# Sorcerer General Mountaineering Camp Management Plan for The Alpine Club of Canada

# Section B – Proposed Use Description

## I. Background

The Alpine Club of Canada has been running General Mountaineering Camps (GMC) annually since its inception in 1906. The purpose of these camps is to allow the **exploration of new mountainous areas to our members in a safe manner through mountaineering, hiking, scrambling and climbing** with certified fully accredited Association of Canadian Mountain Guides (ACMG).

Proposed Use – Over the course of two months, we will set up a base camp consisting of multiple large canvas tents for dinning, cooking, and relaxing. Smaller structures will be used for showers and outhouses. Numerous small camping tents will be set up for our participants personal use. Once set up is complete, we host 7 one week camps. No changes will be made until the end of the 7th week consisting of our tear down. The set up date will begin July 2, with the first participants arriving July 9. Seven individual weeks will allow us to include up to 31 participants each week and approximately 15 staff and volunteers. Making a total of up 46 potential people in one week. The weeks being:

Set-up: July 2 - 9

Week 1: July 9 - 16 (max 31 participants)

Week 2: July 16-23 (max 31 participants)

Week 3: July 23 – 30 (max 31 participants)

Week 4: July 30 – Aug 6 (max 31 participants)

Week 5: Aug 6 - 13 (max 31 participants)

Week 6: Aug 13 - 20 (max 31 participants)

Week 7: Aug 20 - 25 (not a full week, max 12 participants)

Tear down: Aug 20 - 28 (over lapping with Week 7)

All gear, supplies and participants will be flown in via helicopter. Tear down begins during week 7 (less participants) and will continue no later than Aug 28.

The Sorcerer Area was chosen for a number of factors.

- Relative ease of access
  - A relative short drive down a forestry road to a suitable staging area for participants and a helicopter landing area allows for a short and more affordable helicopter ride into our base camp.
- New area of exploration
  - o The ACC's Mission states that we "promote alpine experiences, knowledge and culture; responsible access; and excellence in mountain skills and leadership". Choosing an area that we have not visited before

helps broaden the experience and enjoyment of our members. This area is also great because it lends itself towards learning mountain skills and developing leadership.

- Variety of objectives for varying participants skills and fitness
  - O Hosting the GMC annually, we open our registration for any and all participants no matter their skills or fitness level. Our locations are based on allowing us to offer a variety of objectives for our participants. Whether you're an experienced alpinist or you're new to the mountains, we chose sites that can cater to all levels of experience and fitness.

Preliminary scouting of the area via helicopter was conducted in September 2015. Numerous flights were taken over various locations for evaluation based on criteria mentioned above. No further investigation is needed until the set up dates where the exact location of tents will be decided.

There are no current zoning issues.

There is no competition of the GMC in the vicinity.

#### II. Location

The location of our GMC is located North of Sorcerer Mountain set on Bachelor pass between the Alphabet group and the Argentine group in the Northern Selkirk Mountains in British Columbia. The separate General Location Map (GLM) attached to the TMP provides a more detailed location where our base camp will be and the area we will be working in. The area consists between four maps, 82N5, 82N8, 82N9 and 82K12. Our basecamp will be located at UTM coordinates using the NAD27 11U are 433300 570850 at approximately 6800 ft. elevation.

Sitting on an alpine environment just west of Bachelor pass, we will have rock slabs that will lead into glaciers and rocky ridges. Basing our camp near a small outflow creek, this will be our primary water source.

All access into camp will be via helicopters. All flights will be scheduled on Saturdays, with the exception of set up and tear down. During Saturdays, numerous flights will be made to transport new participants in and exiting participants out along with their personal gear. These flights will also transport new staff and volunteers. Separate flights will be included for the purpose of flying in new fresh food and flying out any garbage. No other flights are planned during the week unless emergencies dictate the need for them.

The GMC is taking place between the dates of July 9 - Aug 25. Working in the first half of the summer months, we are hoping to take advantage of good stable weather. This

time will allow for major winter snowmelt improving travel conditions. This will allow safe campsites and travel on glaciers and mountainous ridges.

Trips from basecamp will vary based on participants expectations and limitations. Sorcerer Mountain will be the main objectives requiring an Advanced Base Camp to allow adequate time. Closer main objectives from our base camp will be Argentine Mountain, Folly Peak, Centurion and Goldstream S. Station. Based on the exploratory nature of our GMC's many other objectives will be explored in the direct use area, many named and unnamed. The attached GLM outlines the area we will be working in. Objectives will range in difficulty and duration based on safety and clients ability. No other parcel of land will be used outside of the GLM.

Confirmation of Safety: As the GMC grows in popularity our ability to offer more remote locations, while maintaining safety, will always be a top priority. This has consistently been evaluated and points of actions have been made and acted upon. Today, along with all participants, a practicing doctor is available for any purpose the participants may need. The first aid ability of these doctors and the resources they have access to allow them to provide help from simple blisters and headaches to heavy trauma with numerous splints, suture kits and a spine board. This allows immediate action upon injury and can provides safe travel for any injured participant. Our relationship with Alpine Helicopters allows us quick access for any emergency evacuation.

Each guide leading a group will be carrying a hand held radio with clear lines of communication to basecamp to allow fast communication and evacuation if needed. All guides will be up to date with their 80 wilderness first aid at a minimum. Evaluation of each injury is made and the necessary arrangements can be made, from helping a client walk back to camp, to calling in for an emergency heli evac to the nearest hospital in Golden B.C.

#### III. Infrastructure

All facilities and infrastructure proposed for the GMC are temporary installments and nothing permanent will be left on site. As mentioned in section I, numerous tents will be set up ranging from a large dinning tent, cooking tent, and "tea room" to smaller two person tents where participants will have access for overnight accommodation and gear storage.

On initial flights during set up, lumber will be flown in for assisting the set up of the larger tents.

Out houses for human waste are also set up in a safe and sanitary manner. A four-foot deep hole is dug for waste containment. During our tear down, we will subscribe to a Category 2 open fire with the lumber necessary for camp set-up. This fire will be conducted on top of these holes to help incinerate human waste. It is then covered over with loam and surrounding rock upon departing the site. Measures are taken to reduce the

chance of any water contamination or serious ground leaching. These sites will be minimum 100 meters away from camp, downstream.

The area in which the Sorcerer GMC is held, has no direct contact with transportation outside that of helicopters. The closest Forest Service Road is located approximately 6 km east along the Gold Stream drainage. We will be using this road for a heli staging area, and we are in the process of gaining a Road Use permit and will be accessed on flight days (Saturdays) by incoming and outgoing participants.

Power is provided at the GMC through solar arrays, propane and a gas generator. Solar electric power is used for lighting and heating (if necessary) as well as charging batteries for satellite phones and emergency beacons (PLB's and "Spot" like devices). Propane is used for cooking purposes mainly and also through gas generators if the solar arrays aren't providing enough power.

The GMC's water needs aren't high. Used primarily for cooking, drinking and cleaning purposes, the tax upon existing streams or alpine lakes (tarns) will not be beyond its carrying capacity. Sites are chosen with this concern as one of the primary ingredients. The GMC feeds up to 45 people (staff and volunteers incl.) and provides water to said participants. A shower for personal hygiene is set up but is not used by everyone everyday. Showers are kept short and warm water is in short supply. Water will be brought into camp through a pump. Average water use is approx. 20 liter/person/day. Maximum amount of water for any one day should not exceed 1000 liters or just over 200 gallons. Drinking water is treated chemically and with UV light to allow safe consumption.

The ACC's dedication to its values runs deep throughout the GMC. Dedicated to having a "responsibility to continue to increase our knowledge of the alpine environment, and to minimize our impact upon it" leads us to minimize our impact as much as possible. All human waste is collected in our sump holes with measures taken to minimize leaching into soil or water. It is incinerated as best as possible during tear down. It is then covered for the minimization of smells and attraction to local animals.

Sanitation in large groups such as this are a big concern and is addressed at the beginning through the Camp Managers talk to new participants and stressed throughout the camp. Hand washing stations are provided for guests to use at all times and encouraged to use after use of the outhouse and before meals.

All garbage is collected and sorted into waste and recycling and flown out weekly.

The GMC employs three cooks for each week. Any food waste is collected and thrown out. All dishes and cutlery are washed using a three sink method; washing rinsing and disinfection. Quality of food and sanitation are key to making the GMC successful. Any excess food waste is collected and flown out.

All waste is flown out every Saturday. This allows a clean and fresh feel to the GMC without having a "dump" located behind camp distracting participants from the views or unnecessarily attracting wildlife.

Water systems installed at the GMC will not meet BC food regulations. As approved by BC's Environmental Health Officer, we will post that water and food safety does not meet their requirements and have posted procedures for our kitchen staff and help. Potable water will be provided through filtration, UV light disinfection and treated to allow reliable potable water. These stations will be clearly marked.

#### IV. First Nations

No local bands have been contacted at this time.

## Section C – Additional Information

#### V. Environmental

## a. Land Impacts

As the Sorcerer GMC basecamp will be in an alpine environment, land disturbances will be kept to a minimum. The ACC strives to minimize all impact on the environment on all camps. Tents will be set up on hardened areas. Travel through treeline areas may occur on non-established trails. Care will be taken to mitigate any major disturbances during this time. No trails will be intentionally developed.

The Sorcerer area is a rarely visited area of the Northern Selkirk Mountains. Visual impacts will be next to zero based on no known external expeditions to this area in the summer of 2016.

No know known archaeological sites are known or recorded as per B.C. Ministry of Forests, Lands and Natural Resource Operations.

All construction for the GMC will be non-permanent. Lumber, 2x4's will be used for setting up the large tents and will be taken down and burned (Category 2 fire) during tear down.

### b. Atmospheric Impacts

**Sound:** Basecamp will only be fully housed early mornings and late into the evenings. No artificial noises will be used beyond that of our gas generator, used as little as possible.

**Odor:** Odor will arise from the cooking and dining tent as well as our outhouses. Smells from the kitchen will be temporary as will outhouses as waste will be covered with soil at the end of the Camp.

**Fuel Emissions:** Propane will be used for cooking and cleaning purposes and potentially heating and lighting. A gas generator will be used to recharge solar batteries if solar charging is not enough. This will be a limited amount of use.

## c. Water or Land covered by water impacts

The GMC basecamp is located in an alpine environment where soil and sediment are low. Drainage, therefor, is a large concern. As with established huts located in the Alpine that the ACC manages, grey water will be strained for any solids and deposited down a 1 meter sump hole. When fluid reaches 20 cm, soil will be deposited on top and another sump hole will be used. These holes will be at least 100 m away from basecamp. If drainage percolation isn't evident, the location will be moved.

The same treatment for blackwater will be used as for grey water.

As mentioned above, our water usage will be low and not outside that of the replenishing cycle of the environment. No water diversion will happen. We will be using a pump to bring water into camp.

Water quality won't be contaminated or harmed throughout the camp and area using the above mentioned mitigation strategies for grey and black water. Water used for public consumption will either be boiled or treated to ensure quality.

Public access and flood potential do not exist in this area. Located on a platform of shale and rock, any water will drain quickly through. Participants will be well educated regarding their impacts upon the surrounding environment.

#### d. Fish and Wildlife Habitat

Disturbances to wildlife travel will only occur during the weeks of attendance. No permanent damage will be left in the area. Few wildlife make the alpine their home, resulting in a small impact upon any local wildlife. Wildlife can be present and passing through, the GMC staff and participants will respect all wildlife encounters and try and mitigate any disturbances to their home.

The location does fall into the habitat or travel for one endangered animal. The Badger, jeffersonii subspecies, American, is the only animal that is nationally recognized as endangered under the Species at Risk Act.

Concerns regarding Mountain Goat and Grizzly habitat have been raised and below are the mitigation strategies we will follow to conduct our mountaineering camp in a way that cause the least amount of negative disturbance on these key wildlife species.

#### Mountain Goat -

i) We will conduct preliminary helicopter flights in advance of the mountaineering camps, to determine flight path(s) (from the staging area on the Forestry Service Road)

- ii) We will utilize these paths to avoid goats.
- We will adapt our flight paths over the course of the season as necessary. We will change the flight path to avoid goats, if goats are newly discovered on a chosen flight path.
- iv) Our flight paths will avoid goats by at least 2km horizontal distance.

## Grizzly Bears -

- i) Bear spray and bear bangers will be available in camp for staff and guided groups that depart for the day
- ii) With 40 plus people in camp on a regular basis, this will be a large deterrent for any passing bears
- iii) There will always be staff present at basecamp to reduce any bear encounters amongst staff and participants through proper education and deterrents
- iv) All food will be sealed in a bear proof container and kept a sealed when not in use
- v) Food waste will be strained and kept with garbage in a sealed blue barrel away from camp until proper disposal is available.
- vi) Proper education will be provided for all participants and staff should bear encounters happen. This information is provided from <u>Safety Guide to Bears in the Wild</u> by the Environmental Stewardship Division of BC Environment.

These mitigation strategies will be passed onto our front country managers, camp managers and all pilots

As we will not be accessing any lakes, rivers or oceans with fish habitat, this will not be applicable.

# VI. Socio-Community

#### a. Land Use

The land use for this proposed management plan is for mountaineering and climbing objectives over the course of 7 weeks. This should not interfere with any public recreational areas due to its remote location. If recreational users pass through the area, they will be allowed any and all access to the area we are working in. The ACC will not impede any other parties' working/recreating in this area.

### b. Socio Community Conditions

No recreational fires will be held during the GMC. A Category 2 fire will be used during tear down for all lumber used in the construction of camp, following the Wildfire Act and proper use through Category 2 Fire Use codes. Use of emergency services will be accesses directly through our Heli operator and public amenities.



