

Lane Cover River Kayakers



Time Trial

Risk Management & Emergency Procedures Document

**(as at 10-Feb-2024)
Version 1.7**

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1 Introduction

This document covers the risk management procedures and emergency actions to be followed in the management of Time Trials held by Lane Cove River Kayakers (LCRK) on Wednesday evenings between the times of 6:15 pm and 8:00 pm. This is the largest regular gathering of paddlers on the Lane Cove River and even though an emergency is unlikely at any time, if one were to occur, this is the most likely time due to the range of skills and experience of those on the water, the extra challenge of paddling in the dark during winter, and the competitive conditions with a staggered start meaning that paddlers are sometimes alone and pushing themselves to the limits of their performance.

There are a number of other gatherings of LCRK members on or near the Lane Cove River for which the emergency procedures and evacuation points also apply, for example:

- Training sessions typically on Tuesday, Friday, Saturday mornings, in which paddlers are in groups and there is at least one qualified instructor
- 2x2 relays some Sunday mornings which follow a similar format to Time Trials but are conducted over a shorter 2km loop and where attendance rates are 10 to 20 paddlers instead of 40 to 60 paddlers for Time Trials
- Paddle NSW marathons held on Lane Cove River about annually, on a Saturday or Sunday morning, which also follow a similar format to Time Trials but over a slightly different course with 5km and 10km loops, during which several safety boats are present on the water and a First Aid officer is in attendance as well as a lot of safety-trained volunteers
- Clean Up Australia days, during which the level of physical exertion is far lower than during Time Trials
- Working Bees, which sometimes include water-based activities such as the clearing of snags, but typically helpers are in groups
- BBQs typically on Wednesday nights after, or instead of, the time trial
- Committee meetings, or non-paddling social gatherings which occur from time to time at or near the club-house, sometimes in the evenings

The primary purpose of the document is to provide an overview of safety precautions and basic procedures to follow in a range of emergencies.

1.1 Description of Time Trials

The Time Trial is held on the Lane Cove River from the Rotary Athletics Field, Lane Cove and comprises 6km, 9km and 12km courses started in up to 20 starts of between 1 and 8 boats at minimum of one-minute intervals.

The Time Trial has been safely conducted weekly for over two decades on the Lane Cove River. Over that time participants have increased to typically 50-60 during daylight time trials (summer) and typically 40-50 at night time trials.

Participants generally arrive from around 5.00 pm and depart by 9.00 pm.

1.2 Overview of safety at Time Trials

All members are advised by email about annually to familiarise themselves with the club's safety page at <http://www.lcrk.org.au/pmwiki/pmwiki.php?n=Main.Safety>

There are a number of procedures that reduce the risk to paddlers during the Wednesday night time trial:

- Lane Cove River Kayakers provides pre-event and event risk management (see section 2).
- The environment is scouted prior to and closely observed during the time trial.
- Computer based registration and tracking using boat numbers is used to monitor the status of each paddler at the start and finish of the time trial as well as at partial lap.
- Start times are reviewed to ensure as far as possible that there is not a large gap between paddlers (so assistance from other paddlers is always close by if needed)
- Protocols and procedures are observed to trigger emergency recoveries and searches as required (see Emergency Procedures).
- The Timing Supervisor has communication with local rescue authorities or emergency services if required, with contact numbers displayed prominently on time-keeping equipment.

1.3 Available safety resources

LCRK has access to a number of safety-related resources:

- Members associated with the medical profession
- First-aid kit in the shed
- Defibrillator (belonging to the Athletics club) which is located in the shower block next to the door to the gymnasium
- The computerised timing system which includes emergency contacts for each member.

The club periodically attempts to identify members that have completed a current, recognised first aid course. The club also occasionally provides first aid training or promotes an accredited first aid course to members.

1.4 Volunteer safety roles for each time trial

Personnel	Number required
Timing Supervisor	1
Timing assistants	1 or 2
Safety Monitors (paddlers with phone and safety pack)	2-3
Immediate safety responders	All paddlers

The nearest committee member, Safety Monitor or Timing Supervisor in the circumstance assumes the coordinating role in any situation that requires decision making.

2 On the day of the time trial (pre-event and event risk management)

2.1 Weather Forecast

A weather forecast is obtained by a nominated LCRK member from the Bureau of Meteorology (BOM) and includes warnings such as for wind, storm, flooding or sewage spills. The report is sent to the committee.

2.1.1 Time trial go / no-go decision-making process

Prior to the time trial, committee members deliberate if the time trial will proceed, or be modified if:

- a) The bureau has forecast winds of great than 25 knots (46km/hr) in the area within 2 hours of the time trial
- b) The bureau has issued any storm or severe weather alert for the area within 2 hours of the time trial
- c) There are adverse heat or smoke conditions likely to impact some paddlers.
- d) Other relevant factors such as localised flooding

2.1.2 Weather Condition Signage

Signage is added at the shed or pontoon if adverse weather conditions are forecast.

2.2 Local Environmental Survey

LCRK personnel coordinate a survey (hazard identification and risk assessment) of the course area and start / finish region periodically and after severe weather anomalies. This includes:

- a) Inspection of the course (for hazards, shifting and new sand bars, etc)
- b) Inspection of the navigation markers and course buoys
- c) Check for flooding and abnormal fast river flow
- d) Check for sewage overflow into Lane Cove River
- e) Check for bush fire hazards (smoke, poor air quality, fire, proximity of firefighting activities)

2.2.1 Time trial course modification process

- a) Prior to the time trial, committee members deliberate if the trial will be modified to allow the time trial to safely proceed.
- b) River hazards are marked as appropriate or removed or the course modified to address factors for time trial conditions

2.3 Information provided to the Timing Supervisor

The following contact information is provided to the Timing supervisor:

- North Sydney Harbour Water Police (02 93207499)
- Emergency Services 000 (Ambulance, Fire brigade, Police)
- For weekend events Marine Rescue (02 9337 5033) (Birkenhead, Port Jackson)

2.4 Equipment provided to Safety Monitors

2 or 3 specific regular paddlers are assigned as “Safety Monitors” for a given time trial.

Safety Monitors are provided a safety pack that includes:

- Flip top mobile phone with button keyboard and pre-programmed numbers
- Small torch
- Space blanket
- Waterproof pouch



3 LCRK Time Trial - Risk Register and Controls

This section details the potential risks faced by paddlers during the LCRK Time Trials together with the controls employed to manage those risks.

3.1 Environmental risks

Inherent risk (what can happen if no controls are put in place)	Likelihood	Consequence	Inherent Risk level	Controls implemented	Residual Risk level (after controls are in place)	Person(s) responsible
Forecast storm or other severe weather event	Likely	High	High	Deliberation by the committee prior to the Time Trial. Possibility of using 6km course or postponing or cancelling. Any decision concerning lightning needs to be cognisant of any actual or forecast lightning in the vicinity (regardless of size), given the possibility of smaller storm cells combining into larger cells.	Low	Committee

Inherent risk (what can happen if no controls are put in place)	Likelihood	Consequence	Inherent Risk level	Controls implemented	Residual Risk level (after controls are in place)	Person(s) responsible
Storm – lightning (not forecast)	Possible	Catastrophic	Extreme	If Time Trial not started, postpone or cancel Time Trial. If Time Trial under way and lightning in the vicinity, redirection to shore.	Low High	Committee Paddlers
Extreme winds (not forecast)	Possible	Moderate	Moderate	Shelter on nearby shore.	Low	Paddlers
Extreme heat or smoke conditions or fire	Possible	Moderate	Low	Deliberation by the committee prior to the Time Trial.	Low	Committee
Extreme cold	Possible	Moderate	Low	Deliberation by the committee prior to the Time Trial. Paddlers to wear appropriate clothing	Low	Paddlers
State of the river - pollution	Possible	Minor	Low	Deliberation by the committee prior to the Time Trial. Paddlers advised in registration email (if LCRK is made aware)	Low	Committee

3.2 Human risks

Inherent risk (what can happen if no controls are put in place)	Likelihood	Consequence	Inherent Risk level	Controls implemented	Residual Risk level (after controls are in place)	Person(s) responsible
Capsized paddler impacted by cold water temperature	Likely (during winter months)	Minor	Moderate	<p>As per current NSW maritime laws, all canoe and kayak paddlers are required to wear a life jacket and it is recommended that all surf ski paddlers do the same.</p> <p>Other paddlers to assist (stay until capsized paddler is in their boat and able to paddle).</p> <p>Initiate emergency services procedure if required.</p>	Low	Paddler
Paddler collisions at night, or unable to see paddlers at night	Likely (during winter months)	Minor	Moderate	<p>All paddlers to display white front light and red rear light. Light to be of low luminosity to avoid blinding oncoming paddlers. Purpose of light is to allow boat to be seen on the water, NOT to provide vision for the paddler.</p> <p>Regular reinforcement to paddlers to “stay right”.</p>	Low	Paddler

Inherent risk (what can happen if no controls are put in place)	Likelihood	Consequence	Inherent Risk level	Controls implemented	Residual Risk level (after controls are in place)	Person(s) responsible
Critical fatigue	Unlikely	Moderate	Moderate	Other paddlers to assist.	Moderate	Other paddlers
Major injury - conscious	Unlikely	Major	High	<ul style="list-style-type: none"> Follow Emergency Procedure 4 	High	Other paddlers
Major injury - unconscious	Rare	Catastrophic	High	<ul style="list-style-type: none"> Follow Emergency Procedure 4 	High	Other paddlers

3.3 On-water risks

Inherent risk (what can happen if no controls are put in place)	Likelihood	Consequence	Inherent Risk level	Controls implemented	Residual Risk level (after controls are in place)	Person(s) responsible
Collision between boats (paddlers and other craft)	Possible	Moderate	Moderate	<p>Paddlers reminded that waterway is not closed, and other traffic could be present, and rules of navigation must be adhered to.</p> <p>Regular reinforcement to paddlers to “stay right”.</p> <p>Deliberation by the committee prior to the Time Trial if there is expected to be significant traffic from other boats.</p>	Low	Paddlers
Collisions between boats and river obstacles	Possible	Minor	Low	<p>River obstacles to be clearly marked on map displayed in club house.</p> <p>Other paddlers to assist those who collide with obstacles.</p>	Low	Paddlers
Capsize	Likely	Insignificant	Low	<p>Safety Craft to assist recovery if paddler is not able to self-recover.</p> <p>Paddlers are required to stop and assist</p>	Low	Other Paddlers

Inherent risk (what can happen if no controls are put in place)	Likelihood	Consequence	Inherent Risk level	Controls implemented	Residual Risk level (after controls are in place)	Person(s) responsible
Oyster laceration	Possible	Moderate	Low	Risk area to be identified (course map)	Low	Paddlers
Fish hooks lacerations	Possible	Moderate	Low	Risk area to be identified (course map)	Low	Paddlers
Crash into navigation buoys	Possible	Moderate	Low	Risk area to be identified (course map)	Low	Paddlers

TERMS AND DEFINITIONS USED

RISK Definition (Likelihood)

LEVEL	DESCRIPTOR	LIKELIHOOD
A	Almost certain	Is expected to occur during this event
B	Likely	Will probably occur during this event
C	Possible	Might occur at some time (perhaps every 2-3 years)
D	Unlikely	Could occur at some time (perhaps every 4-10 years)
E	Rare	May occur only in exceptional circumstances (in more than 10 years)

Definition of the most likely consequence

LEVEL	DESCRIPTOR	MOST LIKELY CONSEQUENCE IF THE RISK OCCURRED
5	Catastrophic	Possible major injury to paddlers requiring hospitalisation.
4	Major	Possible injury requiring ambulance.
3	Moderate	Possible minor injury requiring first aid attention.
2	Minor	Minor injury not requiring first aid
1	Insignificant	Self / Assisted recoverable and manageable incidences.

Probability Matrix

Likelihood	Consequences				
	Insignificant 1	Minor 2	Moderate 3	Major 4	Catastrophic 5
A (almost certain)	Moderate risk	Moderate risk	High risk	Extreme risk	Extreme risk
B (likely)	Low risk	Moderate risk	High risk	Extreme risk	Extreme risk
C (possible)	Low risk	Low risk	Moderate risk	High risk	Extreme risk
D (unlikely)	Low risk	Low risk	Moderate risk	High risk	High risk
E (rare)	Low risk	Low risk	Low risk	Moderate risk	High risk

KEY:

Extreme risk	Cancel time trial
High risk	Attention needed. Consideration to cancel time trial
Moderate risk	Requires constant vigilance during time trial
Low risk	Requires monitoring during time trial

EMERGENCY PROCEDURE 1 - NON-CRITICAL

The following table and explanatory notes detail the actions to be taken in the event of identified situation.

Event	Action	By	Notes
Capsize	Attempt remount	Impacted paddler(s)	Remount on the water or egress to bank for reentry. A bank is within 50m throughout the course.
		Assisting Paddler	Other paddlers are required to assist Assisting paddler must stay with impacted paddler until they have successfully remounted, even if the impacted paddler say that they are OK
Failure to remount / remain mounted	Maintain contact with boat	Impacted Paddler	Paddler to indicate assistance required by raising paddle vertically. Paddler to swim boat ashore and re-enter.
		Assisting Paddler	Other paddlers are required to assist. The assisting craft is required to remain with the capsized paddler even when they say they are OK. Ensure that the information is passed to the time keepers

EMERGENCY PROCEDURE 2 LOST PADDLER SEARCH

All paddlers are monitored via the Time Trial timing and control system which records the progress and expected finish time of each paddler and their actual finish.

If a paddler is overdue search procedures are enacted.

1 Overdue Paddler

A paddler is deemed to be overdue if:

- a) He/she has not returned to the start/finish point,
- b) He/she has not notified the timekeepers of his/her intention to return by 8.15pm.
- c) He/she is more than 15 minutes overdue from their calculated return time

1.1 Search Controller

The following personnel typically fulfil the role of Search Controller. Circumstances will dictate the appropriate person:

- a) Club President
- b) Other committee members
- c) Timing Supervisor or assistants

1.2 Rescue Kit

A rescue kit, packed in a dry-bag and comprising the following items, shall be available for search teams: One is with the time keeper, the other in the inner shed

- 1. First Aid kit
- 2. Torch
- 3. Waterproof mobile phone pouch
- 4. Map including emergency extraction points
- 5. Emergency Space Blanket
- 6. Tape and Towline,
- 7. Whistle,
- 8. Copy of procedure (Appendix 2)

1.3 Search Procedure

- 1. In adverse weather conditions, the Search controller must call emergency services immediately (Water Police - 02 93207499).
- 2. A search party comprising 2 teams of at least 2 boats per team shall be appointed.
- 3. The last known whereabouts of the missing paddler shall be determined if possible.
- 4. The search plan can be modified based on information available from the timekeeping system about the paddler's last known position (i.e. upstream or downstream).

5. One team shall be nominated as the “downstream team” and shall search from the launching pontoon to Figtree Bridge and return.
6. The other team shall be nominated as the “upstream team” and shall search from the launching pontoon to Fullers Bridge and return.
7. Both teams shall be provided with the rescue kit which should be supplemented with a mobile phone.
8. The search controller shall have a mobile phone and the relevant phone numbers shall be exchanged between the teams and the controller.
9. The controller shall have a list of emergency phone numbers, e.g. Water Police, Ambulance etc.
10. If safe to do so, search teams shall depart at the instruction of the Search Controller.
11. The upstream team shall continue downstream when the upstream leg has been satisfactorily searched. The intention here is to meet the downstream team on their return from Figtree Bridge.
12. The Search Controller shall decide the frequency of communication required. For example, get the teams to report back when they have reached certain landmarks.
13. If the paddler is located, the controller is to be immediately notified of the paddler's condition and determine what steps are required to get the paddler back to the launching pontoon.
14. If the paddler needs medical attention, the Police and Ambulance are to be called immediately. The search party is to remain with the paddler.
15. If the missing paddler is not located within 30 minutes, the Search Controller must call emergency services.
16. If both teams return to the launching pontoon without the missing paddler, the controller shall immediately notify the authorities and send the search teams to continue the search in the appropriate areas.

EMERGENCY PROCEDURE 3 LIGHTNING OR EXTREME WEATHER EVENT

A time trial must not go ahead if deemed unsafe as per section Weather Forecast.

In the event that an unforeseen extreme weather event does occur during a Time Trial, the following actions are followed:

Event	Action	By	Notes
Lightning storm	<ul style="list-style-type: none"> Direct all paddlers away from path of storm 	Timekeeping Supervisor	<p>Each group of paddlers to be directed to the nearest shore away from the storm centre</p> <p>In the event of an injured paddler, follow procedure Emergency Procedures 4: Serious Injury or Medical Episode</p>
Extreme weather – resulting in mass capsizes	Paddlers to stay with boat and swim to nearest bank (50m max)	Paddlers	<p>If possible, alert Timekeeping Supervisor . Once passed and safe to do so, return to the timekeepers.</p> <p>In the event of an injured paddler, follow procedure Emergency Procedures 4: Serious Injury or Medical Episode</p>

EMERGENCY PROCEDURE 4 SERIOUS INJURY OR MEDICAL EPISODE

Timekeeping Supervisor and Safety Monitors are briefed on procedures to follow for calling ambulance and giving directions for ambulance access.

Contact should be made with the paddler's emergency contact per the details in the computerised timing system.

The following actions are followed (with reference to the available resources at the front of this document):

Event	Action	By	Notes
Serious injury - Off Water Possible events: <ul style="list-style-type: none">• Injury• Anaphylactic episode• Asthma attack• Hypothermia• Stroke• Heart episode• Epileptic episode	<ul style="list-style-type: none">• Responsible person to assess to the best of their ability.• If further attention is required, Emergency Services are to be called to the site• Responsible person must stay with the injured person until emergency services arrive and relieves them.	Responsible person	Responsible person preferably to have first aid skills and/or qualifications.

Event	Action	By	Notes
<p>Serious injury - On Water</p> <p>Possible events:</p> <ul style="list-style-type: none"> • Injury • Anaphylactic episode • Asthma attack • Hypothermia • Stroke • Heart episode <p>Epileptic episode</p> <p>Injury:</p> <ul style="list-style-type: none"> • Lacerations • Collisions 	<ul style="list-style-type: none"> • Other paddler to make contact with Timekeeping Supervisor, who assesses situation and decides on whether Emergency Services are required. • Agree on emergency extraction point. • Timekeeping Supervisor to contact Emergency services and give direction to Emergency Extraction point. • Nominated person to apply initial first aid if instructed. • Other paddler to summons nearby paddlers to form a Rescue crew, or to contact Timekeeping Supervisor to send a Rescue crew • Rescue crew to take patient to Emergency Extraction point and wait for Ambulance. 	Other paddlers	<p>A map is located in the clubhouse showing emergency extraction points with their street address/GPS location. Safety Monitors also carry a copy of this map.</p>

EMERGENCY EXTRACTION POINTS MAP

Below is a map showing possible Emergency Extraction Points. Note that upstream from the pontoon to Fuller's Bridge, has access via Wirong Ramp and Greens Flat (100m downstream from Fuller's Bridge). There is no access at Fullers Bridge. Common sense should prevail in the event for example that an incident occurs close to a private pontoon.

