



Risk Management Plan

2017 ATHABASCA VOYAGEUR CANOE BRIGADE CANADA'S 150TH BIRTHDAY CELEBRATION

It is the responsibility of all organizers, officials, volunteers and participants to be aware of the Risk Management Plan, be prepared to deal with an incident and conduct themselves at all times in a safe manner. There can be no compromising of these principles.

1 Purpose

The 2017 Athabasca Voyageur Canoe Brigade developed this Risk Management Plan with thanks to the Badlands Brigade Plan and Ft Edmonton Plan for the 2017 Athabasca Voyageur Canoe Brigade.

Identify & communicate the health, safety & environmental hazards associated with the Brigade

- Provide recommendations and guidelines to minimize risk to participants and enable them to make appropriate choices and decisions to manage these risks. The management of the risks is based on best practices in previous brigades and provincial and federal regulations.
- Identify and describe the roles and responsibilities related to this Risk Management Plan for Brigade organizers, volunteers and participants.
- Provide procedures and practices for avoiding and responding to incidents and or emergencies.

Ultimately the Voyageur Brigade Society wants to maintain the credibility of the voyageur canoe adventure while reducing and managing potential risks for participants. It is the responsibility of the Team Captains to ensure the safety of their group. The Risk Management Plan is designed to assist Team Captains with decision-making concerning the risks associated with the Brigade/ Journey.

2 2017 Voyageur Canoe Brigade

The 2017 Athabasca Voyageur Canoe Brigade is planning for a Brigade that consists of 10 -16 voyageur canoes paddling 333 kilometers of the Athabasca River over a six day period. The Brigade will convene in Jasper on June 22nd, 2017, begin paddling on the 23rd and finish at Fort Assiniboine on June 28th. Table 1 below summarizes the itinerary for the Brigade.

Maps of the entire route will be supplied to each team, with roads, put ins, pull outs and crew changes campsites and the proposed route clearly shown. Maps will be carried on the river by the Daily Water Captain, lead canoe and sweep canoe. GPS data for the route may be supplied to each team prior to the event.

Brigade Vision, Goals, Objectives, and Legacy

THE 2017 ATHABASCA RIVER BRIGADE vision is to honor and relive the importance of the Athabasca River as a transportation route in Western Canada for aboriginal peoples, fur traders and settlers.

THE CANADIAN VOYAGEUR BRIGADE SOCIETY at <http://voyageurbrigade.org/> has set three areas of celebration as their goals:

- 1 Experience history; cultural cooperation; and water stewardship.
- 2 To celebrate the 150th anniversary of Canada's foundation with a series of north canoe brigades will starting in the spring of 2017 and lasting all summer long. There are brigades planned for all regions across Canada.
- 3 We are using the Canoe as a symbol to make all Canadians aware of what a great country this is, how we were, are and will be all linked by cross continent and global trade and how valuable our water resources are.

The 2017 ATHABASCA RIVER BRIGADE has set a goal to:

Provide a safe and enjoyable big canoe expedition on the Athabasca River starting in the mountains of Jasper and ending in the parkland area surrounding Fort Assiniboine. This will be done with the following objectives:

- To paddle voyageur canoes in a fashion similar to the original voyageurs involved in the fur trade and exploring west.
- Introduce new paddlers to the voyageur canoe brigading experience.
- Create a relaxed social atmosphere for previous brigade participants to reconnect
- Develop voyageur canoe paddling competency.
- Create a template for hosting future voyageur canoe brigades
- To promote the voyageur canoe brigading experience.
- We will have the opportunity to enjoy Jasper National Park, Yellowhead County, Hinton, Whitecourt, Woodland County, Barrhead County and Fort Assiniboine.

The 2017 ATHABASCA RIVER BRIGADE legacy is:

- To increase respect and interest in Canada's waterways, by exposing Canadians (especially young people) to big boat paddling and its related history.
- To celebrate 150 years of Canada and educate people along our Athabasca River on the historical importance of the voyageur canoe and Canada's rivers in the founding of our nation.
- To help improve digital canoe route information for boating on the upper Athabasca River. (Including access points, etc.)

Table 1- 2017 Athabasca River Brigade Schedule

Camp in Jasper at Snaring River Overflow Campground

Thursday June 22- Day 0 - Arrive in Jasper for registration at Snaring River Overflow Campground in afternoon. 50 campsites are confirmed.

Friday June 23 – Day 1

Total Daily Paddling Distance – 31.5 km

- 1) Maligne River to Airport Day Use 8.6 km (1.5 hours)
Lunch and official kickoff: Crew change opportunity
- 2) Airport Day Use to Jasper House 22.9 km (3.0 hours)

Tentative launch and arrival are scheduled for 9:30 am and 4:00 pm. Total Estimated Daily Paddling Time (4.5 hours). Buses will be provided to pick up paddlers at Jasper House pullout and transport them to Snaring River Overflow Campground.

Camp in Hinton at Riverside Park - Saturday June 24 and Sunday June 25

Saturday June 24 - Day 2

Total Daily Paddling Distance - 44.2 km

- 3) Jasper House to Brule (Solomon Creek) 26.9 km (3.5 hours)
Local celebration : Crew change opportunity
- (4) Brule (Solomon Creek) to Hinton (Riverside Park) 17.3 km (2.0 hours)

Accumulated Paddling Distance - 75.7 km

Tentative launch and arrival are scheduled for 8:00 am and 3:30 pm. Total Estimated Daily Paddling Time (5.5 hours). Buses will be provided to transport paddlers from Snaring River Overflow Campground to Jasper House put in to start the day

Sunday June 25 – Day 3

Total Daily Paddling Distance – 52.6 km

- (5) Hinton to Obed Bridge 25.6 km (2.75 hours)
Lunch and crew changeover
- (6) Obed Bridge to Emerson Bridge 27.0 km (2.75 hours)

Accumulated Paddling Distance – 128.3 km

Tentative launch and arrival are scheduled for 7:00 am and 2:00 pm. Total Estimated Daily Paddling Time (5.5 hours). Buses will be provided to pick up paddlers at Emerson Bridge pull out and transport them to Riverside Park in Hinton. Buses will also be used to facilitate mid-day crew change at Obed Bridge.

Camp at Whitecourt Jet Boat Park - Monday June 26 and June 27

Monday June 26 – Day 4 Total Daily Paddling Distance – 78.2 km

(7) Emerson Bridge to Hwy 947 Bridge (Amoco Road) 78.2 km (8.0 hours)

NO CREW CHANGE SCHEDULED!!!!

Accumulated Paddling Distance – 206.5 km

Tentative launch and arrival are scheduled for 8:30 am and 4:30 pm. Total Estimated Daily Paddling Time (8.0 hours). Buses will be provided to transport paddlers from Riverside Park in Hinton and transport them to Emerson Bridge put in.

Tuesday June 27 – Day 5 Total Daily Paddling Distance – 57.0 km

(8) Hwy 604 Bridge (Windfall) to Whitecourt 33.2 km (3.5 hours)

Local celebration: Crew change opportunity

(9) Whitecourt to Hwy 658 Bridge (Blue Ridge) 23.8 km (2.5 hours)

Accumulated Paddling Distance – 263.5 km

Tentative launch and arrival are scheduled for 8:00 am and 3:00 pm. Total Estimated Daily Paddling Time (6.0 hours).

Camp in Fort Assiniboine- Wednesday June 28

Wednesday June 28 - Day 6 Total Daily Paddling Distance – 69.4 km

(10) Hwy 658 Bridge (Blue Ridge) to TWP Road 605A (Moose Wallow)

Lunch and crew change opportunity 31.2 km (3.0 hours)

(11) TWP Road 605A (Moose Wallow) to Fort Assiniboine 38.2 km (4.5 hours)

Accumulated Paddling Distance – 332.9 km

Tentative launch and arrival are scheduled for 7:30 am and 4:00 pm. Total Estimated Daily Paddling Time with stop at HWY 33 Bridge just prior to entering Fort Assiniboine for welcoming ceremonies (7.5 hours). Total hours paddled on the Brigade are estimated at 36.5 hours.

3 Organizational Structure of the Brigade

A large number of people are required to successfully stage a brigade. People involved can be divided into the following groups: Brigade Organizers, Volunteers, and Participants. The following chart shows the basic organizational structure for this Risk Management Plan.

Organizing Committee Members

#	Position	Name	Email	Contact #	Alternate #
1	Chairperson	Bernie Kreiner	bernie.kreiner@shaw.ca	780-865-9355	
2	Co-Chair	Doug Yalte	dyalte@gmail.com	780-223-0927	780-816-0356
3	Registration	Carrie Anne Guthrie	caguthrie42@gmail.com	780-865-5744	
4	Water Logistics	Rick Zroback	rickzro@gmail.com	780-817-4623	780-865-7681
5	Land Logistics	Ken Cassie	kcaisse@snipercom.net	780-849-0324	
6	Communications				
7	Treasurer	Peter Stone	pstone@hintonaccountants.com	780-817-6423	
8	Hinton Liaison	Diane Watson			
9	Ft Assiniboine Liaison	Quinton Olson	teresaolson62@gmail.com	780-307-4592	
10	Jasper Liaison				
11	Whitcourt Liaison	Dan Moore	northofpeers@gmail.com	780-778-7028	780-778-9099
12	Camping	Bernie Kreiner	bernie.kreiner@shaw.ca	780-865-9355	
13	Permits/ Parks Liaison	Bernie Kreiner	bernie.kreiner@shaw.ca	780-865-9355	
14	Safety / ERP	Doug Yalte	dyalte@gmail.com	780-223-0927	780-816-0356
15	Porta Potties / Water	Doug Yalte	dyalte@gmail.com	780-223-0927	780-816-0356

Our Brigade committee is established to ensure a safe, successful and fun event. Direct inquiries to:

BRIGADE REGISTRAR AND CANOE AVAILABILITY: Carrie-Anne Guthrie at caguthrie42@gmail.com 780-865-5744.

SAFETY: Doug Yalte at dyalte@gmail.com 780-223-0927

CAMPING AND OVERALL EVENT ORGANIZATION: Bernie Kreiner at bernie.kreiner@shaw.ca 780-865-9355

ROAD TRIP LOGISTICS AND MAPPING: Ken Caisse at kcaisse@snipercom.net 780-849-0324

WATER LOGISTICS: Rick Zroback at rickzro@gmail.com 780-817-4623

The 2017 Athabasca River Brigade in Alberta is part of [2017 Canadian Voyageur Brigades](#).

3.1 Risk Management Roles and Responsibilities

Role	Responsibilities
Chair & Co-Chair Communication Coordinator	<ul style="list-style-type: none"> • Facilitate the responsibilities and activities performed by the organizing committee, volunteers and team captains. • Foster collaboration and effective decision making between organizing committee, volunteers and team captains. • Handle all communications with local communities, public, press, emergency services and local authorities in the event of an incident or emergency.
Water Logistics Coordinator	<p>Prior to Brigade:</p> <ul style="list-style-type: none"> • Plan water route for entire canoe trip based on acceptable level of risk as determined by Organizing Committee. • Create and provide route maps with collaboration with Ground Logistics Coordinator to organizing committee and team captains showing the paddling route, barriers to navigation, crew change locations put ins and pull out points. <p>During the Brigade:</p> <ul style="list-style-type: none"> • Update and communicate the daily plan for the next day's paddling at the evening Team Captain's Meeting. The daily plan will include reviewing the specific hazards for the next day's route. (Appendix 6 – Communications Protocol) • Coordinate water route logistics with Ground Logistics Coordinator to ensure canoes and ground support vehicles have an aligned daily plan. • Ensure there is always a Daily Water Captain to coordinate travel along the water route in collaboration with the Team Captains. • After the Brigade: • Provide Brigade Chair with an overview of lessons learned and recommendations from the Brigade.
Daily Water Captain	<p>Before the beginning of daily paddle:</p> <ul style="list-style-type: none"> • Confirm the daily water route plan with Team Captains. • Identify a Lead Canoe and Sweep Canoe and ensure they know their roles and the planned daily water route. • Ensure each Lead Canoe and Sweep Canoe have a first aid kit. • Know who is certified with standard first aid or higher certification. • Meet with Team Captains for a daily Pre-paddle Risk Assessment each morning. <p>During the daily paddle:</p> <ul style="list-style-type: none"> • Be on the water with the canoes whenever the Brigade is afloat. • When risks change compared to the Pre-paddle Risk Assessment facilitate decisions with Team Captains on how to lower risk to an acceptable level (examples: avoid, transfer, mitigate, eliminate). • Ensure radio communications between Lead Canoe and Sweep Canoe. • Provide radio updates, when specified, in the Communications Appendix. • Maintain a record of all teams departing and arriving each day on river. • At the end of each day confirm with the Water Logistics Coordinator that all teams have arrived at the route destination. • Teams must travel as a group of at least three boats, with hailing distance being maintained by all canoes within the group at all times. No boat should be left alone at any time. It is the responsibility of the daily sweep canoe to stay with any canoe that falls behind the main Brigade and if necessary

	<p>should halt progress of the Brigade to allow the slower teams to catch up.</p> <ul style="list-style-type: none"> At times, there may be crews who wish to follow an alternate route to the day's destination. If that occurs there should be at least three canoes in the group and special conditions agreed to by the Daily Water Captain.
Ground Logistics Coordinator	<p>Prior to Brigade start:</p> <ul style="list-style-type: none"> Plan ground crew route for entire canoe trip based on water route plan. Create & provide route maps to committee & team captains showing the land route, crew change locations & put in and pull out points. <p>During the Brigade:</p> <ul style="list-style-type: none"> Coordinate land route logistics with Water Logistics Coordinator to ensure canoes and ground support vehicles have an aligned daily plan. Update the daily plan for ground crew route each evening at the Captain's Meeting based on daily water route plan. Provide signage and markers for land route & flags on the river at designated crew change points and pull out points that match the Daily Water Route Plan. Provide updated route maps, if required to all ground crews showing directions to campsites and canoe put ins and pull outs. <p>After the Brigade:</p> <ul style="list-style-type: none"> Provide Brigade Chair with an overview of lessons learned and recommendations from the Brigade.
Camping Coordinator	<ul style="list-style-type: none"> Contact campsites operators to identify possible campsite specific rules or hazards; for example, fire bans, wildlife awareness, washroom availability, drinking water, curfews, etc. Communicate to Team Captains potential hazards identified above. Confirm campsite preparedness and groups are clear on rules and camping plan.
Safety Coordinator	<p>Prior to Brigade start:</p> <ul style="list-style-type: none"> Review emergency response and canoeing capsizing procedures with Team Captains, Water Logistics Coordinator, Ground Logistics Coordinator and Brigade First Aiders. Collect local contact information including hospitals/clinics, police, community contacts, etc. for distribution to Brigade participants. <p>During the Brigade:</p> <ul style="list-style-type: none"> Ensure Risk Management Plan procedures are being followed and implemented. Provide support and assistance with safety concerns and incident reports. Ensuring Brigade sites (campsites, community social functions, etc.) are considered safe for all participants involved in the Brigade. Ensure one comprehensive first aid kit is also available at the Brigade's Mobile Command Centre. Ensure designated first aid kits are available at campsites and on the river. Follow-up with Team Captains to confirm participants with injuries or illness are being monitored to ensure they are receiving adequate care. (Eg. Medical alert/ heat stroke, allergies.) <p>After the Brigade:</p> <ul style="list-style-type: none"> Provide Brigade Chair with an overview of lessons learned and recommendations from the Brigade.

Team Captain	<p>Prior to Brigade start:</p> <ul style="list-style-type: none"> • Ensure team has the required equipment as described in Appendix 8 Brigade Equipment List. • Ensure their team members read & sign a waiver and voluntary assumption of risk statement after being informed of all the details & risks involved with the trip. <p>During the Brigade</p> <ul style="list-style-type: none"> • Provide necessary communications, canoe and navigational safety for their team. • Attend Team Captains Meeting each day and relay all relevant information presented at the meeting to their team. • Ensure all safety equipment is properly stored in canoe prior to each day's paddle. • Ensure their team members are properly equipped with personal flotation device with sound making device attached, snacks & clothing for the day's paddle. • Ensure safety procedures are followed and reviewed by all team members in the case of a canoe capsizing before brigade begins. • Monitor for fatigue, minor sprains and injuries that may occur to a teammate while participating in the Brigade. • Deal with any internal team dynamics ensuring they do not cause disruptions to the workings of the team or Brigade.
Team Members	<p>Prior to Brigade Start</p> <ul style="list-style-type: none"> • Acknowledge they have read and understand the hazards and risks identified for the Brigade by signing the Waiver Form. • Report medical conditions, allergies or chronic injuries and illnesses on the medical information sheet which clearly indicates the person's name, team, emergency contacts and the particulars of their condition to their Team Captain and Emergency Services. This information will only be used in case of an emergency and will be kept completely confidential with their Team Captain and Emergency Services personnel. • Participants will be asked if they are medical professionals (e.g., EMT, nurse, physician, physiotherapist, etc.), and if they wish to be identified as such to assist in the event of an emergency. This information will be provided to the Water Logistics Coordinator, Safety Chair and first-aid personnel. <p>During the Brigade</p> <ul style="list-style-type: none"> • Conduct themselves in a manner complementary with safe canoeing practices as well as in compliance with all related laws (Appendix 1 Environmental Guidelines).

4 Risk Context, Identification and Mitigation

The Brigade is a 333 kilometer paddling celebration with camping in public campgrounds along the way. There are 3 broad activities that will be considered for this Risk Management Plan:

- Safe voyageur canoe paddling on the Athabasca River.
- Transportation and logistics of equipment and people. The paddling route parallels and crosses main highways, town roads and secondary highways which ensures continual interaction with the general public allowing for easy access for Brigade participants & ground support.
- Group camping.

The daily route and schedule will be clearly identified and communicated to everyone involved (Appendix 6 - Communications Protocol). There will be opportunities for teams to exchange paddlers in the middle of a day at crew change points. The longest distance between crew changes is 31 kilometres

4.1 Character of the River

- Class I to Class II
- Average flows of the Athabasca River measured at Hinton in late June average from a low of 400m³/sec to a high of 600m³/sec.
- Average flows measured at the Windfall station near Whitecourt at the same time average from a low of 400m³/sec to a high of 800m³/sec due to other added volume added from rivers and creeks joining the Athabasca River.
- In mid-June in 2016 when the organizers of the 2017 Athabasca River Brigade paddled the river the average flow measured at Hinton was 255m³ sec. This is slightly below average for that time period.
- During that same time period in 2016 the average flow measured at Windfall was 425m³/sec. This measurement is at the low end for average flows during that time period.
- The two voyageur crews that took part in the 2016 pre Brigade paddle easily averaged 11.5 kms/hr on the water and overall averaged 10/kms/hr for each days paddle with breaks included.

4.2 Risk Management Plan for Canoeing

Danger	Risk	Mitigation
1. Reputation	<ul style="list-style-type: none"> - Inappropriate participant behaviour - Inability or decision not to follow directions or co-operate 	<ul style="list-style-type: none"> - Set clear behaviour expectations at the start of the Brigade. - Encourage a supportive environment. - Outline possible outcomes of inappropriate behaviour
2. Reputational	<ul style="list-style-type: none"> - Ill will from public - Reputation tarnished 	<ul style="list-style-type: none"> - Choose appropriate areas to brief and unload canoes so that public is not restricted in access and participants are not distracted. - Team Captains to monitor noise and behaviour of group.
3. Group Conflict	<ul style="list-style-type: none"> - Conflict within the group and/or inappropriate participant behaviour 	<ul style="list-style-type: none"> - All participants addressed at the start of the Brigade as to expected standard of behaviour. - Participant behaviour that is un-safe or inappropriate should be referred to their Team Captain for appropriate action and follow-up. If serious or repeated, the participant should be removed from the Brigade and a written incident report should be forwarded to the Chair. - Team Captains actively supervise all members of their group, including participants who may be waiting on shore.
4. Environmental Impact	<ul style="list-style-type: none"> - Reputation - Environmental damage 	<ul style="list-style-type: none"> - Participants are to be briefed on 7 principles of 'Leave No Trace' - Appendix 1 - Environmental Guidelines
5. Exposure to Rain, Cold, Wind	<ul style="list-style-type: none"> - Hypothermia/ Hyperthermia - Wet equipment 	<ul style="list-style-type: none"> - Appendix 2 - Management for Environmental Related Illnesses - Appendix 5 - Emergency Response Plan - Appendix 6 - Communication Protocols
6. Exposure to Sun	<ul style="list-style-type: none"> - Sunburn - Dehydration - Heat Exhaustion -Heat Stroke 	<ul style="list-style-type: none"> - Appendix 2 - Management for Environmental Related Illnesses - Appendix 5 - Emergency Response Plan - Appendix 6 - Communication Protocols
7. River Hazards - submerged logs, rocks, bridge abutments, weirs	<ul style="list-style-type: none"> - Capsizing - Impact injuries - Canoe damage 	<ul style="list-style-type: none"> - Participants are briefed about the presence of river hazards. (Appendix 6 – Communications Protocols) - Participants are monitored around areas where river hazards are prevalent. - Participants are briefed on capsize procedures (Appendix 3 - On the River Safe Voyageur Canoeing Guidelines).
8. Trees with potential to fall over (leaners)	<ul style="list-style-type: none"> - Impact injuries - Canoe damage 	<ul style="list-style-type: none"> - Participants are briefed about hazards of leaners
9. Rubbish (in water and onshore)	<ul style="list-style-type: none"> - Cut feet - Embedded objects 	<ul style="list-style-type: none"> - Participants are expected to wear closed in shoes at all times. - Injuries sustained are treated promptly to reduce the likelihood of infection (Appendix 5 - Emergency Response Plan)
10. Getting In and Out of Canoe	<ul style="list-style-type: none"> - Injury while getting in and out of the canoe 	<ul style="list-style-type: none"> - Team captain to demonstrate correct procedure for getting in and out of canoe. - Correct footwear must be worn at all times. - Area to be checked for hazards prior to use.

11. Edges of Rivers and Lakes	<ul style="list-style-type: none"> - Injury from slipping or falling 	<ul style="list-style-type: none"> - Hazardous areas of lake perimeter are highlighted (rocks, steep slopes, mud). - Appropriate footwear to be worn at all times.
12. Poor Communication in the Canoe	<ul style="list-style-type: none"> - Capsizing - Collision - Emotional or relationship difficulties 	<ul style="list-style-type: none"> - Emphasis is placed on communication between partners to ensure the boat is moving correctly and that people avoid arguments. - Participants are also given paddling tips to assist with the smooth operation of their canoes. - Participants are briefed on capsize procedures. (Appendix 3 - On the River Safe Voyageur Canoeing Guidelines)
13. Canoe Collision	<ul style="list-style-type: none"> - Torso injury as a result of collision/impact with bow/stern of other craft 	<ul style="list-style-type: none"> - Create and encourage sufficient space between paddlers to reduce the likelihood of impact from another paddler. - Participants to be briefed in control strokes of canoeing (steering, emergency stops). - Participants briefed on letting occupants of other canoes know if they are likely to hit their canoe - Emergency stop procedure emphasized and practiced - Appendix 9 - Incident Report Form
14. Rafting Up, Docking	<ul style="list-style-type: none"> - Injury such as cuts, abrasions, crushes from contact with fixed objects such as wharfs, jetties, pylons and other craft when "rafting up" 	<ul style="list-style-type: none"> - Hazardous fixtures identified and participants instructed to remain clear. - Participants instructed to keep hands clear of craft gunwales when "rafting up" - Minor cuts and abrasions from contact with objects be treated promptly to reduce the likelihood of infection. - Appendix 9 - Incident Report Form
15. Storm, wind or squall	<ul style="list-style-type: none"> - Capsizing - Multiple rescue - Group separation 	<ul style="list-style-type: none"> - Appendix 3 - On the River Safe Voyageur Canoeing Guidelines - Appendix 4 - Management for Extreme Weather - Appendix 5 - Emergency Response Plan - Appendix 6 - Communication Protocols - Appendix 7 - Emergency Contact List - Appendix 9 - Incident Report Form
16. Thunderstorm and Lightning Storms	<ul style="list-style-type: none"> - Hypothermia - Lightening strike 	<ul style="list-style-type: none"> - Appendix 2 - Management for Environmental Related Illnesses - Appendix 4 - Management for Extreme Weather - Appendix 6 - Communication Protocols - Appendix 9 - Incident Report Form
17. Specific to a race or competitive activity eg. Slalom/ racing, canoe polo, "tag or chasey games".	<ul style="list-style-type: none"> - These activities present additional risks, or increases/magnifies existing risk due to a potential for altered participant focus and additional/higher speeds - Greater risk of: Fatigue/exhaustion/stress, collision with other paddler, impact from other competitors paddle, capsize, equipment damage. 	<ul style="list-style-type: none"> - A pre-race/competition briefing is conducted with all participants to reaffirm potential risks and hazards, (in particular capsize) and competition rules. - All races/competition is conducted where possible in water greater than marginal (waist) depth. If this is not possible participants are reminded as of potential shallow water and how to identify them.
18. Missing person(s)	<ul style="list-style-type: none"> - Paddler goes missing - Split up of group 	<ul style="list-style-type: none"> - Appendix 5 - Emergency Response Plan - Appendix 6 - Communication Protocols - Appendix 7 - Emergency Contact List

		<ul style="list-style-type: none"> - Appendix 9 - Incident Report Form
19. Pre-Existing Conditions	<ul style="list-style-type: none"> - Participants suffers from a pre-existing medical condition (eg. Asthma attack, diabetic, anaphylaxis, epilepsy) whilst conducting an activity on the water. 	<ul style="list-style-type: none"> - Participants will share pre-existing medical conditions with captains and brigade first aiders. - All participants are asked to complete a medical form and share with their Team Captain and Brigade first aiders. - Team Captains and Brigade first aiders aware of the location of completed medical forms. - Medication for pre-existing conditions is carried with/by the participants in a water-proof container. - Each canoe carry (or have ready access to) a suitably equipped first aid kit, including spare asthma inhaler. - Where an activity is conducted some distance from the main centre (such as an extended distance), 2-way radio/mobile telephone contact be maintained (Appendix 5 - Emergency Response Plan, Appendix 6 - Communication Protocols and Appendix 7 - Emergency Contact List)
20. Leaky canoe or maintenance required	<ul style="list-style-type: none"> - Injury to paddlers 	<ul style="list-style-type: none"> - Appendix 8 - Brigade Equipment Lists - Appendix 9 - Incident Report Form
21. Non-Reporting of Incident	<ul style="list-style-type: none"> - Missing opportunities to learn and prevent incidents from reoccurring 	<ul style="list-style-type: none"> - Appendix 9 - Incident Report Form

4.3 Risk Management Plan for Logistics

Danger	Risk	Mitigation
1. Losing canoe from trailer or truck	<ul style="list-style-type: none"> - Lost canoe causes third party incident, damages or injuries 	<ul style="list-style-type: none"> - Suitably skilled participants are responsible for tying on canoes. - The driver should check that canoes are securely on the trailer before driving away. - The driver is responsible for checking that the trailer is sitting on the tow ball correctly and that the safety chain is secured.
2. Steep banks	<ul style="list-style-type: none"> - Sprains & strains 	<ul style="list-style-type: none"> - Appropriate exits and entry points are chosen to avoid any difficulties. - Use developed entry and exit points
3. Loading and Unloading Canoes	<ul style="list-style-type: none"> - Strains - Soft tissue injuries - Damage to canoes 	<ul style="list-style-type: none"> - Use trailers to transport craft to and from the water if significant distance is required. - Loading and unloading is supervised by experienced person. - Participants are briefed about communicating with each other prior to lifting. - A minimum of four participants are to carry a canoe.
4. Reputation	<ul style="list-style-type: none"> - Ill will from public - Reputation tarnished 	<ul style="list-style-type: none"> - Choose appropriate areas to brief and unload canoes so that public are not restricted in access and participants are not distracted. - Team captions to monitor noise and behaviour of group.

4.4 Risk Management Plan for Camping

Danger	Risk	Mitigation
1. Reputation	<ul style="list-style-type: none"> - Inappropriate participant behaviour - Inability or decision not to follow directions or co-operate 	<ul style="list-style-type: none"> - Set clear behaviour expectations at the start of the brigade. - Encourage a supportive environment. - Outline possible outcomes of inappropriate behaviour
2. Reputational	<ul style="list-style-type: none"> - Ill will from public - Reputation tarnished 	<ul style="list-style-type: none"> - Appendix 1 - Environmental Guidelines - Choose appropriate areas to brief and unload canoes so that public are not restricted in access and participants are not distracted. - Team captions to monitor noise and behaviour of group.
3. Group Conflict	<ul style="list-style-type: none"> - Conflict within the group and/or inappropriate participant behaviour 	<ul style="list-style-type: none"> - Set clear behaviour expectations at the start of the brigade. - Participant behaviour that is un-safe or inappropriate should be referred to their Team Captain for appropriate action and follow-up. If serious or repeated, the participant should be removed from the Brigade and a written incident report should be forwarded to the Chair. - Team Captains actively supervise all members of their group, including participants who may be waiting on shore.
4. Environmental Impact	<ul style="list-style-type: none"> - Reputation - Environmental damage 	<ul style="list-style-type: none"> - Participants are to be briefed on 7 principles of 'Leave No Trace'. Appendix 1 - Environmental Guidelines
5. Campfires	<ul style="list-style-type: none"> - Campfire burns 	<ul style="list-style-type: none"> - Appendix 1 - Environmental Guidelines - Appendix 5 - Emergency Response Plan - Appendix 7 - Emergency Contact List - Appendix 9 - Incident Report Form
6. Exposure to Rain, Cold, Wind	<ul style="list-style-type: none"> - Hypothermia/ Hyperthermia - Wet equipment 	<ul style="list-style-type: none"> - Appendix 2 - Management for Environmental Related Illnesses - Appendix 6 - Communication Protocols
7. Exposure to Sun	<ul style="list-style-type: none"> - Sunburn - Dehydration - Heat Exhaustion / Heat Stroke 	<ul style="list-style-type: none"> - Appendix 2 - Management for Environmental Related Illnesses - Appendix 6 - Communication Protocols - Appendix 9 - Incident Report Form
8. Rubbish (in water and onshore)	<ul style="list-style-type: none"> - Cut feet - Embedded objects 	<ul style="list-style-type: none"> - Participants are expected to wear shoes at all times. (no barefoot) - Injuries sustained are treated promptly to reduce the likelihood of infection - Appendix 5 - Emergency Response Plan
9. Thunderstorm and Lightening Storms	<ul style="list-style-type: none"> - Hypothermia - Lightening strike 	<ul style="list-style-type: none"> - Appendix 2 - Management for Environmental Related Illnesses - Appendix 4 - Management for Extreme Weather - Appendix 6 - Communication Protocols
10. Non-Reporting of Incident	<ul style="list-style-type: none"> - Missing opportunities to learn and prevent incidents from reoccurring 	<ul style="list-style-type: none"> - Appendix 9 - Incident Report Form

4.5 Cancellation of Activity or Event

4.5.1 Conditions Leading to Cancellation

There are several circumstances that could lead to the delay or cancellation of a day's paddle or event. The following are some possibilities for consideration:

- Extremely bad weather such as high winds, heavy rain or lightning that creates a high risk for paddling.
- Other natural disasters.

4.5.2 Who Makes Decision to Cancel

The following steps will be followed regarding the cancellation of a day's paddle:

- The Chair will engage the Water Logistics Coordinator, Safety Coordinator and Team Captains to discuss the potential risks and will attempt to facilitate a unanimous group decision.
- In instances where there is not a unanimous decision for cancellation, the Chair will make a recommendation for cancelling based on common best practices and guidance provided in the Appendices.
- The Team Captains will have the final decision as to their team continuing with the day's activity. For teams deciding that they will continue the day's paddle in the event of a recommended cancellation, the Team Captain will be asked to sign off that the team will be continuing on their own and not as part of the Brigade.

The decision to suspend paddling part way through a day after the brigade is underway will follow the same protocol as above with the exception that the Daily Water Captain will facilitate the decision process.

4.5.3 Procedures to Follow in the Event of Cancellation

The Brigade Chair will coordinate scheduled meeting(s) with the Water Logistics Coordinator, Safety Coordinator and Team Captains at a specified location to agree on next steps and monitor changing conditions that caused the cancellation.

5 Appendices

Appendix 1 - Environmental Guidelines

Appendix 2 - Management for Environmental Related Illnesses

Appendix 3 - On the River Safe Voyageur Canoeing Guidelines

Appendix 4 - Management for Extreme Weather

Appendix 5 Emergency Response Plan

Appendix 6 Communication Protocols

Appendix 7 Emergency Contact List

Appendix 8 Brigade Equipment Lists

Appendix 9 Incident Report Form **Appendix 1: Environmental Guidelines**

Based on the Seven Standard Principles of Leave No Trace Guidelines (Leave No Trace

<https://Int.org>)

These seven principles help guide the ethical choices we make to preserve the outdoor experience for generations to come. Leaving no trace is the responsibility of every person. Please remember that these are not rules and regulations - they are guidelines to help shape and direct your ethical beliefs towards the world and your place in it.

Principle of Leave No Trace	Guidelines for Leaving No Trace
1. Prepare and Plan	<ol style="list-style-type: none"> 1. Understand the regulations and special concerns of the areas you access. 2. Research your destination before you leave home. 3. Schedule your trip to avoid times of high use. 4. Seek permits if necessary. (E.g. provincial campgrounds). 5. Prepare for isolation, weather hazards and emergencies. 6. Repackage food to minimize waste and bring rubbish bags. Avoid cans, bottles and aluminum foil. 7. Visit in small groups. Split larger parties into groups of 4-6. 8. Use a map and compass or GPS to eliminate the use of marking paint, rock cairns or flagging.
2. Travel and camp on durable surfaces	<ol style="list-style-type: none"> 1. Durable surfaces are established tracks, gravel, dry grass, established trails and campsites, rock, but be considerate of lichens, snow, water for travel by watercraft, sand and compacted soil. 2. Concentrate activity in popular or high-use areas: <ul style="list-style-type: none"> - Use existing trails and designated campsites. - Walk single file in middle of trail tread, even through mud. - Focus activity where vegetation is absent, where ground has already been bared 3. Spread out activity in pristine areas: <ul style="list-style-type: none"> - Keep an eye out for areas where impact is just beginning and avoid those areas. - Take individual paths across non-trailed areas to prevent formation of a trail and possible erosion. - Travel on and make camp on the most durable surface available. 4. Campsites <ul style="list-style-type: none"> - Plan the route carefully so your group arrives at a pre- arranged site rather than creating a new campsite - Keep groups and campsites small, place tents close together on bare ground. Focus activity where there is no vegetation. - If you divide your group, do not visit between sites to avoid creating social trails - Use a freestanding tent that requires few pegs if staying overnight. - Bring your own poles; do not cut them from the bush. - Never camp on frontal sand dunes. - Protect water sources by camping at least 100 meters from rivers and billabongs. - Never dig trenches around tents - Move camp daily to allow vegetation to recover - Minimize traffic in camp and wear soft shoes to reduce damage to the area 5. Paddling <ul style="list-style-type: none"> - Choose durable surfaces like gravel or sand to load and unload the craft. - Take care to avoid trampling shorelines while exiting and entering the rivers, lakes or ocean. - If craft require tying up, ensure the system does not damage the rocks or vegetation that is used. Use padding if necessary. - Carry craft over dunes and soft riparian areas. Do not drag them. - When entry and egress is from the water, leave craft below the dune level unless tides or wave action prevent their safety. - Do not dig into dunes or create new tracks. - Used formed tracks only. - Learn about specific regulations and issues on this particular river.

Principle of Leave No Trace	Guidelines for Leaving No Trace
	<ul style="list-style-type: none"> - Use a knowledgeable guide on new rivers. Use a river guidebook and map to plan your trip. - Secure required permits early. Some areas have lottery permits so start planning early. - Schedule trip during the time of year when appropriate river flows for your group's skill level will be most likely. Stay informed of flow fluctuations as you approach your trip date. - Trips on weekdays rather than weekends and during off-season provide more solitude and wildlife viewing opportunities. - Create a flexible schedule allowing you to make use of less-used campsites.
3. Dispose of waste properly	<ol style="list-style-type: none"> 1. Rubbish <ul style="list-style-type: none"> - Remove all rubbish. - Do not burn rubbish. Never bury rubbish as animals may dig it up. - Strain water through a fine screen to capture food particles and pack them out 2. Human waste <ul style="list-style-type: none"> - Use toilets where provided. - Carry a small trowel for emergency toileting. - Bury any human waste 15 centimeters under the topsoil, where organisms in the soil will break it down fastest, and at least 100 meters away from tracks, campsites, watercourses, lakes or drainage channels. - Where possible, avoid using man-made toilet paper. Where necessary, use sparingly and bury it deeply or carry it out. 3. Hygiene <ul style="list-style-type: none"> - Wash yourself and any equipment at least 100 meters away from streams or lakes. - Avoid using soaps or detergents. Use only small amounts of biodegradable soap - Scatter drained dishwater. - Do not use soap, toothpaste, shampoo or sunscreen in lakes or streams. - Human Waste <ul style="list-style-type: none"> - This is most likely way to spread disease and illness to other people, so it needs to be done with vigilance - Deposit at least 200 feet from water source, campsite, and trail - Bury in shallow 6 inch hole dug in soil, not sand or gravel, then cover hole - Pack out toilet paper rather than bury it 4. Food <ul style="list-style-type: none"> - Prepare only what you will eat to reduce garbage. - Collect all scraps and pack in plastic bags. - Recover dropped and spilled bits and pack it out with your other garbage
4. Leave What You Find	<ol style="list-style-type: none"> 1. Leave flowers, sticks, driftwood, bark, rocks, arrowheads and other artifacts, animals, skeletons, and any other items without required permits and permission 2. Respect Indigenous art and other sites of cultural significance. Seek appropriate permission. 3. Do not touch rock art, which can be damaged by the natural oils from human skin. 4. Preserve the past by observing but not touching cultural or historic structures and artifacts. 5. Leave campsites as you found them: 6. Do not dig trenches around tents

Principle of Leave No Trace	Guidelines for Leaving No Trace
	<ol style="list-style-type: none"> 7. Do not create furniture or structures 8. Do not hammer nails into trees 9. Do not chop or saw trees or throw hatchets at trees 10. Do not alter the area in any way 11. Be careful when you tie an animal, hammock or other rope to a tree to prevent damage to the bark 12. Return pine needles, sticks, surface rocks that you may have brushed aside 13. Refraining from arranging stones or scratching on rocks or drawing in sand or dirt to 'leave your mark' 14. Help prevent the spread of weeds and pests by checking your vehicle or craft, camping equipment and clothing to ensure they are clean before visiting parks, waterways and forests. 15. Avoid accessing sites where rare and vulnerable plants or animals are found. 16. Do not travel through quarantine areas.
<p>5. Minimize the Impact of Fire</p>	<ol style="list-style-type: none"> 1. Camp fires <ul style="list-style-type: none"> - Use an alternative to a campfire: <ul style="list-style-type: none"> - For cooking, consider using backpacking stoves which are fast, clean, eliminate need for firewood, and have zero local impact - For warmth, bring and use adequate clothing rather than huddling by a fire - Build a 'Leave No Trace' fire: <ul style="list-style-type: none"> - Remove trash from fire area and pack it out - Use only dead and down wood - Use wood you can easily break by hand - Burn all wood to ash to eliminate left-over black wood - If you have a fire, only use existing firerings. Don't build new rings or dig pits. - Scatter cool ashes - Collect timber only where permitted. - Use only dead, fallen timber. Do not break branches from trees as leaf litter and dead timber provide homes and food for animals. - Never light fires during high bushfire periods or in places where the fire might spread. - Going without a campfire when wood is scarce, such as desert, alpine, or high-use areas far from campsite - Always put the fire out by dousing it with water rather than earth. Embers can smolder for days. 2. Fire bans <ul style="list-style-type: none"> - Light fires in parks only where permitted. Many parks do not permit open fires. - Check with the land managers for current restrictions on lighting fires - Carry any cigarette butts out with you. - Fire ban information is available on the Alberta Fire Ban website: https://albertafirebans.ca/

Principle of Leave No Trace	Guidelines for Leaving No Trace
	3. Stoves <ul style="list-style-type: none"> - Use a fuel or gas stove when cooking. - Reduce the risk of bushfires and burn injuries.
6. Respect Wildlife	1. Travel quietly. 2. Observe wildlife from a distance. Do not follow or approach them. 3. Move slowly when around animals. 4. Be aware of their breeding and birthing seasons and giving them more space. 5. Avoiding disturbing their nests, food and water sources, and resting areas. 6. Avoid wildlife during sensitive times, such as mating, nesting, and raising young. Touching nests or young animals may cause their parents to abandon them. 7. Never feed wild animals or birds. Feeding wildlife damages their health, alters natural behaviors, and exposes them to predators and other dangers. Store food and rubbish securely. 8. Control pets at all times or, better yet, leave them at home. All national parks restrict pets so check regulations before bringing them. 9. Report injured animals to the local land managers. Do not attempt to handle an injured animal. 10. Take care in adventure activities to minimize the risk from interactions between wildlife and participants. 11. Manage our food, garbage, and other attractants to prevent disrupting their natural eating habits
7. Be considerate of your hosts and other visitors	1. Learn about the cultural history of the area. Recognize, acknowledge and respect local knowledge. 2. Respect the wishes and regulations of all hosts, including Indigenous, pastoral, land/water managers and locals. 3. Never visit places without appropriate permission. Seek permission and/or a permit. 4. Familiarize yourself and have respect for peoples' customs, culture, values, religion, dignity and feelings. 5. Traveling in small groups to be less of a visual impact. 6. Use clothes and gear of a neutral, natural color to minimize visual impact. 7. Leave radios and the like at home and keeping your group's noise level low. 8. Maintain distance between your group and others of which you are aware. 9. Respect private property and regulations on public property. 10. Show courtesy to others you meet and following common trail etiquette. 11. Paddling <ul style="list-style-type: none"> - Leave larger campsites for larger groups if your group can fit in a smaller area. - Avoid camping, eating, and long rest breaks near popular rapids where you may impact scouting and portaging.

Principle of Leave No Trace	Guidelines for Leaving No Trace
	<ul style="list-style-type: none"> - Canoes, kayaks, and other non-motorized craft usually have the right-of-way over motorboats. - Keep an eye out for fishermen and give them plenty of room, especially if they are wading or fishing from shore. - Let other groups you meet on the river know your plans and where you expect to camp for the night. This can help distribute impact and increase privacy.

Appendix 2: Management for Environmental Related Illnesses

1. Hypothermia	Signs and Symptoms	Treatment	Prevention
Pre-Shivering Hypothermia (Mild)	<ul style="list-style-type: none"> - Body core > 35°C - Increased heart rate and breathing rate - The “umblings” (stumbling, fumbling, mumbling, grumbling) - Lack of sound judgment, confusion, “mild stupidity) - Possible mild/controllable shivering - Pale, cool skin 	<ul style="list-style-type: none"> - Stop heat loss - Replace damp/wet clothing with dry clothing - Protect person from wind and water - Waterproof/windproof layers or shelter - Extra insulation under and around the patient - Exercise - Food with carbohydrates and sugars - Warm sweet liquids 	<ol style="list-style-type: none"> 1. Team captains to be aware of weather forecast for the day and plan accordingly. 2. Pre-briefing and equipment list outlines appropriate clothing & wet weather gear. 3. Participants are shown how to waterproof equipment 4. Group condition is monitored closely during wet weather. 5. Stay well hydrated. Avoid thirst. Keep your urine clear 6. Stay well fed. Avoid hunger. Internal “fires” need fuel 7. Plan to stay dry. Avoid cotton. Wear layers of clothing, taking layers off prior to sweating, adding layers back on prior to losing heat 8. Pace yourself or group to avoid overexertion with resulting sweat, fatigue and loss of stored energy 9. Ensure everyone understands hypothermia & watch out for 1 another for early signs and symptoms.
Shivering Hypothermia (Moderate)	<ul style="list-style-type: none"> - Body core is 35°C and 32°C - Violent and uncontrollable shivering - Increased heart rate and breathing rate - Worsening of the “umblings” - Increased confusion - Cold and pale (maybe dusky) skin 	<ul style="list-style-type: none"> - Food with carbohydrates and sugars - Stop heat loss - Replace damp/wet clothing with dry clothing - Protect person from wind and water - Waterproof/windproof layers or shelter - Extra insulation under and around the person 	
Non-Shivering Hypothermia	<ul style="list-style-type: none"> - Body core < 32°C 	<ul style="list-style-type: none"> - Evacuation – be extra gentle handling patient 	

(Severe)	<ul style="list-style-type: none"> - Shivering stops - Decreased heart rate and breathing rate - Muscle rigidity - Stupor progressing to unconsciousness - Deeply cold and cyanotic (bluish/purple) skin 	<ul style="list-style-type: none"> - Supplemental oxygen - Protect person from wind and water - Waterproof/windproof layers or shelter - Extra insulation under and around the person 	
2. Heat Induced Illnesses	Signs and Symptoms	Treatment	Prevention
<p>Heat Exhaustion</p> <ul style="list-style-type: none"> - Dehydration - Extreme activity - Extreme weather (heat and humidity) 	<ul style="list-style-type: none"> - Increased heart rate and breathing rate - Headache - Dizziness - Nausea - Thirst - Fatigue 	<ul style="list-style-type: none"> - Change environment from hot to cool – move to shady spot, pour water on the head and fanning - Orally rehydrate with water and a pinch of salt - Person needs to rest for at least 1 hour 	<ol style="list-style-type: none"> 1. Hydration <ul style="list-style-type: none"> - Cheapoarde 0.5 litre of juice 0.5 litre of water 0.5 teaspoonful of salt Mix in one litre bottle - Drink 0.5 litre of water in the morning - Drink 0.25 litre of water every 15 to 20 minutes during periods of strenuous exercise - Drink at least 3-4 litres per day <ul style="list-style-type: none"> - Avoid alcohol - Monitor urine – keep clear and copious. Dark yellow indicator of dehydration 2. Maintain a pace that allows everyone to adapt to heat 3. Take scheduled and frequent breaks 4. Wear loose-fitting, cotton clothing that lets air through and sweat evaporate 5. Wear brimmed hat that provides shade for face and head break yourself or group to avoid overexertion with resulting sweat, fatigue and loss of stored energy
<p>Exertional Heat Stroke</p> <ul style="list-style-type: none"> - Dehydration - Extreme activity - Extreme weather (heat and humidity) - Pre-existing heat exhaustion 	<ul style="list-style-type: none"> - Altered level of consciousness - Increased heart rate and breathing rate - Uncoordinated movements - Staggering and balance problems - Confusion - Behavioral change 	<ul style="list-style-type: none"> - Stop activity - Rapid cooling - Move to shady spot - Pour water on the head and aggressively fan the person - Remove clothing that retains heat - Application of ice packs at the neck, groin and arm pits - If the person is conscious orally rehydrate with water & a pinch of salt - Evacuate to hospital 	
<p>Chronic Heat Stroke</p> <ul style="list-style-type: none"> - Heat wave - Pre-existing illness/disease - Age –very young or old 	<ul style="list-style-type: none"> - Unconscious - Seizures - Hot, red, often wet skin - Increased heart rate and bounding pulse 	<ul style="list-style-type: none"> - Rapid cooling - Move to shady spot - Pour water on the head and aggressively fan the person - Remove clothing that retains heat 	

	<ul style="list-style-type: none"> - Increased breathing rate - Uncoordinated movements - Staggering and balance problems - Confusion - Behavioral change 	<ul style="list-style-type: none"> - Application of ice packs at the neck, groin and arm pits - Evacuate to hospital 	
3. Sunburn	- Signs and Symptoms	- Treatment	Prevention
Sun Exposure	<ul style="list-style-type: none"> - Red, painful, slightly swollen possibly blistered skin 	<ul style="list-style-type: none"> - Avoidance of sun - Cold compress - Moisturizing lotions and creams, including aloe - Ibuprofen for pain and swelling - Keep well hydrated 	<ul style="list-style-type: none"> - Paddlers briefed at the trip about being sun smart - Wear at least SPF 30+ sunscreen - Paddlers to wear hats (preferably broad brimmed) and shirts (preferably long sleeved) - Paddlers advised on appropriate clothing and equipment. Clothing with sleeves must be worn under PFD'S.

Appendix 3: On the River Safe Voyageur Canoeing Guidelines

Practice	Control Measures
8. Rules on Water	<ol style="list-style-type: none"> 1. Be respectful and courteous of other users of the river and campgrounds 2. Personal Flotation devices (PFD) are worn at all times while on the water. 3. The Brigade crews could be separated into groups of up to three or more canoes. No canoes will be allowed to travel alone. 4. No one goes past leading boat or fall behind sweep boat 5. No pushing people out of the boats 6. No diving out of boats 7. Follow and respect the emergency whistle system of the Water Captain <ul style="list-style-type: none"> - One Whistle... stop, we want your attention - Two whistles... come to us - Three Whistles... pull over to the riverbank immediately and wait. 8. Beware of health, safety and environmental hazards on the river. 9. Avoid unexpected collisions with other canoes. Create and maintain sufficient space between paddlers to reduce the likelihood of impact from another paddler. 10. Be aware of the dangers of wielding paddles in confined spaces 11. If canoes are 'rafted up' paddles are to be placed inside the canoes when not required 12. Correct footwear and clothing must be worn at all times 13. Continuously watch for the presence of submerged items (e.g. sandbars, logs, trees, rocks) and communicate
2. Capsized Canoe	<ol style="list-style-type: none"> 9. Team Captain blows 3 whistles and nearby participants move to assist over turned boat.

Practice	Control Measures
	<ul style="list-style-type: none"> - The initial management of the situation rests with the stern of the capsized boat. The person at the stern should start the following sequence of actions. - Check (by calling out every paddler's name) that all paddlers are accounted for. - Get all paddlers to retrieve their paddles and return with them to the boat. Paddlers should not leave the boat to reach shore unless it is very close (5 -10m). - If the boat has not righted itself (as it should if gear is tied down in the hull), right the boat using the flip line. - The person at the stern or someone chosen by the stern should get into the boat and start bailing. - When the water level is about half way down the seats, an additional paddler is brought in to assist with bailing. By the time the water level is below the level of the seats, all paddlers should be back in the boat. - Other canoes in the Brigade will pick up floating equipment. - Paddling to shore can be done without emptying the canoe of water if a landable shore is close by (less than 50 m). If the distance is greater, it is advisable to empty the canoe of water to make it as stable as possible. - Report incident to Brigade Safety Coordinator <p>10. Towing a swamped boat to shore is possible but very hard work. This may be necessary if conditions do not allow the capsized boat to be bailed, but it is a last resort, and all paddlers must be out of the water either on shore or in other boats before this is started.</p> <p>11. Under more severe conditions the swamped canoe will have to be abandoned. And under the most severe conditions the rescue canoe and/or safety boat may only be able to assist the swimmers to shore by towing them, either off the side of the rescue canoe, or on a rescue line behind.</p>

Appendix 4: Athabasca 2017 Management for Severe Weather

Weather Event	What to Watch For	Control Measures
<p>9. Thunder and Lightning</p>	<ul style="list-style-type: none"> - Daily weather forecasts - Fluffy cumulus clouds could develop into thunderstorms - Big dark, towering cumulonimbus clouds with 	<p>6. Monitor weather forecasts and keep teams informed at daily team meetings and during the day</p> <p>7. Monitor approaching storm storms. The principle lightning safety guide is the 30-30 rule.</p> <ul style="list-style-type: none"> - The first "30" represents 30 seconds. If the time between when you see the flash and hear the thunder is 30 seconds or less, the lightning is close enough to hit you. If you haven't already, seek shelter immediately. - If greater than 30 seconds continue to monitor to determine if storm is moving closer or further away. If length of time between lightening an thunder increases storm is moving

Weather Event	What to Watch For	Control Measures
	flattened anvil shaped top often produce violent thunder showers with lightening	away, if less it is getting closer – The second “30” stands for 30 minutes. If the time between the last flash of lightening and thunder is 30 seconds or less, wait 30 minutes before leaving your shelter. 8. If the time between lightening & the boom of thunder is 30 sec or less then: – Postpone activities promptly. Don't wait for rain – Get out of the water. It's a great conductor of electricity. Stay off the beach and out of small boats or canoes. If caught in a boat, crouch down in the center of the boat away from metal hardware. – Avoid being the highest point in an open area as lightning hits the tallest object. Take shelter at the lowest point. Finder shelter; for example, in a grove of trees with a relative even canopy. If caught in an exposed area, crouch down on the balls of your feet with your arms covering your head. Lying flat makes you more vulnerable to a strike. – Wait 30 minutes after last lightening before continuing 9. The Daily Water Captain with input from the Team Captains will make the decision to stop or continue.
2. Wind	– Increasing wind – Large waves created by wind	1. Monitor winds before departure. White caps are an indication of thinking about strong management strategies or cancellation. 2. Set safety guidelines- distance between canoes, whistles, rafting up. 3. Set expectation of group travelling together. 4. Participants are empowered to manage group distance and to show raft up sign if the group gets too far apart. 5. Ropes are carried so that there is an option of tying boats together for more stability. 6. Participants are briefed on capsize procedures. 7. Stop activities when controlling the canoe is unmanageable or waves created pose risk of capsizing or swamping the canoe. 8. The Daily Water Captain with input from the Team Captains will make the decision to stop or continue.

Appendix 5: 2017 Athabasca River Emergency Response Plan

1 Levels of Emergency

The Emergency Response considers the following levels and types of response:

Type	Examples
Alert	<ul style="list-style-type: none"> • No injuries • No media interest

	<ul style="list-style-type: none"> No outside help is required Managed by the resources within the Brigade
Level 1	<ul style="list-style-type: none"> First aid required No media interest Unaccounted missing person Managed by the resources within the Brigade
Level 2	<ul style="list-style-type: none"> Injuries requiring medical attention Organized emergency responders may be required (eg. 911 Police) Missing person that require external assistance Medical evacuation may be required Local media interest
Level 3	<ul style="list-style-type: none"> Fatality Organized emergency responders required (eg. 911 Police) Local, provincial and/or national media interest

2 Incident Response

Responses	Incident Classification			
	Alert	Level 1	Level 2	Level 3
Communications				
Brigade	Team Captain	Daily Water Captain	Brigade Chair	Brigade Chair
External Public and Media	Reactive as required	Reactive as required	Brigade Chair – proactive media management to local and possible regional interest	Brigade Chair – proactive media management to local and provincial and national interest
Actions				
Brigade	Within Team	Incident response undertaken in accordance with specific scenarios (Section 3)	Brigade Chair is notified and may provide support to Brigade	Brigade Chair is notified and will manage response activities
External	Reactive as required	Reactive as required	Potential for external multi-agency resources	Immediate external resources required
Resources				
Brigade	No additional personnel required	Establish what resources are required	Limited supplemental resources or personnel required.	Significant resources required
External	None	None	Possible assistance from external support	External resources required

2.1 Standing-Down the Emergency and Returning to Normal Brigade Activities

The decision to stand-down an emergency and return to normal Brigade activities is done through various authorities depending on the level of emergency.

Alert – The decision to stand-down an Alert will be made by the Team Captain. The Team Captain will keep all affected persons informed of the status of the emergency.

Level 1 - The decision to stand-down a Level 1 emergency will be made by the Daily Water Captain. The Daily Water Captain will keep all affected persons informed of the status of the emergency.

Level 2 and 3 Emergencies – The decision to stand-down a Level 2 or Level 3 emergency is made by Brigade Chair in conjunction with external resources requested to provide support. The Brigade Chair will keep all affected persons and the media informed of the status of the emergency.

3 Emergency Call Out List Reference Brigade contact sheet

10. Brigade Contacts	Position in Brigade	Possible ERP Role	Name	Contact Number
	Chair	Incident Commander	Bernie Kreiner	780-865-9355
	Water Logistics Coordinator	Deputy Incident Commander	Rick Zrobac	780 817-4623
	Daily Water Captain	On Scene Commander	determined day of paddle	
	Safety Coordinator	Safety Coordinator	Doug Yalte	780-223-0927
	Ground Logistics Coordinator	Logistics Coordinator	Ken Cassie	780 849-0324
	Jennifer Norquay	Deputy On Scene Commander		
	Connie	Deputy On Scene Commander		
	Theresa Olson	Deputy On Scene Commander		
	Team Captain	Deputy On Scene Commander		
	Team Captain	Deputy On Scene Commander		
	Team Captain	Deputy On Scene Commander		
	Team Captain	Deputy On Scene Commander		
	Team Captain	Deputy On Scene Commander		
	Team Captain	Deputy On Scene Commander		
	Team Captain	Deputy On Scene Commander		
	Team Captain	Deputy On Scene Commander		
	Team Captain	Deputy On Scene Commander		
	Team Captain	Deputy On Scene Commander		
	Brigade First Aider	Brigade Command Centre	Doug Yalte	780-223-0927
	Brigade First Aider	Brigade Command Centre		
	Team First Aiders	See Attached list		
	Agency		Contact Telephone Number	
11. External Emergency Evacuation Contacts	Ambulance (ground and air)		Emergency: 911	
	STARS		888-888-4567 or #4567 from a cell phone.	
12. Health Care Facilities	Jasper Hospital		780-852-3344	
	Hinton Hospital		780-865-3333	
	Whitecourt Hospital		780-778-2285	
13. RCMP	Jasper		780-852-4421	

	Hinton	780-865-2455
	Whitecourt	780-779-5900

4 Immediate Actions

This section provides a description of response specific procedures to ensure all Brigade responders have an understanding of response activities. Depending on the scope of emergency more than one response specific procedure may need to be utilized.

The following Immediate Actions have been included in this plan because they have been identified as potential risks or threats associated with the activities taking place at within the Brigade activities included in this ERP. Potential consequences from these threats may include a threat to human life or harm to the environment. In cases where members of the public or the environment are threatened, the appropriate public protection and/or control and containment measures will be carried out as required by the appropriate authorities.

4.1 First Aid and Medical Treatment Incidents

For MOST BRIGADES, most incidents that may occur will likely be classified as Alert or Level 1. Because of this likelihood, first aid trained people will be travelling with the brigade. Response procedures are contingent on the responder's level of training and knowledge of the specific response activity.

The first person on scene will:

- Assume the role of On Scene Commander until relieved by a more qualified individual, who may be a Brigade participant or a representative from an outside support service (eg. a local emergency service provider).
- Assess the situation to ensure personal and others' safety.
- Administer first aid as necessary.
- Determine need for backup or outside resources. Contact emergency services as needed and have them deployed to site: call 911 where available telephone coverage is available or use the SPOT Satellite Messenger where 911 is not available.
- Important: If you're not sure whether the situation is a true emergency, officials recommend calling 911 and letting the call-taker determine whether you need emergency help.
- STARS Air Ambulance may be dispatched through the 911 emergency number or calling STARS Emergency Line: 1-888-888-4567 or #4567 from a cell phone.
 - Depending on severity of the emergency, provide the following people with an initial assessment including severity of injuries, location, resources needed and first aid treatment provided: Alert and Level 1 – Daily Water Captain (Safety, Water Logistics, and Chairperson are familiar with external resources available.
 - Level 1 and Level 2 – Brigade Chair
- When you call 911 or STARS be prepared to answer questions, which may include:
 - Who you are and your level of medical training
 - A call back number and method to communicate with the scene
 - The location of the emergency: GPS coordinates, highway number, legal land location (section, township, range)
 - The nature of the emergency:
 - Mechanism of injury
 - Number of patients, theirs ages and approximate weights
 - Any information that may help determine what happened

- What types of resources and support maybe required
- Pertinent weather conditions (wind, visibility, freezing rain, etc)
- Remember, the questions are important to get the right kind of help to you quickly.
- Be prepared to follow any instructions the call-taker gives you. Many 911 centers can tell you exactly what to do to help in an emergency until help arrives, such as providing step-by-step instructions to aid someone who is choking or needs first aid or CPR.
- Finally, do not hang up until the call-taker instructs you to.
- After standing down an emergency, the Safety Coordinator will facilitate and work with affected Team Captains, Water Captain and Brigade Chair to complete the Incident Report form and fit for purpose investigation of the emergency. This is an opportunity to perform a thorough incident analysis, and adjust procedures as necessary. Documentation should be kept of all matters discussed at the meeting as proof of action. The Team Leaders are responsible for sharing the outcomes from these investigations their Team Members and explaining how it will affect them for the remainder of the Brigade.

4.2 Emergencies at the Campsite

The Ground Logistics Coordinator will designate an “Emergency Muster Point” at the entrance of each campsite.

Team Captains will be responsible for communicating and showing their teams where the Emergency Muster Point.

Three tweets from air horn will indicate a potential emergency and all people will muster to the Emergency Muster Point.

Team Captains will confirm with the Ground Logistics Coordinator that all their team members have been accounted for at the muster point. If there are any people missing then the Search and Rescue procedure will be implemented.

Depending on the severity of the emergency, the Ground Logistics Coordinator or Brigade Chair will provide instructions to people at the Emergency Muster Point.

Do not leave the Emergency Muster Point until instructed by the Brigade Chair or their designate.

4.3 Missing or Overdue Brigade Participants

This section is a brief overview of some very basic search and rescue (SAR) fundamentals. It should not imply that that the Brigade or Brigade leaders can run an in-depth search and rescue mission. It should be assumed that the Brigade could only be performing these techniques as part of an initial search confirming is the person is missing.

Report possible missing person to their Team Captain who will immediately inform the Brigade Chair. The Chair or their designate facilitate the initial search and rescue procedures.

1. Gathering Information

- Who is missing, and for how long? And Why?
- Where were they last seen?
- Did they say they were going somewhere?
- What is the person’s level of experience? What, if anything, was the person instructed to do if they became lost?
- What gear, clothing, food or other equipment did they have? What were they wearing?
- What was the emotional state of the person?

- What was the missing person’s physical condition? Are there any known medical conditions? Contact captain for this info.
 - What footwear was the person wearing and what does the sole look like?
2. The Initial Informal Search – to confirm the person is missing
- Provide a time limit for the initial search. Once reached call in outside resources. Search the obvious first – location last seen, washroom, viewpoint, car, home, bar, someone else’s tent, etc.
 - Active SAR tactics must remain “close to home” or to a specific point.
 - Only send teams that are competent for an assigned task. All teams will have a minimum of two people to a group.
 - Patrol main thoroughfares to limit the potential search area
 - Remember, resources are limited and that if you have a suspicion that the search will be difficult, urgent or prolonged, call police for SAR support.
3. Decision to Initiate Formal Search
- The decision to initiate a formal search with police and local SAR resources will be the decision of the Brigade Chair.
 - The Brigade Chair or designate will request SAR resources by calling 911 or the local police contact number.
 - From this point on, all search and rescue activities are under the direction of the external SAR rescue teams.
 - Search and rescue (SAR) teams find, stabilize, and evacuate people who are in distress. Briefly, SAR handles incidents in the following way:
 - After receiving a call from the police, municipality, applicable provincial ministry or Parks Canada, the on-call SAR manager alerts the team.
 - Team assembles at a predetermined place. Each member signs in and is accounted for from the start to the termination of the incident.
 - Team departs for the incident scene (missing/lost person or a rescue).
 - At the scene, the following are established:
 - Base of operations
 - Staging area
 - Communication
 - Search manager plans the response, taking into account available resources, expertise, and training, while continuously gathering information about the incident.
 - Teams are deployed, communicating with base by radio/cellphones.
 - On locating the missing person, the team administers necessary medical aid. Additional technical resources may need to be deployed.
 - More resources may be mobilized if the search needs to be expanded and/or teams need relief.
 - Search ends when the tasking agency stands the teams down. The plans to initiate the stand-down procedures are in place from the initial call.
 - The Brigade Chair will input from the police will communicate with relatives, friends and Brigade Participants, informing them of the situation and the procedures being undertaken.

14. Brigade Team First Aiders	Team Name	Team Captain	Name	Level of Training
		Rick Zroback		

	Doug Yalte			

Appendix 7 Emergency Contact List

15. Brigade Contacts	Position in Brigade	Name	Contact Telephone Number
	Chair	Bernie Kreiner	
	Water Logistics Coordinator	Ric Zrobac	
	Safety Coordinator	Doug Yalte	
	Ground Logistics Coordinator	Ken Cassie	
	Communications	Cynthia Bigrigg	
	Team Captain	Connie	
	Team Captain	Jennifer	
	Team Captain	Brett	
	Team Captain		
	Brigade First Aider	Doug Yalte	
	Brigade First Aider		
	Brigade First Aider		
	Agency		Contact Telephone Number
16. External Emergency Evacuation	Ambulance (ground and air)		Emergency: 911
	STARS		888-888-4567 or #4567 from a cell phone.
17. Health Care Facilities	Jasper Hospital		
	Hinton Hospital		
	Edson Hospital		
	Whitecourt Hospital		
18. RCMP	Jasper RCMP		Emergency: 911 Non-Emergency
	Hinton RCMP		Emergency: 911 Non-Emergency
	Edson RCMP		Emergency: 911 Non-Emergency
	Whitecourt RCMP		Emergency: 911 Non-Emergency
	Fort Assiniboine RCMP		Emergency: 911 Non-Emergency

Appendix 8 Safety Equipment Requirements

Provided By	Equipment Requirements
19. Brigade	14. Brigade Emergency First Aid Kit 15. Maps – River and shuttle by buses at designated points along river. 16. Provide the Daily Water Captain with a repair kit to carry on the river. This will include: duct tape, wire, spare nuts & bolts of sizes similar to those in the canoe, silicone repair caulk/adhesive, appropriate resin and materials for significant hull repairs.
3. Teams	1. Canoes will be at least 20 feet or more in length and be considered unsinkable in calm water 2. Approved Personal Flotation Device (PFD) for each paddler. 3. A minimum of two spare paddles 4. A minimum of two manual bailing devices such as buckets (capacity of 20-25 litres) or hand pumps. Bailers will be tied onto the canoe so that they are there when needed. 5. Grab “loops” at each end of the canoe for attaching rescue lines. These grab loops must be strongly secured and capable of taking the full weight of the canoe if swamped. 6. Throw bag with floating 10 mm line and kept easily accessible. 7. Painters shall be attached to the bow and stern loops of the canoe. 8. 5m – 3/8 inch “flip line” to be attached to center thwart. The flip line is a piece of rope attached to the center thwart. 9. A method to re-board the canoe from in the water. (ex. knots in the flip line or a nylon strap with a “stir-up”). 10. A basic first aid kit suitable for treating minor injuries. 11. At least one cell phone or mobile radio fully charged and operational for each day of paddling. 12. Gear will stored in waterproof packs that will float and if possible be secured in the canoe in such a way as to add to the overall flotation of the canoe in the case of upset 13. Teams are recommended to carry a roll or two of duct tape.

Appendix 9 Incident Report Form

**Complete this form in clear print and return to the Safety Coordinator.
 Safety Coordinator will provide support to ensure form is completed effectively.**

Team	Your Name	Your Contact Details
Date and Time of Incident	Name of Individuals Involved	
Contact Information of People Involved		

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Description of Incident (<i>attach additional sheets if more room is required</i>)

Summary of Injuries

Outline of Actions Taken to Prevent Future Incidents
