



**McCrorry Wildlife Services Ltd.**

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**August 13, 2013**

Livain Michaud, Panel Manager  
Canadian Environmental Assessment Agency  
160 Elgin St  
Ottawa ON K1A 0H3

**Re: McCrorry Wildlife Services Comments on New Prosperity Gold-Copper Mine Project – Reference Number 63928 - Federal Review Panel Response to Undertaking (FishLakeTasekoResponseAccessAug892889E(3).pdf)**

Dear Mr. Michaud:

Please find my comments on this latest Taseko Response document as follows:

The access management information provided follows the typical New Prosperity EIS pattern of conceptual approach, which lacks specific details as to where and how the access management prescriptions would be applied in the Taseko development MDA and RSA and transmission/mine road access corridor.

The Taseko access Aug892889E document correctly mentions that access management has been important to grizzly bear recovery efforts in Northern Montana, Idaho, and the Yellowstone Grizzly Bear Recovery Area, resulting in positive grizzly bear population trends. However, as noted in the Appendix attached to my letter, administrative closures in some grizzly bear recovery areas in the US have also had limited effectiveness (Wakkinen 1993, Wakkinen and Johnson 1997, Platt 1993, Hammer 1986, Pollard 1991). These are not mentioned in the Taseko access document. As well, where access management has been monitored in British Columbia there has been limited effectiveness in some areas (see Ciarniello *et al.* 2009). In a survey I did for the BC Wildlife Branch of gated/closed access roads in the BC grizzly bear North Cascades Recovery Area, in every instance, off-road vehicles (ORVs) had trespassed the blockage during the hunting season (Appendix 1, this letter).

Successful grizzly bear recovery in the US has been particularly true where access management has been done in association with large core areas of occupied grizzly bear habitat on Federal lands, such as national parks and national forests that have been included in grizzly bear recovery planning. For example, Yellowstone National Park now has large core grizzly bear areas within the park that are off-limits to public access, but they have only been able to achieve this through strong regulation and constant long-term enforcement neither of which are currently available in BC. Overall, where access management has worked in the US, it has been done in association with strong federal laws concerning recovery of endangered species that have been applied to implementation and enforcement of access management combined with adequate funding for trained staff to manage, monitor, and regulate access management. None of these positive overriding endangered species regulatory and staffing conditions would apply to Taseko's proposed access management prescriptions if applied on provincial lands in the northern portion of the South

Chilcotin Ranges GBPU. Therefore, any access management prescriptions being proposed by Taseko to be implemented by the province would not have much chance of reducing human-caused mortality to grizzly bears except where road obliteration is done over a considerable distance in terrain that cannot be by-passed by illegal ORV use, or where the transmission line would cross fenced private lands.

The province has a poor track record of access management in the Chilcotin. Access management concerns and considerations for the Taseko Watershed area go back to the 1994 Cariboo-Chilcotin Land Use Plan (CCLUP) and the Draft 2004 Chilcotin Sustainable Resource Management Plan (Chilcotin SRMP) and yet we have seen very little effective access management done by the province in the Taseko Watershed area that protects sensitive species and their habitat. The Taseko area was actually one of a number of proposed Sensitive Development Resource Management Zones in the CCLUP for which special guidelines for access and other aspects to protect sensitive species were supposed to be developed *with management emphasis on the maintenance of background recreation values...* (p. 82 CCLUP). The need for proper access management was reinforced by a follow-up study, *Inventory of red- and blue-listed species, and identified wildlife in the Taseko Management Zone, July-August 1996 and February 1997* (Sopeck *et al.* 1997), but no Special Guidelines related to access management were ever done by the province and the Zone has effectively disappeared off the books. If the province had produced strong endangered species legislation combined with adequate funding for long-term implementation of proper, effective, and enforced access management and restrictions in the north end of the South Chilcotin Ranges GBPU, grizzly bear populations would most likely be in better shape than they are today. The province has recently made it clear to the CEAA Panel that they have no current commitment to a grizzly bear recovery plan for the South Chilcotin Ranges GBPU, making it very unlikely the province will implement a proper long-term access management plan if the New Prosperity mine goes in.

Another case in point of the limitations of access management in mitigation of adverse effects of large-scale open pit mining on grizzly bears is the Cheviot coal mine in Alberta. Access management in the Cheviot mineral surface lease (MSL) included the public only being permitted along designated access trails that were either non-motorised or motorised (Cristescu, 2013). However, a recent review in the CEAA March 31, 2013 Practitioners' Guide (July 2013) reported on a case study of the Cheviot Mine that predicted an immediate and significant adverse effect on grizzly bears along with regional pressures on large carnivores reaching the tipping point where population losses would become serious and possibly irreversible. Even within a 100-year reclamation time frame, mitigation of these effects was considered difficult (<https://www.ceaa-acee.gc.ca/default.asp?lang=En&n...1&offset>).

The Taseko access Aug892889E document also fails to provide details on how and where the various access management prescriptions would apply. This is the same deficiency as Taseko not providing details on the standards for the improved access road to Fish Lake.

Since I have been very involved in the Xeni Gwet'in access management plan (McCrorry 2005) for their 1.3 million hectare Caretaker Area and have considerable knowledge of the scientific literature on access management combined with considerable experience in practical applications in the field, I have looked at how the Taseko management prescriptions might be applied and how effective they might be.

## 1. 50 km transmission line

While acknowledging considerable risk to grizzly bears from access issues along the transmission line, how does Taseko propose that the province restrict access to the 80 m wide and 50 km long transmission line? They don't really specify other than to claim they will parallel existing road rights-of-way where possible.

Most transmission lines I have surveyed for public access and bear habitat values (Whistler, Vancouver North Shore, and Coquitlam) generally need to maintain road access where terrain permits for power line and vegetation maintenance. Since vehicle access for maintenance is always necessary, the common practice is to use locked gates and signage. I can't see anything different for the proposed New Prosperity transmission line except where private, fenced land is crossed. In reality, the proposed Taseko transmission line will cross extensive areas of public lands committed to cattle grazing tenures, trap lines, guide-outfitter tenures, First Nations traditional activities, big game hunting, and other activities that currently rely on a network of access roads and primitive trails in various states of maintenance. Hunters will be particularly attracted to the power line right-of-way, as they are elsewhere, due to the wide openings and easy access where the gates can be breached or by-passed with ORV trails. Grizzly bears will also find improved habitats, such as increased berry production, that will lead to increased use of the 80 m wide right-of-way and thus increased human-caused mortality risk.

As noted in my recent report to the Panel and listed again in an Appendix to this letter, gating and other measures would have limited effectiveness in keeping ORVs, hunters, and others out of a Taseko transmission right-of-way. Even if decommissioning is used for some of the roads leading across the Chilcotin Plateau to access the transmission line, the effects may have limited value. Ciarnello *et al.* (2009) compared two study areas in central BC: The plateau study area (Parsnip) had resource development (12% logged) with an extensive road network, while the mountainous study area (Hart Mountains) was relatively pristine (2% logged). Six of nine grizzly bears shot by hunters were within 100 m of a secondary or decommissioned logging road. Five grizzly bears were killed illegally in the more roaded plateau area (four not reported to authorities), while there were no illegal kills detected in the less developed mountain study area.

In my opinion, given the circumstances, conflict and mortality risks involving grizzly bears would have little chance of being mitigated along this mine transmission line infrastructure.

## 2. Access Management in New Prosperity MDA?

The New Prosperity EIS proposes to maintain some sort of First Nations and public access to the trout resource at Fish Lake. Some grizzly bears will also habituate to the mine site and will try to continue their regional movements through the MDA, as well as gain access to remaining trout spawning areas. It is unclear which of Taseko's access management prescriptions will be applied to avoid conflict with mining activities. I would appreciate Taseko providing this information.

## 3. Management prescriptions related to overall increased public access to the RSA and the Xenigwet'in Caretaker Area from improved mine access highway to Fish Lake

As noted on page 69 of my July 30, 2013 report to the Panel: *An indirect cumulative effect of improving the Taseko/Whitewater road to industrial standards will facilitate increased public access to the whole area for recreation purposes, including more armed hunters. It is expected that the increased population of construction and mineworkers for the 35-year span will also contribute significantly to increased motorised access to the backcountry...*

While I agree that some of the management prescriptions noted in tables 1 and 2 of the Taseko Response have had some success in the US, I again point out that the grizzly bear recovery success was in regions with strong federal laws to protect endangered species combined with the staff and funds to implement long-term strict access management where necessary; a situation lacking in the BC Chilcotin.

Nowhere in their access management prescriptions does Taseko attempt to address the complex issue of controlling indirect impacts of increased public access to grizzly bears from the spin-off that will result in the Taseko from the improved 50-km mine highway. Which of the prescriptions from Table 1 and Table 2 does Taseko propose to apply and where?

The only access review and proposed management plan done that includes the Taseko Watershed has been done by the Xeni Gwet'in for their Caretaker Area (McCroory 2005a). The study showed that prior to the 2003 Chilko wildfire (BC's largest) in the Brittany Triangle, there was approximately 364 km of vehicular roading in XGCA, with 167 km of main access (gravel) roads and 197 km of primitive 4 x 4/ATV type roads. Mining roads/cat trails in the Taseko Watershed represented 88 km or 45% of all primitive roads and 24% of all roads prior to 2003.

Nowhere in the New Prosperity EIS do I see the company attempting to address access management related to wildfires that are predictable in the MDA-RSA and areas surrounding the transmission line. After all, this is a fire-driven ecosystem.

In 2003, Ministry of Forests (MOF) control efforts for the Chilko wildfire added about 141 km of new roads/fire guards that served as primitive motorised ORV access. Deactivation in 2003 did not prevent ORV motorised access into the core Brittany Triangle grizzly bear area. Commercial morel mushroom harvesting in the burn in 2004 and 2005 added another 20 km of new ATV trails. Much of the MOF roading/fire guards was done in Nunsti Class A provincial park, where motorised access routes increased by 500%. New access as a result of combined MOF fire control and the commercial mushroom harvest amounted to approximately 160 km, representing an increase of 44% over the pre-2003 level of motorised access in all of the XGCA. The study concluded that motorised access on some of these primitive roads was creating conflict with non-motorised access and disrupting wildlife. New ORV trails were being cut into the side-drainages for sport hunting (McCroory 2005b).

At the same time, the Xeni Gwet'in and others rely on some of the old roads for motorised hunting, wood-cutting, commercial tourism, recreation, and other activities. As part of the Xeni Gwet'in tourism and access management plan (McCroory 2005a), elders identified a number of special areas that they wished to see off-limits to tourism and public access. This included places like Potato Mountain, Graveyard Valley, and Teztan Biny (Fish Lake). The Xeni Gwet'in also attempted to stop motorised ORV access into sensitive wildlife areas and Class A parks by posting non-ORV signs on some of the primitive access roads, such as in Nunsti Provincial Park (a non-motorised park). However, both BC Parks and the Xeni Gwet'in, lacking enough staff, have jointly not been able to stop some unregulated motorised access into the park. A gate on the access road was also attempted in cooperation with the Ministry of Forests and Friends of Nemaiah Valley, but this was kept unlocked due to strong local opposition. The Xeni Gwet'in were also instrumental in working with the RCMP to attempt to stop hunters who had illegally built a 10-km ATV trail into a guide-outfitters area in upper Brittany Creek. After posting no access signs, no follow-up was done by the province to address the illegal access issue.

The Xeni Gwet'in and the Chilko Resorts Community Association have also zoned large areas of their Wilderness Tourism zones in the Xeni Gwet'in Caretaker Area as non-motorised, including off limits to helicopter tourism. They have had some success in working with the province at the policy

level, but limited success in on-the-ground controls for the same reason that the province has a poor track record in the area of controlling public access.

It is thus difficult to foresee how the mitigation of human-caused mortality to grizzly bears through access control proposed by Taseko would have much effect as it relates to controlling the influx of motorised and non-motorised recreation predicted as a spin-off from the mine development.

#### **4. Access management related to wildfires in the Taseko MDA, RSA, and transmission line corridor**

As noted in my July 30 report to the Panel, nowhere does Taseko address access management related to wildfires and wildfire control during the 35-year life span of the mine development. With increased human access generated by the mine, the risk of wildfires will increase. Climate change is also a strong factor as we have seen with the three large wildfires that have burned the Brittany Triangle since 2003. The Chilko fire in 2003 was the largest in the province and cost an estimated \$8 million to attempt to control. Bulldozed roads represented a large increase in lineal disturbance to the area. Attempts to block public access after the fire were unsuccessful as people cut ATV trails around 300-400 m of physical blockages and deactivated sections of road. In spring 2004, approximately 200 commercial morel mushroom pickers moved into the Brittany, with 50 camping areas. The Xenigwet' in attempted to control this through issuance of permits and picking up garbage (McCrorry 2005). Many people carried firearms for protection against bears. Two people were lost in two separate instances requiring large search efforts. One person was never found. Whether any grizzly bears were destroyed in conflict situations remains unknown.

The mushroom harvest was so lucrative that the Xenigwet' in adopted a policy of permitting and careful garbage and access management for prevention of any future fires in their Caretaker Area. However, they would have no controls over any defense-of-life kills of grizzly bears.

In conclusion, as I have described, there are many access issues arising from this proposed large open pit mine development at Tetzan Biny (Fish Lake) that are not addressed adequately by Taseko's EIS and recent follow up documentation on access management prescriptions. More questions are posed than answered. Lack of strong provincial (and federal) endangered species legislation, lack of commitment by the province to a grizzly bear recovery plan, and lack of adequate resource funding for long-term implementation and enforcement of strong access management and enforcement measures make for a very limited overall mitigation effectiveness of human-caused grizzly mortality arising from increased access related to the large New Prosperity Mine.

In my professional opinion, for the already threatened South Chilcotin Ranges grizzly bear, the consequences of additive human-caused mortality from the mine development will be far-reaching and likely irreversible.

Sincerely,

Wayne P. McCrorry, RPBio.

Attach.

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**APPENDIX: Some case history studies on the effectiveness of access control measures in occupied grizzly habitat (as cited in my July 30, 2013 grizzly bear technical report to the Panel).**

- A study in the endangered Selkirk grizzly ecosystem in Idaho showed this low population of approximately 50 grizzly bears suffered 18 deaths between 1982 and 1996, 11 associated with open roads, and 4 on closed roads (Wakkinen 1993, Wakkinen and Johnson 1997).
- In a National Forest in Idaho, of 10 roads administratively "closed" with gates by the US Forest Service (USFS) for wildlife protection purposes, a spot check by the Idaho State Wildlife Department revealed four were not locked and were open to public use (Pollard 1991).
- In Montana, 53 road closure structures (all gates) were inventoried in grizzly bear habitat with the following findings: 38% were ineffective in restricting passenger vehicle access to 44% of the road system; 25% of the failures were due to trails circumventing the closure; 50% were due to failure to lock gates; and 100% of the structures failed to control snow machines or ATV access (Hammer 1986).
- In the Kootenai National Forest in Montana, the USFS is responsible for limiting access to protect threatened grizzly bear populations and their habitat. They evaluated 281 closure structures, behind which were 1355 km of supposedly, protected roads. Of these, 21.4% failed to control vehicle access and a further 25.3% failed to control ATV access; 64% of the roads claimed to be protected were not. Of the 281 structures, 146 were gates; their failure rate was 65.6%, higher than the overall failure rate of control structures (Platt 1993).
- As noted in my report on deactivation of fireguards from the Brittany Triangle 2003 fire, hunters and mushroom-pickers built ATV access roads around all blockages (McCrary 2009). Illegal ATV access roads have also been built into Brittany Creek and portions of the upper Taseko for hunter access (McCrary 2009). Despite signage and remote cameras used by the Xeni Gwet' in BC Parks/Wild Horse Ranger in attempt to determine, with the RCMP, who was using this unauthorised access no enforcement was done by the province.
- At the Chilcotin-Fraser Junction protected area, BC Parks attempted to control access, but both a gate and the fence built to prevent motorised access were removed by unauthorised people in short order (Glen Davidsen pers. comm.).
- In a survey I did for BC carnivore biologist Matt Austin of legally closed, signed, and blocked/gated access roads in the Pasayten and North Cascades in the BC North Cascade grizzly bear recovery area, motorised hunting groups violated all access points surveyed (W. McCrary pers. comm.).

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