

Field Safety Plan: 2023

Fieldwork at Trail Valley Creek Research Station

Name: Branden Walker (WLU)

Location:

Inuvik, NWT; Trail Valley Creek Research Station (TVCRS) (50km North on ITH); Hans Creek Watershed, Havikpak Creek, Inuvik.

Field Dates: TBD (March 23-December 31, 2023)

Supervisors: Philip Marsh, Branden Walker

Local Check-in contacts:

Philip Marsh (WLU); Polar Continental Shelf Program (PCSP) ; Aurora Research Institute

Field contact information: refer to Emergency field contact protocol document for more detail

Primary Field contact: Branden Walker, 905-914-2099, bwalker@wlu.ca

Emergency contact devices:

Satellite internet (Starlink) for daily communication;

Garmin InReach: marsh.lab@garmin.inreach.com;

Satellite phone: 8816-3263-7359

Travel:

Travel to/from Inuvik, NWT is conducted by commercial airline. All COVID-19 guidelines will be followed. All travelers from WLU are required to be fully vaccinated against SARS-COV-2.

Once in Inuvik, Travel to and from the TVCRS is primarily conducted by helicopter (summer months) and Snowmobile (winter). Access to TVCRS is also possible along the Inuvik-Tuktoyaktuk Highway (ITH) and a brief 2km hike over the tundra. A parking lot pullout for WLU is present at KM50 of the ITH.

Field Component:

The field component of the project consists of the following activities:

- 1) Operating WLU vehicles located in Inuvik, NWT (including Truck, skidoo)
- 2) Overland travel on snowmobile
- 3) Extraneous working conditions
- 4) Handling of fuels (gasoline, diesel, propane)
- 5) Working with electrical systems (below 240vAC; 48vDC)
- 6) Working in locations where there could be wildlife encounters

Field Hazard identification and controls:

(1 & 2) **Driving:** Road travel between Inuvik and TVC site location. Driving to remote locations – crew will ensure all vehicle safety material is in place including satellite phone. Vehicle will be checked prior to use. Roadside traffic hazards - Safety cones will be taken and placed in front and behind vehicle when parked on

side of road. Care will be taken when exiting and entering vehicle and crossing road. Speed will be governed by posted limits and construction site policy and by weather and road conditions. Personnel will look out for one another regarding driving. First aid kit and satellite phone will be in vehicle as will the truck safety kit. All personal protective equipment will be used when travelling via snowmobile including helmets and appropriate winter clothing. All field crew are trained for snowmobile operations before travel.

(3) **Physical strain and heat:** The field team will take care to avoid excessive strain and injury. The field crew will keep hydrated and well nourished, and will stretch prior to work. Days will be planned based on duration and nature of work and weather conditions will be considered. Equipment will be lifted by bending knees rather than lifting with back, and crew members should minimize pivoting with heavy loads with both feet planted

(4) **Handling of hazardous and potentially combustible materials** will be completed using appropriate handling procedures. PPE including steel toes rubber boots, disposable clothing, and fuel handling rubber gloves are available on site. Spill containment equipment is also available on site and handling practices will be completed as per the Land Use Permit, which includes reporting spills to the NWT spill hotline.

(5) Fieldwork requires installation and maintenance of small **off-grid electrical systems**. Only qualified and experienced personnel are permitted to work with these low voltage electrical systems.

(6) **Wildlife encounters.** Field sites are areas of potential encounters with wildlife such as grizzly bears, moose, and caribou. Field staff will carry bear deterrent and have completed "Bear Aware" safety training. As per ENR recommendations on Land Use Permit, field crew will follow the General Bear Encounter Guidelines.

(7) **Weather and Environment:** Field personnel will monitor weather forecasts and dress for weather. In most circumstances, fieldwork is conducted in winter months under extreme Arctic winter conditions. Appropriate winter PPE is provided to prevent hypothermia and/or frostbite. All field staff are certified in Wilderness First Aid and are experienced working in these environments. If weather is not suitable for work, or visibility is reduced due to blowing snow, the field staff will take a "weather day" and wait for conditions to improve.

(8) **Slips, Trips and Falls:** Appropriate footwear will be worn for all tasks. This includes cleats for use when walking on stream icings, following a determination that ice thickness is sufficient and hazards related to water flow or thin ice do not exist. Snowshoes will be used for snow surveys and other tasks requiring movement through deep snow. Waterproof insulated boots will be used in conjunction with cleats by members of the field team working on icings if surfaces are wet.

(9) **COVID-19:** Field crews will follow all COVID-19 guidelines at the time of travel. In 2021, each team member received travel exemption and workers self-isolation exemption from ProtectNWT and have received approval from the GNWT Chief Health Officer to conduct travel to NWT to complete work for the project. All COVID-19 protocols will be enforced, including appropriate PPE, wearing masks at all times, physical distancing of 2-metres, regular sanitizing and disinfecting of equipment and facilities. All crew members are required to be fully vaccinated. Measures are in place to reduce contact with local communities if required, and isolation can be undertaken at the TVCRS.

(10) **Other:** The crew will take breaks from work as needed for meals, hydration, and application of sunscreen and/or hand cream during sunny conditions- especially over snow covered surfaces. If the crew travels away from the ITH, a trip plan and check-in plan will also be provided to and set up with the supervisor.

Safety Leadership and Coordination:

The crew will have a 5-10 minute safety meeting every morning prior to starting work. Daily check-in protocols are established with the supervisor and other emergency contacts. During fieldwork at TVCRS, the designated Camp Crew Chief is in charge of safety and communication practices.

Emergency, Near Miss, or Hazard Identification Response Plan:

In the event of an injury, the crew will ensure that the hazard is first eliminated if it affects access to any injured personnel. Any injured personnel will be immediately transported if required to the Inuvik Regional Hospital.

In the event of a near-miss, work will stand-down as in the event of an injury. The identification of new hazards by any personnel will result in the same communication to all crew members, and consultation with managers if necessary before work is resumed.

If the field team fails to check in at an appointed time, or fails to return to Inuvik at the established return time, the check-in recipient for the day will attempt to contact the field team. If contact cannot be made, the check-in recipient will follow the "Missed Evening Check-In" procedure. If this does not resolve the cause of the communication problem, the RCMP will be contacted by the check-in recipient.

Field site locations: (see map)

Trail Valley Creek Research Station (TVCRS) Camp Coordinates: : 68°44'31.20"N, 133°29'56.87"W



Inuvik-Tuktoyaktuk Highway (ITH) Corridor and key research sites.



Emergency Hazard identification response plan:

In the event of a vehicle incident/accident, phone Philip Marsh immediately after notifying emergency first aid.

CHECK-INS - The Contact Person will be responsible to ensure all check-ins and/or changes to ETAs are documented on the original check-in form. **Please inform your Contact Person of any changes in dates, especially or return trip.**

CHECK-IN INFORMATION

Field team will check in with Philip Marsh and Polar Continental Shelf Program (PCSP) by 12pm daily. This will be the formal check-in. Additional updates related to results and progress of work will be provided regularly to Phil Marsh and possibly others.

TRAVELING DELAYS

What if, while travelling, a person is delayed by weather/traffic/road conditions/accident/flat tire/mechanical breakdown/ medical problem?

Traveller will call their contact to notify of delays and develop revised check-in times. If unable to get in touch with Contact Person, then contact your supervisor.

1 hour AFTER Missed Evening Check-In. Refer to Emergency Contact information protocol

1. Attempt to contact the missing person every 10-15 minutes by phone/text and leave a message
2. Contact person to check Highway Hotline website to check on road conditions/events/maintenance (http://www.dot.gov.nt.ca/_live/pages/wpPages/roadConditions.aspx).
3. Notify other potential check-in recipients (Philip Marsh, Branden Walker, Hannah Walker, Alex Maclean)
4. Check by telephone all possible contacts the employee may have had that day with co-workers and/or project manager
5. Contact person to contact Inuvik RCMP and have them search for missing personnel.
6. The Contact Person/ Manager/supervisor shall update any persons/ agencies they have contacted until the person is located.
7. Supervisor to notify applicable RCMP detachment along route and provide trip details and previous check-in times/locations.
8. If they have not already been contacted, the Manager/supervisor or designate present shall notify the following persons of the employee's missed check-in:
 - Employee's spouse and/or family;
 - RCMP, providing details of the situation and what has been done up to that point;
 - PCSP emergency contact hotline

******Once employee is located provide follow up to all involved ******