



Parks Canada Preliminary Screening under the *Mackenzie Valley Resource Management Act*

TYPE OF DEVELOPMENT:

- ✓ New
- Amended
- ✓ Requires a permit, licence or authorization under the *Preliminary Screening Requirement Regulations* (issuance of a National Parks of Canada Business Licence pursuant to the *National Parks of Canada Business Regulations* s.4.1)
- Does not require permit, licence or authorization and is proposed by PCA

1. PROJECT TITLE & LOCATION

Summit Mountain Guides, Cirque of the Unclimbables Trip Proposal
Cirque of the Unclimbables
Nahᓄᓐ Dehé (Nahanni) National Park Reserve, NT

2. PROPONENT INFORMATION

David Lussier
Summit Mountain Guides
1106 Hall Mines Road
Nelson, BC
V1L 1G6
(250) 354-9028
summitmountainguides@gmail.com

3. PROPOSED PROJECT DATES

15 days between July 20-Aug 5, 2018; weather dependent

4. INTERNAL PROJECT FILE #

NAH2018-006



5. PROJECT DESCRIPTION

Summit Mountain Guides (SMG) is proposing a remote wilderness experience and adventure tourism guided trip in Nahᓃᓴ Dehé (Nahanni) National Park Reserve (NNPR), specifically at the Cirque of the Unclimbables (see site maps below). The trip will include climbing the Lotus Flower Tower and is proposed for a maximum 15 day period from July 20-Aug 5, 2018; exact timing of the trip will depend on weather. Maximum group size will be 4 people: 2 guides and 2 clients.

SMG will hire a float plane or helicopter to deposit/pick up the group at Glacier Lake or Fairy Meadows, using a charter company that has been issued a NNPR business licence. If commencing at Glacier Lake, the group will hike to Fairy Meadows to camp, a distance of approximately 5 km, one way. From Fairy Meadows, they will use the standard approach and descent routes for the Lotus Flower Tower formation and may return to Glacier Lake for their pick-up. Camping may take place at the established campsite at Glacier Lake (facilities include a shelter/cabin, bear-proof food lockers, and a privy) and will take place at Fairy Meadows (facilities include a 6-barrel outhouse and informal campsites under the overhangs of erratics and in the meadows).

The Cirque of the Unclimbables is a world-class big-wall climbing area and represents a "pristine" backcountry experience. The natural environment is representative of high-altitude northern regions with thin soil and sensitive high alpine/tundra vegetation. No species at risk are known to use the project area. There is a buried precontact archaeological site at the Cirque, located by the barrel outhouse, and three historic sites have been identified along the north shore of Glacier Lake.

The group will follow a leave-no-trace camping/wilderness use ethic and will adhere to the mitigations described in the Parks Canada Best Management Practice for Commercially Guided Eco-tourism Activities in Nahanni and Nááts'j'ch'oh National Park Reserves of Canada. The requested visitation by SMG is included in the current capacity allotment of no more than 12 campers per night (based on capacity of 3 campsites, with 4 people per site) at the Cirque and 42 total (including campers) day visitors x 77 days in the season for an annual total potential of 3234 visitor days.

6. VALUED COMPONENTS LIKELY TO BE AFFECTED

Water Quality and Aquatic Ecosystem

- Several alpine streams exist in the Cirque and stream crossings are necessary on the hike to/from Glacier Lake to Fairy Meadows and from Fairy Meadows to the Lotus Flower Tower. The float plane will land and take off from Glacier Lake, which is fish bearing but contains no known *Species at Risk Act* (SARA)-listed species.



Wildlife and Vegetation

- No known *Species at Risk Act* (SARA)-listed vegetation or wildlife species will be impacted. However, sensitive high alpine/tundra vegetation is predominant in the Fairy Meadows base camp area, along with lichen encrusted rocks. Grizzly bears (predominantly below tree line), mountain goats, ground squirrels, and alpine birds are present.
- The project area is located within the Ragged Range MB alpine-subalpine Ecoregion (ECG, 2010). The hiking route to Fairy Meadows follows the treed (primarily spruce) valley floor west from the Glacier Lake drop-off to the foot of the talus slope below Mount Harrison Smith. It then ascends the talus slope to the base camp at Fairy Meadows. Vegetation in the Cirque area is representative of sensitive high alpine vegetation grading up into largely nonvegetated terrain above 2000 mASL except for lichen crusts on bedrock and boulder colluvium, and small pockets of vascular and non-vascular plants on moist ledges and sheltered areas. Wildlife throughout the project area consists of grizzly bears (predominantly below tree line), ground squirrels, mountain goats, and various birds (ECG, 2010).

Soil and Landforms

- Soil at this altitude is thin to non-existent, particularly above tree line (ECG, 2010).

Heritage Resources

- There is a buried precontact archaeological site at the Cirque, located by the barrel outhouse, and three historic sites have been identified along the north shore of Glacier Lake. One of the sites corresponds to the location of the Frost Creek campground at the west end of the lake where there are a number of culturally modified trees that must be left intact. The other two historic sites are located closer to the juncture of Brintnell Creek at the east end of Glacier Lake.

Visitors

- The Cirque of the Unclimbables is a world-class big-wall climbing area and visitors expect a "pristine" backcountry experience.

7. EFFECTS ANALYSIS

Water Quality and Aquatic Ecosystem

- Risk of contamination if human waste/grey water/fuel is not properly managed.
- Crossing/approaching stream banks/lake shores can result in erosion and associated decrease in water quality.

Wildlife and Vegetation

- Wildlife can be disturbed/attracted by human presence and food and waste smells.



- Vegetation can be trampled from hiking, movement around base camp, and tent placement.
- Lichen can be scraped off rocks from placement of tent flies, gear hanging, and by hiking.

Soil and Landforms

- Soil can be compacted/eroded from hiking, movement around base camp, and tent placement.

Heritage Resources

- Risk of disturbance from visitors to the historic cultural resources at the Frost Creek campground and the sub-surface artifacts at the Cirque.

Visitor Experience/Public Safety

- Risk of serious injury or death in this remote location and "high-risk" activity of big wall climbing.
- The hiking and camping experience can be negatively affected by habituated wildlife and "non-pristine" backcountry conditions (e.g.: presence of waste/careless site use by other users/climbing gear left behind on the wall).

CUMULATIVE EFFECTS:

- Because soils and vegetation regenerate slowly in the alpine environment of this project area, cumulative effects from trampling and erosion can accrue more quickly than at temperate or lower altitudes/latitude. Additionally, contamination from improperly stored/disposed of food, fuel, and waste takes longer to dissipate in alpine environments.

8. MITIGATION MEASURES

General Note:

- The requested visitation by SMG would be included in the current capacity allotment of no more than 12 campers per night (based on capacity of 3 campsites, with 4 people per site) at the Cirque and 42 total (including campers) day visitors x 77 days in the season for an annual total potential of 3234 visitor days.

Public Safety:

1. Groups climbing in the Cirque must register and de-register their trip with the park office in Fort Simpson either in person or over the phone.

Environmental Considerations/Visitor Experience:

2. SMG must adhere to the following sections of the "*Parks Canada Best Management Practice (BMP) for Commercially Guided Eco-tourism Activities in Nahanni and*



Nááts'ihch'oh National Park Reserves of Canada, Southwest Northwest Territories Field Unit" (Appendix 1):

- a. Mitigation Measures Common to all Commercially Guided Eco-Tourism Activities in Nahanni and Nááts'ihch'oh
 - b. Mitigations for Hiking and Mountaineering
 - c. Mitigations for Overnight Camping
3. SMG will utilize only aircraft operators licenced to operate in Nahanni.

9. OTHER Considerations

Note: Nah?á Dehé Consensus Team has approved this development and will be kept apprised of its progress.

- ✓ Surveillance: NNPR conducts pre and post-season teleconferences with its business license holders; this is considered to be the surveillance for SMG's proposed trip.
- Follow-up monitoring, general
- Follow-up monitoring, required by legislation or policy (indicate basis of requirement e.g. required by the *Species at Risk Act*)
- SARA Notification

10. SIGNIFICANCE OF RESIDUAL ADVERSE EFFECTS

Given the magnitude of effects, the short term of the project, the timing and the application of the selected mitigation measures, the project is not likely to cause significant residual adverse effects to natural/cultural resources or visitor experience.

11. EXPERTS CONSULTED/CONSULTATION RECORD

<i>Department:</i> Parks Canada / Government of Canada	<i>Date of Request:</i> April 23, 2018
<i>Expert's Name & Contact Information:</i> Patrick Carroll PO Box 750, Fort Smith, NT X0E 0P0 Patrick.carroll@pc.gc.ca / Tel: 867-872-7936	<i>Title:</i> Cultural Resource Management Advisor, SW NWT Field Unit
<i>Expertise Requested:</i> Heritage resources	



Response: The project area is an area of interest for cultural resources. A survey was conducted in that area in 2012 (Deck, D. 2013. *Glacier Lake Archaeological Impact Assessment*. Terrestrial Archaeology, Cultural Sciences Branch, Parks Canada Agency) and (Deck, D. 2013. *Archaeological Site in Fairy Meadows Yields Early Date*. Terrestrial Archaeology, Cultural Sciences Branch, Parks Canada Agency). The main concerns from a CRM perspective are disturbance to the historic cultural resources at the Frost Creek campground and disturbance of the sub-surface artifacts at the Cirque.

If it is "business as usual" with no actions beyond what is normal for these operators and no subsurface impacts arising, there should be no CRM concerns with the business application. Any permit should include that intentional disturbance of cultural resources is prohibited.

- The proposal was discussed and approved by the Nahᓃᓴ Dehé Consensus Team on May 3, 2018.
- The preliminary screening was publically circulated for a 21 day review period (April 5 to April 26, 2018). Only one comment was received; a "no concerns" from the Department of Lands, Government of the Northwest Territories (April 6).

11.1 References

Ecosystem Classification Group. 2010. *Ragged Range MB alpine-subalpine Ecoregion, Descriptions for Region 6.1.6.5. Excerpts from Ecological Regions of the Northwest Territories – Cordillera*. Department of Environment and Natural Resources, Government of the Northwest Territories, Yellowknife, NT, Canada. Available online at: [http://www.enr.gov.nt.ca/sites/default/files/reports/nwt taiga plains enrdoc full report ver 9 revisions2009 2ndprintingerrata corrected april2013web.pdf](http://www.enr.gov.nt.ca/sites/default/files/reports/nwt_taiga_plains_enrdoc_full_report_ver_9_revisions2009_2ndprintingerrata_corrected_april2013web.pdf)

12. DECISION

Taking into account the analysis and implementation of mitigation measures outlined in the analysis, the development:

- Might have a significant adverse impact on the environment, and the proposal should be referred to the *Mackenzie Valley Environmental Impact Review Board* for environmental assessment.
- ✓ Does not have a likelihood of causing significant adverse impact on the environment.
- Might be a cause for public concern, and the proposal should be referred to the *Mackenzie Valley Environmental Impact Review Board* for environmental assessment.
- ✓ Does not have a likelihood of causing public concern.



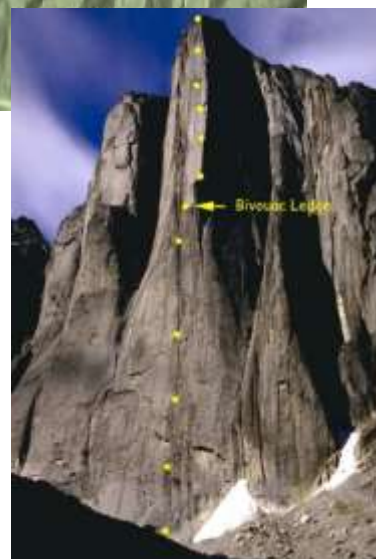
13. RECOMMENDATION AND APPROVAL

Prepared by: <i>Jacquie Bastick</i> Impact Assessment Specialist, Parks Canada (Natural Resource Conservation Branch)	Date: May 4, 2018
Approval Signature:  <hr/> <i>Jonathan Tsetso</i> Superintendent, Nahanni National Park Reserve	Date: May 4, 2018



14. ATTACHMENTS

14.1. Site Maps





APPENDIX 1:

The following Best Management Practices (BMPs) will be included as attachments in the email notification of preliminary screening completion.

- *Parks Canada Best Management Practice (BMP) for Commercially Guided Eco-tourism Activities in Nahanni and Nááts'ihch'oh National Park Reserves of Canada*
- *Parks Canada Best Management Practice (BMP) for Aircraft Operations and Landings in Nahanni and Nááts'ihch'oh National Park Reserves of Canada*