

It is certainly not good planning to set up an intensive mountain biking operation in an area with this extensive high quality grizzly bear habitat from a human safety context and is likely best avoided if possible. From a management perspective, it is useful to manage people and bears in a way that avoids or minimizes conflict and associated property damage and possible injury as they often translate into intolerance, lower appreciation, and ultimately negative conservation outcomes in the long run.

DISRUPTION OF A REGIONAL BEAR VIEWING AND HIKING ASSET

This is all compounded by the fact that the trail up the Whitewater Creek valley is practically a local, regional, and possibly national (and maybe even international) treasure in that it takes hikers to one of the best and reasonably consistent grizzly bear viewing areas in a natural setting in the southern interior of BC. An old mining trail was rerouted years ago for bear viewing to stay on the safer side of the valley. This resort will certainly denigrate the ability of this valley and trail to provide this rare type of experience for many BC residents and visitors alike. The trail contributes to people safely viewing grizzly bears and enhances appreciation, tolerance, and a willingness to share habitat with these sensitive large carnivores.

Thanks for your consideration of this material. Don't hesitate to contact me for more information if required.



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Figure 1. Map of the regional fragmented grizzly bear populations. Dotted lines indicate subpopulation boundaries created by human disturbance. Note the Zinton Resort proposal sits between a larger healthy population that is required to be reconnected to the small fragmented population of ~30 bears south of Hwy31A in the Kokanee Glacier Park area. The smaller grizzly populations indicated on this map all need to be reconnected to the larger healthy population in the central Purcell/northern Selkirk area. The area of the proposed Zinton Resort has the best corridor potential for grizzly bears (See Fig. 2). Adapted from Proctor et al. (2012). The outline of the resort in the following Figures was redrawn from the proposal and may be slightly inaccurate, but generally captures the proposed area.

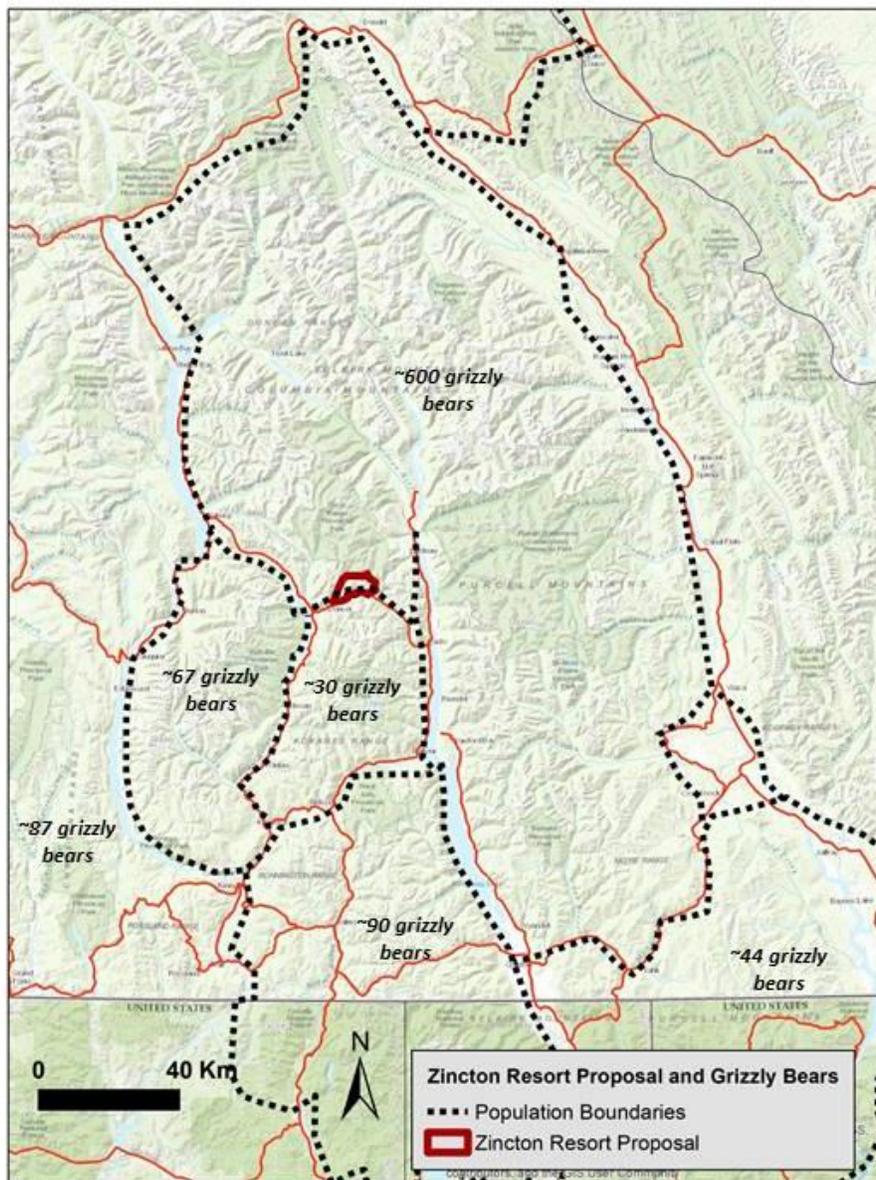


Figure 2. The proposed Zincton Resort area overlays the best grizzly bear corridor potential for connecting the smaller fragmented ~30 bear population with the bears to the north across Highway 31A – the Kaslo-New Denver Highway. Adapted from Proctor et al. (2015). The proposed resort area overlaps the best grizzly bear habitat along the Kaslo-New Denver Highway (See Fig. 3) and the all-season nature of the proposed resort will very likely inhibit this important connectivity function over time.

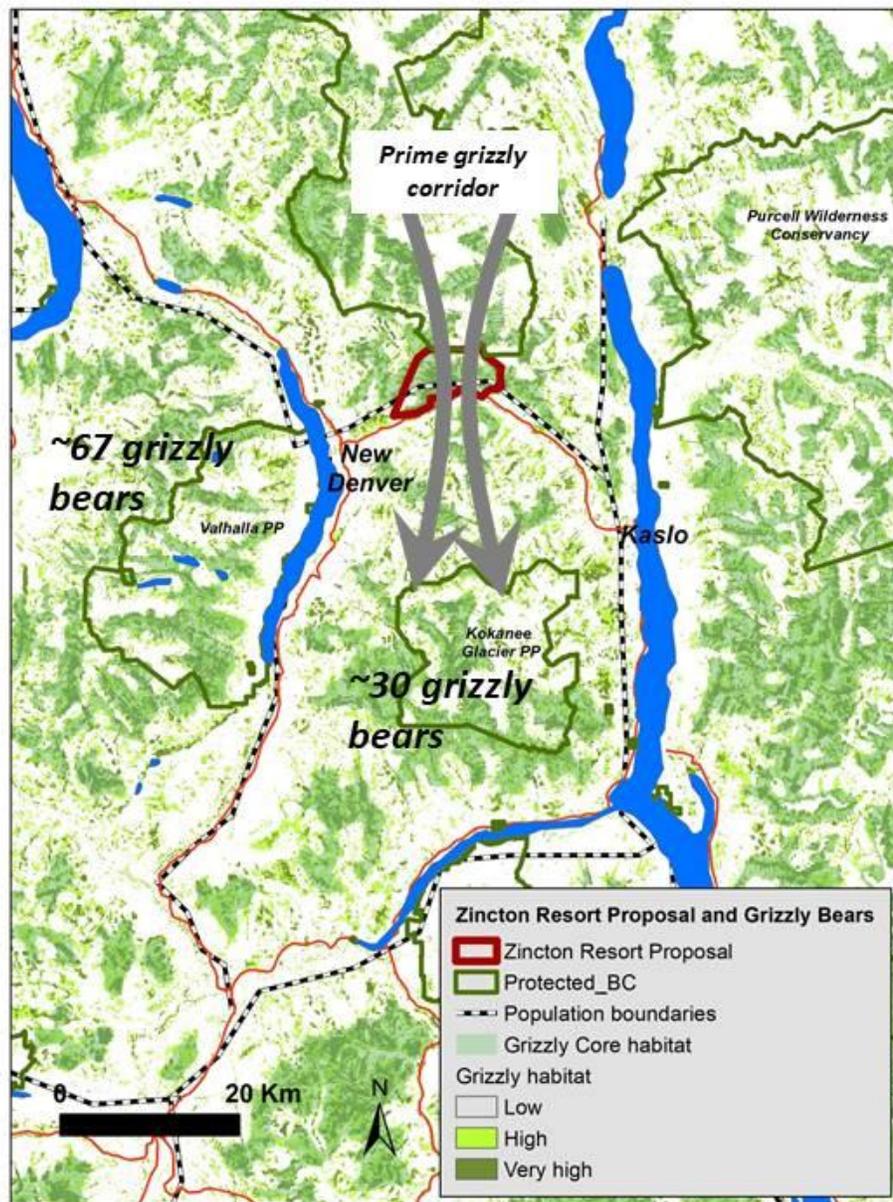


Figure 3. A closer view of the proposed Zincton Resort area relative to grizzly bear habitat and huckleberry patches important to grizzly bears. Huckleberry patches (purple on map) underpin grizzly bear population vitality and viability in this region. Adapted from Proctor et al. (2017). The proposed resort area is the best grizzly bear habitat along the Kaslo-New Denver Highway and represents the best corridor potential for rescue of bears in the larger Kokanee Glacier Park area (Proctor et al. 2015). The dotted population line is drawn just north of Hwy 31A so it does not hide the highway line.

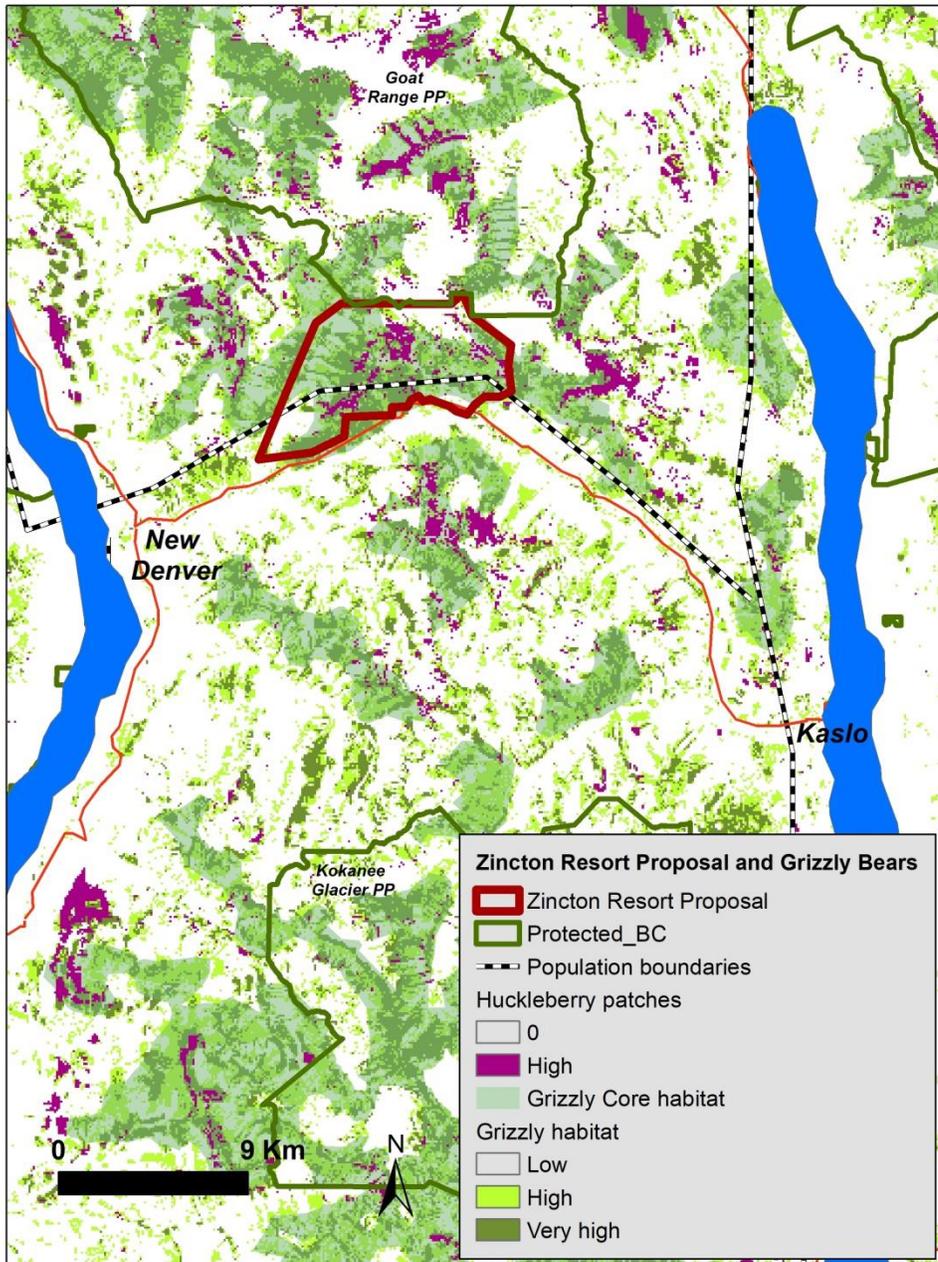
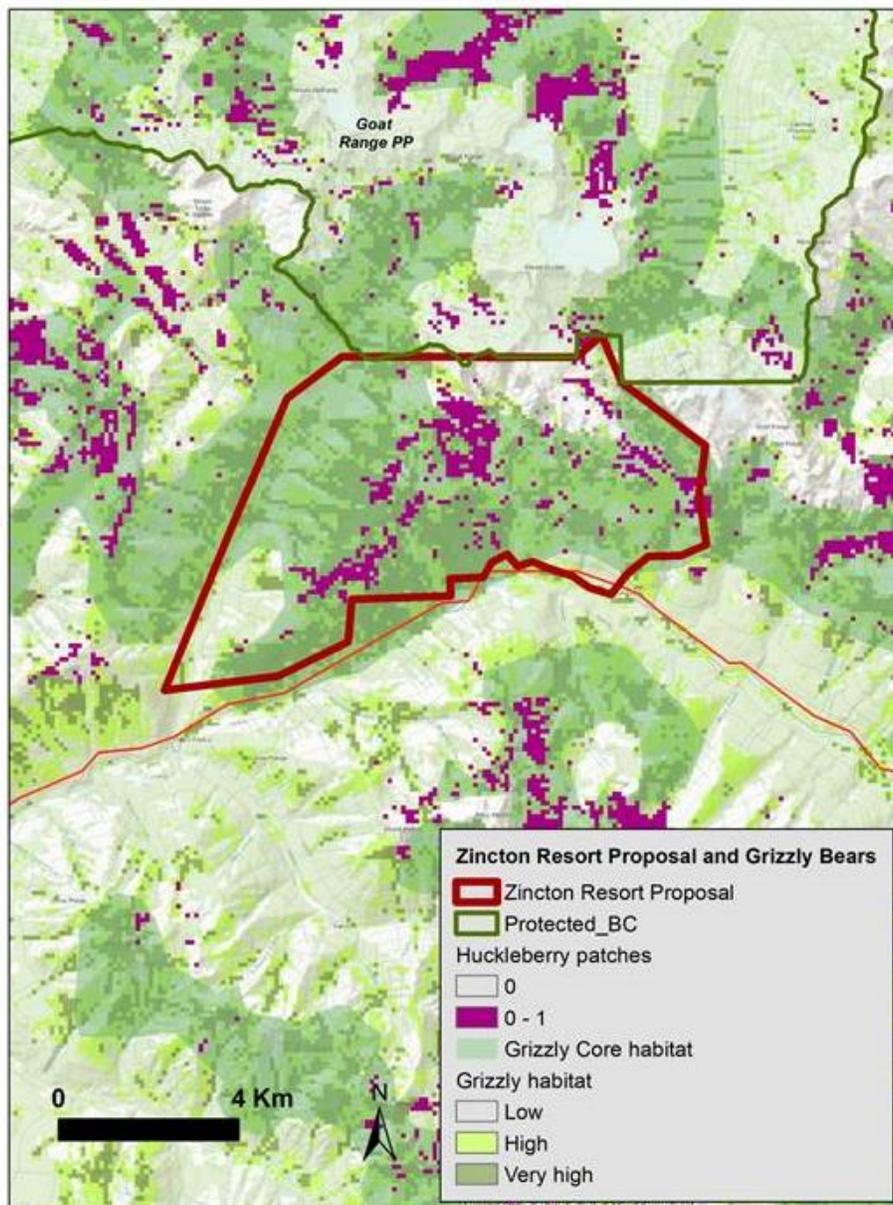


Figure 4. The closest view of the extent of high and very high grizzly bear habitat and huckleberry patches important for grizzlies in the proposed Zincton Resort area (Proctor et al. 2017). The darker green polygon, represents areas where the high and very high habitats cluster, creating especially important areas for these bears. Coupled with the presence of good huckleberry patches (purple), this area represents some of the best grizzly habitat in the area. It's existence just north of the Kaslo - New Denver Highway makes this area the very best corridor connecting bear populations north & south of the Highway. The long term persistence of the bear population to the south of this highway depends on establishing connectivity across this highway. A larger scale all-season resort will very likely compromise that function. Adapted from Proctor et al. (2017).



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Most references can be downloaded at:

<http://transbordergrizzlybearproject.ca/research/publications.html>.