

Safety Plan

For the

Trent Severn Waterway Canoe
Brigade

July 28 to August 7, 2023

May 12, 2023

Introduction

Purpose

The purpose of this plan is to ensure that the Trent Severn Brigade is prepared for as many eventualities as possible. We must do everything in our power to ensure that there are no incidents, and if these do occur, we must be prepared to deal with them.

In the event of an incident where legal action is taken, our best defence is to demonstrate that we have exercised “due diligence”. Due diligence is “...the level of judgement, care, prudence, determination, and activity that a person would reasonably be expected to do under particular circumstances.” A judge or jury would consider whether the incident was foreseeable (could a reasonable person have foreseen that something could go wrong?); preventable (was there an opportunity to prevent the incident?); and controllable (who was the responsible person and what could they have done to prevent the incident or successfully recover without injury or death?).

Event Overview

The Trent Severn Brigade will take place over the course of 11 days, July 28 – August 7, 2023. The brigade will consist of 12-15 replica fur trade north canoes (7.5 – 12 m), each paddled by 6-16 paddlers, that will travel almost 350 kilometers of the Trent Severn Waterway from Waubaushene/Port Severn to the site of the Canadian Canoe Museum, then on to Hiawatha FN on Rice Lake and back to Beavermead Park on Little Lake in Peterborough. This event is expected to take 11 days to complete. In addition, there will be opportunities for smaller craft to informally participate in the event for limited distances and times.

Each evening the Brigade organizer, brigade group leaders, safety chair, and canoe crew captains shall meet to discuss the next day's planned paddle, weather conditions, and route. Canoe Crew captains will be responsible for notifying their crews of any discussion hazards, Brigade Lead and Sweep assignments.

Each morning the Brigade organizer, brigade group leaders, safety chair, and canoe crew captains shall meet to discuss the route, confirm crew assignments and determine if weather conditions are conducive to safe paddling. This group shall have the best available weather reports and route maps. Canoe Crew captains will be responsible for notifying their crews of any change of plans.

Each morning, each canoe crew captain shall confirm his daily crew (see Appendix B) and submit to the safety chair prior to launch.

Persons Responsible

Persons Responsible	Individual Assigned	Overall Responsibility
Brigade Organizer	Bruce Clark	all communication with press and family in the event of an incident, accident or emergency; ensure that canoes meet Paddle Canada and Canadian Coast Guard safety requirements
Brigade Leaders	Will volunteer daily from the various experienced crew leaders in each canoe.	The brigade travels in a group, with a designated lead canoe and sweep canoe. Each morning the Brigade organizer or his/her delegate leads a daily Brigade Meeting, leads decision on when a planned paddle should be cancelled in advance, and when a day's paddle should be abandoned on route, assigns a group leader for each group.
Route Planner	TSW Brigade Organizing Committee	Planning of the basic route, and assist in pre-event safety plan implementation.
Safety Chair	Tom Thwaites Asst. Bruce Lindsay, Walter Ried	Implementation of the Safety Plan
Sweep Boat/Lead Boat	will be assigned for each day at the preceding Brigade Leaders meeting	All canoes complete each day's paddle, or appropriate arrangements are made for the pick-up of canoes departing the route part way along on any day.
Canoe Captains	1 per canoe	Ensure that each canoe is properly equipped to Coast Guard regulations, and Safety and First Aid equipment for their canoe. Responsible for navigation.
Canoe Crew First Aid persons (at least 1 per canoe crew) who ensures that the canoe they is assigned to has required First Aid equipment for its crew.	Provided by each canoe crew.	On Site First Aid, & victim supervision until EMT arrival

Location of the Safety Plan during the Event

- Each of the following are to retain a copy of the Safety Plan, and must have their copy accessible in camp each day.
- Safety Chair
 - Brigade organizer

- Brigade group Leaders
- Canoe Crew Captains
- Crew Captains must ensure that each of their paddlers has initialed a copy of the safety plan

Contact Information

General Information on Contacts

- It is important that all people involved in the safety plan, know their roles ahead of time.

Emergency Response Contacts: 9-1-1 is the emergency phone number for the region!

Official Title	Name	Location on site	Cell phone #
Safety Chair	Tom Thwaits	with canoes	519-374-7551
Brigade Organizer	Bruce Clark	with canoes	705-957-5246
Midland Hospital	Georgian Bay General Hospital	1112 St. Andrews Dr.	705-526-1300
Orillia Hospital	Orillia Soldier's Memorial Hospital	170 Colborne St. W	705-325-2201
Peterborough Hospital	Peterborough Regional Health Centre	1 Hospital Drive	705-743-2121
Lindsay Hospital	Ross Memorial Hospital	10 Angeline Street N	705-324-6111 1-800-510-7365
Trent Severn Waterway, Parks Canada	various lock stations		705-750-4900 1-888-773-8888
OPP Orillia Detachment	Marine unit contact scott.williams@opp.ca	1 University Ave.	705-326-3536
OPP Peterborough		453 Lansdowne St E	705-742-0401
OPP Lindsay	Kawartha Lakes	3028 ON-35	705-324-6741
OPP Midland	Southern Georgian Bay	16864 ON-12	705-526-3761
Rama Fire & Rescue	Rama First Nation	7545 Williams Rd.	705-325-3611

- The Brigade organizer or Safety Chair must contact each of the above well prior to the event to notify them of the event, number of people expected, safety procedures employed at the event (i.e., a copy of this plan), map of route, camp site, map/directions to camp site, and any other information that they require.

On Route: Prior to, During, and Following the Event

Potential Hazards and Control Measures:

Potential Hazard	Control Measure	Person Responsible
Weather conditions: exposure, sun, rain, hail, wind, severe winds, lightning,	Proper clothing, food, water. <input type="checkbox"/> Daily access to appropriate weather forecasts <input type="checkbox"/> Lightning protocol: get off	Safety Chair – to confirm arrange for appropriate weather forecasts (best available)

	the water (preferably under shelter) after first lightning seen; wait 30 minutes after the last lightning seen.	<input type="checkbox"/> , responsibility of brigade group leaders and crew captains
Injury: sprained ankles, blisters, overuse injuries, camp mishaps (cooking burns etc.)	Clothing, first aid supplies, whistles. There must also be a communications device (e.g., radio or cell phone) or system (e.g., calling system before and after going to site.)	Brigade and/or Safety Chair <input type="checkbox"/> Responsibility of brigade group leaders and crew captains
Risks from other boaters: collisions, swamping	following the “rules of the road” advising other users of Brigade Plans, anticipating bottlenecks at locks. Assume houseboats are rentals and operators are beginners.	Brigade organizer, Safety chair and canoe crew leaders
Lake Hazards: wind, big waves in particular on Lake Simcoe	Postponement or leg cancellation Appropriate route selection. Threshold (no-go or pull off the water) criteria: - Thunderstorms forecast w/n 3 hours - Heavy rain - < 1km visibility when paddling w/n 1km of shore - < 2km visibility when paddling w/n 2km of shore - following seas: 1.5m swells or 1m breaking waves (in hindsight I'd back this off to 1.0m swells) - following winds: > 20km/hr - other seas: 2.0m swells or 1m breaking waves (in hindsight I'd back this off to 1.5m swells) - other winds: 30km	Route and Safety Chair – to confirm and arrange for appropriate weather forecasts <input type="checkbox"/> Brigade group leaders <input type="checkbox"/> Canoe Crew Leaders
River Hazards: dams, rocks, shoals, current, waterfalls	Planning and route selection <input type="checkbox"/> Knowledge of navigation markers <i>Red buoys on right till Kirkfield locks. Then red buoys on left till Rice Lake.</i>	Route and Safety Chair
Hypothermia	during this Brigade all paddlers will wear an approved PFD when at, on or near the water.	Individual Paddlers Crew Leaders
Person Overboard	each PFD will be equipped with a whistle and all canoes will be equipped with throw line(s) and a reboarding device	Individual Paddlers Crew Leaders
Locks: turbulent water,	Paddler must follow Lock	Canoe Crew Leaders,

upsetting, collision with other boats in locks, person overboard in steep sided locks	master instructions, canoes should raft up, cables may be present to hold onto, gloves may be an asset. No ties to other canoes or lock lines, only loops so you can escape quickly inside the locks.	Individual Paddlers
Wild life: racoons, skunks etc.	Proper food management; no food in tents or unsecured overnight. Leave No Trace	Individual Paddlers Crew Leaders
Noxious weeds: Poison ivy, Poison sumac, poison oak	Awareness, recognition	Canoe Crew Leaders, Individual Paddlers
Hypo/Hyperthermia	Appropriate clothing, hydration	Canoe Crew Leaders Individual Paddlers

****risk mitigation strategies listed above as well as the rescues listed below will be covered during TSW Brigade's training day on July 28th.***

Canoe and Rescue

The Big Canoes

□ Big Canoes for this event are to be of the 22-25' North Canoe, and larger, up to 36' Montreal Canoes. These canoes will include five, six or more seating benches. Canoes deviating from this standard must be approved by the Safety Chair.

□ These canoes should be rendered unsinkable in calm water. AND, it must be the practice of all paddlers to load day, and/or overnight trip gear into the boats in waterproof packs (garbage bags and other innovative waterproofing techniques are acceptable) and these packs should be secured to the canoe in such a way as to add to

the overall floatation of the canoe and gear in the case of upset. Such gear must be secured such that it cannot come loose and hinder rescue (i.e. tied in tightly or stuffed under seats). It is recommended that a swamped big canoe have enough floatation so that its gunwales are 5" above the water surface. Many older models do not have this much floatation, but this must be tested and floatability your canoe confirmed before the brigade. It must have positive buoyancy when swamped.

□ Canoes are to have on board at all times:

- Spare paddles – minimum 2
- Approved PFD for each paddler. **Paddlers are required to wear their PFDs at all times when on the water.**
- A sound making device, commercial air horn preferred
- A minimum of two manual bailing devices – buckets or hand pumps. Two
- 10-20 litre buckets and a hand pump are recommended.
- An approved first aid kit
- GMRS radio with a minimum capability of 16 km, or a working cell phone. o
- A minimum of two 15 m Throw Bags of floating 10 mm line. Normally

one bag shall be secured at one end to a grab loop, and the second shall be immediately available mid-canoe for rescue work.

- 4 (four) locking carabiners, two with each throw-bag
- A repair kit of materials appropriate to the construction of the canoe. Duct Tape, wire, spare nuts & bolts of sizes similar to those in the canoe, silicone repair caulk/adhesive.
- Brigade will ensure appropriate materials for significant hull repairs.
- Flashlight and spare batteries
- "grab loops" near each end of the canoe for attaching rescue lines are strongly recommended. These grab loops must be strongly secured and capable of taking the full weight of the canoe when swamped. (up to the individual crew captain).
- 0 "reboarding device" two stirrups recommended for each boat, able to slide across the width of the canoe in order to assist reentry on port and starboard. Stirrups can be rope or webbing, and must be able to take the weight of paddlers upon reentry.

General Paddling Practices

Each morning crew captain submit completed Crew Sign-out forms (see Appendix B) , so we know who is paddling with whom, when, in what canoe.

Each morning crew captains will review the route. Crew captains are responsible for having a map of the route for each day.

- At all times during the brigade canoes will paddle as a group. At NO time should a canoe be traveling alone, if one canoe stops, all canoes in the group stop. At no time should canoes be ahead of the designated 'lead' canoe, or behind the designated 'sweep' canoe.
- Regular breaks will occur on water and/or shore
- At times of greater risk or difficulty paddlers MUST follow the instructions of the Safety Chair, who at times:
 - will attempt to balance canoes for physical ability and experience.
 - may direct the order of canoes for approaching landings and portages.
 - may direct rescue attempts

Canoe – Flatwater Rescue

Flatwater rescue is problematic, the conditions (wind and waves usually) that necessitate rescue also make it difficult to affect a safe rescue. The victims from a swamped canoe must remain with their boat. The canoe is the most visible item for rescuers to locate.

Under most mild conditions the quickest rescue is for the rescue canoe or boat to help stabilize the upset canoe, and one or two paddlers clamber in and begin to bail the canoe dry. As the gunwales lift additional paddlers can climb in to help with the bailing. Canoe captains must be familiar with this rescue technique and should be able to rescue a swamped canoe within 5 minutes.

First priority is to identify the most vulnerable paddlers and get them out of the water. This is the responsibility of the crew captains. In a rescue, the captain should be the first to board the swamped canoe and then direct the rescue from inside the canoe. The second person into the canoe should be strong enough to help less capable persons into the canoe.

Canoe – Moving Water Rescue

On the river if a canoe is upset all paddlers should move to the upstream of the upset canoe. Being pinned between a swamped North Canoe and a rock or log jam will surely result in injury. Thus the first consideration of any swimmer from an upset canoe is for their immediate safety, and the avoiding of any further downstream dangers. The paddlers/swimmers from the upset North Canoe should attempt to grab the upstream throw bag on the swamped canoe, and if available they should attach the third throw bag and head to the nearest shore, preferably the next inside of a bend of the river. Swimmers may not be able to tow a North Canoe, but they may be able to reach shore and two or three paddlers may be able to hold the canoe so that it does swing to shore pushed by the river flow.

Rescue canoes should attempt a towing rescue from the upstream end of the swamped canoe. The Rescue canoe should swing around and back down to the swamped canoe to effect a towing rescue. The towed rescue is more effective if additional throw-bags are available to be linked together, it is much easier to paddle a long rope to shore and then attempt to hold the swamped canoe, than to tow a swamped canoe. Once the tow ropes are joined the rescue canoe should head directly to shore, and a slightly downstream angle and sprint to shore is better than to attempt a classic ferry angle tow to shore.

If a motorized boat is available to assist with a rescue it too must attempt the towed rescue from the upstream end or side of the upset/swamped canoe.

Working Alone

TSW Brigade Officials working alone in the forest or on route, before, during, and after the Brigade will ensure that there is a system in place to address hazards and provide emergency communication. Such individuals shall ensure that their expected where about is known to others, the expected return schedule, and they shall carry a communication device

Medical Emergency

Prior to:

- The Route and Safety Chairs shall coordinate the efforts related to providing first aid and medical support during the events.
- When available, a Medical Lead shall normally be appointed, and should be the senior paramedic on site. They shall coordinate required medical activities, and calls for transport (local ambulance, STARS, Armed Forces Search & Rescue) with the Safety Chair.
- Provision of, and the contents of the first aid kit will be determined and set by the TSW Brigade Safety Chair.
- A First Aid base station may be established for each event/camp site. This may be a Tent, St. John's Van, Brigade Headquarters (HQ) or similar facility.
- When available, the first aid volunteers will be headquartered in a specific First Aid Tent.
- This location will also serve as the headquarters for any other safety issue (e.g., searches).
- A senior First Aider should be designated "Lead" Aider for each event, with the responsibility to help coordinate and assign other volunteer first aiders to their respective posts, ensure relief when required, and supervise the first aiders as required.

During:

- It will be the responsibility of the first aid volunteers to deal with all first aid issues. First Aid volunteers are to work within their training, and in any serious incident that exceeds their training "hand-off" the patient to a more senior medic at the first opportunity.
- It will be the responsibility of the Medical Lead and the Ambulance Crew to determine whether and when additional medical help is needed (e.g., if and when to call an air ambulance). The decision should be made in conjunction with the Safety Chair.

Post:

- Safety Chair, Canoe Crew Leaders, and Brigade Organizer must ensure that for each safety incident where more than minor treatment is required an accident/first-aid report shall be completed and a copy is filed by the Route & Safety Chair. (See Appendix A)

Campsite Emergency

- Campsite Point Contact shall designate an “Emergency Muster Point”. This will be identified with a “Sandwich Board” sign, near the entrance to each campsite.
- In the event of a campsite disaster (major storm event, forest fire, public disturbance, etc.) all Crew chiefs or their assistants shall confirm the location and status of their crew members and report such status to the Brigade Chief.
- When safe to do so all Brigade participants and organizers are to report to the designated Emergency Muster Point.

Leg/Day Cancellation

Conditions Leading to Cancellation

While difficult to state specifically what circumstances could lead to delay or cancellation of a day's paddle. The most likely is weather:

- Extremely bad weather: high winds that result in considerable risk to paddlers
- or even make paddling impossible (lakes), or very high winds with risk of windfall (portages);
- severe rain or hail, lightning storms, tornadoes, Forest fire, flooding, or other natural disasters

Who Makes Decision to Cancel

The decision to cancel will be made by Safety Chair in consultation with Brigade Organizer, and communicated through the Canoe Crew Leaders. The Brigade organizer, Safety Chair and Canoe Crew leaders will be responsible for cancelling a day's paddle on route.

Procedures to Follow in the Event of Cancellation

Each evening, or morning, at least 90 minutes prior to scheduled departure, the Brigade organizer, brigade group leaders, safety chair, and canoe crew captains shall meet and determine if weather conditions are conducive to safe paddling. This group shall have the best available weather reports and route maps. If an evening meeting is held a morning meeting will be necessary when conditions are marginal or worse. Canoe Crew captains will be responsible for notifying their crews of any cancellation.

Communication

General

For reliable contact the following shall carry a cell phone:

- o Brigade Organizer – on the water
- o Sweep and lead canoes– on the water

If additional phones are available then they should be spread out within the paddling groups

- o Safety Chair
- o Each participating canoe

Cellular Phones

With a cellular phone, you may contact Rescue Coordination Centers directly. Or, by dialing *16, you will contact the nearest Canadian Coast Guard Marine Communications and Traffic Services Center. Remember that a cellular phone is not a good substitute for a marine radio and it is not an approved means of issuing a distress call. Making a call does not alert other boaters close to you - those other boats could be the ones to help you first if they could hear you. Unlike VHF transmissions, cellular phone signals cannot be followed back to your location by rescuers. Contact your cellular provider to find out if you have access to the *16 service.

For reliable on the water contact, it is recommended that the following shall carry GMRS Radios:

- Safety Chair
- Brigade Organizer
- Sweep and Lead canoes

Marine VHF Radio:

Marine VHF radio is the recommended means of issuing a distress alert. If you have a marine VHF radio, keep it tuned to channel 16. Know where you are at all times and be prepared to describe your location accurately. In case of grave and imminent danger (for example, your boat is taking on water and you are in danger of sinking or capsizing) use channel 16 and repeat "MAYDAY" three times. Then give the name of your vessel and its position, the nature of your problem and the type of assistance needed.

Remember:

Channel 16 is used for EMERGENCY and CALLING purposes only. If possible, take your conversation to a working frequency once you have called another vessel on channel 16. Anyone who uses a VHF radio must follow the procedures described in the VHF Radiotelephone Practices and Procedures Regulations.

Currently, all VHF radio operators are required to have a Restricted Operator's Certificate (ROC) with maritime qualifications. Canada recognizes the American Certificate.

For more information on the ROC, contact the Canadian Power & Sail Squadrons (CPS) tollfree at: 1-888-277-2628.

All of the above must be familiar with their cell phone and GMRS radio operation. A test of the appropriate radios and phones shall be done each morning before, or as part of the brigade departure. (in conjunction with other personnel, and within government regulations)

Overdue Canoes/Crews

Prevention & Preparation

We must do everything we can to prevent people staying out past leg closing times, and to prevent crews from getting lost. There may, however, be occasions where our best efforts to prevent an overdue crew may fail (e.g. due to injury, medical emergency, or weather conditions).

Identifying Overdue Crew

The Brigade Organizer or designate will be responsible for maintaining a record of all departing and arriving crews each day.

Prior to Conducting Search – Determining if a Search is Necessary

The Safety Chair or Brigade organizer will attempt contact by radio or phone any/all missing crew(s).

- The Safety Chair or Brigade Organizer will contact by radio or phone all other canoe crews still on the water, and attempt to determine location and status of missing crew.
- The Brigade Organizer will deal with friends and relatives, informing them of the situation and the procedures being undertaken. The purpose is to reassure them and prevent them from rushing out to search for the overdue participant.
- The Safety Chair will check Brigade Records to see if the overdue crew or participants with the crew are on the list of people who have provided information on pre-existing medical conditions.

Decision to Initiate Search

The decision to initiate a search, after the above attempts to find the person, should be made by the Brigade organizer, Safety Chair, and a local authority, in this case the Ontario Provincial Police Marine unit (911 or _705-326-3536).

Such decision should be first considered 2 hours after the estimated arrival (eta) time of the missing person or crew.

The actual decision as to how and when to start a search will depend upon circumstances. It is difficult to give precise directions, since there are many factors, such as the age, health and experience of the participant(s); weather conditions, length of time the participants are overdue; etc.

Examples of factors to be considered include:

- age, health, experience of the participants/crew
- weather conditions
- length of time the participant is overdue
- what part of the course they were last seen (e.g. water stations, exchange sites, other participants)
- amount of daylight left
- nature of the terrain and water conditions

A decision to call in other agencies (e.g. the police) for assistance, will be made once again by the above three officials.

Dealing with the Media

The TSW Brigade Chair shall be responsible for all communication with any media, or responding to any media inquiries. Brigade participants will be expected to forward all media enquiries to the TSW Brigade chair (B. Clark).

Participants with Identified Medical Conditions

This information will be treated as confidential and will only appear in the copy of the plan that resides with the Brigade Organizer & Safety Chair.

This refers to the participants who provide information to the organizers that they have a medical condition that the organizers should be aware of.

This information is provided voluntarily by some participants. It is important that this information is kept confidential. It must be recorded on a separate form, the only copy of which will be kept in the first aid files. This information will be available to the Route & Safety Chair, and first aid or medical personnel only.

The information sheet should clearly indicate the person's name, brigade crew/Crew, names and phone numbers of next-of-kin, and the particulars of the condition using the exact wording provided by the participant.

Sample medical information form (submitted to Chief Medical Officer):

Name:

Canoe Crew:

Medical Condition: (medications)

Insurance number:

Family Doctor:

Emergency contacts: 1. name: phone # email: 2. Name: home # email

Participants Who Identify Themselves as Medical Professionals –

Registrar to provide

Contact Canadian participants prior to the event and ask if they wish to be identified

as medical professionals and will help out in the event of an emergency (e.g., EMT, nurse, physician, physiotherapist, etc.)

The registrar will provide this information to the Route & Safety Chair and Brigade Organizer.

Ontario like most Canadian provinces has a “Good Samaritan Act” that protects medical personnel who respond to an emergency as a volunteer. For further information see:

http://www.e-laws.gov.on.ca/html/statutes/english/elaws_statutes_01g02_e.htm

Appendix A Incident Report Form

1 – Incident:

Time/ Date: _____

2 – Reported by: _____

Time/Date: _____

3 – Initial Response by: _____

Time/Date: _____

4 – Nature/Type of Incident:

5 – Action(s) taken:

6 – Location / Site of Incident and responses:

7 – Name(s): of victims/patients (Age, Gender, Condition, Contact info): Total #
involved:

8 - Further Response by / and Actions taken:

9 – Incident Details:

Description (What happened):

Presumed Cause:

Other Factors/Details:

10 – Witnesses (Name, address, phone #, how involved)

1 _____

_____ 2 _____

_____ 3 _____

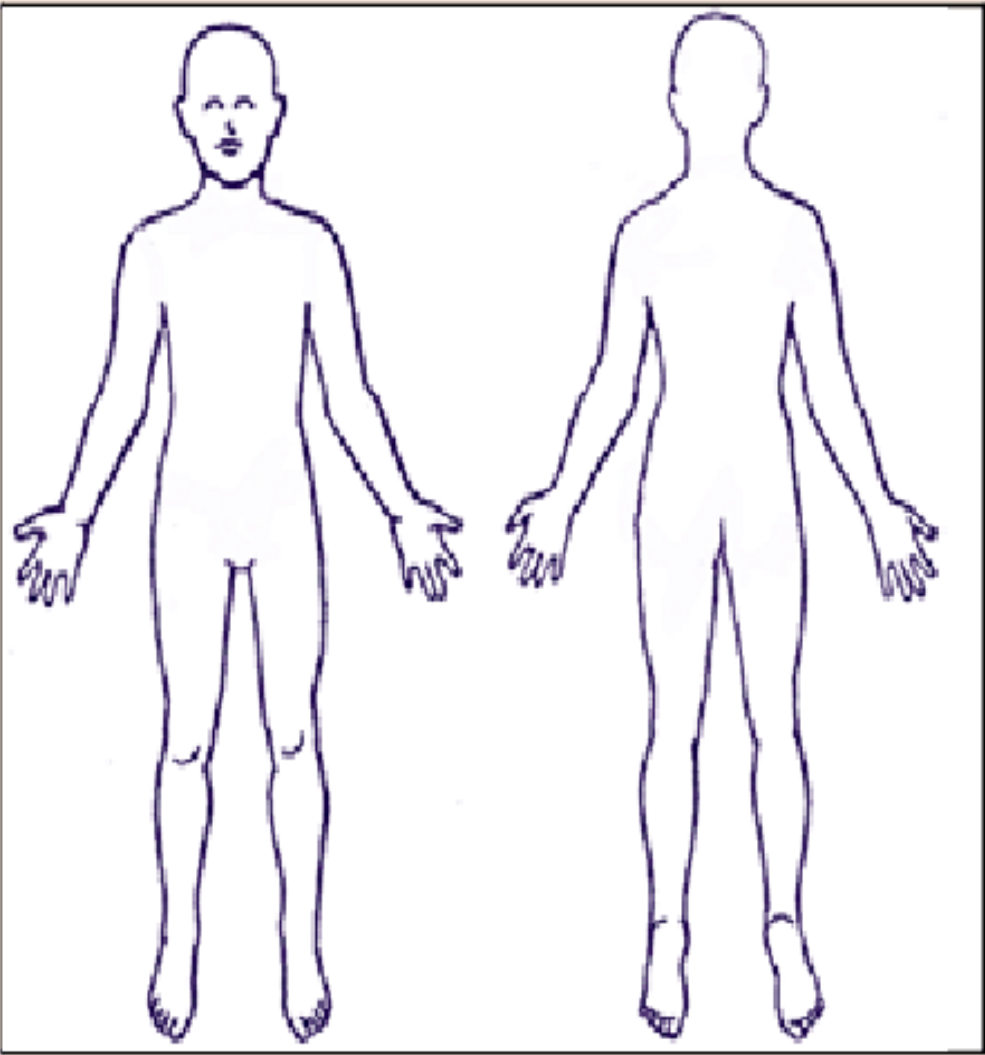
11 – Incident Report Form Completed by:

Name

Address

Phone # _____ e-

mail _____



Appendix B:

2023 Trent Severn Waterway Canoe Brigade Daily Crew Sign-out

For each day the evening prior ideally, but certainly prior to departure, crews are to resubmit or update IN WRITING their paddling crew shift assignments. Both each paddling crew and the Brigade organizers must be aware of who is in each canoe at all times.

Crew Name _____ Date(s) _____

Morning Location _____

Afternoon Location _____

Crew Leader 1 _____

Cell Phone # _____

Crew Leader 2 _____

Cell Phone # _____

Crew Members Paddling: (please print legibly!)

	Morning Shift	Afternoon Shift	Other
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			

10 .			
11 .			
12 .			
13 .			
14 .			
15 .			

Comments _____
