

# Complete COVID-19 Fieldwork Plan

## 1) Preparing for Travel

The individuals listed below will hereafter be referred to collectively as “The Participants.”

Name	Role
Zoe Walker	M.Sc Student, team leader
Christina Braybrook	Ph.D Student
Aaron Irving	Undergraduate Student
Shawn Marriott	Field Technician (Cambridge Bay resident and team leader)
Name to come	Field Assistant (Cambridge Bay resident, to be recruited)
Name to come	Field Assistant (Cambridge Bay resident, to be recruited)

The following forms will be referred to throughout this document. They will be completed and appended in an appendix at the end of this document.

**Prior to travel the following forms will be filled out by *each* participant and submitted to Brent Else (lab group supervisor) and Derek Wilson (Department Field Safety Lead):**

1. Informed Consent Waiver
2. Declaration of Health Status
3. Emergency Contact Form

**Prior to travel the following forms will be completed on behalf of *all* participants:**

1. Field Level Hazard Assessment (FLHA)
  2. Field Activity Communication Plan (FACP)
  3. Emergency Plan
- While in Alberta, the participants will adhere to [Alberta](#) public health measures and monitor their health using the [COVID-19 Assessment tool](#). The participants will travel separately from dwellings in Calgary, Alberta to the Calgary international airport, leaving their family cohorts behind.
  - Upon arrival in Yellowknife, the participants will adhere to [Northwest Territories](#) public health measures. This includes a mandatory 14-day isolation period which will occur at the Yellowknife isolation center.
  - After the 14-day isolation period in Yellowknife, [The Isolation and Return to Nunavut Protocol](#) will be followed, ultimately resulting in safe travel to Cambridge Bay, Nunavut.
  - The participants will now become the fieldwork cohort.

## **2) Arrival and Stay in Cambridge Bay**

### **Community Interaction**

- All participants understand the potential health risk associated with travelling, as well as the risk they bring to the community (Cambridge Bay). The health and safety of the community is our priority. Therefore, the participants will do everything possible to ensure that the health and safety of the community is maintained.
- The only planned close interaction with the community is with the local research technician, Shawn Marriott, who will be hired to conduct fieldwork. Shawn has received both doses of the Moderna COVID-19 Vaccine. We also plan to hire one or two additional research assistants. These research assistants will mostly work with Shawn before and after the University of Calgary students are in Cambridge Bay.
- If Shawn is unavailable, we will contact the Hunters and Trappers Organization (HTO) to hire additional guides. It would be preferable to hire a guide who has received both doses of one of the approved COVID-19 vaccines (Moderna or Pfizer-BioNTech).
- The only other planned community interaction are trips to the grocery store and gas station. Additionally, we may require trips to the hardware store.

During these trips, we will adhere to the following protocols:

#### **Grocery Store:**

- Wear appropriate face mask inside the store and use hand sanitizer upon entry.
- Wipe down carts with a disinfectant wipe (and safely dispose of the used wipe)
- Purchase any items that we touch
- Maintain a 2-meter distance between all customers and store employees
- Use contactless payment
- Limit grocery shops to once a week during off-peak hours

#### **Gas Station:**

- Wear appropriate face mask inside the store and use hand sanitizer upon entry.
- Wipe down fuel pump with a disinfectant wipe (and safely dispose of the used wipe)
- Maintain a 2-meter distance between all customers and store employees
- Use contactless payment
- Maximize gas station trips by filling up all snowmobiles and jerry cans during one trip.

#### **Hardware Store:**

- Wear appropriate face mask inside the store and use hand sanitizer upon entry.
- Purchase any items that we touch
- Maintain a 2-meter distance between all customers and store employees
- Use contactless payment

- If a participant becomes ill during our stay in Cambridge Bay, the Emergency Plan will be followed (See Appendix).

### **Accommodations**

- Pending community approval, the participants will stay at the Canadian High Arctic Research Station (CHARS).
- If CHARS remains closed or is not open to hosting research guests, the participants will stay in a hotel or rent a residence in Cambridge Bay.
- The fieldwork cohort will stay within their accommodation. They will not visit any other residences and will not invite residents to their accommodation.

### **3) Completing Fieldwork**

- The planned fieldwork will occur in the following environments:
  - Lakes surrounding Cambridge Bay
  - Rivers surrounding Cambridge Bay
  - The Finlayson Islands in Dease Strait

No fieldwork will be conducted in the town of Cambridge Bay.

- Potential hazards (including COVID-19) as well as their controls are outlined in the Hazard Assessment and Control (Field level) document.
- Due to the remote conditions associated with this fieldwork, the Field Work Activity and Communication Plan document will be followed.

### **4) Return to Calgary**

- Currently, return to Alberta from other parts of Canada does not require a mandatory 14-day isolation. However, participants will monitor their health using the [COVID-19 Assessment Tool](#)
- If participants are not feeling well, they will:
  - Stay home.
  - Call 8-1-1 (Health Link)
  - Avoid being around people at increased risk for severe illness from COVID-19
  - Get tested for COVID-19, where possible.

## FIELD LEVEL HAZARD ASSESSMENT

Section:	Occupational Health and Safety Management System	Issued By:	Environment, Health and Safety
Document:	Field Level Hazard Assessment	Issued Date:	2011.11.28
Pages:	3	Revision #:	3
		Revised Date:	2020.07.17
		Reviewed Date:	
		Reviewed By:	

This document is to be used for temporary worksites; mobile worksites; and for non-routine work that is not included on a Hazard Assessment and Control Form (HACF). This form must be completed **before** work begins on the day of the job or work shift, **communicated** to each affected employees on-site, and **implemented**. This form must be reviewed daily and updated as changes occur at the worksite (e.g., activities, equipment, materials, site conditions, work groups, etc.)

### 1. Record activity details

<b>Faculty/Unit:</b> Arts	<b>Department:</b> Geography	<b>Type of Activity:</b> <input type="checkbox"/> Operations <input checked="" type="checkbox"/> Research <input type="checkbox"/> Teaching <input type="checkbox"/> Student Group <input type="checkbox"/> Other:	<b>Date Completed:</b> MM/DD/YYYY
<b>Name/Description of Activity:</b> Oceanography/Hydrology Research in Cambridge Bay/ Travel to Finlayson islands to build tower. Travel to lakes and rivers surrounding Cambridge Bay to collect water samples.			<b>Activity Date(s):</b> Departure: MM/DD/YYYY Return: MM/DD/YYYY
<b>Site Location:</b> Cambridge Bay, Kitikmeot Region, Nunavut		<b>Completed by:</b> <a href="#">Click or tap here to enter text.</a>	

**2. Identify the tasks, hazards associated with the tasks, and plans to eliminate/control those hazards (add additional lines/pages as required)**

<b>Tasks</b> (List <b>all</b> tasks/activities; consider emergency conditions)	<b>Hazards</b> (List both health hazards and safety hazards and consider surrounding area)	<b>Plans to eliminate/control</b> (List the controls for each hazard: Eliminate, Engineering, Administrative, Personal Protective Equipment)
Preparation for the trip and for all days on the trip	COVID-19 virus	<ul style="list-style-type: none"> <li>-Identify Cohort members, review risks associated with joining a cohort outside of core/family cohort and record acceptance of risk and commitment to join.</li> <li>-AB COVID self-assessment every morning leading up to and during travel.</li> <li>-If Symptoms are observed by any member of the field cohort the entire field cohort must immediately self-isolate. They will check-in with the University Contact listed in the Communication Plan.</li> <li>-They are encouraged to contact HealthLink at 811 to schedule a COVID-19 test and follow AHS instructions from thereon if in Alberta OR follow appropriate Territorial COVID-19 guidelines.</li> </ul>
Air Travel	<p>Direct exposure to virus transmitted by respiratory droplets that are generated by a person who is coughing, sneezing, or talking.</p> <p>Indirect exposure to virus on objects and surfaces.</p>	<ul style="list-style-type: none"> <li>-Always wear non-medical mask while on plane.</li> <li>-Use disinfectant wipes to handle seat belt, tray table, and any other items that may have been handled by others.</li> <li>-Avoid use of the bathroom during flights. If bathroom use is necessary, use disinfectant wipes to operate door and taps.</li> <li>-Carry hand sanitizer to use frequently during flight whenever it is not possible to use disinfectant wipes to touch surfaces.</li> <li>-Avoid contact and conversation with other passengers outside of your field cohort.</li> <li>-Effort should be made to book seats such that field cohort sit adjacent to one another.</li> </ul>
Helicopter Travel	<p>Direct exposure to virus transmitted by respiratory droplets that are generated by a person who is coughing, sneezing, or talking.</p> <p>Indirect exposure to virus on objects and surfaces.</p> <p>Boarding/exiting helicopter</p>	<ul style="list-style-type: none"> <li>- Always wear non-medical mask while in helicopter.</li> <li>- Use disinfectant wipes to handle seat belt, and any other items that may have been handled by others.</li> <li>- Carry hand sanitizer to use frequently during flight whenever it is not possible to use disinfectant wipes to touch surfaces.</li> <li>-Charter company must provide safety orientation prior to departure.</li> </ul>
ATV Travel	<p>Weather extremes, poor visibility</p> <p>Stuck vehicle</p>	<p>Weather forecasts will be consulted prior to (and during, if possible) any fieldwork. Fieldwork will be cancelled when visibility is low.</p> <p>Operators should consult with local guides/technicians to avoid adverse route conditions (deep snow, water, mud, rough surfaces).</p> <p>Tow ropes must be carried</p>

	<p>Mechanical failure</p> <p>Personal injury, collision</p> <p>Indirect exposure to virus on objects and surfaces.</p>	<p>Care will be taken not to overload vehicles/sleds. When leaving the townsite, participants will always travel in groups with 2 or more vehicles.</p> <p>Pre-trip inspection of vehicle must be completed before each outing.</p> <p>Helmets must be worn. Operators must have completed ATV training course. One operator per ATV. Ensure loose clothing is secured</p> <p>Sanitize all touch points before operating vehicle, or use hand sanitizer frequently.</p>
Snowmobile Travel	<p>Weather extremes, poor visibility</p> <p>Stuck vehicle</p> <p>Mechanical failure</p> <p>Personal injury, collision</p> <p>Indirect exposure to virus on objects and surfaces.</p> <p>Direct exposure to virus transmitted by respiratory droplets that are generated by a person who is coughing, sneezing, or talking.</p>	<p>Weather forecasts will be consulted prior to (and during, if possible) any fieldwork. Fieldwork will be cancelled when visibility is low.</p> <p>Operators should consult with local guides/technicians to avoid adverse route conditions (deep snow, water, mud, rough surfaces). Tow ropes must be carried Care will be taken not to overload vehicles/sleds. When leaving the townsite, participants will always travel in groups with 2 or more vehicles.</p> <p>Pre-trip inspection of vehicle must be completed before each outing. When traveling by snowmobile, an appropriate number of snowmobiles will be used, such that all participants can return to base if one ATV fails.</p> <p>Helmets must be worn. Operators must have completed Snowmobile training course. Ensure loose clothing is secured</p> <p>Sanitize all touch points before operating vehicle, or use hand sanitizer frequently.</p> <p>Avoid riding two passengers on a snowmobile. If two passengers must ride on a snowmobile, both must wear a non-medical mask.</p>
UTV Travel	<p>Weather extremes, poor visibility</p>	<p>Weather forecasts will be consulted prior to (and during, if possible) any fieldwork. Fieldwork will be cancelled when visibility is low.</p>

	Stuck vehicle	Operators should consult with local guides/technicians to avoid adverse route conditions (deep snow, water, mud, rough surfaces). Tow ropes must be carried Care will be taken not to overload vehicles/sleds.
	Mechanical failure	Pre-trip inspection of vehicle must be completed before each outing. When traveling by snowmobile, an appropriate number of snowmobiles will be used, such that all participants can return to base if one snowmobile fails.
	Personal injury, collision	Operators must have class 5 drivers license. Operation of UTV off road requires UTV or ATV training course.
	Indirect exposure to virus on objects and surfaces.	Sanitize all touch points before operating vehicle, or use hand sanitizer frequently.
	Direct exposure to virus transmitted by respiratory droplets that are generated by a person who is coughing, sneezing, or talking.	Passengers must ride in separate rows when possible. Non-medical masks must be worn when more than one person is traveling in UTV.
Local inhabitants – including hunters	Personal injury from hunters Harassment, Violence	Participants will wear high visibility clothing Travel in pairs, with local guide (no working alone not permitted)
Collecting water and sediment samples from ice	Water submersion	Throwing ropes to be carried on all skidoos or ATVs All participants will watch the "Cold Water Bootcamp Videos" A site assessment will be conducted by field technician or experienced guide prior to beginning and travel on ice will not proceed if ice thickness is less than 60cm, or if melt ponds have progressed to the point where they are melted through to the underlying ocean. The field technician or experienced guide will conduct ongoing monitoring/reassessment for changing conditions while working/ traveling on ice surface. During melt pond season (i.e. if there is standing melt water on the ice surface) PFDs must be worn, and participants must carry ice rescue picks.
	Exposure to temperature extremes	Dress in layers. Appropriate jackets, pants, boots will be provided.
	Injury from power ice auger	Ice augers will only be operated with experienced field technicians. Safety glasses and boots will be worn.
	Ice – slippery walking surface	Wear appropriate footwear

	<p>Indirect exposure to virus on objects and surfaces.</p> <p>Direct exposure to virus transmitted by respiratory droplets that are generated by a person who is coughing, sneezing, or talking.</p>	<p>Sanitize all touch points before operating equipment, or use hand sanitizer frequently.</p> <p>Work is outside, which minimizes risk of transmission. Maintain 2m distance if possible. Wear non-medical masks when 2m distance cannot be maintained.</p>
Collecting water samples from rivers	<p>Water submersion</p> <p>Exposure to temperature extremes</p> <p>Exposure to temperature extremes</p> <p>Injury from power ice auger</p>	<p>Work should be conducted in pairs, with once participant approaching the river, one participant a safe distance away with throwing rope. Participants must wear PFDs. Participants will not enter the river, or walk on ice surrounding the river. They will only approach the edge of the river to deploy sampling equipment. All participants will watch the "Cold Water Bootcamp Videos"</p> <p>Dress in layers. Appropriate jackets, pants, boots will be provided.</p> <p>Sanitize all touch points before operating equipment, or use hand sanitizer frequently.</p> <p>Work is outside, which minimizes risk of transmission. Maintain 2m distance if possible. Wear non-medical masks when 2m distance cannot be maintained.</p>
Installation of weather station	<p>Adverse weather – wind</p> <p>Struck by materials or equipment</p> <p>Injury from operating power tools</p> <p>Injury from non-power tools</p> <p>Indirect exposure to virus on objects and surfaces.</p> <p>Direct exposure to virus transmitted by respiratory droplets that are generated by a person who is coughing, sneezing, or talking.</p>	<p>Weather forecasts will be consulted prior to (and during, if possible) any fieldwork. Fieldwork will be cancelled under high wind conditions.</p> <p>When raising weather station tower, no participants should be standing beneath the lifting section as it is being raised. All participants will wear hardhats</p> <p>Safety glasses must be worn when operating power tools Power tools should only be operated by experienced personnel.</p> <p>Wear work gloves, appropriate footwear.</p> <p>Sanitize all touch points before operating equipment, or use hand sanitizer frequently.</p> <p>Work is outside, which minimizes risk of transmission. Maintain 2m distance if possible. Wear non-medical masks when 2m distance cannot be maintained.</p>



Collecting drone imagery	Walking surfaces – slips, trips, falls	Assess work area/ environment for trip hazards
	Drone propellers during take-off and landing	Participants will stand outside of designated drone landing area and be in constant communication with drone operator
	Drone control	Drone operator will have a drone license and only operate in areas that are safe to do so
Wildlife	Bear or other wildlife encounter	<p>Polar Bears are not common in this region. Grizzly Bears are more common. All participants will read Parks Canada's "Polar Bear Safety" and "Safe Travel in Bear Country" guidelines.</p> <p>Participants will complete "Bear Aware" training.</p> <p>A local guide/technician will be employed for trips &gt;5 km from Cambridge Bay. The local guide/technician will carry appropriate bear deterrent devices (e.g. firearm, air horn).</p> <p>Arctic foxes may be a nuisance in Cambridge Bay. Participants should be aware of local reports of foxes, travel in groups (when on foot), and stay alert.</p>
Fueling vehicles and equipment	Indirect exposure to virus on objects and surfaces.	<ul style="list-style-type: none"> <li>- Wear appropriate face mask inside the store and use hand sanitizer upon entry.</li> <li>- Wipe down fuel pump with a disinfectant wipe (and safely dispose of the used wipe) and/or use disposable gloves</li> <li>- Maintain a 2-meter distance between all customers and store employees</li> <li>- Use contactless payment at gas station</li> <li>- Maximize gas station trips by filling up all snowmobiles and jerry cans during one trip.</li> </ul>
Interactions in community (Grocery store, hardware store, HTO guide office)	<p>COVID-19 - Direct exposure to virus transmitted by respiratory droplets that are generated by a person who is coughing, sneezing, or talking.</p> <p>Indirect exposure to virus on objects and surfaces.</p>	<ul style="list-style-type: none"> <li>- Wear appropriate face mask inside buildings and use hand sanitizer upon entry.</li> <li>- Wipe down carts with a disinfectant wipe (and safely dispose of the used wipe)</li> <li>- Purchase any items that we touch</li> <li>- Maintain a 2-meter distance between all customers and store employees</li> <li>- Use contactless payment</li> <li>- Limit grocery shops to once a week during off-peak hours</li> </ul>
Darkness/low light Strong Sunlight	<p>Inability to see is a safety hazard</p> <p>Sunburn and snow blindness</p>	<ul style="list-style-type: none"> <li>-Work hours in the field will maximize available daylight. Daylight hours will vary considerably over the field activity period, but days are generally long this time of year.</li> <li>- Sunscreen and sunglasses/goggles will be worn.</li> </ul>
Fatigue/Dehydration Pre-Existing Physical/Medical Needs	<p>Exhaustion may lead to mistakes that are a safety concern.</p> <p>A new environment may aggravate a condition and make it worse.</p>	<ul style="list-style-type: none"> <li>-Field leader will manage activities to maintain reasonable work/rest hours.</li> <li>- Participants will complete a "Declaration of Health Status" form and alert team members to activities they are unable to participate in.</li> </ul>
Limited/Remote Medical Services and communication		-All participants will be aware of appropriate communication channels for medical services. All participants will carry extended medical insurance including medical evacuation.

		-Field locations should have cell phone coverage. A satellite communication device (In-Reach) will be carried as well, in case of a lack of coverage
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**3. Record other information applicable to the activities and review with all participants:**

<b>Applicable written SOP's have been reviewed including:</b> (list all that apply) <ul style="list-style-type: none"> <li></li> <li></li> </ul>	<b>The following individuals are the designated First Aiders:</b> (list all names) Zoe Walker Shawn Marriott	<b>Closest Emergency Assembly Point:</b> Click or tap here to enter text.
		<b>Alternate Emergency Assembly Point:</b> Click or tap here to enter text.

**4. Have all participants review and sign below *prior* to commencing work** (By signing this form, you acknowledge that you understand the hazards and how to apply the methods to eliminate or control the hazards).

Worker's name (Print)	Signature	Worker's name (Print)	Signature
Click or tap here to enter text.	Click or tap here to enter text.	Click or tap here to enter text.	Click or tap here to enter text.
Click or tap here to enter text.	Click or tap here to enter text.	Click or tap here to enter text.	Click or tap here to enter text.
Click or tap here to enter text.	Click or tap here to enter text.	Click or tap here to enter text.	Click or tap here to enter text.
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Click or tap here to enter text.	Click or tap here to enter text.	Click or tap here to enter text.	Click or tap here to enter text.

<b>Manager/ Supervisor's name</b> (Print) Click or tap here to enter text.	<b>Manager/ Supervisor's signature</b> Click or tap here to enter text.
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**NOTE:** A communication plan is required for *all* off campus field activities/events. Provide copies to the department head/director and all participants.

**NOTE:** Copies of completed and signed FLHA's shall be retained for a minimum period of three (3) years and be readily accessible upon request. Copies may be retained electronically or in hard copy.

## **Emergency Safety Plan**

*This is the emergency safety plan, created in adherence to the safe travelling guidance for COVID-19, in the event of an emergency.*

*Safety and evacuation planning will vary depending on location of travel. Plans must be made for the eventuality of you, or a colleague being required to self-isolate if showing symptoms as well as an evacuation plan.*

Groups will follow the “Field work activity and communication plan” document.

- **Medical Facilities:**

**Cambridge Bay Kitikmeot Regional Health Centre (24 hour facility)**

13D Omingmak Street, Cambridge Bay

1-867-983-4500

Transportation: Driving

**Yellowknife Stanton Territorial Hospital (24 hour facility)**

550 Byrne Road, Yellowknife

1-867-669-4111

Transportation: Air evacuation

- **Daily communication:**

Team Members will complete daily field plans (POLAR Fieldtrip Checklist Document) which will be emailed in the evening prior to the planned field activities for the following day. Field plans will be completed with COVID-19 Field Work Hazard and Control Register precautions. Plans will be confirmed via email each morning after checking local conditions. We will check in by phone or text upon return to the research station accommodations each evening.

If not contacted during the above schedule describe what the overdue Check In response will be including: If the

representative will try and contact field party, how they would contact, who is to be alerted if contact cannot be

made.

Fail to contact communication plan:

- If field party fails to contact at the end of the day, University will escalate.

- Escalation plan:

- 1) Call Polar Knowledge Canada: Contacts/numbers to be confirmed prior to departure
- 2) Call RCMP (1-867-983-0123)
- 3) Call Campus Security (403 220-5333)

- **Symptomatic COVID-19 Testing:**

The Alberta Health Services (AHS) COVID-19 self-assessment will be completed each morning. Any participant that begins to feel unwell or develops any symptoms listed in the AHS Screening at any time during the day should immediately isolate (I.e., leave site and return to lodging facility) and they will check-in with the University Contact listed in the “Field work activity and communication plan” document. Symptomatic participant will stay isolated from other lodging team members, if possible. Provincial protocols will be followed (<https://www.gov.nu.ca/health/information/covid-19-novel-coronavirus>). Phone contact will be made with the Cambridge Bay Kitikmeot Regional Health Centre where primary coordination efforts for COVID-19 testing is occurring. Testing and further action will adhere to provincial protocols and guidance from the local health centre (I.e., Kitikmeot Regional Health Centre, 1-867-983-4500).