

MCIB

Marine Casualty Investigation Board
Bord Imscrúdú Taismí Muirí



**REPORT INTO INCIDENT
INVOLVING AN
OLYMPIC STYLE ROWING BOAT
NEAR THE SALMON WEIR
THOMONDGATE, LIMERICK,
23 FEBRUARY 2019**

**REPORT NO. MCIB/286
(No.3 OF 2021)**

The Marine Casualty Investigation Board (MCIB) examines and investigates all types of marine casualties to, or on board, Irish registered vessels worldwide and other vessels in Irish territorial waters and inland waterways.

The MCIB objective in investigating a marine casualty is to determine its circumstances and its causes with a view to making recommendations to the Minister of Transport - for the avoidance of similar marine casualties in the future, thereby improving the safety of life at sea and inland waterways.

The MCIB is a non-prosecutorial body. We do not enforce laws or carry out prosecutions. It is not the purpose of an investigation carried out by the MCIB to apportion blame or fault.

The legislative framework for the operation of the MCIB, the reporting and investigating of marine casualties and the powers of MCIB investigators is set out in the Merchant Shipping (Investigation of Marine Casualties) Act, 2000.

In carrying out its functions the MCIB complies with the provisions of the International Maritime Organisation's Casualty Investigation Code and EU Directive 2009/18/EC governing the investigation of accidents in the maritime transport sector.



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Glossary of Abbreviations and Acronyms

AGS	An Garda Síochána
C	Celsius
CGR	Coast Guard Radio
CoP	Code of Practice: The Safe Operation of Recreational Craft (2017) ¹
CPR	Cardiopulmonary Resuscitation
CRBI	Community Rescue Boats Ireland
ESB	Electricity Supply Board
ETA	Estimated Time of Arrival
FISA	Federation Internationale des Societes d’Aviron (World Rowing Federation-the international governing body for rowing)
IARU	Irish Amateur Rowing Union
IMA	Irish Maritime Administration
IMO	International Maritime Organisation
IRCG	Irish Coast Guard
LAFB	Local Authority Fire Brigade
LOA	Length Overall
MCIB	Marine Casualty Investigation Board
MN	Marine Notice
MOP	Member of the Public
MRCC	Marine Rescue Coordination Centre
MRSC	Marine Rescue Sub-Centre
NEOC	National Emergency Operations Centre
NGB	National Governing Body
PIW	Person in the Water
Quad	Olympic style coxed quadruple scull (rowing boat with four rowers and a coxswain)
RTB	Returned to Base
RI	Rowing Ireland
SITREP	Situation Report
S.I.	Statutory Instrument
SRU	Search and Rescue Unit
UK	United Kingdom
UTC	Co-ordinated Universal Time
VHF	Very High Frequency
Kilogram	kg
Kilometres	km
Kilowatts	kW
Litres	lts
Metres	m
Nautical miles	NM

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1. SUMMARY

- 1.1 On Saturday 23 February 2019 at approximately 09.30 hours (hrs), a rowing boat with five young persons (aged 12-13 years) (“the crew”) was launched from Athlunkard Boat Club slipway on the Abbey River, a tributary of the River Shannon in Limerick City with the purpose of carrying out a training session on the River Shannon. A coach accompanied the rowing boat, in a Safety Boat.
- 1.2 At approximately 10.15 hrs the rowing boat got into difficulty, struck some midstream supports of Thomond Weir, overturned and the five crew were thrown into the water. A member of the public alerted the rescue authorities and a rescue operation commenced; primary responder being the Local Authority Fire Brigade’s (LAFB) inflatable boat “Fire Swift”² which was exercising in the locality.
- 1.3 Four crew were rescued from the water by the Coach in the Safety Boat. A fifth young female rower was entangled with the boat and submerged underwater but freed after intervention by the “Swift Rescue” boat’s crew. The Casualty was treated on “Swift Rescue” and transported ashore and hospitalised.

Note: All times are local time = Co-ordinated Universal Time (UTC).

2. In this report the inflatable boat designated “Fire Swift” by Limerick Fire and Rescue (LAFB) and operated by Limerick Fire and Rescue personnel is also referred to as “Swift Rescue” by witnesses and “Limerick Fire boat” in the IRCG SITREP.

2. FACTUAL INFORMATION

- 2.1 The overturned rowing boat was an Olympic style rowing boat, otherwise known as a ‘Quad’, owned and operated by Athlunkard Boat Club (“The Club”), founded in 1898 is located on the O’Dwyer Bridge just outside Limerick City. The Club has a number of Olympic style rowing boats of various sizes categorised by the number of rowers in the boat. A Quad in this case has four rowers and one coxswain steering the boat, a total of five crewmembers.

See Appendix 7.1 Quad “*Louie Murnane*”.

See Appendix 7.2 Athlunkard Boat Club Location.

- 2.1.2 Crew sitting positions are as follows:

Rower seat positions are numbered 1 to 4; seat position number 4 (bow) being most forward and seat position number 1 (stroke) being most aft and located directly in front of the coxswain whose position is the aftermost crew seat.

Each rower position is fitted with a sliding fore and aft seat with fixed footrests comprising fitted shoes with quick release Velcro type fasteners. Aluminium outriggers complete with quick release oar rowlocks are fitted to port and starboard of each rower, i.e., each rower operates two oars.

See Appendix 7.3 Quad Crew Seating Arrangement.

- 2.1.3 The rowing Quad “*Louie Murnane*” was lightly constructed as is usual for boats of this type, using various synthetic materials, the principle being a lightweight honeycomb core sandwich with epoxy resin skins providing the waterproof membranes interior and exterior. Reserve buoyancy is provided by one sealed buoyancy compartment in the bow with four double bottom compartments extending the length of the boat and one full height buoyancy compartment at the stern; these compartments are fitted with screwed hatch lids to aid interior inspection.

- 2.1.4 Quad “*Louie Murnane*” was delivered to the Club in 2001 from its United Kingdom (UK) manufacturer, Janousek Racing Boats Ltd.

See Appendix 7.4 Quad “*Louie Murnane*” Manufacturers Plate.

2.2 Vessels

2.2.1 The Rowing Boat:

Name:	<i>“Louie Murnane”</i> .
Type:	Olympic style coxed quadruple scull (Quad).
Builder:	Janousek Racing Boats Ltd., Weybridge, Surrey, England, UK.
Hull Identification Number (HIN):	20977.
Construction:	Epoxy resin honeycomb sandwich between epoxy resin skin membranes.
Length Overall (LOA):	12.8 metres (m).
Beam of Hull:	0.51 m.
Max Beam:	1.65 m.
Height (floor to topside):	0.35 m.
Crew Capacity:	Four rowers plus one coxswain.
Safety Features:	Six sealed compartments providing reserve buoyancy. Fitted bow ball.
Ownership:	Athlunkard Boat Club.
Area of Operations:	River Shannon and tributaries local to Limerick City.

The casualty boat had five crew (four rowers and one coxswain), each rower seated in-line facing towards the stern and operating a pair of oars (one each side) while the coxswain sat in the stern, facing forward and steering the boat using a cable system linked to a quadrant operated rudder at the rear end of the boat.

See Appendix 7.3 Quad Crew Seating Arrangement.

2.2.2 The Safety Boat:

Name:	<i>“Safety Boat”</i> .
Manufacturer and Model:	Linder 400 Sportsman.
Type and Construction:	Aluminium monohull, hard-chine boat.
Length Overall:	4.01 m (manufacturers website information).

Beam:	1.64 m (manufacturers website information).
CE Design Category:	‘C’ i.e. voyages on coastal waters, large lakes, bays, estuaries or rivers, where wind force of up to force six on the Beaufort scale and significant wave heights of up to 2 m may be experienced.
Maximum Persons (carried):	Four persons and maximum weight 487 Kilogram (kg) (marked on CE plate).
Rescue Equipment:	One throwing lifebuoy with 3 m of rope tied to the boat. One pair of oars. Engine kill cord. Personal Flotation Device (PFD) worn by the Coach.
Propulsion:	Outboard petrol engine - Yamaha 4-stroke 15 HP.
Ownership:	Athlunkard Boat Club.
See Appendix 7.5 Safety Boat and Safety Boat CE Plate.	

2.3 Quad Crew and Safety Boat Crew Particulars

2.3.1 Quad Crew:

Coxswain:	12 years age, experienced trainee, joined Athlunkard Boat Club September 2018.
Rower No.1 (stroke):	12 years age, experienced trainee, joined Athlunkard Boat Club September 2018.
Rower No.2:	13 years age, novice, first day rowing on the river, although had been on the water before, joined Athlunkard Boat Club around Christmas 2018.
Rower No.3 (Casualty):	12 years age, novice, some previous rowing experience, joined Athlunkard Boat Club around Christmas 2018.
Rower No.4 (bows):	12 years age, experienced trainee, 2018 summer camp attendee.

2.3.2 Safety Boat Crew:

Coxswain:	Adult, Coach.
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Completed Rowing Ireland (RI) Introduction to Rowing Coaching Course (2018).

Ex-Slua Muiri (Naval Reserve) member five-six years: Gemini Coxswain course.

Qualified First Aider, (through the Naval Service and Red Cross courses).

Completed Child Safeguarding Training course with Cork County Council in November 2014 and renewed in 2019.

RI Garda vetted.

Experienced rower since teenager.

Joined Athlunkard Boat Club in 2016 as a general helper and rigger. Became interested in coaching younger crews prior to completing RI's Introduction to Rowing Coaching Course in 2018. Coaching since then up to 10-15 hours per week with Athlunkard Boat Club.

2.4 Safety Equipment Onboard Quad and Safety Boat

2.4.1 Quad:

The Coxswain was wearing a PFD as recommended in Code of Practice (CoP): The Safe Operation of Recreational Craft (2017) at chapter 8 paragraph 8.2, and as set out in the Club's Health and Safety Policy³. The crew were not wearing PFDs.

2.4.2 The relevant regulations for the use of PFDs in recreational craft are set out in Statutory Instrument (S.I.) No. 921 of 2005 Pleasure Craft (Personal Flotation Devices and Operation) (Safety) Regulations 2005 (amended by S.I. No 349 of 2012) ("the Regulations") with guidance provided by Marine Notice (MN) 10 of 2016.⁴

A "suitable personal flotation device" means a personal flotation device—

- (a) which has on it the CE conformity marking consisting of the initials "CE" taking the form of the specimen set out in Annex IV to Council Directive 89/686/EEC of 21 December 1989 (as amended by Council Directive 93/68/EEC of 22 July 1993 and Council Directive 96/58/EC of the European Parliament and the Council of 3 September 1996).

3. At appendices 7.10 and 7.12

4. For more detailed information on lifejackets and buoyancy aids, see Marine Notice No. 45 of 2012 (Lifejackets and Buoyancy Aids). Marine Notice No. 39 of 2013 (Wear a Personal Flotation Device (PFD) and increase your chance of survival in the event of entering water) and Marine Notice No. 48 of 2015 (Personal Flotation Device (PFD) Requirements) provide information on the wearing and carrying of PFDs in the fishing and commercial vessel sectors.

(i) which is sufficient to give a person using it a positive buoyancy in waters which are likely to be encountered where the vessel on which it is required to be used or to be available for use is reasonably likely to be,

(ii) which is appropriate to the body weight of the person who is to wear it,

and/or

(b) which has on it the mark of conformity which must take the form of the specimen set out in Annex D to Council Directive 96/98/EC of 20 December 1996 (as amended by Commission Directive 98/85/EC of 11 November 1998, Commission Directive 2001/53/EC of 10 July 2001, Commission Directive 2002/75/EC of 2 September 2002, Directive 2002/84/EC of the European Parliament and of the Council of 5 November 2002 corrected by Corrigendum of 10 September 1997 and Corrigendum of 29 August 1998).

Marine Notice 10/2016 sets out that *“The term “personal flotation device” (PFD) covers all forms of lifejackets and buoyancy aids which, when correctly worn and used in water, will provide buoyancy and increase the likelihood of survival. A lifejacket is designed to prevent drowning and must be capable of returning the user to the surface as quickly as possible and of keeping the person afloat, permitting breathing while waiting for help. Buoyancy aid clothing ensures a degree of buoyancy and support in the water while enabling the user to swim or take action to escape from danger.”*

The Regulations create an offence where a regulatory PFD is not worn and apply to pleasure craft (as defined) being operated in Irish waters (save where being used in emergencies or law enforcement) and to –

“(a) any person on board such craft, and

(b) any person being towed by such craft or on board a vessel or object of any kind, being towed by such craft.”

The Regulations however also provide that they do not apply (other than Regulations 8 and 9 which relates to alcohol consumption) to *“rowers in boats which are–*

(a) designed and specifically used for rowing in boat races and which are capable of being entered into regattas or other events recognised by the Irish Amateur Rowing Union, and

(b) of a design and type in respect of which events are held in the Olympic Games or other international rowing regattas.”

These boats are described in the Regulations as craft designed and specifically used for rowing in boat races and capable of being entered into regattas or other events recognised by the Irish Amateur Rowing Union (IARU), and also events held

in the Olympic Games or other international rowing regattas. The application and interpretation of the Regulation to this marine casualty is addressed later in this report.

2.4.3 The Safety Boat had the following equipment onboard:

- Engine kill cord for use by the engine operator.
- Lifebuoy (1) attached by 3 m rope to the boat.
- Paddles (2).
- PFD worn by the Coach.

2.5 Voyage Particulars

Rowing from Athlunkard Boat Club (on the Abbey River) to the River Shannon, thence upriver to an area known as ‘the Huts’ and downriver to the area upstream of Thomond Weir to turn around and returning to Athlunkard Boat Club on completion of the training session. Distance approximately six kilometres (kms).

See Appendix 7.6 Athlunkard Boat Club Training Area.

2.6 Type of Casualty

This was a marine casualty resulting in serious injury to a person and the loss of a vessel.

Activity: Rowing training session in an Olympic style boat.

Consequences: Life changing injuries to a minor (the Casualty) and loss of the rowing boat.

2.7 Environmental Conditions

Location: Thomond Weir, Thomondgate, Limerick.

See Appendix 7.7 Photographs:

Thomond Weir - Upstream View (north side).

Thomond Weir - Downstream View (south side).

Thomond Weir - Support Spans.

Boat Turning Area - Upstream of Thomond Weir.

Weather: Source: Met Éireann (Ref: WS1730/1905_21).

Weather: A weak cold front traversed the area prior to the incident of 23rd February 2019. While a few spots of drizzle or very light rain may have occurred between 07:00 and 08:30 hours, it was dry at 10:00 hours. All the rest of the day was dry with variable cloud and some bright spells.

Temperatures: It was mild. The air temperature was between 12 to 13 degrees Celsius (C).

Wind: Winds from the south were moderate (mean speeds of 10 to 14 knots) or 20 to 24 km/hr. This would have equated to Force 4 on the Beaufort scale. A few infrequent gusts up to force 5 may have occurred.

Visibility: Good.

See Appendix 7.8 Met Éireann Estimate of Weather Conditions in Abbey River.

Weather: Source: Marine Rescue Sub-Centre (MRSC) Valentia SITREP One Routine. DTG 23 1052Z Feb19.

Wind: S force 3.

Water surface: Smooth.

Air Temp: 11.3 degrees C.

Visibility: Good.

Cloud Cover: Overcast/No Rain.

Tide: For Saturday 23 February 2019 at Limerick Dock.

Information Source:
www.tidetimes.co.uk/limerick-dock 20190223

LOW TIDE: 03.02 hrs HEIGHT: 0.30 m

HIGH TIDE: 09.19 hrs HEIGHT: 6.40 m
 Ebb range 6.10 m

LOW TIDE: 15.38 hrs HEIGHT: 0.30 m

HIGH TIDE: 21.49 hrs HEIGHT: 6.10 m

Shannon River Water Flow Rates: The flow rate at Ardnacrusha was full load (245 cubic metres/second) while the combined flow rate at Parteen Weir throughout Saturday 23 February 2019 was at the statutory discharge rate (250 cubic metres per second).

This water flow combines and passes through Thomond Weir.

See Appendix 7.9 Shannon Basin River Catchment.

Total Combined Parteen Weir Flow.

Average Daily Ardnacrusha Flow.

2.8 Shore Authority Involvement and Search and Rescue Response

23 February 2019.

Irish Coast Guard.

SITREP One and Final: Routine 23 1052Z FEB 19.

From MRSC Valentia to MRSC Valentia SITREP Group UIIN0255/19.

Person in the Water (PIW) Limerick City

Identity of Casualty: Rowing Boat.

Position: 52° 40.05N, 008° 37.59W.

Situation: Capsized rowing boat, Limerick City.

Number of Persons: Six.

Assistance Required: Locate and Assist.

Coordinating RCC: Valentia Marine Rescue Coordination Centre (MRCC).

Description of Casualty: Rowing boat crew.

Weather on scene: Wind: 3 S. Sea: Smooth. Air Temp: 11.3°C.

Visibility: Good. Cloud: Overcast.

Precipitation: No rain.

Initial Actions: Tasked Limerick Fire boat from exercise.

Tasked Limerick Community Rescue Boats Ireland (CRBI) and R115 Irish Coast Guard (IRCG) rescue helicopter.

Advised An Garda Síochána (AGS), Fire Control, NEOC (National Emergency Operations Centre).

Search Area: Abbey River, Limerick City.

Additional information:

10.12 hrs 999/Member of the Public (MOP) advise of multiple PIW in Limerick, capsized boat. Tasked Limerick Fire boat from exercise, Limerick CRBI, R115 from exercise, advised AGS and NEOC.

10.28 hrs Limerick Fire boat has recovered one casualty from the water and ashore with rescue crews.

10.30 hrs R115 on scene.

10.31 hrs Limerick Fire boat confirm all persons out of the water.

All Search and Rescue Units (SRUs) stood down and Returned to Base (RTB).

Incident closed.

3. NARRATIVE

Athlunkard Boat Club

3.1 The Club was established in 1898 and has members of all age groups. The Club has a good competitive reputation and is affiliated to RI, the national governing body (NGB) for the sport of rowing in Ireland.

3.2 Athlunkard Boat Club's slipway (for launching and recovering boats) is on the bank of the Abbey River. The Club's rowing area is the Abbey River and out onto the River Shannon and then by turning right, going upriver under the railway bridge and further upriver on the River Shannon to the area known locally as 'the Huts' before turning around and rowing downriver to the turning area immediately upriver of Thomond Weir before turning again and rowing upstream. Upriver and downriver training sessions take place on this stretch of the Shannon River between 'the Huts' and Thomond Weir (the Club's normal training session area).

See Appendix 7.6 Athlunkard Boat Club Training Area.

3.3 This stretch of river is subject to Shannon Estuary tidal flows and river water flows from Ardnacrusha and Parteen Weir on the River Shannon.

3.4 Waterborne training sessions are approximately one and a half hours in duration and timetabled to occur between one and half hours before and one and a half hours after slack water high tide. This is to enable launch and recovery of boats from the Club's slipway on the Abbey River which is influenced by the tide.

3.5 Coaching sessions continue throughout the year. Waterborne activities and training sessions are dependent on prevailing weather conditions, tidal conditions, and coach availabilities. On-water coaching is irregular during the winter period as river and weather conditions are often considered adverse.

3.6 Shannon Basin and River Water Flows, Tidal Conditions, and Weather:

Thomond Weir was constructed in 1938 across the River Shannon between Thomondgate and Kings Island, Limerick City.

See Appendix 7.7 Photographs: Thomond Weir- Upstream View (north side).
Thomond Weir - Downstream View (south side).
Thomond Weir - Support Spans.

In addition to the Shannon Basin catchment surface water flows through Ardnacrusha and the Parteen Weir. Thomond Weir's water flow is influenced by tidal conditions, particularly during spring tides. Flow rates and water levels in the River Shannon are higher in spring and winter months than in summer

months due to seasonal rainfall. The Electricity Supply Board (ESB) confirmed that the flow rate at Ardnacrusha was full load while the flow rate at Parteen Weir into the River Shannon was at the statutory discharge rate throughout 23 February 2019.

- 3.7 On Saturday 23 February 2019 at the time of the incident, a series of high spring tides augmented the Shannon River winter water flows through Thomond Weir. High tide was at 09.19 hrs that morning and the tide would turn and start to ebb shortly after. The incident occurred at approximately an hour to an hour and a half after high tide (ebb tide) when river flow and tidal flow were combined in the same direction and presented a significant body of water flowing through the weir at this particular time of that day.
- 3.8 An estimate of weather conditions by Met Éireann in the Abbey River describes the weather at 10.00 hrs on the 23 February 2019 as being dry conditions with variable cloud and some bright spells. Temperatures were mild between 12 to 13 degrees C. Winds were from the south and moderate with a few infrequent gusts. Visibility was good.

The Incident

- 3.9 In February 2019 the Club was running weekly training sessions on the water because the weather was good. The MCIB learned from interviews of Athlunkard Boat Club coaches that formal structured risk assessments were not carried out or recorded. An informal type of risk assessment was carried out by the Head Coach prior to this training session comprising an assessment of prevailing weather and river conditions and it was agreed with the other two coaches present that the conditions were suitable for rowing. There was no record of risk assessments having been carried out with respect to:
- Water temperature/hypothermia risk.
 - Stronger river currents in river due to seasonal rain.
 - Tidal augmentation of river flow rates particularly at Thomond Weir.
 - Debris in the water.
 - Features of the planned training run such as Thomond Weir.
- 3.10 On the morning of 23 February 2019, the Club's Head Coach (who was also the Club's Safety Officer) after an informal risk assessment and after conferring with the other coaches, considered river and weather conditions were suitable for a junior member coaching session. There is no written record of a risk assessment. The planned days training session was for three quads, each with a mix of novice and junior crewmembers and two safety boats with three coaches in total. They would all launch at approximately 09.00 hrs in order to proceed upriver to 'the Huts' to begin the training runs and thence proceed downriver and turn around before Thomond Weir. Quad "*Louie Murnane*" was attended by one Safety Boat

crewed by one coach. The other two quads were attended by one Safety Boat with two crew coaches onboard.

- 3.11 Usual Quad trainee crew seat positions are as follows: the most experienced crew are positioned as coxswain (aft), then as rower No. 1 and rower No. 4. rower No. 2 and rower No. 3 positions, being in the middle of the boat, are reserved for junior and novice crewmembers. This was the configuration in the “*Louis Murnane*”.

See Appendix 7.1 Quad “*Louie Murnane*”.

See Appendix 7.3 Quad Crew Seating Arrangement.

- 3.12 The rowing experience of the crew of the Quad “*Louie Murnane*” was as follows:
- Rower No. 1, Rower No. 4, and the Coxswain were junior members who had completed the Club’s previous summer camp and were relatively experienced.
 - Rower No. 2 and Rower No. 3 were novice members who had joined the Club around Christmas 2018 and were inexperienced. The Casualty was seated in Rower No. 3 position.

- 3.13 A series of minor technical problems on the Quad delayed the departure of Quad “*Louie Murnane*” and its accompanying Safety Boat from the slipway by approximately thirty minutes with the result Quad “*Louie Murnane*” and its Safety Boat lagged the larger group (two quads and Safety Boat) by approximately thirty minutes and some river distance. The delay did not prompt any further risk assessment of water conditions.

- 3.14 The larger group, rowing upriver, reached ‘the Huts’ and turned around to row downriver. This larger group rowing downriver, passed the Quad “*Louis Murnane*” and its Safety Boat in opposite directions just upstream of the railway bridge. Quad “*Louis Murnane*” was rowing upriver towards ‘the Huts’ as they passed each other. The larger group, reaching the turn-around area above Thomond Weir, turned and rowed back upriver to finish its training session at the Boat Club slipway on the Abbey River. By this time the smaller group had turned at ‘the Huts’ and was rowing downriver. The Coach was unaware that the larger group had finished its training session.

See Appendix 7.6 Athlunkard Boat Club Training Area.

See Appendix 7.7 Photograph: Boat Turning Area - Upstream of Thomond Weir.

- 3.15 Quad “*Louie Murnane*” continued rowing downriver to the turning area immediately above Thomond Weir. The Coach understood that this was the route the earlier first group had taken but did not realise the group had, by this time, completed the course and was returning to the Abbey River, heading for the clubhouse.

- 3.16 Quad “*Louie Murnane*” continued the course and at the point above the Thomond Weir (the turning area), the Coach in the Safety Boat instructed the Quad crew to turn the Quad around in order to reverse course and row back upstream to the Abbey River and Boat Club slipway.
- 3.17 By this time the Shannon River flow was augmented by a strong spring ebb tide and the Quad crew experienced difficulty in turning the boat. The Coach stated that the rowers did not respond adequately to his directions. The river conditions were such that the winter river flow, augmented by the ebbing high spring tide, propelled the Quad downriver at a deceptively fast rate. The crew were unable to turn the Quad around and it rapidly drifted downstream towards the weir propelled by the river current. Realising that the Quad was not going to complete the turn in time before striking the weir span supports the Coach instructed the Coxswain to re-align the boat to go through the weir between the supporting spans of Thomond Weir. Understandably there are varying different recollections from the participants as to precisely how these events unfolded. It was not considered that these were substantial in anyway.
- See Appendix 7.7 Photograph: Thomond Weir - Support Spans.
- 3.18 While the crew attempted this manoeuvre the bow of the Quad made contact with one of the weir's support spans and slewed sideways across the weir. The weir's concrete supports spans are approximately 7 m apart. Quad “*Louie Murnane*” was 12.8 m in length. The Quad breached and overturned across two supports. The force of the water caused the hull of the Quad to fracture (but not separate), at a point 4.9 m from its stern. The crew were thrown into the water. The Quad remained afloat but lodged across two of the weir's supports. Four of the crew surfaced; three climbed onto the upturned hull while one remained in the water and clung on to the Quad's hull according to their Boat Club training. The crewmember at Rower No. 3 position did not surface in the water.
- 3.19 In response to the predicament of the Quad's crew, the Coach in the Safety Boat steered through the weir and turned the boat, bow upstream, to approach the distressed Quad from downstream of the weir. The Coach steered the Safety Boat towards, and between the weir supports holding the Quad and approached the Quad from under the top spans of the salmon weir, making contact with the overturned Quad while under the weir's spans. The Coach was aided in keeping the Safety Boat in this position by the steering wheel which was fortunately stiff in operation and not inclined to move from its ‘set’ position and the engine set in the forward drive position. Seeing the crewmember trapped in the water by the Quad the Coach left his steering position at the console and moved forward towards the bow and, by leaning over the gunwale, was able to reach down to grab and attempt to recover the trapped Rower from the water. However, the Coach found that the Rower was snagged by the Quad and could not be pulled from the water. Initially the Coach thought the Rower was snagged by her coat

but in fact she was snagged by her hair in one of the Quad's outriggers. In order to gain access to remove the coat, the Coach lifted the outrigger with his right hand to change the angle of the outrigger which was keeping the Rower submerged. This action enabled the Coach to raise the trapped Rower to the surface with his other hand (his left hand). At this point the Coach spoke to the trapped Rower who responded twice with his name. Despite persistent efforts by the Coach and a Quad crewmember onboard the upturned Quad they were unable to free the trapped Rower's hair.

- 3.20 At this time two of the remaining Quad crew were on the upturned hull of the Quad, one was in the water assisting with the trapped Rower No. 3 and one other crew was in the water holding onto the Quad. The Coach in the Safety Boat was alongside the trapped Rower attempting a rescue. Then the crewmember holding onto the upturned Quad became detached and was swept through the weir and on downriver. The Coach was now presented with a dilemma; to stay with the trapped Rower or retrieve the drifting crew, who was not wearing a PFD and was in danger of drowning. The Coach considered that, as he had successfully raised the trapped Rower's head above the water surface previously, he did not anticipate any difficulty having to do the same again. Due to this, the Coach released his hold on the trapped Rower, retrieved the crewmember who had gone through the weir and the other crew who was assisting in the water and quickly returned to the trapped Rower. In the meantime, the Quad had overturned further, and the trapped Rower was further submerged under the water. Notwithstanding his efforts the Coach was unable to raise her to the surface again.
- 3.21 Around this time, two members of the public appeared on the overhead span of the weir bridge to assist. One of them climbed down from the weir span to assist in rendering help from the Safety Boat. A member of the public made a 999 call to the emergency services, this was timed at 10.12 hrs. The remaining crew climbed across from the upturned Quad hull to board the Safety Boat.
- 3.22 As this incident was unfolding, the other Safety Boat with the two coaches onboard and the other two quads had returned to the Club slipway along the Abbey River. The coaches were unaware of the emergency downriver at Thomond Weir.
- 3.23 At the weir, the remainder of the crew of the Quad "*Louie Murnane*" with the Coach and a member of the public were all on the Safety Boat attempting to rescue the trapped Rower. The LAFB inflatable boat "*Swift Rescue*" with two crew onboard arrived on scene. "*Swift Rescue*" crew were able to free the trapped Rower by cutting the Casualty's hair away from the Quad. The Casualty was taken aboard "*Swift Rescue*" which immediately departed the scene. A "*Swift Rescue*" crewmember applied cardiopulmonary resuscitation (CPR) to the Casualty as the boat took the Casualty to shore and waiting LAFB paramedics.

- 3.24 After “Swift Rescue” departed the scene with the Casualty onboard, the Coach and remainder of the Quad crew returned to Athlunkard Boat Club. The Coach informed the Head Coach of the incident by mobile phone while en route to the Club. There was no other means of communication available to the Coach. On arrival at the Boat Club slipway the Coach and crew were met by the parents of the crew and an ambulance crew.
- 3.25 Quad “*Louie Murnane*” was recovered from the river the following day, 24 February 2019 and taken by Gardai to a secure storage location.

Emergency Organisations Response

- 3.26 Immediately prior to the incident at Thomond Salmon Weir, LAFB’s inflatable rescue boat “Swift Rescue”, was exercising on the River Shannon in the vicinity of Hellsgate Island, Limerick City. The LAFB had advised the Coast Guard of its exercise and location. On receipt of the emergency call at 10.12 hrs the Coast Guard immediately contacted “Swift Rescue” and tasked it to the location of the incident at Thomond Weir.

See Appendix 7.7 Photograph: Boat Turning Area - Upstream of Thomond Weir.

- 3.27 “Swift Rescue” crew estimate they were on scene by 10.15 hrs. “Swift Rescue” reported that two members of the public were also in attendance on scene: one person was on the weir spans gangway and the other was onboard the Safety Boat assisting the Coach trying to rescue the trapped Rower.
- 3.28 “Swift Rescue” was able to drive in alongside the Safety Boat, under the weir gangway structure and render assistance. A crewmember of “Swift Rescue” used a knife to free the trapped Rower who was then recovered to the boat and began emergency resuscitation of the Casualty. “Swift Rescue” proceeded immediately to its predesignated rendezvous point at St Michael’s Rowing Club slipway where they were met by a fire tender team who carried the Casualty ashore and continued resuscitation until the ambulance arrived.
- 3.29 From the witnesses interviewed in the investigation (and from the Garda statements provided) there was very little difference over the factual description of the events that occurred. There are minor discrepancies between all the statements but these do not affect the overall description of the events set out.

Safety Culture and Safety Management

Club Safety Regime

- 3.30 Athlunkard Boat Club is managed by a small committee and events are run by a number of adult volunteer helpers. Athlunkard Boat Club has a written Health

and Safety Policy. The date of origin of the two page Health and Safety Policy was not determined. The policy does not appear to have been reviewed since its initial publication. No evidence has been provided of this Safety Policy as being taught to new Boat Club members and the Coach professed to not being aware or having seen this policy document.

See Appendix 7.10 Athlunkard Boat Club Health and Safety Policy.

- 3.31 Athlunkard Boat Club operates an Accident/Incident reporting book which is kept in the Boat Club Captain's office and is described as being a "live" document. The book's whereabouts and purpose are not mentioned in the Club's Health and Safety Policy. An Accident/Incident reporting book should provide a reliable instrument that may provide guidance to the organisation and its coaches as to what happened during an incident and how the same incident can be avoided. It is a 'lessons learned' document. While this document was generally known to the coaches who were interviewed, the Coach on the rescue launch was not aware of its existence.

Coaching Requirements

- 3.32 The Club suffers from a scarcity of coaches and helpers. The Club was not only short of available coaches, but this shortage was compounded by the Club's difficulties in funding and recruiting volunteers to progress them into and through the RI coaching scheme. This led to situations where only a few qualified coaches and volunteers were available on training sessions to provide two crew on safety boats. Athlunkard Boat Club Head Coach is the only Level 2 qualified coach in the Club, and he is also the Club Safety Officer. The Club's other coaches have 'Introduction to Rowing Coaching' or Level 1 coaching qualifications.
- 3.33 According to RI's website (www.rowingireland.ie), the hierarchy of RI coaching qualifications follows a progression and start at:
- the foundation course Introduction to Rowing Coaching Course (which is aimed at coaches who have already gained some experience in the sport and wish to improve their coaching skills)
 - this can be followed by a 'Level 1 Coaching Course' which leads to a Level 1 Certification,
 - and thereafter a 'Level 2 Coaching Course' leading to a Level 2 Certification,
 - and finally, the 'Level 3 Coaching Course' (being the most proficient which includes the highest coaching competencies).

See Appendix 7.11 Rowing Ireland Education - Coaching Courses.

- 3.34 The Code of Practice (CoP): Safe Operation of Recreational Craft, 2017, contains a chapter, dedicated to recommendations in respect of the safe operation of rowing boats. It specifically applies to 'Olympic Style' rowing boats, and

addresses requirements for boat construction and equipment, coach/safety boat equipment. The CoP emphasises at part 8.2 which addresses Olympic style rowing boats that *“The following safety points should be adhered to all times. A coach and/or a safety boat should be in attendance at all times. Operators of such safety boats should be suitably qualified and boats should be suitably identified by markings or warning flags to alert other craft in the area that there are rowing boats on the water.”* [underlineation added] It then lists the equipment that should be in a safety boat, which is set out later.

See Appendix 7.12 Code of Practice Chapter 8.

- 3.35 RI published a Safety Policy and a Safety Manual (the versions applicable at the time of the incident being the 2017 editions of each). Both documents record the existence of a prior draft Safety Statement dating from May 2014, and it appears that in 2017 the content was split into the policy and the manual. The Safety Manual and Safety Policy documents are stand-alone documents although the content of the Safety Policy is replicated at the outset of the Safety Manual. These were available on the RI website at the time of incident in 2019. The Manual opens with the content of the Safety Policy, and then sets out the various responsibilities of the RI Safety Committee, club safety officers, coaches, and members. It then sets out sections dedicated to various types of hazards and sets out, in prescriptive terms, under the heading *“Current/Additional Control Measures”* a series of requirements relevant for each hazard types and sets out the entity who has responsibility. The items therefore listed under *“Current/Additional Control Measures”* appear to be intended to be read as matter that RI considered to be mandatory (except where the opposite is made clear). In accordance with the Safety Manual all operators of safety launches should be suitably qualified and have the necessary experience of the *“launch/engine/river/lake”*.

See Appendix 7.13 Extract of Rowing Ireland Safety Manual (May 2017).

- 3.36 The Club Health and Safety Policy states that *“A coach is an adult known to the committee, approved for such by the committee and Garda vetted by Rowing Ireland”*.
- 3.37 The Coach was qualified to Athlunkard Boat Club standards as a coach. He had successfully completed the RI’s Introduction to Rowing Coaching course and was certified as having done so. He was an experienced boat handler and considered a valuable member of Athlunkard Boat Club’s coaching community. RI has an ‘Introduction to Coaching Course’ in the organisations hierarchy of coaching courses on its website.

Risk Assessment

- 3.38 RI coaching courses concentrate on teaching rowing. Safety awareness and safety guidelines, risk assessments and identifying hazards, were not mentioned

in the syllabi for Level 1 to Level 3 coaching courses at the time of this investigation. Athlunkard Boat Club coaches stated that risk assessment was not in the Introduction to Rowing Coaching or the Level 1 coaching courses.

- 3.39 The usual practice prior to a rowing session was for the lead coaches and other coaches present to collectively make an informal (marked by an absence of formality) risk assessment based primarily on prevailing river and weather conditions. Formal (as in a documented form according to an established, recorded, systematic, process of evaluating potential risks in a projected activity) risk assessments were not carried out. The informal assessments were not recorded by the coaches.
- 3.40 During the training session the Coach was not aware of the possible hazard presented by Thomond Weir or the potential dangers arising from the river and tidal conditions prevailing at that time and in that locality. The weir is considered a hazard by the Club. The occasions on which crew travel through the weir are limited to experienced crews and typically when conditions are favorable for this purpose.
- 3.41 The CoP sets out requirement for coaches, coxswains, and crew to be aware of possible hazards or potential dangers arising from tidal, stream or wind that may prevail locally. Furthermore, the CoP contains recommendations that: *“Coaches, coxswains and crew should at all times be aware of local navigation rules, including any possible hazards or potential dangers arising from tidal, stream or wind that may prevail locally.”*
- 3.42 The RI Safety Manual (2017) is specific in the section ‘Responsibilities of the Club Safety Coaches’ where it states that Club coaches will: *“Carry out a risk assessment relevant to the activity proposed to identify any unforeseen hazards. (The assessment will also take into account the ages, abilities and limitations of the personnel involved, together with the water and weather conditions prevailing or facilities available, so that a Safety Plan can be prepared and the programme of activity adjusted to suit.)”*
- 3.43 The World Rowing Federation (Federation International Societies Aviron (FISA)) published ‘Minimum Guidelines for the Safe Practice of Rowing (2005)’, in relation to: Local CoP for hazard identification and prevailing climatic conditions in respect of *“a plan of the local water, drawing attention to local navigation rules, hazards and restricted waters use. Attention should be drawn to any variation in normal procedures that may be necessary due to the state of tide or stream, or other climatic conditions”*.
- See Appendix 7.14 FISA Minimum Guidelines for the Safe Practice of Rowing (2005).
- 3.44 Athlunkard Boat Club has no listed (as in recorded) ‘river bounds’ limiting the

Club's activities up or downriver. The Club's coaches have discretion as to deciding the limits of the Club's training sessions and it was not considered unusual for groups of rowers to act independently of the plan as to the limits of the training session or staying together in a single group for the training session.

- 3.45 Athlunkard Boat Club also does not have a list of river hazards. The Club's position is that coaches are familiar with river navigation and hazards through narrative, discussions, and experience over time. Experience, river knowledge and awareness of the river's hazards are the working criteria for selecting the Club's safety boat crews and coaching staff. Boat crews are introduced to river navigation and hazards by coaches during their training sessions.
- 3.46 Thomond Weir was not considered a hazard by the Club's coaches; passing through the weir would not be considered unusual for them and the weir merely presented an obstacle in the river. The majority stated that going through the weir was routine. The common comment from the coaches was if they missed the turn they would go through the weir and that having to do this was not a problem. The Club on the other hand stated that the weir is considered a hazard by the Club and that the occasions on which crew travel through the weir are limited to experienced crews and typically when conditions are favorable for this purpose. This difference of opinion or assessment of what is or is not a hazard, or under what conditions a feature is a hazard illustrates one of the reasons for effective hazard assessment and uniform sharing of same, and of what conditions might be relevant (as here these included river flows, water conditions and weather). Also given the discretion that rests with coaches to alter training routes the need for uniform hazard identification (including the assessment of conditions) is even more important.
- 3.47 No evidence was provided that evidenced any risk assessment of the conditions and hazards by reference to the skills and experience of each of the crew on each of the three training boats. The rowing experience of junior crewmember novice/trainees varies. Many are introduced to rowing as novices by attending the Club's summer camp. Intakes are irregular; the most recent novice intake prior to the incident started their coaching around Christmas 2018. However, all crew witnesses onboard Quad "*Louie Murnane*" were aware of the emergency procedures associated with a capsized boat. Boat capsize drills are not part of training for the Club's rowing crews due to the dangers in carrying out such an exercise. However, in their initial training novice/trainee rowers are instructed that in a capsize situation trainees should stay with the boat and climb back onboard the hull as soon as possible as standard capsize procedure. This is borne out by the actions of the four crew of the Quad who attempted to stay with it during the incident.

Safety Boat and Safety Equipment

- 3.48 Safety Boat design: per EU Directive 94/25/EC, the CE mark design capacity for

Athlunkard Boat Club's safety launch is four persons and a maximum weight of 487 Kg. The boat did not have the capacity to carry the crew of the Quad (five) plus the single crew of the Safety Boat without exceeding the boats design capacity irrespective of whether the total weight was under 487 Kg.

- 3.49 In accordance with the relevant hazards section, RI's Safety Manual (2017) a safety launch must have sufficient capacity for the transporting of injured crewmembers/rowers to the boathouse.
- 3.50 Equipment: the CoP, Part B, Chapter 8, Section 8.2 "Olympic style rowing boats" states the coach/safety boats should carry the following items of equipment:
- *"Suitable bailer.*
 - *A throw bag with at least 10 m of buoyant line.*
 - *A sound signaling device - air or aerosol power klaxon.*
 - *Thermal exposure blankets.*
 - *Lifebuoys or additional PFD/lifejackets to assist persons in the water.*
 - *Suitable First Aid Kit.*
 - *Anchor and line.*
 - *Knife.*
 - *Engine Kill Cord to be used by engine operator.*
 - *Paddle.*
 - *Suitable handholds fixed to the side of the boat - to assist persons being rescued."*

And the CoP adds that "All participants should be aware of the requirements set out in the Rowing Ireland Water Safety Code." The RI Safety Manual does not include a knife or equivalent in its list of equipment.

- 3.51 The "Current/Additional Control Measures "set out in RI Safety Manual (2017) in respect of rescue launches are:
- *"All launches used will be suitable and safe for the intended task and have sufficient capacity for transporting injured crew members/rowers to the boathouse.*
 - *All launches will be maintained in a safe condition, will be checked regularly and the results recorded.*
 - *All outboards used will be fitted with a suitable "kill cord" which will be worn at all times by the operator while the boat is in motion.*
 - *All operators will be suitably qualified and have the necessary experience of the launch/engine/river/lake.*

- *All launch operators will be trained in first aid and cold water immersion treatment.*
- *Regular training exercises will be carried out of all skills especially water rescue.*
- *All launches will be equipped with a*
 - *Suitable outboard/ engine spares / fuel / anchor and chain/oars/ paddles / bucket / bailer.*
 - *Suitable first aid kit / thermal blankets.*
- *All personnel in the launch will wear approved lifejackets.*
- *All engines will be serviced as per the suppliers instructions.*
- *The guidance in the operator’s handbook will be followed in the event of engine failure.”*

Therefore, in accordance with RI all launches must be equipped with anchor and chain, thermal blankets, bucket or bailer, suitable first aid kit and all personnel in the launch must wear approved lifejackets.

3.52 The FISA publication Minimum Guidelines for the Safe Practice of Rowing (2005) in relation to safety aids to be carried in Coaching/Safety Boat:

- A bailer.
- A horn or similar warning device.
- A grab line at least 15 m long.
- Thermal/exposure blankets.
- Lifebuoys or lifejackets.
- A basic first aid kit.
- A sharp knife.
- An anchor and line.

See Appendix 7.14 FISA Minimum Guidelines for the Safe Practice of Rowing (2005).

3.53 The Club’s Health and Safety Policy states in Part 1 “Equipment”, that “*All equipment must be checked by the crew using the boat before and after use and essential items such as bow balls, hatch covers and heel restraints must conform to the recommendations of Rowing Ireland*”. It also provides at “*Part 3: Safety policy dealing Safety Launch*” under paragraph 3 that “*The safety launch must have a safety bag on board*”. The policy does not state what equipment should be contained in the safety bag.

3.54 On the day of the incident for these training sessions neither of the two club safety boats had safety bags onboard. The Coach stated he never saw a safety bag and was not made aware by the Club of the requirement to have a safety bag. The Safety Boat's safety equipment comprised:

- A lifebuoy attached to a 3 m length of line.
- Two Oars.
- Engine kill cord.
- PFD worn by the Coach.

Therefore, the Safety Boat involved in the incident did not have the following CoP recommended equipment onboard:

- Suitable bailer.
- A throw bag with at least 10 m of buoyant line.
- A sound signaling device - air or aerosol power klaxon.
- Thermal exposure blankets.
- Enough lifebuoys or additional PFD/lifejackets to assist persons in the water.
- Suitable First Aid Kit.
- Anchor and line.
- Knife.
- Suitable handholds fixed to the side of the boat - to assist persons being rescued.

As noted above the RI list does not include any requirement for a knife or equivalent.

3.55 The importance of the Safety Boat and coaches for Athlunkard Boat Club training sessions for inexperienced rowers was emphasized clearly in the Club's Health and Safety Policy at Part 1 which states: "*No inexperienced rowers/sculler may take to the water without supervision of a competent club approved coach*" and at "Part 3 Safety Policy Dealing Safety Launch" [sic] provides "*All crews must keep close to safety launch and obey directions of coach when on the water*", and also set out that rowers were not to go on the water if a safety launch was not available. In addition, for junior members the presence of a club coach was mandatory for training sessions

3.56 Equipment safety checks are carried out on each rowing boat at every stage as the boats leave the boat house, assemble on the slipway and finally at launching, by the attending coaches.

There are no clear instructions in the Club's Health and Safety Policy regarding responsibility for equipment safety checks on the safety boats. The Policy under Part 1 Equipment: states that "*All equipment must be checked by the crew using*

the boat before and after use and essential items such as bow balls, hatch covers and heel restraints must conform to the recommendations of Rowing Ireland". The terminology implies the equipment check is directed at rowing boat crews for the rowing boat's equipment. There are no instructions in the Safety Policy specifically referring to safety equipment checks onboard safety boats or responsibility for the conduct of checks.

Safety boats are launched by the trainees, and nobody is nominated to check the safety equipment onboard.

- 3.57 Athlunkard Boat Club coaches were unaware of the CoP or its content relating to rowing activities including equipment. Athlunkard Boat Club's Health and Safety Policy does not make reference to, or reflect the requirements contained within the CoP.

Risk Assessment: Hypothermia

- 3.58 The potential for the onset of hypothermia in river boat users is always present, but in Ireland the sea temperature rarely exceeds 15 degrees C, even at the height of summer and early September when it is at its highest. For people not used to cold water, i.e. a temperature less than 15 degrees C, sudden immersion is associated with two problems, either of which may result in drowning. On initial immersion, the shock of the cold water coming in contact with the skin can result in incapacitation and drowning in the first two/three minutes. For those that survive this and are unable to get out of the water quickly, progressive body cooling leading to hypothermia will follow in time. The rate of onset will depend on water temperature and the protective measures taken to reduce body cooling.

Signs of "Cold Shock" are initial deep gasping, uncontrollable rapid breathing with possible dizziness and pins and needles, panic and a large increase in heart rate and blood pressure. The dangers are inhalation of water, drowning and stroke or heart attack.

Hypothermia occurs when the body temperature drops by 2 degrees C. It takes only 15/30 minutes in cold water before the temperature of the heart, brain and internal organs begins to drop. Skin and muscle temperatures cool far quicker resulting in impaired ability to swim or engage in early lifesaving actions. The main dangers are impaired muscle coordination affecting early vital lifesaving actions involving hands, loss of consciousness, drowning, cardiac arrest and death.

- 3.59 Marine Notice No. 39 of 2013 (Wear a Personal Flotation Device (PFD) and increase your chance of survival in the event of entering water) sets out details for PFDs and emphasizes that wearing one correctly can increase the chances of

survival sevenfold, noting that cold water shock can set in within three/five minutes of entering the water, swimming failure within three to 30 minutes and hypothermia after 30 minutes.

Hypothermia is recognised in RI's Safety Manual (2017) - Hazards Training Activities section and carries a moderate risk rating. Control measures outlined include:

- *All training teams/personnel will be instructed in the prevention, recognition and treatment of hypothermia.*
- *Suitable protective clothing must always be worn.*
- *Sufficient thermal blankets will be carried on the launches for use in an emergency.*

- 3.60 Quad crew statements taken after the incident by the Gardai indicate that the crew were not instructed on hypothermia prior to setting out and that clothing worn by the young crew was light and consisted mainly of hoodies, leggings, tee-shirts, and a jacket for some. The girls had their hair tied back; the Casualty's hair was tied back in a ponytail according to the Quad crew statements (the Coach has a different recollection). There were no thermal blankets carried onboard the Safety Boat during the training session.

Rowing Ireland (RI) - Coaching and Rowing Standards

- 3.61 RI is the accredited national governing body for rowing as a sport in Ireland. According to the organisation's website (www.rowingireland.ie), at the time of investigation, there were 73 rowing clubs affiliated to RI. The organisation had almost 4,000 registered racing members in affiliated clubs and universities. Athlunkard Boat Club is affiliated to RI. Olympic style rowing boats are used in the Olympic Games and are governed in Ireland by RI as per paragraph 8.2 of the CoP the use of Olympic style rowing boats. Quad "*Louie Murnane*" was an Olympic style rowing boat.

- 3.62 The RI website set out on the page under Health and Safety⁵ the following:

"Everyone involved in rowing has a duty of care to ensure their actions both on and off the water are conducted in a manner which does not compromise the safety of others. Rowing Ireland has the responsibility to develop and maintain a culture of safe practice to advise all our clubs that they can support everyone involved in the sport in their efforts to achieve this.

All decisions regarding safety at rowing clubs and rowing events should be based on risk management as no safety document can possibly cover all situations. By continually assessing likely risks and taking action to manage

5. <https://www.rowingireland.ie/supporting-our-clubs/health-and-safety/>

them, some generalised standards can be developed, enabling us to provide guidance on how to avoid and take action regarding unforeseen hazardous situations.

All clubs have a responsibility to provide information, education and training about safety to their members. Individual members also have a responsibility to find out, learn, question and implement safety best practice. It is essential that all clubs register their members with Rowing Ireland to ensure full cover for all members. In addition, clubs need to take into account their own local risks and should conduct risk assessments regularly.”

3.63 RI also oversees the development of coaching in the sport through its Coach Education Programme (2019). Coaching courses are developed under the supervision and endorsement of Sport Ireland Coaching which is administered by Sport Ireland (www.sportireland.ie) who monitor the quality of the syllabus and delivery. RI supplements the Coaching Ireland course syllabus with technical content pertaining to rowing. There is no element of risk assessment in the Level 1 to Level 3 Coaching Course syllabi (as per the 2017 syllabi) and therefore is it reasonable to surmise that coaching students would not be made aware of this subject, or the skills associated with risk assessment.

3.64 The RI Safety Policy was published in 2017, and makes various commitments in respect of safety, and in particular the following commitments in respect of:

- Promoting and improving the safety of all its members.
- Enforcing safety rules and regulations.
- The general availability of RI’s Safety Manual.
- Hazards in training activities and risk rating.

The Safety Policy (which is repeated at the start of the RI Safety Manual) goes on to state the following:

“Rowing Ireland is committed to ensuring, promoting and improving the safety of its members, visitors, and to members of the general public.

Member/visitor safety is a matter of major concern to Rowing Ireland and subsequently safety rules and regulations will be strictly enforced.

It is Rowing Ireland policy to comply with the Safety, Health and Welfare at Work Act 2005 & the Safety Health and Welfare at Work (General Applications) 1993 and any other relevant legislation.

Rowing Ireland shall conduct its business, so far as reasonably practicable, in such a manner as not to expose persons to any undue risks that may affect their health and safety.

Rowing Ireland is committed to dealing with all identified hazards, firstly by elimination if possible, by substitution or replacements with less hazardous substances, reduction of members exposure to an internationally acceptable level for the sport and as a last resort the use of personal protective equipment.

Our objectives are to provide a safe and healthy recreational environment for our members, visitors, contractors and members of the public who may be affected by our activities and also to meet our obligations under the Safety, Health and Welfare legislation.

Rowing Ireland shall, as far as reasonably practicable, provide and maintain:

- Place, equipment and systems of sport/recreation that are safe and without risk to health/safety.*
- Sufficient information, instruction, training and supervision to ensure all club members/visitors avoid hazards and contribute positively to their own health and safety while participating in the sport.*
- Consultation and communication with all members/visitors in relation to health and safety.*
- A place of recreation without risk to health and means of entry and exit that are safe and without risk.”*

3.65 RI also published a Rowing Ireland Safety Manual (2017) (Version 1 approved by the RI Board on 1 July 2017). It says of itself:

- “The Safety Manual is aimed at protecting our members, visitors, contractors and members of the public from accidents and ill health.*
- The Safety Manual is available to our members, visitors, outside service providers and inspectors of the Health and Safety Authority.*
- The Safety Manual will be reviewed periodically and updated as required.”*

3.66 The Safety Manual (2017) contains:

- Policy and Safety Statements.
- Responsibilities of the Rowing Ireland Safety Committee.
- Responsibilities of Club Members.
- Responsibilities of Club Coaches.
- Responsibilities of the Club Safety Adviser.
- Responsibilities of the Child Protection Officer.
- Relevant legislation.
- Hazards and Risk Rating.
- Risk Rating Matrix.

The Manual provides it was to be brought to the attention of all employees, members and visitors. It sets out sections dedicated to various types of hazards and, as stated earlier, sets out in prescriptive terms, under the heading “*Current/Additional Control Measures*” a series of requirements relevant for each hazard types, and sets out the entity who has responsibility. The items therefore listed under “*Current/Additional Control Measures*” appear to be intended to be read as matter that RI considered to be mandatory (except where the opposite is made clear). The Manual contains sections specifically focused on hazards, particularly those relating to:

- Boating equipment.
- Lack of local knowledge of River/Lake/Reservoir.
- Rescue launches.

3.67 The Manual describes the responsibilities of the Rowing Ireland Safety Committee as follows:

- a. *Monitoring performance of statement by reviewing incident trends and annual resource management.*
- b. *Revising Safety Manual annually.*
- c. *Ensuring on-going consultations with regional and club safety officers or their representatives.*
- d. *Auditing Rowing Ireland safety procedures.*
- e. *Chase up action, if required.*
- f. *Monitoring club safety officer engagement to ensure compliance.*
- g. *Arranging Safety Courses for members.*
- h. *Organising periodic information workshops with members/officers to clarify requirements for safety manual.*
- i. *Encouraging clubs to report and investigate incidents (accidents, near misses, damage) and ensure that appropriate statutory notifications are properly completed.*
- j. *Taking appropriate action on any safety representations.*
- k. *Estimating annual resource allocation for execution of safety programme.*
- l. *Provide templates for emergency plans and assessments.*
- m. *Identifying training needs and ensuring that these training needs are satisfied.*

- 3.68 The Manual then sets out lists of the responsibilities of Club members, Club Safety Officers, Club coaches. The first three are set out hereafter:

Responsibilities of Club Members

Members are reminded of their responsibilities under the Safety, Health and Welfare Legislation

- *Read and understand Rowing Ireland / club safety manual;*
- *Co-operate with Rowing Ireland / club officers to enable Rowing Ireland / the club to comply with statutory provisions;*
- *Take reasonable care for their own safety, health and welfare and that of others;*
- *Make proper use of all equipment etc.*
- *Make proper use of personal protective equipment;*
- *Report immediately to the club safety advisor, any defect in club house, club equipment, slipway, boats, launches, engines which might endanger the safety, health or welfare of which he/she becomes aware*
- *Refrain from playing dangerous practical jokes or engage in horseplay;*
- *Report any injury to him/herself, which occurs at Rowing Ireland activities, even if the injury does not stop him/her from participating;*
- *Suggest safer methods for our activities*
- *Attend health and safety training provided by the clubs / Rowing Ireland*

Responsibilities of the Club Safety Advisor

1. *The adviser will be fully conversant with the Rowing Ireland Safety Manual.*
2. *Create a 'Live' Risk Assessment Document to assess the risks to club members and visitors both on and off the water.*
3. *Implement the club safety policies and procedures and monitor all aspects of health and safety within the club including adherence to current legislative requirements.*
4. *Advise the club management committee on health and safety requirements, the resources required for their implementation and the on-going reviews.*
5. *Inspect / audit all locations and documentation to ensure that all legislative requirements are met and the necessary controls are implemented for all high-risk activities.*
6. *Ensure that all testing and certification for equipment is carried out as required and that records are kept.*

7. *Ensure that accidents record book(s) are kept, accidents are reported, investigated / monitored and the required remedial / statutory action taken.*
8. *Ensure that dangerous occurrences are reported, recorded / investigated and the required remedial / statutory action taken.*
9. *Identify the clubs on-going training needs and organise the necessary training.*
10. *Oversee the safety arrangements for Regattas / Training etc.*
11. *Develop contacts with local river users group, or similar body, to assist in understanding and resolving areas of conflict between users.*

Responsibilities of the Club Coaches

- *Be responsible for the safety of all junior (<18) persons under their control.*
- *Co-operate with Rowing Ireland in the implementation of the practices in the safety manual.*
- *Inform club members of the safety procedures associated with Rowing Ireland activities.*
- *Ensure that club members follow safe procedures.*
- *Carry out a risk assessment relevant to the activity proposed to identify any unforeseen hazards. (The assessment will take into account the ages, abilities and limitations of the personnel involved, together with the water and weather conditions prevailing or facilities available, so that a Safety Plan can be prepared and the programme of activity adjusted to suit).*
- *Ensure that every member of the crew, including the coxswain, is dressed suitably and adequately protected for the weather conditions they are likely to encounter.*
- *Inspect the rowing/sculling boat prior to launching to ensure that it is not damaged and that riggers, stretchers, shoes, seats and rails are properly adjusted, secured and free from damage and all boats have affixed bow-balls.*
- *Inspect oars and sculling blades to ensure that they are free from damage and properly adjusted.*
- *Ensure that coxswains wear lifejackets or buoyancy aids. Those in bowloaders wear only manual PFDs.*
- *Ensure that launch occupants wear life jackets or buoyancy aids when accompanying crews and at other times whilst afloat.*
- *Ensure that all coaching launches and safety boats carry the required safety equipment.*

- *Ensure that Considerations have been made to assist someone into the boat or for the driver to self-rescue in the event they fall overboard.*
- *Ensure all launch drivers wear a working kill-chord (dead-man) when driving a launch.*
- *Ensure that any activity after dark involving coaching launches that the launches to be fitted with lights as laid down in the International Prevention of Collision Regulations or as prescribed by the appropriate navigation authority.*

3.69 RI first published and promulgated the Safety Manual in 2017. The Safety Manual was revised by RI officers in May 2020 and the new revised Safety Manual (2020 Version 1), was made available for downloading on the organisations website [www.rowingireland.ie/Supporting Our Clubs/Our Clubs/Health and Safety](http://www.rowingireland.ie/Supporting%20Our%20Clubs/Our%20Clubs/Health%20and%20Safety) in or around November 2020. While the language of 2020 Safety Manual remains very substantially unchanged from the 2017 edition, the newer version of the Safety Manual re-names the RI Safety Committee as the RI Safety Advisory Committee. The latest version therefore corresponds more closely with the RI evidence in the investigation that the role of RI was only to advise and encourage affiliated clubs in their rowing activities. However, the prescriptive tone of the 2017 Safety Manual remains unchanged and is not compatible with an ‘advisory’ interpretation which is illustrated by the language of, for example, ‘ensuring compliance’ and ‘requirements of the Safety Manual’ as found at page 4, sections e), f) and h) of the Safety Manuals 2020 and 2017 editions.

RI confirm that the description of the functions of the RI Safety Committee is correct and state that these responsibilities include consultation with regional and club safety officers, organising periodic workshops to clarify requirements for safety manuals, arranging safety courses for members and providing templates as resources, to promote a sport where all club members, safety officers and coaches jointly contribute positively to the health and safety at club level. RI asserts that it has complied with its responsibilities in that regard and strongly refutes the assertion by the Club and the Coach which state that it has a prescriptive and compliance role in local club level. RI believe its role, particularly in light of its limited resources, is advisory in nature.

Athlunkard Boat Club and Rowing Ireland

3.70 Athlunkard Boat Club is affiliated to RI. The Club provides subscription to RI on an annual basis in order to gain affiliation which enables the Club to participate in competitive rowing as a sport. Athlunkard Boat Club’s annual application provides the names and contact details of the Boat Club officers to RI. Boat Club officers say they have very little interaction with RI other than the affiliation process and on the occasions of regional regatta competitions.

3.71 RI officers advised during the investigation that RI had the following functions and objectives:

- Mandate is to encourage rowing in Ireland at club level.
- Acts in an advisory capacity as part of its mandate to encourage rowing in Ireland at club level.
- Assists clubs through encouragement and advice.
- The RI Safety Officer role was to provide advice and encouragement.
- The RI Safety Committee role was to provide advice and encouragement.
- Does not have oversight in respect of safety at club level.
- Does not have a mandate for a regulatory oversight function of the clubs.
- Coaching courses are carried out through and endorsed by Sport Ireland Coaching (www.sportireland.ie) with RI providing technical input for the specific activity of rowing.
- Provides safety advice and encouragement only to Club Safety Officers.
- Interaction with Clubs since 2017 is through bi-annual and/or annual conferences.
- RI navigates the safety space by sharing information with the clubs.
- RI officers could not describe the RI organisations safety culture.
- RI does not disseminate safety issues to Club Safety officers.
- Interaction with Club Safety officers has little response from the clubs.
- Safety Courses for club officers is an occasional event owing to poor responses from volunteer club officers and RI does not keep records of attendees.
- Affiliation for clubs provides clubs with access to competitive events.
- Confirmed that Athlunkard Boat Club was affiliated to RI.
- Does not provide funding for rowing boats which are bought and owned by the club.
- Does not have any oversight in respect of child protection at club level apart from vetting coaches.
- National Child Protection Officer position was vacant as not having been promulgated.
- Does not initiate any internal investigations in the event of a rowing incident or accident.
- RI officers were unable to provide investigators with information regarding the commencement of coach training courses or the number of coach training courses run in 2018.

- Officers do not visit clubs informally or formally to monitor activities.
- Communications with the clubs is not interactive, rarely occurs and when it does, consists of emails and phone calls.
- Communication feedback from the clubs is not encouraged and not administered.

3.72 RI officers stated during the investigation that the Safety Manual was a guidance document only and that RI does not gauge the efficacy of the Safety Manual. RI advised that a review of the Safety Manual was planned.

3.73 RI advised the MCIB investigation that, with regard to RI Safety Manual (2017) and Safety Policy (2017), the Safety Manual document was disseminated to the Club Officers by email on the 29 May 2017 and was available for download on www.rowingireland.ie website.

3.74 On the 29 May 2017 RI sent an e-mail to the safety officers of all affiliated clubs informing them of the revised RI Safety Statement. The email was addressed: *“To All Club Safety Officers, Please find attached a draft of the revised Rowing Ireland Safety statement. I note this document is particularly detailed but I refer you to pages 3 to 6 of the Draft document attached that are especially important”* which document described the following safety topics:

- Safety Policy and Safety Manual.
- Responsibilities of the RI Safety Committee.
- Responsibilities of Club Members and Club Safety Officer.
- Responsibilities of Club Coaches and Club Child Protection Officer.

The attachment to this mail was not provided to the MCIB. The topics indicated are contained in pages three to six of RI Safety Manual (2017) therefore it appears the Safety Statement referred to is actually a draft of the 2017 Safety Manual. The email was blind carbon copied (bcc) to ‘athlunkardbccaptain’ in the email’s address block (it is noted that this is not a complete email address). There is no record in Athlunkard Boat Club evidencing that Athlunkard Boat Club, being an affiliated club, received this particular e-mail.

3.75 A further email was sent on the 9 November 2017 from RI:

“To All Club Safety Officers, Please find the recommended responsibilities of the Club Safety Officer below as described in our Safety manual <http://www.rowingireland.ie/wp-content/uploads/2010/04/Safety-Manual-Approved-1-July-2017.pdf>. Please feel free to share any of your safety tips with us to ensure we can continue to promote best safety practice.”

3.76 There is no record in Athlunkard Boat Club evidencing that Athlunkard Boat Club, being an affiliated club, received either e-mail. There is no evidence indicating

that Athlunkard Boat Club Officers acknowledged these mails and no evidence that these emails were followed up by RI. On the other hand, RI point out that it has a record showing the email was issued to the correct address, which was provided to RI by the Club. RI advises that Athlunkard Boat Club has received all emails to the stated email address since 2017 and that it has received responses from the Club, utilising the email address in question. RI officers stated during the investigation that there was little interaction from Club Safety Officers over these documents. The lines of communication between RI and Athlunkard Boat Club were poor and RI's policies and recommendations probably did not reach the Club's general coach community.

- 3.77 An internal email was sent on the 18 October 2017 by RI's Safety Officer to the RI Safety Committee referred to 'Safety Officer Safety Tips' and sought suggestions on content before being transmitted to Club Safety Officers. It would appear from this email that the officers of RI at that time had engaged in some level of proactivity to safety awareness at Club level.

See Appendix 7.17 - Rowing Ireland Emails

29 May 2017 email to all Club Safety Officers.

09 November 2017 email to all Club Safety Officers.

18 October 2017 email reference Safety Committee.
email to all Club Safety Officers

- 3.78 Athlunkard Boat Club coaches including the Coach accompanying the Quad "*Louie Murnane*" were unaware of the CoP. Neither were they aware of the RI Safety Manual or the RI Safety Policy. The Club asserts that it was for RI to ensure that the safety content is delivered and carried out at club level. RI state its role is advisory in nature to include consultation with regional and club safety officers, organising periodic workshops to clarify requirements for safety manuals, arranging safety courses for members and providing templates as resources, to promote a sport where all club members, safety officers and coaches jointly contribute positively to the health and safety at club level. The purpose of RI is to issue guidance to clubs on various aspects of the sport of rowing. It does not carry a mandate for enforcing safety and procedural issues, which are solely within the remit of individual clubs (as outlined in RI Safety Manual) due to their familiarity with their own budgetary and membership quotas which impact safety considerations.
- 3.79 Athlunkard Boat Club's Health and Safety Policy does not make reference to, or reflect the requirements contained within the RI Safety Policy (2017), or the CoP, or the World Rowing Federation Guidelines as there are no direct links, references or quotations from either of these guidance documents incorporated within the club's Health and Safety Policy document.

4. ANALYSIS

4.1 Summary

4.1.1 The occurrence of this incident had a number of contributory factors which stretch beyond the morning of 23 February 2019 when Athlunkard Boat Club embarked on a series of training sessions on the River Shannon. Working with young people and particularly in a water training environment demands special skills and expertise not just from the coaches and helpers at the coal face but also in the culture and ethos of the organisations promoting young people's engagement with sports. The incident itself contained two distinct events; firstly, the capsizing of the Quad and secondly the entanglement of Rower No.3's hair with the Quad. Contributory and causative factors identified and analysed in this report extend beyond the decisions of the coaches to higher levels of club culture and the ethos of the national governing body. Analysis of this incident will consider the relevant contributory and causative factors that arise from:

- Planning the training session including risk assessment re: river conditions, hazards and routes.
- Crew and Coach factors.
- Equipment.
- Actions around the incident at the weir.
- The safety environment/compliance/noncompliance.
- The regulatory/oversight environment.

4.1.2 The purpose of MCIB investigations is to establish causes to ascertain whether improvements in safety can be identified. In that regard safety in the context of recreational craft must be considered. According to the Maritime Safety Strategy 2015-2019⁶ published by the then Department of Transport, Tourism and Sport, in the 12 year period from 2002 to 2013, there were 137 fatalities which were related to recreational craft, fishing vessels, passenger vessels, and cargo ships. The vessel categories most at risk in relation to fatalities were reported as being recreational craft and fishing vessels, followed by passenger vessels and cargo ships. 67 fatalities arose from recreational craft which included 44 due to vessel capsizing, resulting in drowning/hypothermia and 20 due to persons falling overboard/drowning. The Strategy identifies and analyses the recurring factors contributing to maritime fatalities and comments as follows:

“10. Although the focus is on fatalities, similar factors contribute to incidents where there has been no loss of life. Thus, by tackling the factors highlighted, both fatalities and incidents overall can be reduced. The prevalence of these factors is borne out by the practical experience of the IRCG in its management of emergency response in the maritime sector. Each

6. At <https://assets.gov.ie/23845/08e8cbcc31214fb09350c15bfe91b881.pdf>

of the factors listed is important and it is noteworthy that there are often multiple factors identified in relation to each fatality.

11. A common underlying factor when reading through the MCIB reports over the years is the need for an enhanced culture of safety in the maritime sector; this factor is therefore listed first. There is a strong sense that insufficient attention is paid by individuals to maritime safety as a matter of course. Taking to the water is so familiar that it risks being taken for granted, and basic safety checks overlooked. The safety culture will only change when it becomes second nature for people to think ‘safety first’ when planning and undertaking a voyage or water-based activity.”

The common causes identified include:

“Unsuitable or inadequately maintained safety equipment on board, or lack thereof. Lack of crew training.

Failure to plan journeys safely, including failure to take sea/weather conditions into account.

Non-wearing of personal flotation device (lifejacket/buoyancy aid).”

The Strategy goes on to comment that:

“MCIB reports have indicated that a lack of compliance with maritime safety requirements can be a factor in marine casualties and that better enforcement could address this issue. Enforcement can be improved, and additional deterrents can be put in place, but these actions alone will not be enough - a dramatic change in attitudes and practice across the maritime sector is the main requirement to improve maritime safety.”

While the circumstances here are less common in involving training on Olympic style boats (and noting again the very unusual factor of the crewmember’s hair becoming entangled) the contents of the Maritime Safety Strategy 2015 - 2019 are relevant as is the section setting out practical steps that can be taken to reduce the risk of injury or fatalities.

4.2 Planning the Training Session Including Risk Assessment

- 4.2.1. Due to Athlunkard Boat Club’s location, planning for water borne training sessions are timetabled to occur between one and half hours before and one and a half hours after slack water high tide. This is to enable launch and recovery of boats from the Club’s slipway on the Abbey River which is influenced by the tidal range and therefore training sessions are restricted to approximately one and a half hours in duration. On-water coaching is irregular during the winter period as river and weather conditions are often considered adverse. However, in February 2019 the Club was running weekly training sessions on the water because the weather was good. On the day of the incident higher than normal tidal conditions for launching and recovering the boats and benign weather was

especially favourable and it was an opportunity to give trainees some experience of club water borne activities in the time available. The planned route for this session did not deviate from the Club's usual training route between the upriver turning point at 'the Huts' to the downriver turning point above Thomond Weir. From the planning perspective the training session was routine, along a well-known route and within a certain time frame. Therefore, there was no 'plan' for the training session but rather a repeat of numerous training sessions that had occurred before and was habitual by nature to the coaches of the Club. Features normally associated with preparing a plan were therefore omitted, i.e., route to follow, communications, safeguards and emergency procedures and nearest assistance, etc. The absence of a planning process increased the likelihood of a deviation and in this case resulted in the Quad "*Louie Murnane*" operating with the Coach and Safety Boat in isolation and some distance from assistance. The lack of a plan was a contributory factor towards the capsized incident.

- 4.2.2 The Club's Head Coach (also the Club Safety Officer), after conferring with the other coaches and making an informal risk assessment, decided river and weather conditions were favourable for a coaching session.

There was no record of a formal risk assessment having been carried out and there were no standard procedures within the Club for carrying out risk assessments. The cause for the absence of a standard routine of risk assessment of the Club's activities may have been due to several prevailing issues:

- There was no evidence produced by Athlunkard Boat Club that there existed a viable safety culture within the Club as might be evidenced by a record of hazard identification, hazard and risk assessment, safety meetings, incident investigations or safety audits (including the lack of knowledge of the CoP or of the content in the RI Safety Manual). The Club has stated that their safety standards are no different to many other rowing clubs.
- A complacent attitude in the context of passive and routine training sessions and normally short training session timeframes where nothing was expected to occur out of the ordinary.
- The Coach stated the hazardous nature of Thomond Weir was never communicated to him while the Club stated that the weir was known to be a hazard and only for the experienced rower where the conditions are favorable. The Club officers familiarity with the environs of the river training route and their lack of uniform and clearly conveyed assessment of the risks of Thomond Weir bear this out.
- The Coach stated that risk assessment was not included in the coaching course syllabi he attended in 2018 (Sport Ireland/Rowing Ireland 'Introduction to Rowing Coaching'). RI's Level 1 to Level 3 Coaching Courses (circa April 2019) likewise contained no safety or risk assessment subjects.

See Appendix 7.11 Rowing Ireland Education - Coaching Courses.

4.2.3 The Club coaches on the day appeared not to have been conscious of, or had not been made aware, or advised of, the hazards presented by the river flow and the increased water flow rate through Thomond Weir. This was contrary to the recommendations contained in the RI Safety Manual or the CoP in that:

- RI Safety Manual (2017) states in its “Responsibilities of Club Coaches Section”: *“Carry out a risk assessment relevant to the activity proposed to identify any unforeseen hazards. (The assessment will take into account the ages and abilities and limitations of the personnel involved together with the water and weather conditions prevailing or facilities available so that a Safety Plan can be prepared and the programme of activity adjusted to suit)”*.
- The CoP states *“Coaches, coxswains and crew should at all times be aware of local navigation rules, including any possible hazards or potential dangers arising from tidal, stream or wind that may prevail locally.”*

As set out above, the water flow downstream from the Shannon Basin catchment is significantly higher during the winter months. The river was at full flow as measured by ESB Ardnacrusha Generating Station. The tidal conditions on Saturday morning 23 February 2019 incorporated a very large tidal range (6.1m) which meant a very large body of water was moving downstream at the time of the incident. This body of tidal water would be augmented by the normal ‘winter’ river water flow.

The coaches did not make any risk analysis of the river training session that took into account the limitations of the crew onboard Quad “*Louie Murnane*” or the effects of increased tidal and river flows above Thomond Weir. The absence of a viable safety culture and the Club’s complacent attitude towards safety during its river activities were contributory factors towards the incident at Thomond Weir.

4.2.4 Thomond Weir was not considered a hazard by the Club’s coaches; passing through the weir would not be considered unusual for them and the weir merely presented an obstacle in the river. The majority stated that going through the weir was routine. The common comment from the coaches was if they missed the turn, they would go through the weir that having to do this was not a problem. The coaches may well have been able to navigate the weir in many types of conditions, or in the conditions present on the day of this incident. The Quad was not, however, crewed by coaches.

4.2.5 The weir is however clearly an obstacle and a hazard under certain easily predicted circumstances i.e., river flow and tidal conditions. It spans the river and navigation through the weir requires skill from the crew. The investigation found a significant complacency within the Club’s coaches as to the risks presented by the weir. The Club’s coaches indicated that they did not consider the weir to be a particular hazard, more of an obstacle. The Coach said he was

not aware it was a hazard. The Club has stated the weir was known to be a hazard and only for the experienced rower where the conditions are favorable. These differing views illustrate clearly the value of uniform and clearly conveyed hazard and risk assessment.

4.2.6 The Coach of the Safety boat stated that the weir is not flagged as a hazard by the Limerick City authorities but that he considered it should be flagged and demolished given its derelict state. Even so the Coach stated that he had navigated through the weir on numerous occasions in the previous year. There is no evidence that the issue was raised with or discussed between the Club's officers.

4.2.7 Irrespective of whether different coaches had different views at different times of the risk profile of the weir, it remains the case that this was a visible hazard which would have been assessed prior to the training session and assessed in relation to the skills and experience of each of the crew on each of the three training boats. It should also have been assessed having regard to the weather and water conditions. While the Coach would have become very conscious of the huge volume of river flow under the weir, once it became obvious the boat was not for turning given the inexperience of the young crew there was only one option remaining which was to go through the weir. The crew were young, inexperienced, frightened, and un-coordinated and the Quad would be difficult to manage in a fast flow even with an experienced crew.

4.2.8 If a formal risk assessment had been made then it would likely have considered:

- Stronger river currents in river due to seasonal rain.
- Tidal augmentation of river flow rates, particularly at Thomond Weir, downriver from the rowing boats turning point.
- Water temperature and attendant risk of hypothermia.
- River debris moving downriver.

These risk factors should have been assessed as being pertinent and, with reference to the RI Safety Manual (section 'Risk and Hazard Rating' 'matrix'), accorded the appropriate risk rating. Conditions that day were deceptive. The weather was fine and the Club's boat slip house on the Abbey River was relatively sheltered and remote from the training areas on the Shannon. The strong Shannon River flow only became apparent to the Coach as the flow increased in speed approaching the constriction immediately upriver of Thomond Weir. Their increase in speed approaching the weir unsettled the young Quad crew as the Coach attempted in vain to direct them in turning the Quad around in order to row back upriver to safety. In this instance, the likelihood of an incident involving a capsize would be elevated due to the nature and competencies of the novice/trainee Quad crews in the event of a 'person in the water' incident as would the severity rating of the incident due to the river

conditions (deceptively fast flow, deep water, and the cold) and the risk of drowning.

4.2.9 The combination of the Thomond Salmon Weir and the Shannon River water flows that day presented significant dangers to river users at this time, especially to an inexperienced crew. This was apparent when the crew had difficulty making the turn to return to the Club. From an incident perspective and in the context of risk assessment, the main components in the capsizing of Quad “*Louie Murnane*” were:

- The winter river flow augmented by an ebbing spring tide.
- The novice/trainee competencies of the Quad crew.
- Thomond Weir being considered an obstacle rather than a hazard.

The absence of a comprehensive risk assessment was a causative factor in this incident.

4.3 Quad Crew and Coach Factors

4.3.1 The crew of Quad “*Louie Murnane*” comprised of young people (trainees and novices), inexperienced with Olympic style rowing. As set at paragraph 2.3.1 the crew details were as follows:

Coxswain:	12 years age, experienced trainee, joined Athlunkard Boat Club September 2018.
Rower No.1 (stroke):	12 years age, experienced trainee, joined Athlunkard Boat Club September 2018.
Rower No.2:	13 years age, novice, first day rowing on the river, although had been on the water before, joined Athlunkard Boat Club around Christmas 2018.
Rower No.3 (Casualty):	12 years age, novice, some previous rowing experience joined Athlunkard Boat Club around Christmas 2018.
Rower No.4 (bows):	12 years age, experienced trainee, 2018 summer camp attendee.

The Club’s assessment that three of the crew were experienced is not consistent with their details above. Those with some rowing experience gained at summer camp training the previous summer were instructed by the Coach to occupy the front (No.4 rower position) and astern seat positions (No.1 rower position) and the coxswain’s position, in the Quad. The novice trainees were to occupy the middle section (No.3 and No.2 rower positions) of the Quad.

See Appendix 7.3 Quad Crew Seating Arrangement.

- 4.3.2 The crew could not be considered a team but rather a medley of young people gaining an introduction to Olympic style sport rowing. As such the performance of the crew could be predicted to be unsynchronized and some of the crew would likely have had a poor appreciation of the potential outcome in the event of some emergency occurring in the boat's operation. An experienced coach would likely expect these characteristics of a young novice/trainee crew under normal circumstances. However, when the 'normal' circumstances changed as when the Quad was swept towards the weir the Coach was unable to successfully instruct the untrained and unsynchronized crew to turn the Quad in time to row away from the weir or subsequently, to re-align the Quad in order to pass through the weir. The crew acted out of unison and once the river flow had taken control of the Quad the collision with the weir's structure was the most likely outcome. Therefore, from the outset of the training session the collective inexperience of the Quad's crew was a risk and a causative factor for the capsizing of the Quad.
- 4.3.3 The Coach attending the young crew of the Quad "*Louie Murnane*" was experienced as a boat coxswain and qualified to a junior level of coaching. He was given the responsibility of coaching the young crew of Quad "*Louie Murnane*" and attended them from the pre-session slipway preparations until they were out on the training route. Due to delays arising in those preparations the Coach found himself and the Quad's crew separated from and lagging behind the main group by some time and distance. In fact, the Coach and Quad "*Louie Murnane*" were significantly separated and isolated by river distance from the other coaches in the other Safety Boat. The safety features of mutual support and assistance that they may have been rendered by the other coaches was not available because the training group had become split from the outset of the training session and was a contributory factor of the incident.
- 4.3.4 The Coach eventually learned how far his group was behind the first group when he rounded the river bend above Thomond Weir and realised the larger group with the other two coaches had returned to the Abbey River. By this time the Quad and Safety Boat were approaching the downriver turning point above Thomond Weir. The Coach directed the Quad to make the turn at the normal turning point. However, the Quad crew experienced difficulties in turning the boat and it was at this time that the Coach became aware of the increased river flow and speed of their approach onto Thomond Weir. The hazardous nature of Thomond Weir was not appreciated by the Coach until this moment, and he had not been warned of the weir as being a hazard by the Club Safety Officer or any of the other coaches or officers in the Club. The hazard presented by Thomond Weir was underestimated by the Coach, Club Safety Officer and officers of Athlunkard Boat Club. This under estimation of the hazard was a contributory factor to the capsizing of the Quad "*Louie Murnane*".

4.4 Equipment

- 4.4.1 Safety Boat equipment: The function of a safety boat is to render assistance to persons in the water in danger of harm. In order to carry out this function a safety boat must have the required carrying capacity and have onboard the recommended type and standard of safety equipment.

The Safety Boat did not have onboard the type or scale of equipment as recommended and described in CoP (2017) Chapter 8 or as recommended in FISA's "Minimum Guidelines for the Safe Practice of Rowing (2005)" and referred to in Section 3 in that:

- There was no knife onboard.
- There were no additional PFDs or life rings for anybody adrift in the river.
- There was no bailer.
- There was no horn or similar audible warning device.
- There was no grab line minimum 15 m long.
- There was no anchor and line.
- There was no First Aid Kit.
- There was no thermal protection for rescued rowers.

- 4.4.2 The rescue equipment onboard the Safety Boat consisted of a single lifebuoy tethered to the boat with 3 m of line. The gap between what rescue/safety equipment was onboard the Safety Boat and what is recommended by the CoP and FISA to be onboard was substantial. Furthermore, Athlunkard Boat Club Health and Safety Policy required that "The safety launch must have a safety bag on board". The MCIB was informed by the Coach that he was not aware of the Club's Health and Safety Policy and had never seen a safety bag. Another coach stated that he knew of a safety bag, but it was never checked. The Club produced no document specifying the contents of the safety bag or who was responsible for ensuring a safety bag was onboard the safety launch. The lack of rescue and safety equipment onboard the Safety Boat was a causative factor in the inability of the Coach and his helper (the crewmember and the member of the public in that order) to free the trapped Rower.

- 4.4.3 The absence of a responsible person and procedures for checking the contents of the safety bag and the Club's failure to apply any provisions around the requirement for the safety bag or its contents, demonstrated a complacent regard by the Club towards the purpose of the Safety Boat and the safety equipment it was supposed to carry and was a causative factor in the outcome of the Quad's capsize at the weir.

- 4.4.4 The mandatory wearing of PFDs is waived for Olympic rowing boats. The regulations for the use of PFDs in recreational craft is set out in S.I. No.921 of

2005 Pleasure Craft (Personal Flotation Devices and Operation) (Safety) Regulation 2005 (amended by S.I. 2012/349) with guidance in MN 10 of 2016, referred to in Section 2.

The Regulations create an offence where a regulatory PFD is not worn and apply to pleasure craft (as defined) being operated in Irish waters (save where being used in emergencies of law enforcement) and:

“(a) any person on board such craft, and

(b) any person being towed by such craft or onboard a vessel or object of any kind, being towed by such craft.”

The Regulations however also provide that they do not apply (other than Regulations 8 and 9 which relates to alcohol consumption) to rowers in boats which are:

“(a) designed and specifically used for rowing in boat races and which are capable of being entered into regattas or other events recognised by the Irish Amateur Rowing Union, and

(b) of a design and type in respect of which events are held in the Olympic Games or other international rowing regattas.”

Quad “*Louie Murnane*” satisfied both the above criteria.

- 4.4.5 The exclusion set out in the Regulation is peculiar in that it is worded by reference to the type of boat, and not by reference to any user or circumstance of usage. It is not clear to the MCIB whether the statutory instrument should be interpreted so as to exclude the wearing of PFDs in the very junior training that occurred here. If that is the correct interpretation, the relevant Department and RI should consider whether this was in fact intended. If it was not intended, then this should be clarified, and that clarification disseminated to rowing clubs. The importance of section 8.3 of the CoP in requiring knowledge of RI Water Safety Code, and the compliance with same is made all the more important where there is a waiver for the wearing of PFDs.
- 4.4.6 It is of note that the list of equipment set out at page 15 in the RI Safety Manual (2017) for Rescue Launches does not provide for the launch having extra PFDs although the CoP includes in the recommended equipment: *Lifebuoys or additional PFD/lifejackets to assist persons in the water*. Given the role ascribed to RI in the CoP in respect of Olympic style boats (and the position stated by RI itself at the opening of its Safety Manual (2017)), the lack of clear and coherent training and supervision of safety in clubs is an issue that requires immediate attention.
- 4.4.7 While the wearing of a PFD by Rower No.3 may not have avoided the hair entanglement, it may have assisted in ensuring that all the other crew were sufficiently safe to allow all efforts to be focused on Rower No.3. Also, if the Safety Boat had extra PFDs onboard it would have reduced the risk to the other

crew in the period immediately after the capsizing. The fact that trainees/novices onboard Olympic style rowing boats are not required to wear PFDs and indeed were not wearing them when the two trainee/novice rowers were swept downriver added to the many difficulties faced by the Coach in his initial efforts to free the trapped Rower, distracted him from his rescue efforts and was a contributory factor to the subsequent injuries sustained by the trapped Rower.

- 4.4.8 Athlunkard Boat Club initial training for novice/trainee rowers instructs them that in a capsizing event crew should stay with the upturned boat and climb back onboard the hull as soon as possible. This is borne out by the actions of the four crewmembers of Quad “*Louie Murnane*” who attempted to stay with the Quad during the incident and confirmed by their statements subsequent to the incident. However, in swift water in particular, there is the likelihood that a crewmember, or all the crewmembers could become separated from the boat and in this instance the capability to throw a flotation device each to several people in the water is essential. It is clear from the statements from the Coach, and the member of the public who jumped into the boat after the coach and Safety Boat had returned from picking up the two swimmers, that the Quad moved in the meantime further submerging the trapped Rower under the water. Had there been a number of flotation devices onboard the Safety Boat the Coach’s conflicting position, which arose when the two crewmembers were in the water and were swept downriver necessitating him to leave the trapped Rower in order to recover the two swimmers, might have been avoided. Not having spare flotation devices onboard, the Safety Boat is considered a contributory factor to the incident after the Quad capsized.
- 4.4.9 Communications between the coaches relied on mobile phones. There were no communications between the Coach and the other coaches overseeing the training session by mobile phone or any other means. The safety boats did not carry audible warning devices. It is a matter of conjecture whether the two groups were within effective range of the recommended audible warning device. The Coach stated that if he had known the first group had finished their training session and turned into the Abbey River, he would have curtailed his groups training session before the turning point above Thomond Weir and instead turned into the Abbey River. The failure to establish an effective means of communications between the coaches on the two safety boats was a contributory factor to the capsizing of the Quad.
- 4.4.10 The function of a safety boat is to render assistance to persons in the water in danger of harm. In order to carry out this function a safety boat must have the required carrying capacity. The Safety Boat attending the Quad “*Louie Murnane*” had a carrying capacity limited to four persons as evidenced by that stated capacity on the boats CE plate. Therefore, in the event of a Quad capsizing event:
- There were five crew on a Quad. There was insufficient carrying capacity in the Safety Boat to carry all the participants.

- One rescue boat had only the capacity for four persons. It would require two safety boats to rescue the crew of one Quad.

When the Safety Boat returned to the Club after the incident it had five persons onboard. The approved CE rated design capacity of the Safety Boat is four persons. The Safety Boat was therefore overloaded. However, it must be noted that this was NOT a contributory factor to the cause of the incident or its outcome.

See Appendix 7.5 Safety Boat and Safety Boat CE Plate.

4.5 Actions Around the Incident

4.5.1 The Coach in the Safety Boat had two distinct sets of tasks during the training session.

Firstly, he was required to coach and safely supervise the Quad's crew and secondly, he was required to manoeuvre the Safety Boat. Therefore, while his attention was on the evolutions of the Quad his physical actions were constrained to manoeuvring the boat. Quad "*Louie Murnane*" rowed downriver, in isolation, with one Safety Boat in attendance to the stretch of river above Thomond Weir. The Coach in the Safety Boat was relying on the three more experienced crew to be able to turn the Quad away from the weir. However, when the crew attempted this manoeuvre they experienced difficulties not only in their rowing co-ordination but also the fast downriver current was strong and acted against their rowing effort.

4.5.2 Safety Boat manning. The CoP, FISA Guidelines and RI Safety Manual are ambiguous on the manning levels for coach and safety launches and there are no guidelines specifically focused on minimum manning levels for accompanying safety boats. None of the guideline documents specify or recommend a minimum number of crew on a coaching/safety boat accompanying young trainees.

See Appendix 7.12 Code of Practice Chapter 8.

See Appendix 7.13 Extract of Rowing Ireland Safety Manual (May 2017).

See Appendix 7.14 FISA Minimum Guidelines for the Safe Practice of Rowing (2005).

However, it is clear that an additional crewmember onboard the Safety Boat would have been of assistance to the Coach in the initial stages and during the incident. Albeit, a member of the public jumped into the Safety Boat and assisted after the Coach had recovered the swimmers and returned to the trapped Rower who, by that time, was further immersed underwater and was

more difficult to free. An additional crewmember onboard the Safety Boat prior to the incident may have been able to:

- Open and maintain mobile phone communications with the other coaches.
- Inform and advise the Coach of the faster river flow towards the weir.
- Control the boat as the Coach made directions to the crew in turning the Quad and after the Quad capsized.
- Assist in freeing the trapped Rower at the earlier stages of the rescue.

Even when considering the lack of direction in the three guideline documents mentioned above the under-manning of the Safety Boat contributed towards the Coach being overwhelmed by the safety implications as the Quad and its crew were swept towards Thomond Weir and the efforts needed in freeing of the trapped Rower after the Quad capsized.

4.5.3 Hair entanglement. The Quad's female crewmembers had their hair tied back, Rower No.3's hair was tied up in the form of a ponytail. When the Quad capsized and Rower No.3 entered the water her hair became entangled in the rowlock and trapped the Rower under water. Athlunkard Boat Club's Health and Safety Policy, RI Safety Manual or Safety Policy, the CoP Chapter 8 'Rowing Boats', or FISA Minimum Guidelines for the Safe Practice of Rowing makes no mention of rowers hair length or safety issues related to rowers hair length and it can be deduced that in the context of rowing that entanglement of a rowers hair in the equipment mounted on a rowing boat is an unusual type of event. Despite this, the length of hair, albeit tied back in a ponytail, was the cause for the Rower's entrapment in the Quad and therefore a causative factor of her subsequent injuries.

4.5.4 The safety equipment onboard the Safety Boat was deficient of many items. In this instance the availability and use of a knife to cut the trapped Rower's hair would have mitigated the seriousness of the outcome of the capsized. It is not clear why the RI Safety Manual did not include this item.

See Appendix 7.12 Code of Practice Chapter 8.

See Appendix 7.14 FISA Minimum Guidelines for the Safe Practice of Rowing (2005).

It was only after the LAFB's "Swift Rescue" boat with crew equipped with a knife arrived on scene that the LAFB crew was able to cut the Rower's hair and free the trapped Rower. It can be reasonably deduced that the absence of a readily available knife onboard the Safety Boat in the early stages of attempts to free her hair exacerbated the situation by delaying the recovery of the Rower who was submerged for some time and was a contributory factor to the injuries sustained by the trapped Rower.

4.5.5 Degree of separation. Separation of one Quad from the main body of the training group was not considered unusual by fellow Club coaches. The delay of 30 minutes between the leading group of quads and Quad “*Louis Murnane*” was also not considered unusual by the coaches in the training session. However, this delay separated the Quad from the required mutual safety cover of two boats. This separation denied assistance, support or advice that either Safety Boat could render to the other and was particularly significant when Quad “*Louie Murnane*” struck the weir supports and overturned. The degree of separation between the two safety boats during the training session is considered to be a contributory factor to the capsize of the Quad.

4.6 Safety Environment, Compliance/Non-Compliance

4.6.1 Athlunkard Boat Club safety management system. Athlunkard Boat Club officers had not instigated any formal processes that would introduce the fundamental safety concepts of hazard identification and risk assessment into a club safety management system. Neither had the Club instigated an appropriate safety record and review structure. The fall-out from this was a complacent and hands-off regard by the Club’s officers and coaches towards developing a viable safety culture within the Club. The Club’s regard for health and safety was not in compliance with RI Safety Manual (2017) policy statement (page 3) which stated, “*Rowing Ireland shall as far as reasonably practicable, provide and maintain: Sufficient information, instruction, training and supervision to ensure all club members/visitors avoid hazards and contribute positively to their own health and safety while participating in the sport*”.

See Appendix 7.13 Extract of Rowing Ireland Safety Manual (May 2017).

Neither was this attitude in concert with FISA’s Minimum Guidelines for the Safe Practice of Rowing which encouraged all rowing programmes to implement, at a minimum, guidelines to help make informed decisions and ensure the safe practice of rowing as a sport.

See Appendix 7.14 FISA Minimum Guidelines for the Safe Practice of Rowing (2005).

Athlunkard Boat Club’s disregard towards developing a safety culture and implementing an effective safety management system was a causative factor to the capsize incident and subsequent injuries to the trapped Rower. The Club take the position that RI was responsible to ensure it was aware of, and had implemented the RI Safety Manual, the CoP, the FISA guideline and that it received the Marine Notices. RI take the position that its role is to issue guidance to clubs on various aspects of the sport of rowing, it does not carry a mandate for enforcing safety and procedural issues, which are solely within the remit of individual clubs (as outlined in RI Safety Manual) due to their familiarity with their own budgetary and membership quotas which impact safety

considerations. RI point out that the Safety Manual was on its website and assert that it was sent to the Club.

- 4.6.2 The Club Safety Officer of Athlunkard Boat Club at the time of the incident was also the Head Coach and certified to RI Level 2 coaching standard. Despite this position and coaching certification, the Head Coach stated he had little formal training in safety and that RI had little interest in advocating issues including safety matters. He was not aware of the contents of the RI Safety Manual or the CoP and stated that there was little interaction between RI and Athlunkard Boat Club other than the Club's annual application for affiliation to RI as part of which his and other Club officer's names and contact details were submitted. RI never requested to see safety documents or the Accident Logbook (which was kept in the Club Captain's office) and consider that sort of safety auditing to be outside their remit.
- 4.6.3 RI have advised during the investigation that even though it is the national governing body it does not have oversight over club training standards which are the responsibility of the individual clubs. The organisation states that its mandate is only to encourage and offer advice in respect to safety issues. There was also poor communications between the national governing body and Athlunkard Boat Club in relation to the dissemination of safety advices and their follow up. It is reasonable to deduce that if there had been a more dynamic, proactive and consistent policy within RI since its initial efforts in 2017 to "push-down" and disseminate advise and encourage the nurturing of a safety culture within the clubs, Athlunkard Boat Club, in 2019, may have had a better safety culture. As outlined above RI believe its role is advisory in nature. The Club and the Coach state that it was up to RI to ensure that its safety documentation was disseminated and that had that happened this incident would not have happened. It also criticizes RI for the fact that its content list for the safety bag did not include reference to having a knife. The absence of a knife was only one of a number of causative factors. The lack of effective advice and encouragement in safety matters since 2017 from RI, the national governing body for rowing in Ireland, to Athlunkard Boat Club in order to nurture a safety culture within the Club was a contributory factor to this incident. However, the primary obligation to ensure activities on water are carried out safely are the responsibilities of the parties that engage with them. That obligation extends to informing oneself about safety. The RI safety documentation is clear that safety lies primarily at club level and with users. What is less clear is whether it follows that simply circulating a safety manual to its members is an effective means of improving safety. One significant feature of this investigation is the strong opposing views that RI and the Club have of their respective roles and respective responsibilities in relation to safety. That fact should of itself lead RI to assess the effectiveness of its contribution to the improvement of safety.
- 4.6.4 The Club did not have a Hazard List or a record of hazards. The Club instead relied on narrative communication of the river hazards to its crews. Thomond

Weir was not identified as a possible hazard or indeed even considered a hazard by the Club coaches and it was a normal, if not a regular, occurrence to pass through the weir. Changes in river water flow and tidal conditions were also not considered a hazard. Thomond Weir and the confluence of adverse river flow and extreme tidal conditions may historically have been recognised as hazards within the Club, and this may have been lost in the oral narrative form of in-club communication with the result that this mode of communicating hazards to the Club's coach and crew community was seriously flawed and ultimately failed. The absence of a functioning Hazard List was not conducive to the safety of Club's water activities, but the absence of a list was not considered to be a contributory factor to the Quad capsizing incident or its outcome.

4.6.5 The Club's Accident/Incident Book was kept in the Club Captain's office. The book's contents were not generally known or read. The Coach in the Safety Boat was not aware of the existence of the Club's Accident/Incident Book. An accident reporting structure is a fundamental element of safety management in any organisation. The lines and tools for accident reporting must be understood and easily accessible at all levels of the organisation. Athlunkard Boat Club had no functioning accident reporting structure in place. The absence of a functioning Accident/Incident Book available to all Club coaches was not conducive to the safety of Club's water activities but the absence of a functioning Accident/Incident Book was not considered to be a contributory factor to the Quad capsizing incident or its outcome.

4.6.6 The coach had completed RI's Introduction to Rowing Coaching Course which is understood by the MCIB as being an introduction course to the Level 1 coaching certification course. According to the RI website the Introduction to Coaching Course (February 2021) is suitable for beginner coaches. The Level 1 Coaching Course (April 2019) was aimed at coaches who already gained some experience in the sport and were wishing to improve their coaching skills. The investigation found that RI set no level of coaching certification for potential rowing coaches. The Coach had not completed the Level 1 Coaching Course. RI had not made that training course available to the Coach from the time that he joined Athlunkard Boat Club in 2016 to February 2020.

See Appendix 7.11 Rowing Ireland Education - Coaching Courses.

4.6.7 Athlunkard Boat Club encouraged the Coach to coach young people though he had not completed the Level 1 Coaching Course. Athlunkard Boat Club inducted the Safety Boat Coach as suitably qualified to coach young persons. The Coach stated he was never informed of the Club's requirement for a safety bag in the Safety Boat. He was not aware of the Health and Safety Policy. He had no knowledge of the Club's Accident/Incident Book. Neither was he aware of the CoP: The Safe Operation of Recreational Craft (2017). He completed the Introduction to Rowing Coaching in 2018 but stated that this course did not cover any aspect of water safety. The Coach appears to have had little interaction with

the Club officers with regard to safety management. The absence of interaction between the Coach and the Club and vice versa regarding safety is considered to be a contributory factor towards this incident.

- 4.6.8 Athlunkard Boat Club officers and coaches stated that the Club has very little interaction with RI other than the administrative processes associated with the Club's annual application for club affiliation. The Club's officers interviewed stated they had no knowledge of the RI's Safety Policy (2017) or Safety Manual (2017) and were generally unaware of the availability of safety courses or indeed any advisory assistance in that regard. RI promulgated its Safety Policy (2017) and Safety Manual (2017), in 2017 and asserted that both documents were sent by email to Athlunkard Club Captain and Club Safety Officer in May and November 2017 respectively.

See Appendix 7.17 - Rowing Ireland Emails
29 May 2017 email to all Club Safety Officers.
09 November 2017 email to all Club Safety Officers.

- 4.6.9 The Club's Safety Officer states that the email of 29 May 2017 was not received. By way of proof that Athlunkard had been sent an email copy of the revised RI Safety Statement, RI provided to the MCIB a copy of their email of 29 May 2017 which was blind carbon copied (bcc) to the email identity athlunkardbccaptain. The latter is not an email address in fact. RI did not provide any acknowledgement from Athlunkard Boat Club indicating that the Club received this mail. The Club's administrative processes associated with an application for affiliation with RI includes submitting a list of Club officers names and contact details on an annual basis. It would be reasonable to assume that contact details would include viable email addresses of the Club's officers. The Club's Safety Officer states that the email of the 09 November 2017 was not received. RI provided to the MCIB a copy of their email of the 09 November 2017 to "All Club Safety Officers". However, the address block of this document merely records that the email was sent to info@rowingireland.ie. RI did not provide proof that the email was sent to Athlunkard Boat Club Safety Officer and RI have no acknowledgement from the Club indicating that it received this email.
- 4.6.10 RI's current Safety Policy and Safety Manual have been available on their website from 2020. The 2017 editions were available online at the time of the incident in 2019. It may be deduced that the communication between RI and Athlunkard Boat Club was not fit for purpose and there is doubt as to whether Athlunkard Boat Club received the Safety Policy (2017) or the Safety Manual (2017) directly from RI. Even if they did, directly or indirectly, it appears little or no regard was had to them by the Club. The failure of RI to "push down" the implementation of the NGB's Safety Policy (2017) and its Safety Manual (2017) to Athlunkard Boat Club was a contributory factor to the Club not developing a viable safety culture, and thereby implementing a formal Risk Assessment procedure which would have identified Thomond Weir as a hazard.

4.7 Regulatory Oversight Environment

- 4.7.1 FISA, the World Rowing Federation's Minimum Guidelines for the Safe Practice of Rowing was published in 2005. The CoP: The Safe Operation of Recreational Craft was first published in 2007. These documents do not provide a legal framework and are guidelines for the most part. Both documents were available to download online. Despite the timely and easily accessible promulgation of these guidelines, the Athlunkard Boat Club's Health and Safety Policy did not reflect the standards and best practice for safe rowing as described in either.
- 4.7.2 RI is the national governing body for the sport of rowing in Ireland. The organisations stated responsibilities towards rowing and club safety standards are described in its Safety Policy (2017) and Safety Manual (2017). RI's Code of Conduct and Good Practice for Coaches and Sport Leaders is an advisory document and focused on the care and considerations towards young people. This document provides contact details for RI's National Children's Officer although MCIB were informed that this position was not filled.
- 4.7.3 RI officers stated that the Safety Policy (2017) and Safety Manual (2017) were for guidance purposes only for RI's affiliated clubs. Despite the regulatory nature and tone of the contents, RI advised that it did not have any oversight responsibility for ensuring that the regulations or safety requirements stated in the RI documents were in operation at club level even though these documents were available on the RI website at the time of the incident at Thomond Weir in 2019 and during the course of the investigation.
- 4.7.4 RI does not appear to have considered requirements of governance referred to in the CoP Chapter 8 section 8.2 in relation to rowing in Olympic style boats where PFDs are commonly understood not to be required once the boat is an Olympic style irrespective of the nature of the crew or of the rowing that is being carried on.
- 4.7.5 RI officers had little communication or interaction with officers of Athlunkard Boat Club. There is no evidence of any purposeful information flow between the two organisations. While there was evidence presented by RI that the Club had received important safety documents RI appear to have no follow up plan or campaign to the roll out of the content, with Athlunkard Boat Club, and presumably with other clubs. None of the Club's officers interviewed were aware of the 2017 RI documents during this investigation. The Club also stated that it believed its standards were as good as any other rowing club. If that is the case, then there is plainly a great need for RI to develop a system that does get users to know of and comply with safety standards. All of the Club's officers stated that interaction between RI and the Club was minimal. Communication between RI and Athlunkard Boat Club were minimal and there is doubt that Athlunkard Boat Club received the Safety Policy (2017) or the Safety Manual

(2017). The mutual relationship between RI and Athlunkard Boat Club was not fit for the purpose of disseminating safety advice and encouragement as the RI 2017 documents appear to have intended. The absence of any effective interaction between RI and Athlunkard Boat Club evidences a serious gap between the national governing body's aspirations, for improving safety standards in the sport of rowing (evidenced by the 2017 safety documents), and Athlunkard Boat Club's practices with regard to rowing safety and was therefore a contributory factor in the marine casualty in 2019.

5. CONCLUSIONS

5.1 The Causative Factors of this Incident were as Follows

- 5.1.1 The absence of a comprehensive risk assessment prior to the training session was a causative factor in this incident. Reference paragraph 4.2.9.
- 5.1.2 The collective inexperience of the Quad's junior crew was a causative factor for the capsizing of the Quad. Reference paragraph 4.3.2.
- 5.1.3 The lack of rescue and safety equipment onboard the Safety Boat was a causative factor in the inability of the Coach and his helper (the crewmember and the member of the public in that order) to free the trapped Rower. Reference paragraph 4.4.2.
- 5.1.4 The complacency by Athlunkard Boat Club towards the purpose of the Club's Safety Boat and the safety equipment it was supposed to carry was a causative factor towards the outcome of the Quad's capsizing at the weir. Reference paragraph 4.4.3.
- 5.1.5 Despite being tied back in a ponytail, the Rower's long hair trapped the Rower to the capsized Quad and was a causative factor of her subsequent injuries. Reference paragraph 4.5.3.
- 5.1.6 Athlunkard Boat Club's disregard towards developing a safety culture and implementing an effective safety management system was a causative factor to the capsizing incident and subsequent injuries to the trapped Rower. Reference paragraph 4.6.1.

5.2 The Contributory Factors that led to this Incident were as Follows

- 5.2.1 The absence of a planning process increased the likelihood of a deviation and in this case resulted in the Quad "*Louie Murnane*" operating with the Coach and Safety Boat in isolation and some distance from assistance. The lack of a plan was a contributory factor towards the capsizing incident. Reference paragraph 4.2.1.
- 5.2.2 The absence of a viable safety culture and the Club's complacent attitude towards safety during its river activities were contributory factors towards the incident at Thomond Weir. Reference paragraph 4.2.3.
- 5.2.3 The Coach and Quad "*Louie Murnane*" were significantly separated and isolated by river distance from the other coaches in the other Safety Boat. The safety features of mutual support and assistance that they may have been rendered by the other coaches was not available because the training groups had become split from the outset of the training session and was a contributory factor of the incident. Reference paragraph 4.3.3.

- 5.2.4 The hazard presented by Thomond Weir was underestimated by the Coach, Club Safety Officer and officers of Athlunkard Boat Club. This under estimation of the hazard was a contributory factor to the capsizing of the Quad “*Louie Murnane*”. Reference paragraph 4.3.4. By identifying Thomond Weir as a hazard, the Coach may have taken precautions resulting in avoidance of the capsizing incident and its outcome.
- 5.2.5 The fact that trainees/novices onboard Olympic style rowing boats are not required to wear PFDs and indeed were not wearing them when the two trainee/novice rowers were swept downriver added to the many difficulties faced by the Coach in his initial efforts to free the trapped Rower, distracted him from his rescue efforts and was a contributory factor to the subsequent injuries sustained by the trapped Rower. Reference paragraph 4.4.7.
- 5.2.6 Had there been a number of flotation devices onboard the Safety Boat the Coaches conflicting position which arose when the two crewmembers were in the water and were swept downriver necessitating him to leave the trapped Rower in order to recover the two crew might have been avoided if he had flotation devices onboard to assist them without having to leave the trapped Rower. Not having spare flotation devices onboard, the Safety Boat is considered a contributory factor to the incident after the Quad capsized. Reference paragraph 4.4.8.
- 5.2.7 The failure to establish an effective means of communications between the coaches on the two safety boats was a contributory factor to the capsizing of the Quad. Reference paragraph 4.4.9.
- 5.2.8 The under-manning of the Safety Boat contributed towards the Coach being overwhelmed by the safety implications as the Quad and its crew were swept towards Thomond Weir and his efforts in freeing the trapped Rower after the Quad capsized. Reference paragraph 4.5.2.
- 5.2.9 The absence of a knife onboard the Safety Boat in the early stages of attempts to free the Rower’s hair exacerbated the situation by delaying the recovery of the Rower who was submerged for some time. The absence of the availability of a knife onboard the Safety Boat was a contributory factor to the injuries sustained by the trapped Rower. Reference paragraph 4.5.4.
- 5.2.10 The degree of separation between the two safety boats during the training session is considered to be a contributory factor to the capsizing of the Quad. Reference paragraph 4.5.5.
- 5.2.11 The lack of advice and encouragement in safety matters emanating from RI, the national governing body for rowing in Ireland, since 2017 to Athlunkard Boat Club in order to nurture a safety culture within the Club was a contributory factor to this incident. Reference paragraph 4.6.3.

- 5.2.12 The absence of interaction between the Coach and the Club and vice versa regarding safety is considered to be a contributory factor towards this incident. Reference paragraph 4.6.7.
- 5.2.13 The Club was not aware of the RI Safety Manual or its contents (or the CoP or FISA) although it was available on the RI website and RI have provided evidence that it was sent to the Club. The absence of an effective and measurable assessment of the implementation of the NGB's Safety Policy (2017) and its Safety Manual (2017) to club level and particularly Athlunkard Boat Club was a contributory factor to the Club not developing a viable safety culture, thereby implementing a formal risk assessment procedure and identifying Thomond Weir as a hazard. Reference paragraph 4.6.10. As RI does not consider safety compliance lies within their remit, there is no independent or third party system to audit safety in the sport at club level.
- 5.2.14 The absence of any effective interactive communications between RI and Athlunkard Boat Club evidences a serious gap between the national governing body for rowing in Ireland's 2017 aspirations for improving safety standards in the sport of rowing, and Athlunkard Boat Club's 2019 practices with regard to rowing safety was a contributory factor towards the incident. Reference paragraph 4.7.5.

5.3 Other Findings from the Investigation of this Incident are as Follows

- 5.3.1 With reference to the Maritime Safety Strategy 2015-2019; while the circumstances of this incident are less common in involving training on Olympic style boats (and noting again the very unusual factor of the crewmember's hair becoming entangled), the contents of the Maritime Safety Strategy 2015 - 2019 are relevant as is the section setting out practical steps that can be taken to reduce the risk of injury or fatalities. Reference paragraph 4.1.2.
- 5.3.2 The mandatory wearing of PFDs is waived for Olympic rowing boats. It is not clear to the MCIB whether S.I. No.921 of 2005 Pleasure Craft (Personal Flotation Devices and Operation) (Safety) Regulation 2005 (amended by S.I. 2012/349) should be interpreted so as to exclude the wearing of PFDs in the very junior training that occurred here. If that is the correct interpretation, the relevant Department and RI should consider whether this was in fact intended. If it was not intended, then this should be clarified, and that clarification disseminated to rowing clubs. The importance of section 8.3 of the CoP in requiring knowledge of RI Water Safety Code, and the compliance with same is made all the more important where there is a waiver for the wearing of PFDs. Reference paragraphs 4.4.4 to 4.4.7 and 4.7.4.

- 5.3.3 At the time of the investigation, there was little interaction between RI and Athlunkard Boat Club other than the Club's annual application for affiliation to RI. The list of responsibilities of club members, club coaches and the club safety officer set out in the Safety Manual (2017) were not known and were not complied with.
- 5.3.4 Despite RI's professed mandate for encouraging rowing as a sport in Ireland there appears to have been no encouragement from RI towards Athlunkard Boat Club at any time since 2017 in relation to safety. The national governing body considers it does not have oversight over club safety and that it is not mandated to carry out a regulatory oversight function despite the list of responsibilities of the RI safety committee set out in the Safety Manual (2017). RI officers stated that it only offers advice and encouragement in respect to safety issues and that RI does not carry out club safety audits. It appears there is a considerable divergence between the terms of the 2017 Safety Manual (which sets out the respective obligations of the RI safety committee and club members/coaches/safety officer). In this regard the MCIB considers RI should assess and clarify its mandate. Reference paragraphs 4.6.2, 4.6.9 and 4.7.3.
- 5.3.5 The Club did not have a Hazard List or a record of hazards. The Club instead relied on oral narrative communication of the river hazards to its crews. Reference paragraph 4.6.4. In addition, the absence of a functioning Accident/Incident Book available to all Club coaches was not conducive to the safety of Club's water activities. Reference paragraph 4.6.5. Both these tools are crucial to a viable safety culture and the construction of a Safety Management System within the Club.
- 5.3.6 The coaching training run by Sport Ireland Coaching did not have a comprehensive safety element around the time of the incident where coaches were taught risk assessment tools and could learn risk assessment skills. Reference paragraph 3.63 and 4.2.2.

6. SAFETY RECOMMENDATIONS

6.1 That Athlunkard Boat Club

- 6.1.1 Immediately carry out an audit of all river obstacles and hazards in the Club's area of activities taking into account seasonal river flow conditions, Ardnacrusha water outflows and prevailing tidal conditions in order to produce a Hazard and Obstacle list. Ensure the Hazard and Obstacle list is disseminated in an effective way, and readily available on an ongoing basis to all Club members. Ensure the Hazard and Obstacle list is part of a regular audit and update of all safety procedures and documents.
- 6.1.2 Immediately carry out a risk assessment programme of all its "on river" activities including the assessment of river obstacles and hazards, tidal states and river flows, safety boats and equipment condition, crew experience, coach and helper availability, qualifications and safety supports.
- 6.1.3 Immediately carry out an audit of the type and scale of safety and rescue equipment onboard safety boats during river training sessions and bring them to at least the minimum standards required by Rowing Ireland and as recommended in the Code of Practice Chapter 8 Rowing Boats and FISA Minimum Guidelines for the Safe Practice of Rowing. Ensure that safety equipment onboard safety boats are to the type, scale and in a usable condition and that procedures include ensuring there is an identified responsible person for checking the equipment, and for the proper recording of same.
- 6.1.4 Immediately carry out a review of the capability and suitability of the Club's safety boats with regard to providing safety support during the Club's water training activities.
- 6.1.5 Immediately carry out a review of crew personal protective clothing (including having adequate treatment of all hair lengths) having regard to the dangers associated with hypothermia.
- 6.1.6 Immediately carry out an audit of the Club's safety practices and ensure they comply with legislation in respect of Safety, Health and Welfare at Work Act 2005 and General Applications 1993, and that they follow applicable Marine Notices, the guidelines from Rowing Ireland, the Code of Practice: The Safe Operation of Recreational Craft (2017), and FISA's Minimum Guidelines for the Safe Practice of Rowing.
- 6.1.7 In conjunction with the audit above, develop a viable Safety Management System and proactive safety culture within the Club to include a system for the regular audit of the Club's health and safety policies, procedures, and their effectiveness.

- 6.1.8 In the context of the safety review and audit, review record and ensure compliance with the respective responsibilities of Club members/coaches/Club Safety Officer as recommended by Rowing Ireland.
- 6.1.9 Immediately carry out a review of the Club's procedures with regard to safety training of junior/novice rowers. Review the non-wearing of Personal Flotation Devices by junior/ novice trainees with safety boats to carry onboard Personal Flotation Devices to enable rescue of the crew under training in compliance with the Code of Practice where Personal Flotation Devices are not being worn.
- 6.1.10 Introduce planning processes so that the coaches in charge of Club training sessions have fail safe procedures mitigating the effects of unexpected deviations from the "Plan".
- 6.1.11 Introduce training session procedures whereby safety boats are never separated to the extent that the advantages of mutual support and assistance between the safety boats are lost given that many local features on a river involve bends and banks with limited visibility.
- 6.1.12 Introduce an effective means of communications between the coaches on safety boats other than by mobile phone technology.
- 6.1.13 Introduce minimum manning levels for Club safety boats of at least two persons including the safety boat operator.
- 6.1.14 Initiate and timetable regular Club officer/Club coach meetings and working groups to ensure safety issues and coaching practices are reviewed and discussed in order to propagate a healthy and interactive climate of information exchange within the Club.
- 6.1.15 Ensure all Club coaches coaching minors attend the Sports Ireland Coaching Children Programme and that there is a continuous development of coaching skills.
- 6.1.16 The accident/incident content of this reporting book should be pro-actively disseminated among the Club's coaches as part of the Club's safety culture.

It should be noted that the Club confirmed to the MCIB in April 2020 that it had undertaken a safety audit of its practices in line with Rowing Ireland guidelines and a risk assessment of the stretches of the river which the Club uses.

It is not the function of the MCIB in carrying out an investigation and publishing a report, to audit whether these steps have been taken or whether they are adequate.

This report recommends that Rowing Ireland should consider carrying out that audit and assessment, and the audit and assessment of the recommendations made to the Club in this report.

6.2 That Rowing Ireland

- 6.2.1 Immediately carry out a review and clarify its policy with regard to affiliated club's safety practices and Rowing Ireland's role in audit and enforcement as provided for the Rowing Ireland Safety Committee.
- 6.2.2 Implement a programme for the effective dissemination of Rowing Ireland safety recommendations, and of the Code of Practice.
- 6.2.3 Appoint a Rowing Ireland Communications Officer with specific responsibility to open and maintain interactive communications with all Rowing Ireland affiliated clubs in order to disseminate Rowing Ireland's safety advice to affiliated clubs.
- 6.2.4 Implement a programme of Rowing Ireland Safety Courses for club safety officers and coaches with particular focus on hazard identification, risk assessment and risk mitigation processes.
- 6.2.5 Immediately advise and encourage all affiliated clubs to carry out an audit of all river obstacles and hazards in the club's area of activities taking into account seasonal river flow conditions and prevailing tidal conditions in order to produce a Hazard List readily available to all club members and reviewed and updated on a regular basis.
- 6.2.6 Immediately implement a Safety Policy review with regard to the applicability of S.I. No. 921 of 2005 - Pleasure Craft (Personal Flotation Devices and Operation) (Safety) Regulations 2005 as amended by S.I. (2012) 349 regarding their application to Olympic style rowing boats, especially in relation to minors and during training, issue clear guidelines and consistent with the Code of Practice.
- 6.2.7 Immediately carry out a review of its policy with regard to affiliated club's procedures involving junior/novice rower training, introduction of novices to river activity skill sets and crew capability assessments.
- 6.2.8 Immediately carry out a review of its policy with regard to affiliated club's rowing boat crew standards for personal protective clothing and hair length with regard to the dangers associated with hypothermia and entanglement and recommend a minimum level of safety clothing standards for rowing crewmembers.
- 6.2.9 Immediately implement a Safety Policy with regard to requiring club safety boats to carry onboard extra Personal Flotation Devices to enable the rescue of crew.

- 6.2.10 Initiate a programme of guidance and advice to all affiliated clubs to develop an effective means of communications between the coaches other than by mobile phone technology.
- 6.2.11 Consider whether there is merit in adopting a requirement for minimum manning levels for safety boats.
- 6.2.12 Implement a programme to push down the guidelines and advice contained within Rowing Ireland's Safety Manual to affiliated club level.
- 6.2.13 Consider whether there is merit in requiring evidence of compliance with the Code of Practice and Rowing Ireland safety recommendations as a condition of affiliation to Rowing Ireland.
- 6.2.14 Consider whether there is merit in engaging with the funders of rowing clubs to require evidence of compliance with the Code of Practice and Rowing Ireland safety recommendations as a condition of funding.
- 6.2.15 Immediately assess its approach to the creation of safety policies or guidelines and ensure that these policies or guidelines are effectively communicated to clubs in order to develop a proactive approach to monitoring and improving rowing safety standards at club level.

6.3 That the Minister for Transport

- 6.3.1 Immediately review the Code of Practice: The Safe Operation of Recreational Craft, Chapter 8, section 8.2 with a view to amending the section with regard to rowing boat crew standards for personal protective clothing and hair length and mentioning the dangers associated with hypothermia and entanglement and recommending minimum standards of dress code for rowing crewmembers.
- 6.3.2 Review S.I. No. 921 of 2005 Pleasure Craft (Personal Flotation Devices and Operation) (Safety) Regulations 2005 as amended by S.I. (2012) 349 regarding its application to the use of Personal Flotation Devices in Olympic style rowing boats, especially in relation to minors and during training.
- 6.3.3 Review the Code of Practice: The Safe Operation of Recreational Craft, Chapter 8, section 8.2 with a view to amending the section with regard to minimum manning levels of club safety boats.
- 6.3.4 Review the Code of Practice: The Safe Operation of Recreational Craft, Chapter 8, section 8.2 with a view to amending the section with regard to requiring club safety boats to carry onboard a redundancy of Personal Flotation Devices to the scale enabling rescue of the crew of a capsized rowing boat.

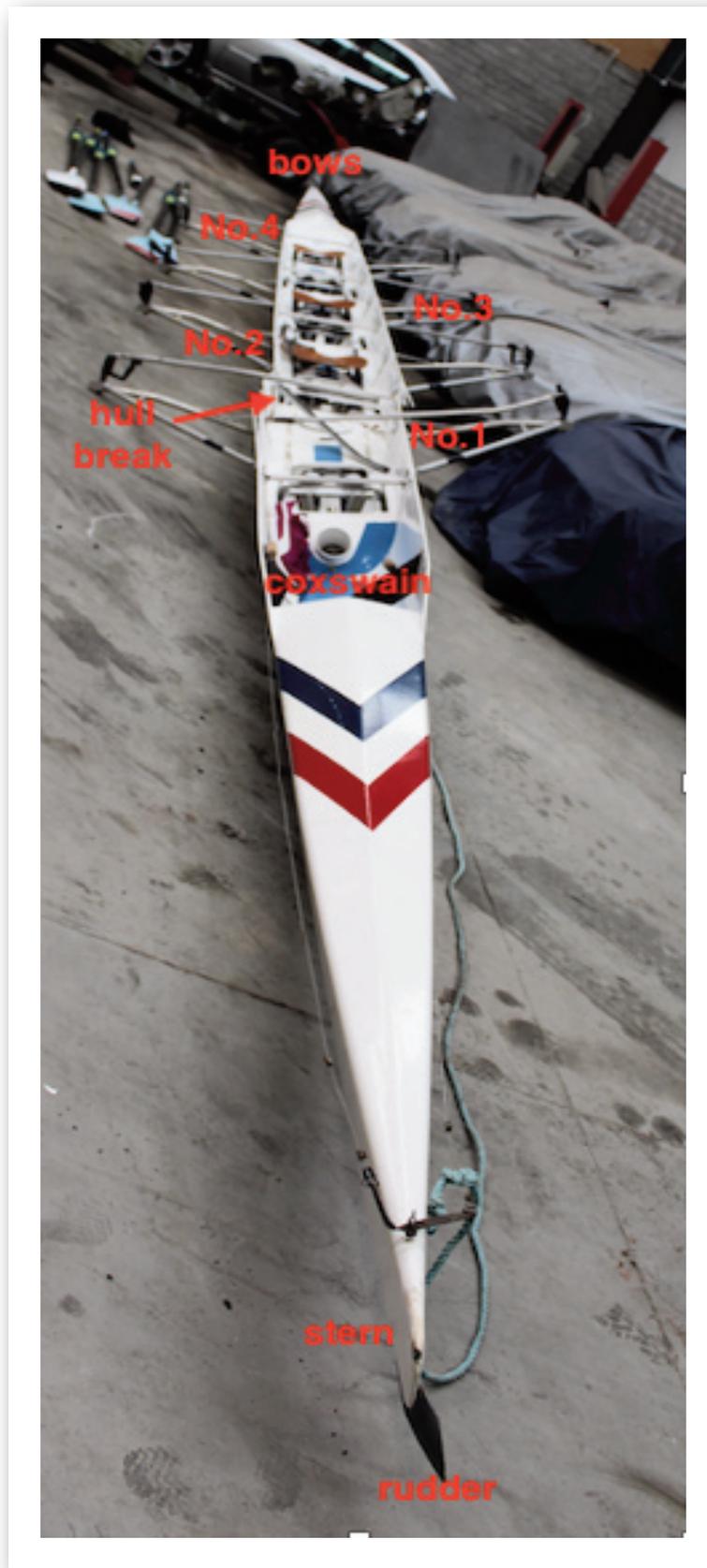
- 6.3.5 Review the Code of Practice: The Safe Operation of Recreational Craft, Chapter 8, section 8.2 with a view to amending the section with regard to an effective means of communications between the coaches on safety boats and/or shore station other than by mobile phone technology.
- 6.3.6 Appoint a body to identify methods whereby the sporting governing bodies oversee safety standards in clubs and ensure that coaches are sufficiently qualified.
- 6.3.7 Develop an effective programme with measured outcomes of information dissemination of the safety messages contained in the Code of Practice: The Safe Operation of Recreational Craft and relevant Marine Notices, especially in relation to youth rowing, canoeing and kayaking.
- 6.3.8 While the requirements and recommendations set out at Chapter 8 “Rowing Boats” of Code of Practice have been highlighted in this MCIB report, and the availability of the Code of Practice was advertised in Marine Notice 27 of 2020, consideration should be given to an assessment of the most effective way of delivering the important safety content of the Code of Practice to water sports clubs. Code of Practice Chapter 8 requirements should also be highlighted again by means of a further Marine Notice, and especially to club water sport training providers.
- 6.3.9 Consideration should be given to how best to enhance safety standards within the club water sport training provider sector including whether a mandatory registration or licencing scheme which requires the registration of coaches/instructors, and their qualifications should be introduced.
- 6.3.10 Consideration should be given to including in the Code of Practice guidance for hazard identification and avoidance with recommendations for minimum rescue equipment and facilities.

7. APPENDICES

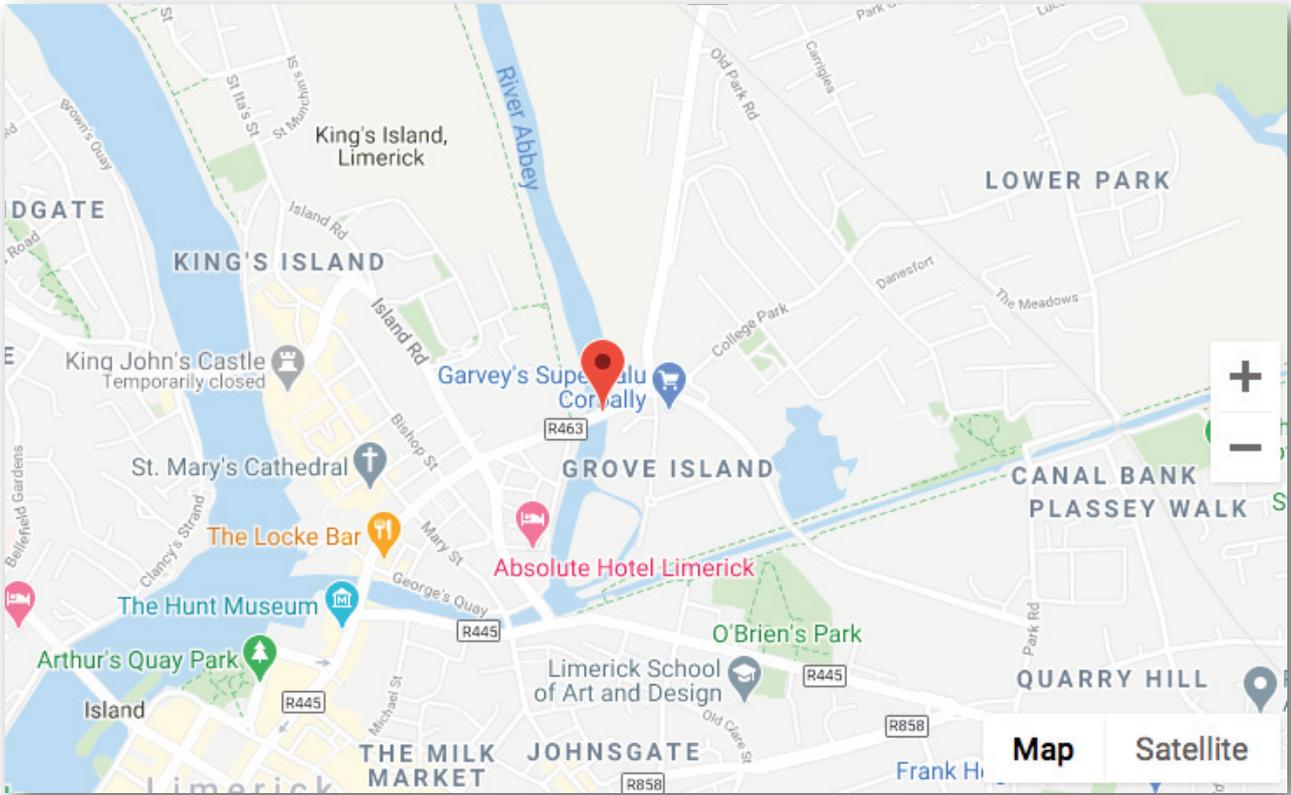
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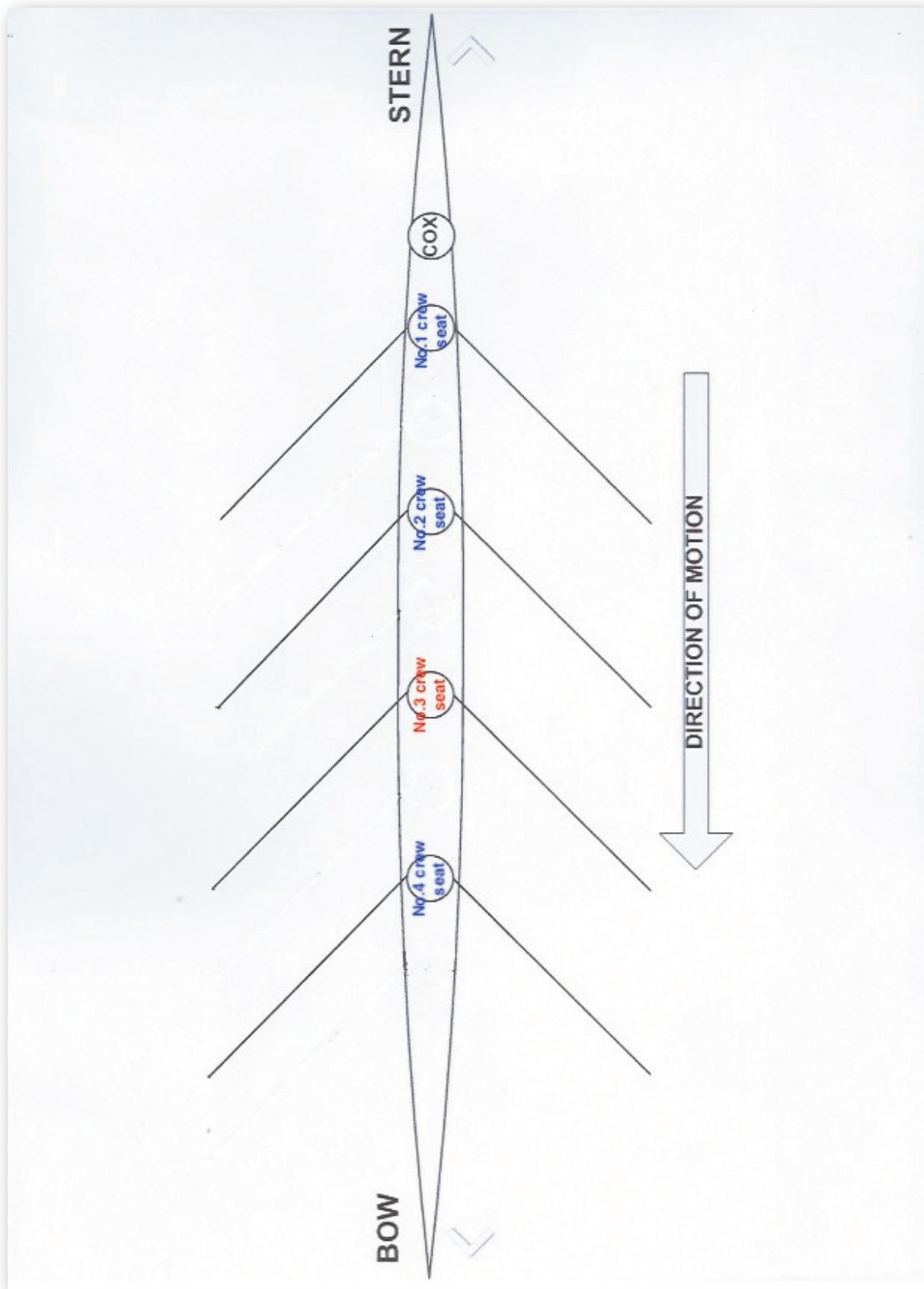
Appendix 7.1 Quad "Louie Murnane"



Appendix 7.2 Athlunkard Boat Club Location



Appendix 7.3 Quad Crew Seating Arrangement



Appendix 7.4 Quad “Louie Murnane” Manufacturers Plate



Appendix 7.5 Safety Boat & Safety Boat CE Plate

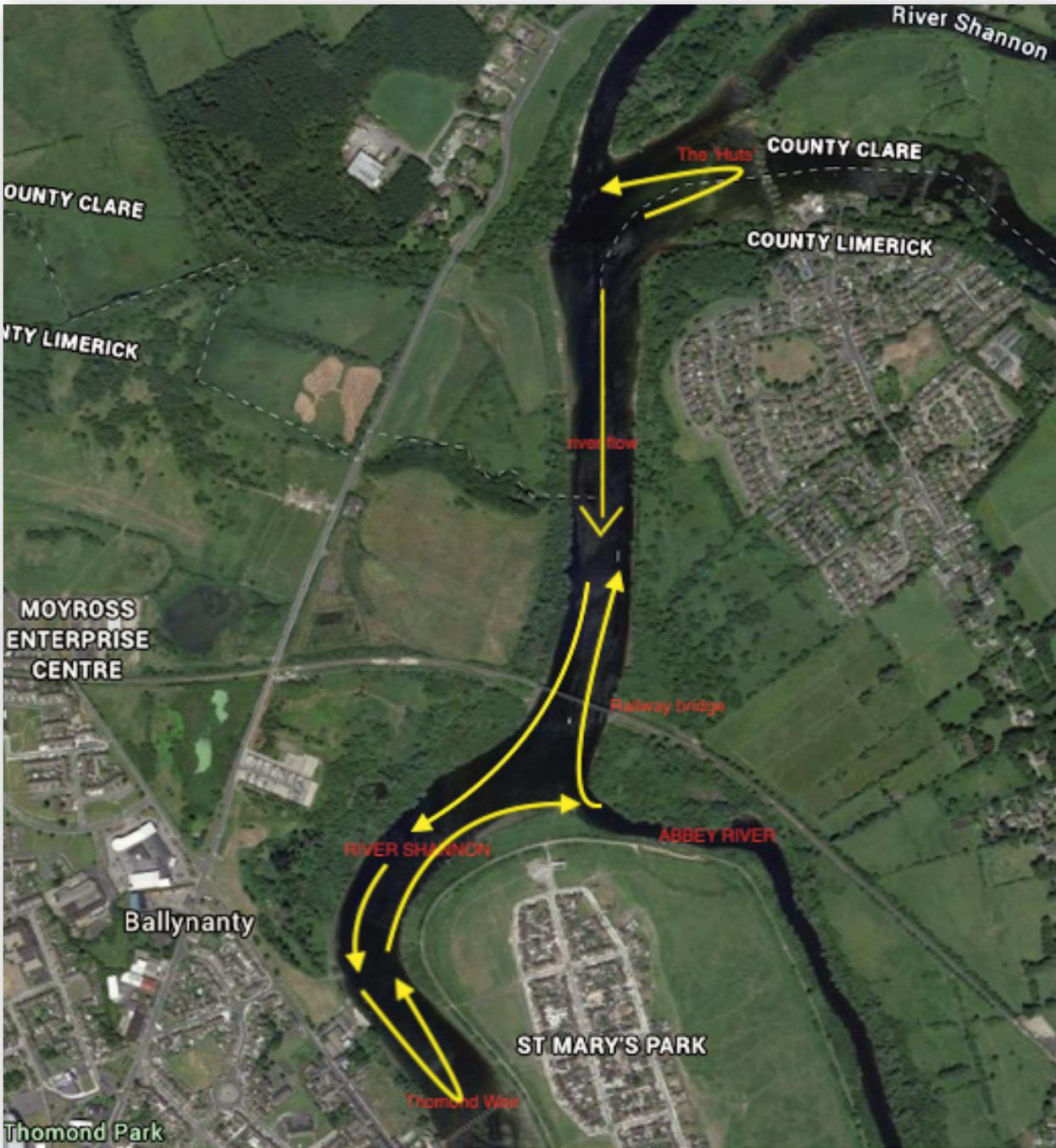


Safety Boat



Safety Boat CE Plate

Appendix 7.6 Athlunkard Boat Club Training Area



Appendix 7.7 Photographs



Thomond Weir - Upstream View (north side).



Thomond Weir - Downstream View (south side).

Appendix 7.7 Photographs



Thomond Weir - Support Spans.



Boat Turning Area - Upstream of Thomond Weir.

Appendix 7.8 Met Éireann Estimate of Weather Conditions in Abbey River



MET ÉIREANN
The Irish Meteorological Service

Glasnevin Hill,
Dublin 9, Ireland.

Cnoc Ghlas Naíon
Baile Átha Cliath 9, Éire.
www.met.ie

Tel: +353-1-806 4200
Fax: +353-1-806 4247
E-mail: met.eireann@met.ie

14 May 2019

Our Ref. WS1730/1905_21
Your Ref. MCIB/12/286

Re: Estimate of weather conditions in Abbey River, Limerick City (Thomond Salmon Weir), at 10:00 hours on the 23rd of February 2019.

Weather: A weak cold front traversed the area prior to the incident on the morning of the 23rd of February.

While a few spots of drizzle or very light rain may have occurred between 07:00 and 08:30 hours, it was indeed dry at 10:00 hours. All of the rest of the day was dry with variable cloud and some bright spells.

Temperatures: It was mild. The air temperature was 12 to 13 degrees Celsius.

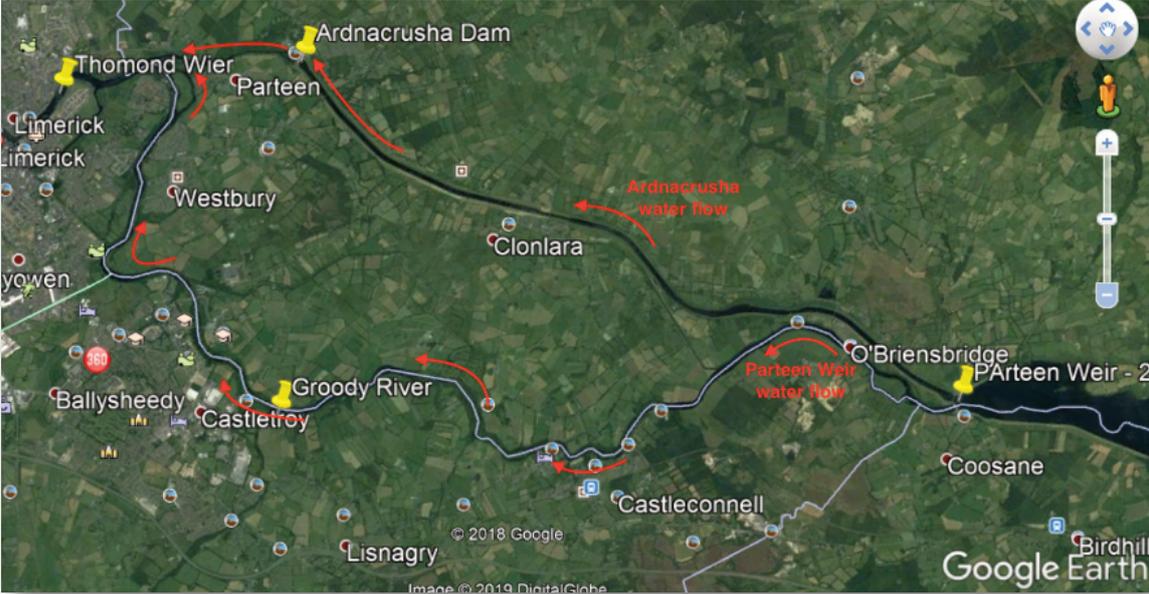
Wind: Winds from the south were moderate (mean speeds of 10 to 14 knots) or 20 to 24 km/h. This would have equated to Force 4 on the Beaufort scale. A few infrequent gusts up to force 5 may have occurred.

Visibility: Good (Greater than 10 km).

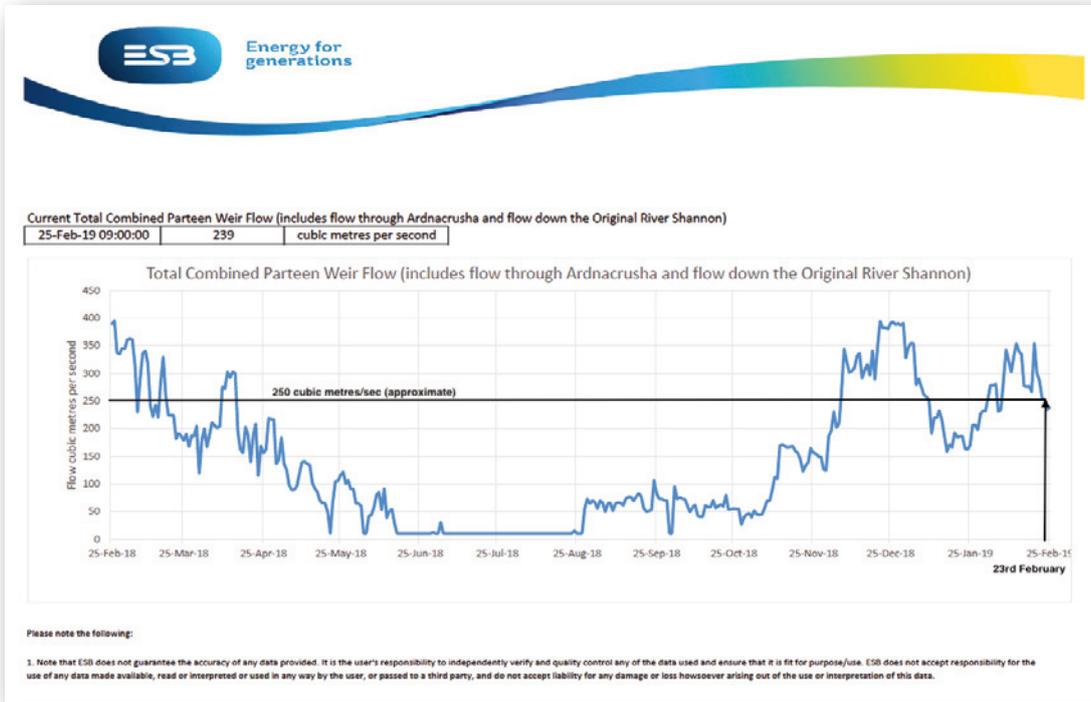
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Meteorologist, (General forecast Division). [Redacted]
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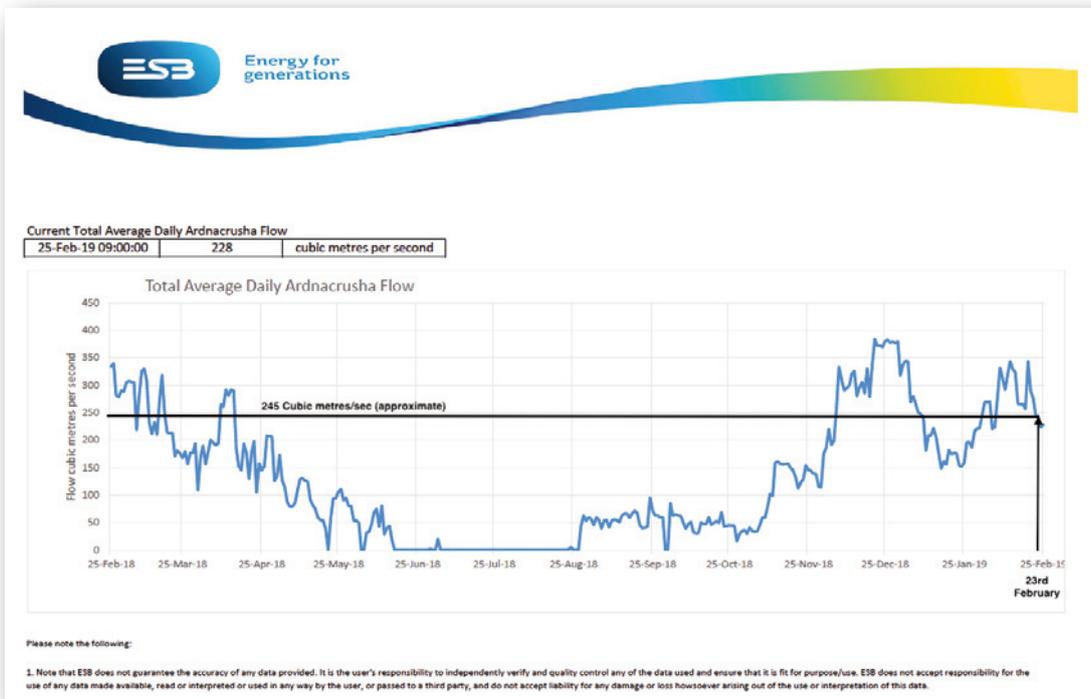
Appendix 7.9 Shannon Basin River Catchment



Appendix 7.9 Shannon Basin River Catchment



Total Combined Parteen Weir Flow.



Average Daily Ardnacrusha Flow.

Appendix 7.10 Athlunkard Boat Club Health and Safety Policy

Athlunkard Boat Club Health and Safety Policy

Part 1: Safety policy dealing with crews on the river

1. No inexperienced rowers/sculler may take to water without the supervision of a competent club approved coach.
2. All rowers do so at their own risk.
3. All scullers and crews should have a coach with them.
4. All coxes must wear a properly fitting life jacket during the outing.
5. If any part of the outing is during darkness then the crew must attach a suitable light to the bow of the boat prior to going on the water to make them easily visible to oncoming crews (a light on the stern is recommended as well).
6. Crews and coxes must make themselves aware of the rules of the river and be bound by them at all times (a copy of these rules is on the club notice board in the gym)
7. Crews rowing through the town should be accompanied by a launch at all times.
8. All rowers must, as a condition of membership, be able to swim 50m unaided and make themselves familiar with the capsized drill.

Equipment: All equipment must be checked by the crew using the boat before and after use and essential items such as bow balls, hatch covers and heel restraints must conform to the recommendations of Rowing Ireland.

Breakages: Any breakages during the outing should be reported to the coach or a committee member and the boat should not be used again until it has been satisfactorily repaired.

Insurance: All rowers and those using the gym must be a paid up member of Athlunkard Boat Club before using any club equipment. All rowers wishing to use club equipment for rowing purposes must register with Rowing Ireland no later than 1 January each year.

Part 2: The Clubhouse is to be treated with respect by all members/coaches and guests

1. Athlunkard Boat Club, its committee and its trustees accept no responsibility for any accidents or personal injuries which may occur to a member whilst using club equipment in the gym, on the water or in transportation for training purposes or during competition. Report incidents and accidents using the incident book in the clubhouse.
2. Non members are required to sign a waiver and agree to abide by the health and safety policy prevailing at the club and agree to become a temporary member for the period of their visit.
3. All users of the clubhouse and surroundings should be mindful of the hazards that surround them. Through no fault of the club or its users, from time to time the grounds and internal floors throughout can become wet and slippery. It is necessary for every individual to pay particular care and attention to their own safety. This is particularly important in the winter months when icy conditions are likely to be a regular occurrence.
4. The changing/ shower-rooms should be treated with respect by all users, due to the activity of the club there is likely to be some natural ingress of water into the changing rooms. All users should be mindful that with the combined use of showers and the natural ingress of water the tiled floors may

Appendix 7.10 Athlunkard Boat Club Health and Safety Policy

become slippery; it falls on all members/coaches/ guests to make an effort to reduce or remove this risk when it arises in a sensible fashion.

5. Due care should be taken by all members/coaches and guests to ensure the safety of all personal belongings and valuables, the club accepts no responsibility for any items lost or stolen on the premises.
6. It is at the members/coaches risk that they remove boats and equipment from high or low storage racks within the boathouse, paying particular attention to correct manual handling guidelines taking care not to injure themselves.

Part 3: Safety policy dealing Safety Launch

1. The safety launch and engine must be in good working order.
2. The safety launch must have safety bag on board.
3. Any persons operating/using the launch must wear a correctly fitted lifejacket and be familiar with the workings of the engine.
4. All crews must keep close to safety launch and obey directions of coach when on the water.

UNDER NO CIRCUMSTANCES ARE ANY ROWERS TO GO ON THE WATER IF A SAFETY LAUNCH IS NOT AVAILABLE FOR THE SESSION.

Part 4: Junior Members

1. It is the policy of Athlunkard Boat Club that no juniors members (rowers under 18 years of age) are to be on the club premises for any reason, training or otherwise unless requested to do so by a coach and are supervised by that coach for the time that they are there. They must not remain on the premises after the training session is over for longer than is necessary.
2. If for some reason the coach cannot attend, the session then cannot go ahead unless arrangements are made for another club coach to supervise the rowers.
3. A coach is an adult known to the committee, approved for such by the committee and Garda vetted by Rowing Ireland. The list of such approved coaches is available from the secretary.
4. Parents, older siblings, adult rowers or adult volunteers are not approved coaches and therefore cannot act in the capacity of a coach.

Appendix 7.11 Rowing Ireland Education - Coaching Courses

ROWING IRELAND – EDUCATION


[Home](#)
[News](#)
[Rowing For All](#)
[Supporting Our Clubs](#)
[High Performance](#)
[Events](#)
[About Us](#)



Our Courses

SHARE   

We offer a range of courses to our registered members. We have developed a hybrid learning approach for the delivery of our Coach Education Program courses through the use of virtual online training and real-world practical experience. As part of this fresh approach to coach education, we are reviewing course content as well as updating and upgrading presentations in line with Sport Ireland Coaching best practices.

Introduction to Coaching Course

This introductory coaching course is suitable for beginner coaches and parents willing to get involved with helping in the club. Juniors or students aged 17+ with some rowing experience, but not coaching experience, will benefit from this course.

On the course we introduce coaching methods, rowing technique, safety and welfare awareness, communication and session planning.

Application forms are available from coacheducation@rowingireland.ie The cost for the course is €80.

Level 1 Coaching Course

Our Level 1 course is currently unavailable as we are re-developing it to take account of the new COVID-19 situation. We will post notices and advise clubs when we are ready to deliver our new formatted course.

Level 2 Coaching Course

Our Level 2 course is currently unavailable as we are re-developing it to take account of the new COVID-19 situation. We will post notices and advise clubs when we are ready to deliver our new formatted course.

Strength Training for L1, L2 and L3 Coaches

We are developing a suite of S&C courses that fit into the L1, L2 and L3 pathways but that also are open to other coaches who wish to top up their Strength Training skills. These will be available in the new year.

Code of Ethics/Child Protection Awareness/Safeguarding 1:

This 3-hour workshop is available to Rowing Clubs as an evening session 7pm-10pm. We require at least a month's notice to set this up.

Should you require any further coaching information don't hesitate to contact our Coach Education Co-ordinator.

coacheducation@rowingireland.ie

Appendix 7.11 Rowing Ireland Education - Coaching Courses

Level 1 Coaching Course (circa April 2019)

- **Course outline**

Rowing Ireland are pleased to announce a **Level 1 Coaching Course in Galway and Offaly** starting on Thursday evening 17th Jan 2019 and continuing on other dates listed below. The course is open to all clubs.

Places are limited so priority will be given to applicants who are **actively coaching** and planning to take on coaching roles in the coming season.

The Level 1 course is aimed at coaches who have already gained some experience in the sport and are wishing to improve their coaching skills. Coaches will learn about planning and delivery of a training session on land and water. A specific module on strength training is included. The course covers practical skills such as how to teach good technique, how to rig a boat, introduction to periodisation, designing a training programme and delivering a good training session. Coaches will be helped to further develop their picture of what to look for in good technique. Other coaching skills covered include communication, goal setting, race preparation and advice on nutrition-hydration. Coaches will get plenty of opportunity to practice and learn from hands on activities. There will be an emphasis on real coaching practice on the water including feedback and an improvement plan.

Coaches must attend all sessions and complete all course work to qualify for L1 certification. There will be in course assessment through the course activities, practical sessions and tasks as well as a written assessment covering topics covered in the course. There will be an assessment of coaching practice as well as a follow up of logged coaching hours/sessions.

The course is certified by Coaching Ireland (formerly NCTC) and Rowing Ireland

Level 2 Coaching Courses (Dates TBC)

- L2 coaches must attend and pass the assessment at one of the **Strength Training** all day sessions listed.
- Classroom and water sessions at NRC.
- Water sessions, camps at selected locations to be decided based on where the majority of coaches are based. There will be 2-4 locations selected based on numbers. Selected locations will be suitable for coaching off a bike, such as (Carlow, Dublin, Portadown, Offaly, and Fermoy).
- Completion of L2 water sessions/camps.
- Places are limited and will be confined to those who meet the entry requirements and are actively coaching.

Appendix 7.11 Rowing Ireland Education - Coaching Courses

Document No.3 RI Education – Coaching Courses (page1 of 2)

- Level 2 certification requires full attendance and completion of a number of home-work tasks and projects.
- The Level 2 Coaches will plan and run the water and land sessions as part of a one day training camp where they will also deliver a 10 min presentation (using any method you wish) to a group of athletes and coaches on an assigned topic.
- The course fee is €200 payable online before starting at:

Level 3 Coaching Courses (Dates TBC)

- L3 coaches must attend and pass the assessment at one of the **Strength Training** all day sessions listed as well as attend and pass a follow up assessment at the NRC.
- Classroom and water sessions at NRC.
- Classroom and water session at NRC.
- Places are limited and will be confined to those who meet the entry requirements and are actively coaching.
- **L3 Assessment** is based on full attendance and engagement with all aspects of in course tasks particularly the coaching activities on water and in gym. Coaches must pass the strength training coaching module and will be assigned at least two written homework tasks on a range of topics such as training programme development, documenting a skills development session, etc. Coaches will also complete a mentoring project with a Level 1 coach.
- The course fee is €400 payable online before starting at:

Child Protection Awareness and Safety Training

Rowing Ireland will run a series of Child Protection Awareness courses (also known as Code of ethics or Safeguarding 1) in each province throughout 2017. This is normally run as an evening course, approximately 6:30-9:15pm. This is the same as the course offered by the Local Sport Partnerships. Coaches must have this certification to move to L1 or beyond and is also required for coach licencing. This training is strongly recommended for anyone who is working with young people in coaching or any other capacities. There will also be a safety and risk assessment discussion on the night. Courses can be booked by contacting the tutor emails below.

Note, this module is being covered on all L1 courses and will be part of the upcoming L1 courses in Coleraine and Fermoy. People not attending the full L1 may link in just for this module but must register.

Rowing includes "Olympic Style" rowing boats, racing gigs/skiffs and traditional racing currachs.

8.1 Training

It is recommended that rowers undertake appropriate training. A number of training schemes and approved courses are available and information may be obtained directly from course providers including Rowing Ireland (see Appendix 9 for details of course providers).

8.2 Olympic style rowing boats

These boats are used in the rowing events in the Olympic Games and are governed in Ireland by Rowing Ireland. The following safety points should be adhered to at all times.

A coach and/or a safety boat should be in attendance at all times. Operators of such safety boats should be suitably qualified and boats should be suitably identified by markings or warning flags to alert other craft in the area that there are rowing boats on the water.

Coach/safety boats should carry the following items of equipment:

- Suitable bailer
- Suitable inflatable pump – if an inflatable is used as a rescue boat
- A throw bag with at least 10 m of buoyant line

- A sound signalling device – air or aerosol power klaxon
- Thermal exposure blankets
- Lifebuoys or additional PFD/lifejackets to assist persons in the water
- Suitable First Aid Kit
- Anchor and line
- Knife
- Engine Kill Cord to be used by the engine operator
- Paddle
- Suitable handholds fixed to the side of the boat – to assist persons being rescued.

All participants should be aware of the requirements set out in the Rowing Ireland Water Safety Code.

8.3 Boat construction and equipment

- All rowing equipment should be kept in good order and inspected regularly.
- Buoyancy compartments located in bow and stern must be checked to ensure they are in good order and will function as intended. Boats should be handled carefully and correctly at all times when out of water to avoid damage to hulls or injury to crews or spectators.
- Boats, when placed on water and prior to crew embarking, should be checked to confirm they are safe, free of leaks and all moving parts are functioning.
- Restraints and quick release

Appendix 7.12 Code of Practice Chapter 8



∞ Rowing Boats

mechanisms must be in good working order on boats equipped with fitted shoes. The use of Velcro straps on fixed shoes, as opposed to lace-ups, is recommended.

- Check ventilation bungs are in position and that outriggers, swivels, seats, etc. are secure.
- Ensure all steering mechanisms are working.
- Sculls and oar buttons should be checked to ensure they are secure and properly set.
- Coaching launches should be on the water at all times when rowing craft are in use. Unescorted outings are not encouraged and, if undertaken, a designated person ashore should be aware of departure times, destinations and return times.
- All persons participating should be in good health and capable of swimming 100 m while wearing light clothing.
- All boat coxswains should wear an approved PFD/lifejacket at all times.

Boats should not be used at night unless they comply with the requirements of the International Collision Regulations regarding navigation lights. Boats should not be operated in weather or tide conditions that may compromise their low freeboard and stability.

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Appendix 7.12 Code of Practice Chapter 8

Rowing Boats 8

Coaches, coxswains and crew should at all times be aware of local navigation rules, including any possible hazards or potential dangers arising from tidal, stream or wind that may prevail locally. When racing in competitions, the Water Safety Code of Rowing Ireland is to be adhered to fully.

8.4 Coastal racing gigs/Traditional racing currachs

- Crew engaged in racing these boats should wear a suitable PFD/lifejacket at all times.
- Boats should be equipped with a means of attracting attention (Aerosol Klaxon).

- Coaches/Crews should not operate these boats in waters that are beyond the capabilities of the crew or boats.
- Coaching/Rescue boats that are in attendance should be suitably equipped and be operated by competent operators.

8.5 National Associations

Rowing Ireland is the governing body for rowing in Ireland and represents over 100 clubs across Ireland (See Appendix 10 for contact details).

The Irish Coastal Rowing Federation is a governing body for coastal rowing in Ireland (see Appendix 10 for contact details).



Appendix 7.13 Extract of Rowing Ireland Safety Manual (May 2017)

Rowing Ireland Prepared by: Safety Committee

SAFETY MANUAL

To be brought to the attention of all: Employees / Members / Visitors



Rowing Ireland Farran Wood, Co. Cork

Date	Version	Description	Author	Board Approved
Mar 2014	Draft	Preparation of the Safety Statement	John Curley	
May 2017	1.0	Review of Safety Manual	Joe Cantillon, Hamish Adams	1 st July 2017

Rowing Ireland Prepared by: Safety Committee

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Appendix 7.13 Extract of Rowing Ireland Safety Manual (May 2017)

Rowing Ireland

Policy Statement

Rowing Ireland is committed to ensuring, promoting and improving the safety of all its members, visitors, and to members of the general public.

Member / Visitor safety is a matter of major concern to **Rowing Ireland** and subsequently, safety rules and regulations will be strictly enforced.

It is **Rowing Ireland** policy to comply with the Safety, Health and Welfare at Work Act 2005 & the Safety Health and Welfare at Work (General Applications) 1993 and any other relevant legislation.

Rowing Ireland shall conduct its business, so far, as is reasonably practicable, in such a manner as not to expose persons to any undue risks that may affect their health and safety.

Rowing Ireland is committed to dealing with all identified hazards, firstly by elimination if possible, by substitution or replacements with less hazardous substances, reduction of member's exposure to an internationally acceptable level for the sport and as a last resort the use of personal protective equipment.

Our **objectives** are to provide a safe and healthy recreational environment for our members, visitors, contractors and members of

Board of Rowing Ireland

Rowing Ireland Safety Manual

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Board Approved 1 July 2017

Prepared by: Safety Committee

the public who may be affected by our activities and also to meet our obligations under the Safety, Health and Welfare Legislation.

Rowing Ireland shall, as far as is reasonably practicable, provide and maintain: -

- ▲ Place, equipment and systems of sport / recreation that are safe and without risks to health / safety
- ▲ Sufficient information, instruction, training and supervision to ensure all club members / visitors avoid hazards and contribute positively to their own health and safety while participating in the sport
- ▲ Consultation and communication with all members / visitors in relation to health & safety
- ▲ A place of recreation without risk to health and means of entry and exit that are safe and without risk

Safety Manual

- ▲ The Safety Manual is aimed at protecting our members, visitors, contractors and members of the public from accidents and ill health.
- ▲ The Safety Manual is available to our members, visitors, outside service providers and Inspectors of the Health and Safety Authority.
- ▲ The Safety Manual will be reviewed periodically and updated as required.

Rowing Ireland

Prepared by: Safety Committee

Responsibilities of the Rowing Ireland Safety Committee

- a) Monitoring performance of statement by reviewing incident trends and annual resource allocations.
- b) Revising Safety Manual annually.
- c) Ensuring on-going consultations with regional and club safety officers or their representatives.
- d) Auditing Rowing Ireland safety procedures.
- e) Chasing up action, if required.
- f) Monitoring club safety officer engagement to ensure compliance.
- g) Arranging safety courses for members.
- h) Organising periodic information workshops with members / officers to clarify requirements of the safety manual.
- i) Encouraging clubs to report and investigate incidents (accidents, near misses, damage) and ensure that appropriate statutory notifications are properly completed.
- j) Taking appropriate action on any safety representations.
- k) Estimating annual resource allocation for execution of safety programme.
- l) Provide templates for emergency plans & risk assessments.
- m) Identifying training needs and ensuring that these training needs are satisfied.

Rowing Ireland Safety Manual

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Appendix 7.13 Extract of Rowing Ireland Safety Manual (May 2017)

Rowing Ireland

Responsibilities of Club Members

Members are reminded of their responsibilities under the
Safety, Health and Welfare Legislation

- ▲ Read and understand Rowing Ireland / club safety manual;
- ▲ Co-operate with Rowing Ireland / club officers to enable Rowing Ireland / the club to comply with statutory provisions;
- ▲ Take reasonable care for their own safety, health and welfare and that of others;
- ▲ Make proper use of all equipment etc.
- ▲ Make proper use of personal protective equipment;
- ▲ Report immediately to the **club safety officer**, any defect in club house, club equipment, slipway, boats, launches, engines which might endanger the safety, health or welfare of which he/she becomes aware
- ▲ Refrain from playing dangerous practical jokes or engage in horseplay;
- ▲ Report any injury to him/herself, which occurs at Rowing Ireland activities, even if the injury does not stop him/her from participating;
- ▲ Suggest safer methods for our activities
- ▲ Attend health and safety training provided by the clubs / Rowing Ireland.

Rowing Ireland Safety Manual

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Board Approved 1 July 2017

Prepared by: Safety Committee

Responsibilities of the Club Safety Officer

1. The adviser will be fully conversant with the Rowing Ireland Safety Manual.
2. Create a 'Live' Risk Assessment Document to assess the risks to club members and visitors both on and off the water.
3. Implement the club safety policies and procedures and monitor all aspects of health and safety within the club, including adherence to current legislative requirements.
4. Advise the club management committee on health and safety requirements, the resources required for their implementation and the on-going reviews.
5. Inspect / audit all locations and documentation to ensure that all legislative requirements are met and the necessary controls are implemented for all high-risk activities.
6. Ensure that all testing and certification for equipment is carried out as required and that records are kept.
7. Ensure that accidents record book(s) are kept, accidents are investigated / monitored and the required remedial / statutory action taken.
8. Ensure that dangerous occurrences are recorded / investigated and the required remedial / statutory action taken
9. Identify the clubs on-going training needs and organise the necessary training.
10. Oversee the safety arrangements for Regattas / Training etc.
11. Develop contacts with local river users group, or similar body, to assist in understanding and resolving areas of conflict between users.

Rowing Ireland

Responsibilities of the Club Coaches

(Refer to the 'Rowing Ireland Water Safety Code' available on website)

Club coaches will:

- ▲ Be responsible for the safety of all junior (<18yrs) persons under their control.
- ▲ Co-operate with Rowing Ireland in the implementation of the practices in the safety manual.
- ▲ Inform club members of the safety procedures associated with Rowing Ireland activities.
- ▲ Ensure that club members follow safe procedures
- ▲ Carry out a risk assessment relevant to the activity proposed to identify any unforeseen hazards. *(The assessment will take into account the ages, abilities and limitations of the personnel involved, together with the water and weather conditions prevailing or facilities available, so that a Safety Plan can be prepared and the programme of activity adjusted to suit.)*
- ▲ Ensure that every member of the crew, including the coxswain, is dressed suitably and adequately protected for the weather conditions they are likely to encounter.
- ▲ Inspect the rowing/sculling boat prior to launching to ensure that it is not damaged and that riggers, stretchers, shoes, seats and rails are properly adjusted, secured and free from damage and all boats have affixed bow-balls.
- ▲ Inspect oars and sculling blades to ensure that they are free from damage and properly adjusted
- ▲ Ensure that coxswains wear lifejackets or buoyancy aids. Those in bowloaders wear only manual PFDs.
- ▲ Ensure that launch occupants wear life jackets or buoyancy aids when accompanying crews and at other times whilst afloat.
- ▲ Ensure that all coaching launches and safety boats carry the required safety equipment.

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- ▲ Ensure that Considerations have been made to assist someone into the boat or for the driver to self-rescue in the event they fall overboard.
- ▲ Ensure all launch drivers wear a working kill-chord (dead-man) when driving a launch.
- ▲ Ensure that any activity after dark involving coaching launches that the launches to be fitted with lights as laid down in the International Prevention of Collision Regulations or as prescribed by the appropriate navigation authority.

Responsibilities of the Club Child Protection Officer

- ▲ Familiarise themselves with the Sport Ireland Code of Ethics "Good Practice for Children's Sport" and Rowing Ireland policy.
- ▲ To report all allegations or suspicions of child abuse to Health Services Executive and/or An Garda Síochána/PSNI.
- ▲ Communicate with parents and/or agencies as appropriate.
- ▲ Assist with the ongoing development and implementation of the club's child protection training needs.
- ▲ Liaise with the Rowing Ireland National Children's Officer in relation to child protection/safeguarding training needs.
- ▲ Be aware of local contacts and services in relation to child protection, i.e. principal and duty social workers and their contacts.
- ▲ Advise club officers on issues of confidentiality, record keeping and data protection.
- ▲ Ensure all coaches of juniors and/or vulnerable adults are Garda vetted/Access NI checked.
- ▲ Ensure all coaches complete code of ethics training.

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Rowing Ireland

Transport - Boat Trailer Accident Scene Management

- ▲ The immediate accident scene will be made safe:
Driving Accident-switch off engine and applying handbrake / warn other traffic by using warning triangles / hazards lights / cones etc.
- ▲ The driver will ensure their own personal safety and that of the passengers before assessing the casualty/ies
- ▲ The necessary first aid will be administered
- ▲ If necessary the emergency services will be notified with the following information
 - Type of accident
 - Number of casualties
 - Location of the accident or collection point for the casualty
- ▲ The casualty will only be moved if there is an immediate danger / threat to his safety.
- ▲ The casualty will be treated for shock (he will be placed in a safe position for his particular condition, kept warm, comforted and reassured)
- ▲ Other employees present will provide the required assistance.

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- ▲ The **Club Safety Officer** will be notified.
- ▲ The accident scene will be preserved in any case that warrants investigation by the Health & Safety Authority
- ▲ All details of the accident / witnesses will be collected by site management
- ▲ The entry in accident book will be completed. The accident scene will be sketched / photographed

Relevant Legislation

- ▲ Safety, Health and Welfare at Work Act, 2005
- ▲ Safety, Health and Welfare at Work (General Applications) Regulations 1993 / 2007
- ▲ Safety, Health and Welfare at Work (Miscellaneous Welfare Provisions) Regulations, 1995
- ▲ Code of Practice on the Prevention of Workplace Bullying
- ▲ Rowing Ireland Water Safety Code
- ▲ Relevant Road Traffic Legislation

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Hazards & Risk Rating

Hazard: Any substance, operation, machine or process with the potential to cause harm.

Risk: The likelihood of harm being caused.

Risk Rating		Likelihood				
		Negligible	Rare	Unlikely	Possible	Probable
		1	2	3	4	5
Severity	Insignificant	1	2	3	4	5
	Minor	2	4	6	8	10
	Moderate	3	6	9	12	15
	Significant	4	8	12	16	20
	Death	5	10	15	20	25

Risk Rating Matrix

Risk Rating = Consequence x Likelihood

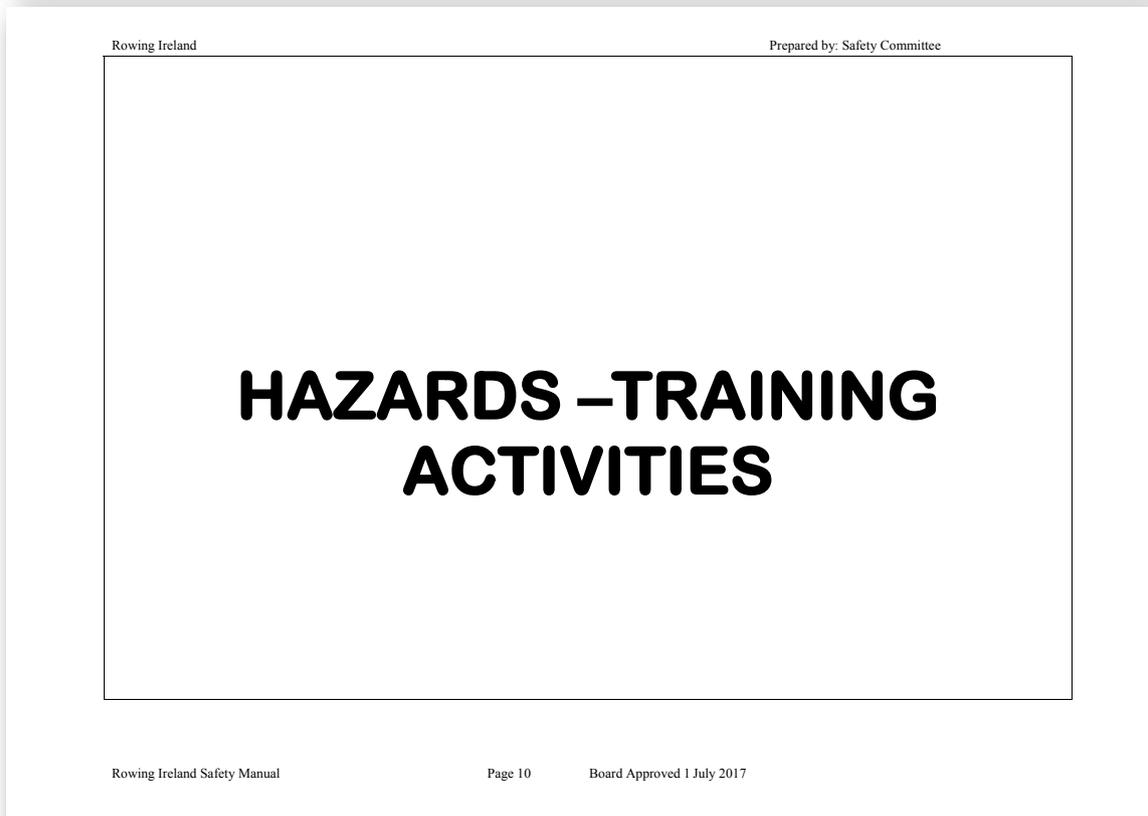
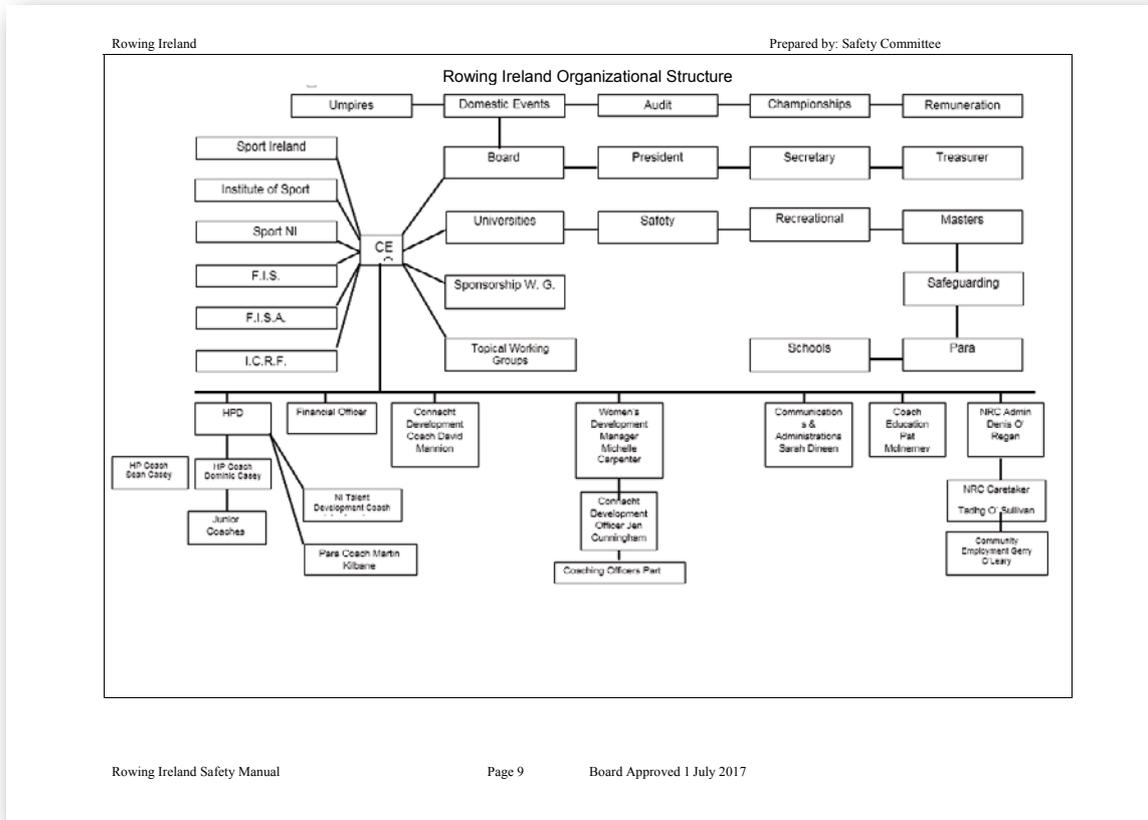
1-9	Low	10-15	Medium	16-25	High
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Boating Equipment			
Activity	Risk To	Person Responsible	Risk Assessment Findings
General club activities— Training / Regattas / Club Activities	Rowers Coaching Staff	Club Equipment Officers	
Hazard	RR*	Consequence(s)	Current / Additional Control Measures
Lack of knowledge of row area Currents Obstacles	Moderate	Cold Water immersion Hypothermia Drowning	<ul style="list-style-type: none"> ▲ All club equipment will satisfy the requirements of Rowing Ireland. ▲ For the safety of all concerned, the equipment will be suitable and safe for club members to use and be maintained in good order. ▲ Suitable procedures will be put in place to ensure that damaged equipment is identified to responsible officials without delay and the damage repaired before the equipment is used again. ▲ Damaged equipment should be "quarantined", with the nature of the damage clearly marked, to ensure that it is not used until repaired ▲ Bow-Ball: Every boat must at all times have firmly attached to its bows a white ball of not less than 4cm diameter made of rubber or material of similar consistency so that the bow is properly protected or its shape does not present a hazard. ▲ Heel restraints and "quick-release" mechanisms must be in proper and effective working order in all boats equipped with fitted shoes. ▲ For evening outings, rowing after sunset, boats shall be fitted with lights as required by the Department of the Marine or other statutory authority. ▲ Oars and sculls will be checked to ensure that "buttons" are secure and properly set. ▲ Buoyancy compartments, bow and stern canvasses, etc., will be checked to ensure that they will function as intended (boat buoyancy) ▲ Hatch covers will be securely fitted.

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Lack of Local Knowledge of River / Lake / Reservoir			
Activity	Risk To	Person Responsible	Risk Assessment Findings
General club activities— Coaching / Regattas / Club Activities	Rowers Coaching Staff	Club Officers	
Hazard	RR*	Consequence(s)	Current / Additional Control Measures
Lack of knowledge of row area Currents Obstacles	Moderate	Cold Water immersion Hypothermia Drowning	<ul style="list-style-type: none"> ▲ A suitable map / plan of the river / lake / reservoir will be prominently displayed showing local hazards / obstacles / currents / navigation hazards ▲ Instructions on how to handle any variations to normal procedures such as dealing with current / winds / climatic conditions etc. ▲ All club members will be briefed on the plan and all newcomers / visiting teams prior to going on the water.

Temperature - Sun Rays			
Activity	Risk To	Person Responsible	Risk Assessment Findings
General club activities— Boating / training	Rowers Coaching Staff	Club Officers	
Hazard	RR*	Consequence(s)	Current / Additional Control Measures

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Rowing Ireland		Prepared by: Safety Committee	
Sun Ray's (reflective glare) / Extreme Heat	Moderate	Sunburn	<ul style="list-style-type: none"> ▲ All training teams / personnel will be instructed in the prevention, recognition and treatment of sunburn, heatstroke and heat exhaustion. ▲ Protective clothing must always be worn. ▲ Appropriate barrier creams should be used on exposed areas of skin.

Temperature Extremes-- Cold			
Activity	Risk To	Person Responsible	Risk Assessment Findings
General club activities— Boating / training	Rowers Coaching Staff	Club Officers	
Hazard	RR*	Consequence(s)	Current / Additional Control Measures
Cold / exposure and hypothermia	Moderate	Hypothermia Loss of tactile sensitivity, muscular strength, coordination, disorientation, and unconsciousness	<ul style="list-style-type: none"> ▲ All training teams / personnel will be instructed in the prevention, recognition and treatment of hypothermia. ▲ Suitable protective clothing must always be worn. ▲ Sufficient thermal blankets will be carried on the launches for use in an emergency

Rowing Ireland		Prepared by: Safety Committee	
Poor Swimming Ability			
Activity	Risk To	Person Responsible	Risk Assessment Findings
General club activities— Coaching / Regattas / Club Activities	Rowers Coaching Staff	Club Officers	
Hazard	RR*	Consequence(s)	Current / Additional Control Measures
Poor swimming skills Lack of confidence in the water Lack of confidence in the water Lack of knowledge of man overboard rescue procedures	Moderate	Cold Water immersion Hypothermia Drowning	<ul style="list-style-type: none"> ▲ All club members swimming ability will be assessed to determine their ability and confidence in and under the water and the results recorded. ▲ All club members must participate in capsizing and immersion drills also ▲ All coaching members / rowers must also be instructed / assessed in simple rescues / underwater recovery / use of ropes / throw bags ▲ Physically challenged athletes participating in organised rowing or sculling activities must be provided with suitable rescue facilities to cope with any accident whilst afloat. ▲ Written records will be kept of all assessments

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Rescues Launches			
Activity	Risk To	Person Responsible	Risk Assessment Findings
General club activities— Coaching / Regattas / Club Activities	Rowers Coaching Staff Visiting Team	Club Officers	
Hazard	RR*	Consequence(s)	Current / Additional Control Measures
Unsafe / suitable launch No "kill cord" Incompetent Launch operator Lack of First Aid Lack of Suitable equipment Engine Failure	Moderate	Cold Water immersion Hypothermia Drowning	<ul style="list-style-type: none"> ▲ All launches used will be suitable and safe for the intended task and have sufficient capacity for the transporting of injured crew members / rowers to the boathouse ▲ All launches will be maintained in a safe condition, will be checked regularly and the results recorded. ▲ All outboards used will be fitted with a suitable "kill cord" which will be worn at all times by the operator while the boat is in motion ▲ All operators will be suitably qualified and have the necessary experience of the launch / engine / river / lake ▲ All launch operators will be trained in first aid and cold water immersion treatment ▲ Regular training exercises will be carried out of all skills especially water rescue ▲ All launches will be equipped with a <ul style="list-style-type: none"> ○ suitable outboard / emergency spares / / fuel / anchor and chain / oars / paddles / bucket / bailer ○ Suitable first aid kit / thermal blankets ▲ All personnel in the launch will wear approved lifejackets ▲ All engines will be serviced as per the supplier's instructions. ▲ The guidance in the operator's handbook will be followed in the event of engine failure.

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Coaches			
Activity	Risk To	Person Responsible	Risk Assessment Findings
General club activities— Coaching Crews---	Rowers Coaching Staff Visitors	Club Officers	
Hazard	RR*	Consequence(s)	Current / Additional Control Measures
Inexperience / Unqualified Coaches	Moderate	Cold Water immersion Hypothermia Drowning	<ul style="list-style-type: none"> ▲ Only experienced coaches, \ approved by Rowing Ireland will be permitted to conduct club activities. ▲ Ideally coaches should have a qualification in: <ul style="list-style-type: none"> ○ Water rescue ○ Basic First Aid/CPR ○ Boating Safety

Launch Operators			
Activity	Risk To	Person Responsible	Risk Assessment Findings
General club activities— Operating Launch	Rowers Coaching Staff	Club Officers	
Hazard	RR*	Consequence(s)	Current / Additional Control Measures

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Inexperience / Unqualified operators	Moderate	Cold Water immersion Hypothermia Drowning	<ul style="list-style-type: none"> ▲ Only experienced operators, approved by the club, will be permitted to operate launches. ▲ Ideally operators should have a qualification in: <ul style="list-style-type: none"> ○ Water rescue ○ Basic First Aid/CPR ○ Boating Safety
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New Members			
Activity	Risk To	Person Responsible	Risk Assessment Findings
General club activities— Coaching Crews	Rowers Coaches	Club Officers	
Hazard	RR*	Consequence(s)	Current / Additional Control Measures

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Existing Medical Condition Underage Poor swimming ability	Moderate	Cold Water immersion Hypothermia Drowning	<ul style="list-style-type: none"> ▲ Pertinent information on any existing medical conditions must be received and recorded ▲ Emergency phone numbers must be held by club and be available to all supervisors where the need arises ▲ Proof of age will be required where applicable. ▲ Parental / guardian permission received where applicable. ▲ New members to be instructed on Manual Handling techniques ▲ New members to be instructed on techniques for carrying boats from the boat house to the launching area and back ▲ New members must produce evidence of being able to comply with the Water Safety Code 2006 in respect of swimming or take a swim test organised by the club. ▲ New members must be made aware of action to take if an emergency arises. ▲ A minimum entry level of swimming ability must be adopted for all new potential club members. ▲ All persons participating in rowing or sculling must be in good health and able to do the following: <ul style="list-style-type: none"> ➢ Swim a minimum of 50m in light clothing and to demonstrate within that test competence under water and in treading ➢ Demonstrate the use of rescue equipment. ➢ New members will be instructed in manual handling techniques and techniques for carrying boats and oars from the clubhouse to the launching area
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Appendix 7.14 FISA Minimum Guidelines for the Safe Practice of Rowing (2005)

FISA's Minimum Guidelines for the Safe Practice of Rowing

This document should be considered as an example for the development of a localised safety programme. Each national, regional or local rowing organization should have its own regulations for the safe practice of the sport of rowing which fully reflects local, regional or national laws, obligations and requirements. In this respect FISA accepts no legal liability.

FISA's Minimum Guidelines for the Safe Practice of Rowing

Introduction

Many accidents take place because uninformed decisions are made before leaving the boathouse. Weather and water conditions, time of day, equipment, and supervision are all critical components that must be considered to have a safe training session. FISA encourages all rowing programs to implement, at a minimum, the following guidelines to help make informed decisions and ensure the safe practice of our sport. The standards below are available to be used as a basis for establishing fundamental guidelines or to supplement existing ones.

I. Required Elements

A. General

These guidelines provide the minimum rowing safety standards generally appropriate for rowing organizations. Each organization is responsible for enforcing safety standards in their respective area and local laws may require more stringent regulations or policies as deemed appropriate. The following minimum guidelines may be freely used to create comprehensive safety regulations appropriate to the area.

B. Safety Adviser

Each rowing organization should appoint a Safety Adviser. The duty of the Safety Adviser is to ensure that the safety program is followed.

C. Code of Safety

Each organization should prominently post a "Code of Safety" or its equivalent, such as "Safety Rules and Regulations", including rules and information on:

- Safe Rowing Equipment
- Boathouse Rules
- Local Code of Practice and navigation rules
- Rowers', Scullers', Coaches' and Coxswains' Responsibilities
- Emergency Rules/ Capsize and Accident Drills
- Coaching Boats and Safety Boats
- Safety at Regattas
- Log book for unsupervised rowers
- Visual aids on; water safety, lifesaving, hypothermia, hyperthermia, resuscitation procedures

Appendix 7.14 FISA Minimum Guidelines for the Safe Practice of Rowing (2005)

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- Telephone number list, to include
 - Doctor/Ambulance/Police
 - Fire Department
 - Local hospital casualty department
 - Local, river or harbor police
 - If there is no telephone readily available at the boating area, clear directions to the nearest available telephone must also be displayed.

Safety and first aid equipment should be readily available in every boating area to include:

- First aid cabinet (to be fully stocked and regularly checked)
- Thermal blankets/exposure bags
- Life rings/buoys and rope line.
- Life jackets

Where possible, clubs should maintain adequate comprehensive insurance to cover personal injury to club members on and off the water and personal injury and damage to property or liability to third parties. There should be included in these policies adequate cover for the Safety Adviser.

II. Detailed Information

A. Safe Rowing Equipment

For the safety of all concerned, rowing equipment should be maintained in good working order. Particular attention must be paid to the following:

- Every boat must have a firmly attached ball of not less than 4 cm (1.5 inches) diameter on its bow. Where the construction or nature of the boat is such that the bow is properly protected or its shape does not represent a hazard then this requirement need not apply.
- Heel restraints and "quick-release" mechanisms must be in proper and effective working order in all boats equipped with fitted shoes. These restraints should not allow the heel to lift more than 5 cm (2 inches).
- For rowing in reduced daylight, boats shall be fitted with lights as required by the local and national waterway authorities. At the least, all boats should have a light forward and aft.
- All oars and sculls should be checked to ensure that "buttons" are secure and properly set.
- Bow and stern compartments should function as individual buoyancy compartments and must be checked to ensure that they will function as intended.
- Boats should meet minimum flotation requirements:

When full of water a boat with the crew seated in the rowing position should float in such a way that the top of the seat is a maximum of 5 cm (2 inches) below the static waterline.

Older boats not designed to meet this requirement may use inflatable buoyancy bags, foam blocks or other materials.

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B. Local Code of Practice

Since conditions vary from venue to venue, each organisation should prepare and display a local code of practice, which should include a plan of the local water, drawing attention to local navigation rules, hazards and restrictions to water use. Attention should also be drawn to any variation in normal procedures that may be necessary due to the state of the tide or stream, high winds, or other climatic conditions. Local codes of practice should emphasize that safety is paramount.

C. Personnel Responsibilities**1. General**

All participants in rowing and sculling, including coxswains, should receive proper instruction in watermanship and technique, including capsize drills, from a qualified coach. No one should put him- or herself or others at risk when on the water. This applies particularly to beginners and to juniors.

Encouragement should be given to athletes to become fully aware of life-saving and resuscitation procedures by attending training courses. In particular, it is highly desirable that Safety Advisers and coaches should be so trained.

Rowing activities should be coordinated with those of other local water users to minimize clashes of interest and the possibility of creating additional water hazards.

There should be a required reporting structure for all non-trivial accidents to the Safety Adviser or higher authority where these events are recorded for further review. This information should be passed on to the regional or national authorities for a comprehensive overview of safety in the sport.

2. Rowers and coxswains

Any rower or coxswain going out on the water will be responsible for abiding by all local rules, regulations and traffic patterns. They should be in good health and properly attired for the present and potential conditions. All rowers and coxswains should demonstrate the ability to swim 50 meters (54 yards) in light clothing and to demonstrate within that test competence under water and in treading water. If a person cannot meet the requirements of the swimming test for physical or other reasons, an approved lifejacket or buoyancy aid should be worn when in a boat. In case of accident, stay with your boat rather than attempting to swim to the shore. Your boat, unless seriously damaged, is your life raft.

Coxswains should receive a full explanation on handling the boat, all relevant safety procedures and boat handling. Inexperienced coxswains should be allowed out in boats only if observed by an experienced coach, preferably in a fully equipped coach boat. They must also be familiar with navigation rules.

3. Coaches

Coaches must be responsible for those under their authority and should ensure that they are informed of safety procedures and abide by them. They must evaluate environmental conditions and determine if it is safe for rowers to go out on the water.

D. Coaching Boats**1. General**

The presence of a coaching boat gives far better safety protection to a crew than a coach on a bicycle on the land. The coach must drive safely, always consider the safety of those on board, and consider the effect upon other water users.

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2. Training Drivers

To take out an engine-powered boat without previous instruction is to put the driver, any passengers and other water users at risk. At the very least the club shall ensure that an experienced driver goes out with a new driver until he has shown that he is fully in control of the launch.

The manner in which coaching boats are driven may create unnecessary problems for other water users. Excessive washes and waves create difficult rowing conditions and can cause accidents to smaller boats. Thoughtless driving often causes damage to moored boats and to riverbanks. To use coaching boats for coaching, rescue and other purposes all on the same water, requires drivers to be fully aware of the effect of the wake they cause and the risk that the very sport they are seeking to assist cannot take place because their manner of driving their boat has made the water unusable.

3. Coaching Boat Requirements

All coaching and safety boats should carry the following safety aids:

- A bailer and, for inflatable rubber dinghies, a suitable pump and a spare valve
- A horn or similar warning device, capable of attracting attention over a distance of at least 200 metres (217 yards).
- A grab line at least 15 metres (16 yards) long with a large knot tied in one end to assist throwing. Ideally a purpose made rescue/heaving line throw-bag.
- Thermal/exposure blankets to reduce wind-chill and counteract hypothermia. Make use of proprietary items but not woolen blankets that only absorb moisture and do not then retain heat. In the absence of recognised equipment, polythene sheet cut to the size of a commercially available exposure bag will provide the necessary level of heat retention until proper treatment can begin.
- Life buoys/Life jackets. These are essential when several people are in the water and the launch can attend to only one at a time.
- A basic first aid kit (list contents and check regularly as before).
- A sharp knife with carrying sheath.
- A paddle.
- Simple handholds fixed to the side of a launch to give help to any person being rescued, and provide self-help should the driver fall overboard.
- Engine, cutout lanyard device.
- An anchor and line.

4. Low Light Conditions

When it is necessary for outings to take place in the dark or in poor visibility the coaching boat must carry a waterproof flashlight and sound signalling system as a means of signalling for assistance. The boat must be fitted with lights as required by local/national authorities.

5. Lifejackets

It is advisable that buoyancy aids or life jackets be worn at all times by all on board a coaching boat and are essential when going out to sea or on very wide stretches of water. Life jackets that depend on oral inflation should be worn partly inflated; those that have auto inflation must be checked at intervals suggested by the manufacturers.

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6. Coaching Boat Maintenance

Maintenance of the boat and its engine is vital since the possible consequences of failure are great. A tool/spare parts box should be kept dry and checked regularly (an extra can of pre-mixed fuel is also a vital spare). It is a wise precaution to check that the engine is securely fixed to the hull and that the secondary safety fixing exists and is properly effective every time the boat is used.

7. Coaching Boat Design

Choice of a coaching boat, its hull size and its shape must be matched to an engine suitable for the work it is to undertake and the load to be carried. In particular, boats to be used for coaching on rivers or enclosed waters must be of a design which will enable a launch to accompany a crew rowing at speed without creating a wash that makes the water unusable or unsafe for everyone else, or causes damage to banks or installations.

E. Accident Log

An accident log is to be maintained and be available for inspection at all times, giving time, place and nature of accident, injuries/damages sustained and names and addresses of witnesses. Accident logs should be made available to the proper national authority where required.

III. Cold Water Guidelines - Hypothermia**A. Background**

Most experts in immersion hypothermia and cold water near drowning / drowning define cold water as temperatures below 20° C (68° F) (It is also recognized that colder temperatures increase the rate of body cooling and increase the risk of cold shock and swimming failure. The majority of persons dying from immersion succumb in the early stages of the incident due to a range of physiological responses including gasping, hyperventilation and rapid peripheral cooling, resulting in aspiration, reduced breath-hold and incapacitation.

Preparation and prevention are essential to protect against the effects of the cold-water environment. This should include emergency drills with the equipment that would be used. Acclimatisation to the cold is also shown to lessen the negative physiological responses.

B. Guidelines**1. Conditions**

Environmental conditions should be monitored, including water temperature, wind, precipitation and sea-state, and appropriate safety directions such as those set out in #3 below should be issued.

2. Clothing

Protective clothing should be worn which is appropriate for the conditions. The activity with the objective is to keep the body dry and to insulate against heat loss.

3. Precautions

When the water temperature is at 10° C (50° F) or below or when the environmental conditions warrant, special safety precautions should be considered. Possibilities should include:

- Warning members against going on the water;
- Advising members to go on the water only if carrying a personal flotation device (PFD) or lifejacket of appropriate size for each member of the crew, a sound-signaling device and, if it is after sunset and before sunrise, navigation lights as set out in the Collision Regulations AND;
- Where appropriate, only if attended by a safety boat carrying a PFD or lifejacket of appropriate size for each member of the crew of the largest vessel being attended.

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C. Hypothermia

Hypothermia occurs when the whole of the body has been chilled to a much lower than normal temperature, i.e. below 35° C (95° F) compared with the normal body temperature of 37° C (98.6° F). This should be avoided at all costs.

- "Dress to beat the cold" - Layers of clothing are more effective than one warm garment. The outer layer should be wind and waterproof.
- Do not take or give alcohol in cold conditions. Alcohol accelerates heat loss as well as impairing judgment.
- Be alert to the warning signs of cold both in yourself and others.
- Coaches of young children must be particularly aware of the risks to their charges of exposure to cold. Exposed arms, legs and head heighten the risk.

If a person has fallen into cold water, their body will lose heat rapidly. To reduce heat loss, the person should keep his clothes on except for heavy coats or boots which may drag the person down.

Sudden immersion in cold water can have a shock effect that can disrupt normal breathing, reducing even a proficient swimmer to incompetence. Confusion and an inability to respond to simple instructions will become evident.

When hypothermia is suspected; try to prevent further loss of body heat and re-warm the affected victim.

Send for help. Hypothermia is a medical emergency whether the patient is conscious or unconscious.

If conscious the victim should be actively re-warmed under careful observation.

If unconscious the victim must get medical aid as soon as possible. Follow instructions given under Resuscitation.

D. Symptoms and signs of hypothermia

The following are the most usual symptoms and signs, but all may not be present:

- Unexpected and unreasonable behavior possibly accompanied by complaints of coldness and tiredness.
- Physical and mental lethargy with failure to understand a question or orders.
- Slurring of speech.
- Violent outburst of unexpected energy and violent language, becoming uncooperative.
- Failure of, or abnormality in, vision.
- Twitching.
- Lack of control of limbs, unsteadiness and complaining of numbness and cramp.
- General shock with pallor and blueness of lips and nails.
- Slow weak pulse, wheezing and coughing.

A very dangerous situation is still present when a person who has been in the water for some time is taken out of the water. Further heat loss must be prevented. The victim should be protected against wind and rain if possible. Re-warming can be carried out by:

- Wrapping the victim in a thermal/exposure blanket.
- Others placing their warm bodies against the victim.

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- Giving hot drinks (if conscious), but not alcohol.

PREVENTION IS ALWAYS THE BEST POLICY.

E. Resuscitation

To be effective, resuscitation must be started as soon as possible, even while the patient is in the water. Otherwise irreversible damage or death will occur within a few minutes. Many thousands of lives have been saved by ordinary citizens who have known what to do and have had the courage to do it at the critical time.

The saving of life during a medical emergency depends on the accurate assessment and proper management of the ABC of resuscitation:

A - AIRWAY

B - BREATHING

C - CIRCULATION

On finding a person requiring resuscitation:

1. Approach

Establish there is no danger to yourself or the victim. If you see someone in difficulties in the water, DO NOT go into the water after him. It is critical that the rescuer handle the emergency in such a way that he himself remains safe. Remember there may be neck or back injuries requiring extra care when moving the victims.

- Find something to help pull him out – a stick, a rope or clothing.
- Lie down to prevent yourself from being pulled in.
- If you cannot reach him, throw any floating object - football, plastic bottle - for him to hold on to, then fetch help.
- If you are in a safety launch carefully approach him if it is safe to do so.

REACH · THROW · TOW

HAVING RESCUED THE VICTIM - SHOUT IMMEDIATELY FOR HELP

2. Assess the patient

Responsiveness - Establish responsiveness by shouting "ARE YOU ALLRIGHT" loudly and gently shaking the shoulder. If the patient is unresponsive, i.e., not breathing with no pulse: leave the patient immediately and summon help. Return to the patient and commence resuscitation.

a) Breathing

Inspect the airway - remove blood, vomit, loose teeth or broken dentures but leave well fitting dentures in place.

b) Open the airway

The rescuer should place two fingers beneath the point of the patient's chin, lift the jaw and at the same time place the palm of the other hand on the patient's forehead. Tilt the head well back by pressing on the forehead and the airway will open.

c) Check for breathing

The rescuer should place her ear close to the patient's mouth looking down along the line of the chest.

- Listen for the sound of breathing.

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- Feel for air movement indicating breathing.
- Look for rising and falling of the chest.

d) Circulation

Check for the presence of a pulse by feeling for the carotid artery in the neck. The artery lies along each side of the voice box (larynx).

If the patient is unresponsive - not breathing with no pulse - leave the patient immediately and go and telephone for help. Return to the patient and commence resuscitation.

If the patient is unresponsive, not breathing but with a pulse – perform ten “mouth to mouth” (expired air resuscitation) breaths, then leave the patient and telephone for help (in certain countries there are special short emergency telephone numbers, such as “999” or “911”). Return to the patient, check for breathing and pulse and continue resuscitation.

If the patient is unresponsive but is breathing and has a pulse then turn him on his side into the recovery position.

e) The Recovery Position

Kneel to one side of the patient. Take the nearest arm and place it at 90° to his body, elbow bent and palm uppermost. Take the farthest arm and place it with the palm outwards held against the casualty's cheek. Bend the far knee upwards to 90°, keeping the foot flat on the ground.

Supporting the hand on the face, pull gently but firmly on the bent up thigh to roll the patient towards you. Rearrange the far side, now upper leg to 90° and ensure the airway is still open by tilting the head and lifting the chin.

3. Resuscitation Procedure

This is the provision of artificial ventilation by mouth to mouth breathing, and an artificial circulation by external chest compressions.

a) Mouth to Mouth Breathing (Expired Air Resuscitation)

Lie the patient on his back. Kneel beside the head of the patient and open the airway by lifting the head and lifting the jaw. Open the patient's mouth and pinch the nostrils closed. Open your mouth, take a deep breath, seal your mouth firmly over the patient's mouth and breath out steadily into the patient.

Watch the patient's chest rise as if he is taking a deep breath 1-2 seconds.

Remove your mouth from the patient's mouth and allow the chest to fall (4 seconds). Give two breaths.

If mouth to mouth breathing is difficult, check and reposition the airway. Vomiting may occur if breathing returns, place the patient in the recovery position to prevent him from choking.

b) Mouth to Nose Breathing

If mouth to mouth breathing fails to give air to the patient mouth to nose breathing is an alternative method. With the patient placed in same position as described above the mouth is sealed firmly over the patients nose and you may breathe out steadily into the patient. Ensure that sealing of your mouth around patient's nose does not prevent airflow to the nose.

Watch the patient's chest rise as if he is taking a deep breath 1-2 seconds.

Remove your mouth from the patient's nose and allow the chest to fall (4 seconds). Give two breaths.

c) External Chest Compression

Place the patient flat on his back and kneel alongside the chest. Place the heel of one hand on the lower third of the breast bone. Place the heel of your other hand on top of the first hand. With your arms held

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straight and the hands on the chest all the time, press down on the breast-bone to depress it 4-5 cm (1.5 to 2 inches), then release.

Compress the chest smoothly 15 times at a rate of approximately 80 compressions per minute. After performing 15 compressions give 2 ventilations. Continue the compressions and the ventilations until help arrives. Do not stop to reassess the patient's pulse or breathing until help arrives.

4. Training

Remember that effective resuscitation training is essential; the foregoing text is only a guide/aide to understanding the practice of resuscitation that you are strongly recommended to learn. Contact your Red Cross or other medical training group for practical instruction in First Aid and resuscitation.

IV. HOT WEATHER GUIDELINES - Hyperthermia

Where rowing training and racing take place in a warm climate, participants may be subject to health risks. Organizers and other responsible persons should be prepared to evaluate the potential risks and to take precautions. This section represents the conclusions reached by the FISA Sports Medicine Commission in their paper "Hot weather and safety guidelines" which gives more detailed information on heat related problems and safety measures.

The main medical problems in warm and hot environments are related to:

- Air temperatures
- Air humidity
- Heat Radiation from sun and warm environments
- Exercise induced heat production
- Impaired heat reduction (Clothing, ventilation, hydration)

The main strategies to prevent heat-induced illnesses are

- Acclimatization
- Adequate hydration
- Postponement of exercise to cooler time periods of the day.

A. BASIC MEDICAL ISSUES

High intensity exercise in a hot environment with associated fluid loss and elevation of body temperature can lead to:

DEHYDRATION ▪ HEAT EXHAUSTION ▪ HEAT STROKE

The heat related problems always start with dehydration and accompanied by an elevated body core temperature. Exercise further increases heat load on the body. With increased core temperature, energy demands for temperature regulation increase and this further depletes energy resources, particularly glucose stores. These conditions are prerequisites for the heat induced illnesses. However, it should be mentioned, in the case of excessive thermal load, heat exhaustion and heat stroke may occur without dehydration.

The main heat related illnesses are represented in Table 1 with the causes and physical problems, the indications and symptoms, and simple rules for treatment. Any athlete with an elevated temperature above > 40 °C (104 °F) which does not resolve after 30 minutes of cooling and rehydration is to be considered a medical emergency.

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HOT WEATHER RISK EVALUATION

Taking into account the above mentioned factors, three levels of risk can be considered for hot, dry days according to the ambient temperature. When available, "wet bulb globe temperature" (WBGT) should be used to quantify environmental heat stress:

Table: risk evaluation related to ambient temperature or WBGT

AMBIENT DRY TEMPERATURE	WBGT	RISK OF THERMAL INJURY
25° – 31.9° C (77° - 89.4° F)	24.0 – 29.3 °C (75 - 85 °F)	Moderate
32° – 38° C (89.6° - 100° F)	29.4 - 32.1 °C (85 – 89.9 °F)	High
38°C and above (>100°F)	32.2 °C and above (> 90 °F)	Extreme

REGATTA CANCELLATION / POSTPONEMENT

In general, with proper planning and observation of local weather forecasts it should not be necessary to cancel a regatta. For the safety of participants the amendment of the regatta program to allow for events to be contested in the cooler parts of the day may suffice. When high or extreme thermal risk is indicated, special precautionary measurements are required.

B. SAFETY MEASURES

Hot weather safety measures:

1. Shade and Cooling facilities
 - a) For regattas in warm months, shaded rest areas (Buildings, tents, natural shade) need to be provided.
 - b) Cool or air conditioned rooms are recommended when warm weather with temperatures higher than 32° C (89.6°F) are expected.
 - c) Fans to enhance air movement in rooms and resting areas are recommended when room temperatures exceed 25° C (77° F).
2. Medical centre and first aid provisions
 - a) Rescue and first aid teams should be trained in diagnosis and treatment of temperature related illnesses and problems.
 - b) Facilities for intravenous infusion and intravenous fluids (e.g. Ringer Lactate solution) have to be provided at the medical centre.
 - c) For cooling, crushed ice, water and fans should be provided at the Medical Centre.
 - d) The medical centre should be air conditioned when dry air temperatures higher than 32° C (89.6°F) are expected.
3. Organization, training, racing and related measures
 - a) Training times: Teams should be advised to train in the morning and evening hours, when warm weather with temperatures higher than 32° C (89.6°F) are expected.
 - b) Course closed: Racing course should be closed for training (usually during the hottest part of the day, 11:00am - 3:00pm), when dry air temperatures exceed 38°C (>100°F).
 - c) Official and umpire rotation: Rotation of volunteers should be considered when dry air temperatures exceed 32° C (89.6°F).
 - d) Clothing: Clothing worn by umpires, officials and volunteers should also be adjusted to temperature.

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- e) **Extra water:** Provision of extra water for wetting the face, clothes and hair should be provided at the regatta course when dry air temperatures exceed 32 °C (89.6°F) for athletes, visitors and officials.
4. Drinking water and fluid supply
- a) **Drinking water:** At regattas in warm months, free access to drinking water should be provided to athletes.
 - b) **Water hygiene:** If tap water is drinkable, an official certificate of health authorities should be provided specifying the hygienic quality.
 - c) **Amount of water supplied: Drinking water:** The total amount of free water provided by organizers should be at least 2 liter (2 quarts) per day, when dry air temperatures exceed 32° C (89.6°F) , additional 1 liter per day should be provided. 1 liter (1 quart) can be provided at the meals.
 - d) **Water for the crews:** Organizers are advised to find a suitable place for the coaches to give water to the crews after racing.
 - e) **Water in rescue launches:** Organizers are advised to have water in the rescue launches but to be given out in case of emergency and to provide water near to the victory ceremony.
 - f) If the OCs would have a sponsor for mineral water then this water is available to the teams for free and distributed through a certain system.
5. Personal recommendations
- a) **Hydration:** The base fluid need of athletes is 2 liters per day and increases with exercise time (1 liter / hour) and air temperatures (1 liter per 5° C (9° F) temperature increase above 25° C (77° F)). For hydration, water, hypotonic and isotonic fluids may be used.
 - b) **Radiation:** Indirect radiation from the sun or from hot cars or in hot rooms enhances the negative effects of hot temperatures. Shade provides shelter.
 - c) **Hats:** Athletes in direct sunlight should wear hats which should be wetted with water
 - d) **Clothing:** Clothing should be made with fabrics that minimize heat storage and enhance sweat evaporation. Light coloured, loose fitting clothes, made of natural fibres or composite fabrics with high absorption properties that provide for adequate ventilation are recommended.
 - e) **Rest:** Sleep and rest enhance temperature tolerance.
 - f) **UV Sun block:** decrease radiation damage of the skin and reflect also radiation. This decreases thermal load.
 - g) **Lying down after races** in warm environments may have negative effects on circulation and may provoke collapses. Rowers are advised to cool themselves with water after the races.
6. Acclimatisation
- a) Acclimatisation of the participants includes the rowers as well as the umpires, other officials and volunteers and is the most important measure to prevent heat related illnesses.
 - b) Preparation for exercise under hot conditions should include a period of acclimatisation to those conditions, especially if the athlete is travelling from a cool / temperate climate to compete under hot / humid conditions.
 - c) Acclimatisation to hot environments takes usually 7 to 10 days.
7. Information on health risks
- 1. Participants or officials at a high risk of heat illness should inform the medical staff in case of extreme weather conditions.
 - 2. Risk increases with medical conditions including asthma, diabetes, pregnancy, heart conditions and epilepsy. Some medications and conditions may need special allowances.

For more detailed hot weather risk evaluation during regattas, the "Heat Stress Adviser" (author: J.Coyle, Tulsa, OK; based on a Sports Medicine Australia (SA Branch) checklist for planning sports events) may be downloaded from the site: http://www.zunis.org/sports_p.htm and the FISA Medical Commission hot weather and safety standpoint.

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Table - Heat Stress Disorders: Cause and Problems, Signs and Symptoms, Treatment

Heat Stress Disorder	Cause and Problem	Signs and Symptoms	Treatment
Heat Cramps	<ul style="list-style-type: none"> o Failure to replace salt lost through sweating o Muscle problems o Wrong training time (e.g. noon) o Wrong training suit (e.g. no cotton, only lycra, only nylon) 	<ul style="list-style-type: none"> o Muscle cramps 	<ul style="list-style-type: none"> o Re-hydration o Supplementation of sodium chloride o Supplementation of calcium and magnesium o Avoidance of pre-race caffeine supplementation
Hyperventilation	<ul style="list-style-type: none"> o Overbreathing o Low blood CO₂ level o Low training status o Age 	<ul style="list-style-type: none"> o Dizziness, tingling around lips, carpopedal spasm, fainting 	<ul style="list-style-type: none"> o Slow, deep breathing o Re-breathing from paper bag o Rowers trained on breathing techniques before training in heat and during warming up on water
Heat Exhaustion	<ul style="list-style-type: none"> o Excessive heat strain with inadequate water intake o Failure to replace water loss o Cardiovascular problems (inadequate venous return, filling time) o Reduced skin perfusion o Increased sweating o Orthostatic hypotension o Wrong training suit (e.g. no cotton, only lycra, only nylon) o Increased Humidity 	<ul style="list-style-type: none"> o Weakness, unstable gait o Fatigue o Wet, clammy skin o Headache > nausea > collapse 	<ul style="list-style-type: none"> o Rest in shade o Cooling with water, shower o Re-hydration o Pre-training proper hydration o Supplementation of magnesium and electrolytes o Very light meal in 1 hour-time
Physical Exhaustion and Dehydration	<ul style="list-style-type: none"> o Excessive work in heat o High T_c > 40 °C (104 F) 	<ul style="list-style-type: none"> o Excessive fatigue o Weight loss o Increased hematocrit 	<ul style="list-style-type: none"> o Rest in shade o Cooling with water, cold shower o Re-hydration o Use of right-material head cup o Use of sports sun glasses o Adequate Electrolyte and Carbohydrate replacement after every training session
Heat exhaustion combined with physical exercise			
Exertional Heatstroke	<ul style="list-style-type: none"> o Damage to or dysfunction of multiple organ systems is frequent o High T_c > 40 °C (104 F) 	<ul style="list-style-type: none"> o Shivering o Mental status changes o Irrational behaviour > delirium o Convulsions o Loss of consciousness 	<ul style="list-style-type: none"> o Rapid, immediate cooling o Cold-water immersion, ice packs o wrap in wet sheets and fan o Continue until T_c is < 102 F. o Intravenous Re-hydration o Cardiopulmonary
Classic heatstroke (rare in sports)	<ul style="list-style-type: none"> o Elderly and patients with serious underlying diseases o Closed rooms o Chronic dehydration 		

Appendix 7.15 Rowing Ireland Safety Policy (2017)



SAFETY POLICY

Rowing Ireland is committed to ensuring, promoting and improving the safety of all its members, visitors, and to members of the general public.

Member / Visitor safety is a matter of major concern to Rowing Ireland and subsequently, safety rules and regulations will be strictly enforced.

It is Rowing Ireland policy to comply with the Safety, Health and Welfare at Work Act 2005 & the Safety Health and Welfare at Work (General Applications) 1993 and any other relevant legislation.

Rowing Ireland shall conduct its business, so far, as is reasonably practicable, in such a manner as not to expose persons to any undue risks that may affect their health and safety.

Rowing Ireland is committed to dealing with all identified hazards, firstly by elimination if possible, by substitution or replacements with less hazardous substances, reduction of member's exposure to an internationally acceptable level for the sport and as a last resort the use of personal protective equipment.

Our objectives are to provide a safe and healthy recreational environment for our members, visitors, contractors and members of the public who may be affected by our activities and also to meet our obligations under the Safety, Health and Welfare Legislation.

Rowing Ireland shall, as far as is reasonably practicable, provide and maintain: -

- ▲ Place, equipment and systems of sport / recreation that are safe and without risks to health / safety.
- ▲ Sufficient information, instruction, training and supervision to ensure all club members / visitors avoid hazards and contribute positively to their own health and safety while participating in the sport.
- ▲ Consultation and communication with all members / visitors in relation to health & safety.
- ▲ A place of recreation without risk to health and means of entry and exit that are safe and without risk.

Safety Manual

- ▲ The Safety Manual is aimed at protecting our members, visitors, contractors and members of the public from accidents and ill health.
- ▲ The Safety Manual is available to our members, visitors, outside service providers and Inspectors of the Health and Safety Authority.
- ▲ The Safety Manual will be reviewed periodically and updated as required.

Anti-Doping Policy Board Approved 1st July 2017

Appendix 7.15 Rowing Ireland Safety Policy (2017)

Signed by the Chief Executive Officer



Date	Version	Description	Author
Mar 2014	<u>Draft</u>	Preparation of the Safety Statement	
May 2017	1.0	Review of Safety Manual & separation of policy to a stand-alone document.	

Anti-Doping Policy Board Approved 1st July 2017

Appendix 7.16 Rowing Ireland Code of Conduct and Good Practice for Coaches and Sports Leaders

Code of Conduct & Good Practice for Coaches and Sports Leaders

This is one of a series of documents intended to set the standard for behaviour within Rowing. It applies to all Coaches, with or without qualifications, umpires, officials, and anyone left in charge of young people or vulnerable persons, within Irish Rowing.

Rowing and Young People

Rowing Ireland is indebted to the countless number of volunteers who give of their time in providing rowing opportunities for young people and vulnerable persons.

Rowing provides an excellent pathway for people to learn new skills, become more confident and maximise their own potential.

Through their participation, they can learn and develop life skills, have fun and enjoyment, make friends and experience life in a way that can enhance their personal growth throughout their lives.

People become involved in rowing for a variety of different reasons. They come from a variety of sporting backgrounds and take on various roles within clubs and other organisations. Irrespective of their role or responsibility, coaches and leaders all share the common goal of providing opportunities for young people and vulnerable persons.

Coaches, parents, carers and administrators all have an important role to play in promoting good practice in sport. They should have, as their first priority, providing safety and enjoyment of the sport.

Rowing Ireland wants sport to be safe, to be fun and to ensure that all rowing and associated activity takes place in the spirit of 'FAIR PLAY'.

Fair play is the guiding principle of the Sports Council Code of Ethics as well as the Rowing Ireland Code of Ethics and Good Practice which is designed to provide guidance for those working with young people in rowing. It outlines the type of issues that need to be discussed and addressed to provide the safest and most enjoyable environment not only for rowers but also the coaches and other volunteers involved.

Coaches achieve satisfaction from working with young people and vulnerable persons. Focusing on the individual participants' needs and performance encourages young people to achieve and demonstrate enjoyment, equality and fair play. They will come to realise that standards of behaviour are as important as sports performance.

Coaches should be aware of the imbalance of power that exists between an athlete and a coach. In addition, the athlete can be vulnerable at certain times and in certain conditions. The athlete must be able to trust her/his coach to act in the athlete's best interests. In addition, the coach should be careful not to hurt or exploit the athlete's vulnerability. Because of the power imbalance and the vulnerability of athletes, intimate relationships between coaches and athletes are in most cases inappropriate.



In taking this approach children and vulnerable persons are encouraged to:

- Do their best – put in their best effort.
- Improve and develop their skills.
- Make friends.
- Play by the rules.
- Appreciate/accept everyone in the group, regardless of ability, race, religion, gender etc.

Player Centred Approach

Coaches need to be aware of why children and vulnerable persons want to try rowing. They want to learn new skills, make new friends, be part of a group, to win and be successful, experience challenges, excitement and action.

While winning is important, it must be remembered that winning at all costs does not meet the needs of players. Results are not necessarily a good indicator of coaching effectiveness or ability, the improvement level of those in rowing and their level of enjoyment is.

Coaches should aim to provide a safe and enjoyable environment where young people and vulnerable persons are placed at the centre of all activities.

In promoting good practice and creating a player centred approach coaches should:

- Act as good role models.
- Encourage and be positive during sessions so that participants leave with a sense of achievement.
- Set challenging, realistic but achievable goals.
- Plan and prepare each session appropriately and ensure proper levels of supervision.
- Ensure that all activities are inclusive and allow all participation in an enjoyable way.
- Put the welfare and enjoyment of children and vulnerable persons first and strike a balance between this and winning or achieving results.
- Enforce the principles of fair play treating each person equally, with dignity and respect and ensure that everyone plays within the rules.
- Be aware of the developmental stages and needs of those in rowing.
- Avoid over training and over emphasis on competition.
- Involve parents/guardians/carers and other club members in what we do.
- Be qualified and up to date with the latest coaching knowledge and skills.

Appendix 7.16 Rowing Ireland Code of Conduct and Good Practice for Coaches and Sports Leaders

Best Practice

In keeping young people and vulnerable persons at the forefront of planning and practice, coaches can be confident that participants will enjoy their rowing experiences and that their actions are regarded as safe and in keeping with the principle that welfare is of paramount consideration.

Coaches are given a position of trust by parents/guardians and rowers, and should show the highest standards of behaviour whilst in the company of children and vulnerable persons. It is important that coaches follow an agreed code of good practice, and parents/carers/club officials are satisfied that coaches are suitable to lead the activities undertaken. It is important to note that in adhering to these guidelines we ensure not only a safe environment for children and vulnerable persons, but also a safe environment in which coaches and volunteers can operate.

Coaches/volunteers should never:

- Exert undue influence over a participant in order to obtain personal benefit or reward.
- Share a room with a young or vulnerable person alone on away trips.
- Engage in rough physical games, sexually provocative games or allow or engage in inappropriate touching of any kind, and/or make sexually suggestive comments about or to a child or vulnerable person.
- Engage in any sexual activity with under 18's. This will be subject to club disciplinary procedures.
- Use any form of corporal punishment or physical force on a young or vulnerable person.
- Take measurements or engage in certain types of fitness testing without the presence of another adult.
- Undertake any form of therapy (hypnosis etc.) in the coaching of young or vulnerable people.

Most coaches work in an environment where it is recognised that, in a sporting context, certain types of coaching require a 'hands on approach', i.e., it may be necessary to support a participant in order to physically demonstrate a particular technique. This should only occur when necessary and in an open and appropriate way with the knowledge, permission and full understanding of the participant concerned and his/her parent/guardian/carer.

Coaches must realise that certain situations or friendly actions could be misinterpreted, not only by the rower, but by outsiders motivated by jealousy, dislike or mistrust and could lead to allegations of sexual misconduct or impropriety. Therefore coaches should be aware of, and avoid all situations conducive to this risk.

Where possible, coaches/volunteers should avoid:

- Spending excessive amounts of time with children or vulnerable persons away from others.
- Taking sessions alone (always employ 'Two Person' supervision).
- Taking children or vulnerable persons to their homes.
- Taking children/vulnerable persons on journeys alone in their car.

Safety

Coaches have a responsibility to ensure the safety of the participants with whom they work as far as possible within the limits of their control. Therefore, coaches should seek to create a safe and enjoyable environment for rowing and training.

In this respect:

- Regular safety checks should be carried out in relation to premises, training facilities and equipment.
- Appropriate safety rules should be adopted and implemented.
- Parent/guardian/carer should be informed of the starting and finishing times of training sessions and events.
- A first aid kit should be available at all training sessions /events and injuries should be recorded, with a note of action taken in relation to each one. Never put injured rowers out to compete.
- Parent/Guardian/Carer should be notified of injuries/illness which their children/young persons incur while participating in any rowing activity.

In promoting "Sport for Fun" coaches should:

- Encourage participation and fun.
- Promote the development of skills as opposed to winning at all costs.
- Emphasise and praise effort.
- Act as a good role model.
- Actively discourage participants from abusing umpires, officials, crew mates or opponents (remove from crew).
- Insist on **FAIR PLAY** (remove from crew).
- Be realistic with your expectations.
- Be aware of participants' feelings.
- Teach rowers to respect different cultures.

Children & vulnerable persons in Rowing are entitled to:

- Be safe.
- Be treated with dignity, sensitivity and respect.
- Participate in rowing on an equal basis, appropriate to their ability and stage of development.
- Be happy, have fun and enjoy the sport.
- Make a complaint in an appropriate way and have it dealt with through a proper and effective complaints procedure.
- Be afforded appropriate confidentiality.
- Be listened to and to be believed.
- Have a voice in the running of the club.

Children & vulnerable persons should also be encouraged to realise that they also have responsibilities to treat other participants, officials, coaches and volunteers with the same degree of fairness and respect.

Appendix 7.16 Rowing Ireland Code of Conduct and Good Practice for Coaches and Sports Leaders

In this regard children/vulnerable persons should agree to:

- Play fairly, do their best and have fun.
- Make high standards of Fair Play the standard others want to follow.
- Respect opponents. They are not enemies, they are partners in a sporting event.
- Congratulate opponents after events, whoever wins.
- Give opponents a hand if they are injured, make allowances so they can get attention.
- Accept apologies from opponents, when they are offered.
- Respect fellow crew/squad members and support them both when they do well and when things go wrong.
- Treat rowers from minority groups with the same respect you show other people.
- Be modest in victory and be gracious in defeat “**BE A SPORT**”.
- Approach the club Safeguarding/Children’s Officer with any questions or concerns they might have. Coaches and parents/carers should encourage children/vulnerable persons to speak out and support them in doing so.

Children/vulnerable persons should not:

- Cheat.
- Use abusive language, or argue with, the umpire, officials, crew mates or opponents.
- Use violence: they should use physical contact only when it is allowed within the rules.
- Bully.
- Tell lies about participants.
- Spread rumours.
- Take banned substances to improve performance.
- Keep secrets about any person who may have caused them harm.

Signed:
Name:.....
On Date:.....

Responsibility to Report

Any person, who has concerns about a child/vulnerable person’s welfare or who suspects that a child/vulnerable person is being abused, or is at risk of abuse, has a responsibility to report their concerns to the HSE/Gateway team or Gardaí/Police.

Persons unsure about whether or not certain behaviours are abusive and therefore reportable, are advised that they can seek advice from the duty social worker in their local health board area where they will receive appropriate advice.

In cases of emergency where a child/vulnerable person appears to be at immediate and serious risk and the duty social worker is not contactable, call the Gardaí/Police.

Under no circumstances should a child/vulnerable person be left in a dangerous situation, pending intervention by the Statutory Authorities.

All clubs should have clear procedures for responding to reports or concerns relating to the safety and welfare of children/vulnerable persons. Coaches/volunteers, children/vulnerable persons and parents/guardians/carers should be aware of how and to whom they report concerns within the club or organisation.

Mobile Phones etc.

Mobile phones and communication devices are often given to children/vulnerable persons for security, enabling parents/carers to keep in touch and make sure they are safe.

However such technology has also allowed an increase in direct personal contact with young & vulnerable persons, in some cases used to cross personal boundaries and cause harm. Within clubs there is a need to encourage responsible and secure use of these devices.

In this respect Coaches are advised to:

- Use group texts for communication among athletes and teams and inform parents/carers of this at the start of the season
- It is not appropriate to have constant communication with individual athletes
- Don’t use the phone in certain locations; inappropriate use of your camera phone may cause upset or offence to another person, e.g. changing rooms, or may cause a safety risk e.g. on the water.

For further information or advice see:

www.rowingireland.ie
Or contact: National Children’s Officer, c/o Rowing Ireland, National Rowing Centre, Farran Wood, Ovens, Co. Cork. Tel. +3521 743 4044
Email: info@rowingireland.ie

Appendix 7.17 Rowing Ireland Emails

Rowing Ireland - 29 May 2017 email to all Club Safety Officers

[Redacted] Mon, 29 May 2017, 14:23
cc: athlunkardbocaptain, [Redacted]

To All Club Safety Officers,

Please find attached a draft copy of the revised Rowing Ireland Safety Statement.

I note this document is particularly detailed but I refer you to pages 3 to 6 of the Draft document attached that are especially important.

Regards

[Redacted]
Rowing Ireland
National Rowing Centre
Farran Wood Ovens Co. Cork
[Redacted]

Rowing Ireland - 09 November 2017 email to all Club Safety Officers

Note to Safety Officers Inbox

[Redacted] Thu, 9 Nov 2017, 14:49

To All Club Safety Officers,
Please find the recommended responsibilities of the Club Safety Officer below as described in our Safety Manual <http://www.rowingireland.ie/wp-content/uploads/2010/04/Safety-Manual-Approved-1-July-2017.pdf>. Please feel free to share any of your safety tips with us to ensure we can continue to promote best safety practice.

Appendix 7.17 Rowing Ireland Emails

Rowing Ireland - 18 October 2017 email to all Club Safety Officers

Safety Officer Safety Tips  Inbox



[Redacted]

18 Oct 2017, 13:23



Hi guys,

One of our goals is to supply a safety tip every week. We'll run out pretty quickly if left to ourselves. All we really need is a number that will repeat. I'd like to see 52 but we might not reach that many.

Let's ask the SO's from each affiliated club to send in their top three suggestions.

It also gets them involved and makes them aware that the Safety Committee exists.

What do you think?

My mail to each [Redacted] would be as follows (please comment or improve):

Hi <name>,

As Safety Officer of your club I am contacting you for help. The Rowing Ireland Safety Committee is trying to raise awareness and improve overall safety within rowing.

We intend to attach a 'Weekly Safety Tip' on the Rowing Ireland Bulletin and yours might be the one that makes a difference to someone's well being.

To this end, we'd like if you could send us your (or your club's) top 3 safety tips?

They need not be overly long (And you can send in more than three if you are feeling productive!)

If you want your name associated with the tip that can be arranged and of course we can refrain from using your name if you so wish (anon)

Looking forward to hearing from you,

[Redacted]

SECTION 36 PROCESS

Section 36 of the Merchant Shipping (Investigation of Marine Casualties) Act, 2000

It is a requirement under Section 36 that:

- (1) Before publishing a report, the Board shall send a draft of the report or sections of the draft report to any person who, in its opinion, is likely to be adversely affected by the publishing of the report or sections or, if that person be deceased, then such person as appears to the Board best to represent that person's interest.
- (2) A person to whom the Board sends a draft in accordance with subsection (1) may, within a period of 28 days commencing on the date on which the draft is sent to the person, or such further period not exceeding 28 days, as the Board in its absolute discretion thinks fit, submit to the Board in writing his or her observations on the draft.
- (3) A person to whom a draft has been sent in accordance with subsection (1) may apply to the Board for an extension, in accordance with subsection (2), of the period in which to submit his or her observations on the draft.
- (4) Observations submitted to the Board in accordance with subsection (2) shall be included in an appendix to the published report, unless the person submitting the observations requests in writing that the observations be not published.
- (5) Where observations are submitted to the Board in accordance with subsection (2), the Board may, at its discretion -
 - (a) alter the draft before publication or decide not to do so, or
 - (b) include in the published report such comments on the observations as it thinks fit.'

The Board reviews and considers all observations received whether published or not published in the final report. When the Board considers an observation requires amendments to the report, those amendments are made. When the Board is satisfied that the report has adequately addressed the issue in the observation, then no amendment is made to the report. The Board may also make comments on observations in the report.

Response(s) received following circulation of the draft report (excluding those where the Board has agreed to a request not to publish) are included in the following section.

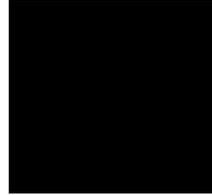
The Board has noted the contents of all observations, and amendments have been made to the report where required.

8. SECTION 36 - CORRESPONDENCE RECEIVED

	PAGE
8.1 Coach	115
8.2 Solicitors for Rowing Ireland	138
8.3 Solicitor for Casualty	141
8.4 Limerick Fire & Rescue	142

Note: The names and contact details of the individual respondents have been obscured for privacy reasons.

Correspondence 8.1 Coach



**Marine Casualty Investigation Board
Leeson Lane,
Dublin 2,
Ireland**

Re: MCIB/286 - Thomond Salmon Weir Second Draft Submission

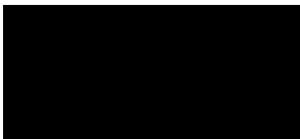
FAO: - MCIB Board

Please find attached my submission concerning MCIB/286 - Thomond Salmon Weir Second Draft Accident Report.

I would like my submission published as part of the final Accident Report. Please redact my personal data contained within and that of any others, which may have been mentioned prior to publishing.

In relation to my previous submissions to the first draft accident report, and in order to re-iterate for clarity, I do not want any of my previous first draft submissions and supporting documentation to be included in the final report.

Regards



Chartered Engineer MIEI

Correspondence 8.1 Coach

Second Draft Accident Report MCIB/286 Thomond Salmon Weir

Comments under Section 36

10 May 2021



Correspondence 8.1 Coach

Part One – Overarching comments.

1. Please note that there are paragraph numbering errors in the draft report at page 22 as referenced herein. Accordingly, all parties need to be able to properly cross reference to the correct paragraph numbering in these comments and **I reserve the right to receive a further draft with correct paragraph numbering in order to do so, in the interest of justice under Section 36.**
2. Please note that in relation to the requirement for the carriage of a knife, there is a very serious error at paragraph 4.5.4 where the report states that a knife was a requirement of Rowing Ireland's Safety Manual. **The report erroneously states that the requirement for a knife is in RI's Safety Manual at Appendix 7.13.** This is a critical issue as Rowing Ireland's Requirements do not include the requirement for a knife to be carried, and do not cross refer to the COP (of their own Department) or the FISA Guidelines. This should be highlighted by the MCIB as a serious Departmental failing in addition to the incredible failure to implement the previous MCIB investigators' recommendations that the COP be made mandatory. Had this been carried out, this accident would not have happened and it is only right that such a failure that had had such consequences for me and everyone else involved is included in this report and acted upon urgently.

Additionally Rowing Ireland failed to advise Athlunkard Boat Club to subscribe to Marine Notices, which, given the emphasis and reliance by the Transport Department and the MCIB on Marine Notices in respect of information about PFD's and the COP as highlighted in this report, is an extraordinary failing that must be highlighted in this report as a finding of fact, and an urgent recommendation made to rectify this failing, and to ensure that Marine Notices are no longer relied upon as the medium for highlighting critical information about safety. In any event it is clear these recommendations should be mandatory.

3. As referenced herein it is submitted that the following additional recommendations should be made:

That Rowing Ireland

1. **Immediately amend their Safety Manual to include reference for the requirement of a knife, in line with the COP and FISA Guidelines.**
2. **Immediately instruct all affiliated Rowing Clubs to subscribe to Marine Notices; and**
3. **Immediately revise their expenditure plans by prioritising safety in affiliated rowing clubs both for equipment and educational training.**

That the Department of Transport and the Minister without delay:

1. **Given the emphasis and reliance by the Transport Department and the MCIB on Marine Notices in respect of information about PFD's and the COP as highlighted in this report, urgently ensure that Marine Notices are no longer relied upon as the medium for highlighting critical information about safety that should be disseminated more generally and efficiently to the public; and.**

Correspondence 8.1 Coach

2. Make the Code of Practice for The Safe Operation of Recreational Pleasure Craft mandatory as a matter of urgency in line with previous MCIB Investigators' recommendations.

Correspondence 8.1 Coach

Part Two – Response to Indexed Sections of the Draft Report.

1 Summary

- 1.1 The launch time of the Quad was earlier than 0930am. It was closer to 0900am. Departure was 0930am.

2 Factual Information

2.2 The Boat Details

- 2.2.2 Please also include in Safety Boar details the maximum weight as stated on the CE Plate: 487kgs.No

2.3.0 Quad Crew and Safety Boat Crew details

- 2.3.1 Correction needed. Rower No.2 and 3 had joined well before Christmas 2018. Whilst it was Rower 2's first occasion to row in the Quad, she had previously coxed some Rowing Boats and had travelled in the Safety Boat numerous times. Rower No.3 had both rowed and coxed several times prior Christmas 2018.
- 2.3.2 Correction needed. The Safety Boat Coach was not solely interested in training younger ages. The Coach filled in to help as required. Younger age groups required more help, supervision and guidance when launching etc.

MCIB has omitted the fact that the Safety Boat Coach was injured during this accident. Medical details were provided to MCIB from a Certified Medical Practitioner to that effect. MCIB continues to ignore that Safety Boat Coach was injured during the accident.

2.4 Safety Equipment on board Quad and Safety Boat

2.5 Voyage Particulars

2.6 Type of Casualty

Correction needed. MBIB has omitted the fact that the Safety Boat Coach was injured during this accident. Medical details were provided to MCIB from a Certified Medical Practitioner to that effect. MCIB continue to ignore that he was injured during the accident.

2.7 Environmental conditions

Correction needed. Whilst the environmental conditions outlined in the report are statistical interpolations of a regional weather forecast, it does not actually match those conditions encountered during the rowing session. The session was held that morning with a clear blue sky and very low wind speeds. The wind speed encountered on the Abbey River and Shannon River was so low that there were no concerns in relation to prevailing wind levels. Nationally, in the sport of rowing, wind speed is the major factor in decision making for water training and regattas during the rowing season.

Furthermore, Appendix 7.7 does not illustrate the usual turning area.

Correspondence 8.1 Coach

From the illustration contained on Page 57 Downstream photo, the area outlined is clearly incorrect and misleading. The Quad and the Safety Boat were in the middle of the river and indeed possibly closer to the eastern bank.

The water volume information as supplied by ESB in appendix 7.9 refers to 25th of February 2019. This accident occurred on the 23rd of February. This is an inaccuracy that needs to be amended.

As per the information referenced in the appendix, total combined recorded intake at Parteen Weir (Ardnacrusha and Old Shannon River) is 250m³ per second, which is only 62.5% of the maximum inflow rate recorded during the previous year leading up to the accident. This graph as supplied by ESB outlines that the river flow was actually lower than what this investigation actually implied.

Tide information

High tide 0919am Height 6.40m at limerick docks

Low tide 1538pm Height 0.3m at limerick docks

Range 6.10m Time taken from high to low tide in minutes = 379

Drop in water height was 0.016095m per minute

Accident occurred approximately 53 minutes after high tide and as per my calculations above, resulted in a drop in height of water at Limerick docks by 0.853 metres. At 1012am, the actual corresponding Limerick Docks datum height of water level was 5.247m. This drop in level resulted in a 13.33 % reduction in volume of water passing through the Weir when compared to the volume of water at high tide.

A calculation should be undertaken into the reduction in volume of water in the river at the Weir at 10.12am. The report currently implies that there was a huge volume of water coming down the river when in fact, the river contribution was only 62.5% of the maximum recorded that year prior to the accident and the tide had dropped 0.853m in height resulting in a 13.98 % reduction in volume. This is important in supporting the deceptive nature of the flow in and around the Weir.

2.8 Shore authority Involvement and Search and Rescue

Correction needed. It is incorrect to suggest that the Casualty was both recovered from the water and brought ashore at 1028am. The casualty was recovered by the Swift Water Boat well before 1028am, and brought ashore before 1028am. As confirmed to MCIB in documentary evidence from my Vodafone log of calls that day, the Safety Boat Coach's first connected phone call was to Rower 3's Aunt was at 1023am. Prior to that, two un-connected phone calls were made to Rower 3's Mother, but these were unsuccessful, evidence of this I have provided to the MCIB.

The safety boat, with rescued crew, had already departed the accident site and travelled north towards the bend in the River Shannon at the point where the Abbey River intersects. The safety boat coach had not departed the accident site prior to the recovery of Rower

Correspondence 8.1 Coach

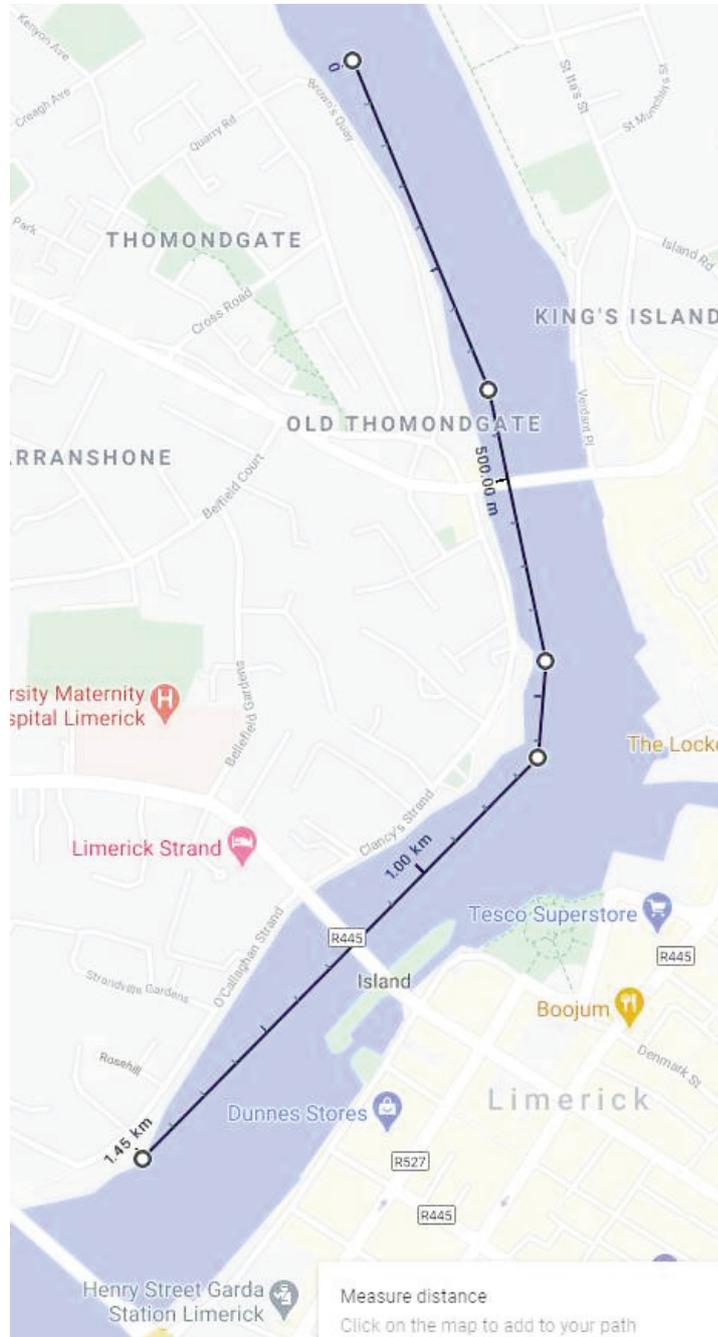
No.3. Indeed, the report at paragraph 3.27 states that the 'Swift Rescue' crew estimate they were on scene at 1015, and it took approximately 1 minute to recover the casualty. Assuming the Swift Water Rescue Boat departure was 1016am it did not take Swift Water Rescue Boat 12 minutes to travel 1.45km. This equates to a speed of 7.25 Km/h in a boat that is capable of significantly quicker speed?

The time of arrival of one of the two casualties on shore does not make sense. What is the max speed of LCCC swift water Craft? The timeframe outlined within the 1st draft report was clearly incorrect and unfortunately, some of the information in this section is again incorrect. In an accident where the overall duration was less than 6 minutes, the accuracy of the number of minutes matter. Indeed, Rower 3's actual recovery is matching the amount of time that I have consistently estimated that she was under the water during this accident.

Refer to map below for distance from accident to landing point adjacent to St Michaels Rowing Club.

CORRESPONDENCE 8.1

Correspondence 8.1 Coach



Correspondence 8.1 Coach

My view of this 10.28am record of shore arrival is completely inaccurate. These inaccuracies very misleading and needs to reflect the actual situation, as they are directly linked to the action that I took in a limited time period, and it is not fair to me that such serious inaccuracies have not been corrected.

- 3.6 As per my response to the previous draft report, MCIB has omitted that;
- (a) Thomond Weir has been derelict at least forty years,
 - (b) Previous & current owners have done little to ensure that the weir and the river adjacent is safe for river users and
 - (c) Local Authorities had failed to use their statutory powers to instruct the owners of the Weir to remove it.

Thomond Weir ceased operation in 1978. If this derelict structure had been removed during the previous 42 years pre-accident, the accident and the subsequent injuries to Rower No.3 and the Safety Boat Coach would not have occurred. Why didn't OPW didn't highlight this structure as dangerous when they planned a safe navigation route for vessels travelling from the Shannon estuary to Parteen Weir? Again, this error to identify, highlight and signpost this derelict structure as dangerous was a major causative factor in the occurrence of the accident.

- 3.7 Correction needed. High tide occurred at 0919am and as MCIB state elsewhere in the report, the first 999 call was received at 1012am. This is less than 1 hour after high tide and not between 1 to 1.5 hours. Accuracy is important when reporting on accidents that lasted approximately 6 minutes in duration.
- 3.8 Correction needed. Met Eireann's weather estimate is noted but they are very inaccurate in regard to wind estimate. Wind levels were minimal on the day during the rowing session.

The Incident

- 3.9 Correction required. Formal 'on the day' risk assessments of the conditions were carried out but were not documented. The Club Captain had been out on the same route earlier at 0700am that morning. This training session did not report any health and Safety concerns in relation to river condition.

The river conditions were risk assessed by the Club Captain and the Head Coach / Safety officer prior to the Quad departing. Furthermore, the Safety Boat Coach can confirm that he carried out a risk assessment prior to launching and at several times during the training session. Same with Debris. If statutory authorities had carried out their statutory role pre-accident, this accident would never have happened.

- 3.10 Correction needed. MCIB needs to include the fact that as discussed in 3.9, the Clubs captain, who is responsible for all rowing in the Rowing Club was on the river earlier that day at 0700am.
- 3.12 Correction needed. Rower No.2 and No.3 attended at the club well before Christmas 2018 with rower 2 being in the club a month longer. MCIB should provide accurate details in relation to commencement of membership. Typically, Rowers attend training and then follow up with

Correspondence 8.1 Coach

membership in the weeks thereafter, which is fair to all. Rower 3 had paid the membership fee but had not returned the required documentation to allow for Rowing Ireland registration. Furthermore, this paragraph within section 3.12 should continue to read. "The other casualty was in the Safety Boat."

How can MCIB state that the time delay did not prompt any further risk assessments to be carried out, when that question has never been previously asked by MCIB?

3.13 Correction needed. the Quad spent most of that initial time delay on the water adjacent to the slip and were fully aware of the adjacent river conditions even though they had not visibly changed. All Coaches would confirm that training sessions involve continuous undertaking of risk assessments to minimise risk. This evolves as the water and environmental conditions change during each session.

3.18 Correction needed. The force of the water did not cause the hull of the Quad to fracture. It fractured post-accident when the bow and stern of the Boat was secured with rope to the upper railings of the Weir. As the tide reduced in level, the water filled Boat fractured under its loaded weight.

Correction needed. Four of the five Quad occupants surfaced and immediately climbed on top of the Quad as per previous safety instruction. Rower No.3 didn't.

3.21 Correction needed. The inference that the person who climbed down from the Weir did so at 10.12am is incorrect and needs to be corrected. Safety Boat Coach estimates that the helpers on the weir arrived approximately one minute before the Swift Water Boat's arrival- i.e., at 1014. So, this needs to be corrected to say 999 call by one member of the public at 1012, followed by the arrival of the second member of the public on the Safety Boat at 1014. Between the 999 call at 1012 and the second member of the public arriving on the Safety Boat the remaining two of the Quad crew had boarded the Safety Boat.

3.24 Correction needed. Prior to calling the head Coach, two un-connected calls were made to Rower No.3's mother and another connected call was made to her Aunt at 10.23am. Documentary evidence was provided to MCIB but this revised draft report omits this fact. Post-interview in June 2019, the Safety Boat Coach offered to meet MCIB officials to provide further clarification re MCIB's inconsistencies but the offer was never accepted.

3.26 Correction needed. In reference to Appendix 7.7, the location of the accident, as outlined within the photographs is incorrect. Surely, for accuracy, the actual span where the accident occurred must be indicated.

3.27 Important addition. If the first 999 call was 1012am and the arrival of the swift water Boat was at 1015am, then in all likelihood, rower No.3 was not under the water longer than 4 minutes given that it took less than a minute to free Rower No.3's hair and lift her onto the Rescue Boat.

3.28 Correction needed. Whilst Rower 3's hair was cut free by the fireman, the rower was lifted into the Swift Water Rescue Boat by the combined effort of the fireman, Safety Boat Coach and the helper from the Weir.

Club Safety Regime

Correspondence 8.1 Coach

- 3.32 The Club Captain was not the person that was Level 2 qualified, it was the Head Coach. The Club Captain and Head Coach is not the same person.

Coaching Requirements

- 3.33 Correction needed. The progression of training of Coaches was significantly hindered by the fact that Rowing Ireland was not carrying out Level 1, 2 or 3 Coach training in Limerick in the 3.5 years that the Safety Boat Coach was involved in Rowing. Why hasn't MCIB investigated this lack of training and its subsequent knock-on effects? Throughout this report, MCIB has reiterated the fact that Coach Education in the club was only to a certain level. This situation in regard to Coach Education is directly influenced by external factors as previously discussed. Rowing Ireland failed to provide Coach Education and volunteer Coaches cannot undertake training when none is available.

Furthermore, discussion of the actual level of Coach Education at the club is irrelevant in that even in the event that all of the Club's Coaches were educated to Level 3, none of the Coach Education syllabi carried out by Rowing Ireland prior to the accident included any topics of safety, hazard identification and risk assessment. This is clearly a national governing body failing and one has to ask why the State, as the main funder of Rowing Ireland, had not identified this issue prior to the accident occurring.

- 3.34 The state via its Government Departments must provide mandatory training nationally to educate users of the CoP requirements. Clubs and Coaches cannot be held responsible for the failure of the overseeing Government department to transpose the guidelines into regulation.
- 3.35 Rowing Ireland did not implement their mandate their responsibilities as outlined. For ease of reference below is an extract of some of the responsibilities of the Rowing Ireland safety committee as outlined within Rowing Ireland Safety Manual Page 4, dated first of June 2017, Rowing Ireland indicated that the Safety Committee had a responsibility to;
- c) Ensuring on-going consultations with regional and club Safety officers or their representatives. **Clearly not carried out**
 - f) Monitoring club Safety officer engagement to ensure compliance. **Clearly not carried out**
 - g) Arranging Safety courses for members. **Clearly not carried out**
 - h) Organising periodic information workshops with members / officers to clarify requirements of the Safety manual. **Clearly not carried out**
 - l) Provide templates for emergency plans & risk assessments. **Was this ever provided to all clubs?**
 - m) Identifying training needs and ensuring that these training needs are satisfied. **Clearly not carried out**

Correspondence 8.1 Coach

- 3.37 Correction needed. In relation to Rowing Ireland Hierarchy of Coach Education, the introduction to Rowing Coaching course is an actual coaching course as listed within the hierarchy of Rowing Ireland Coach Education as outlined in section 3.33 of the draft report and is also advertised on their website. The final sentence is therefore incorrect and inconsistent with section 3.33 and should be removed.
- 3.39 Correction needed. Risk assessments are carried out on a daily basis and are not required to be written. Is the MCIB implying that an 'on the day' risk assessment of the conditions needs to be recorded to be formal? Just because a risk assessment is not recorded, doesn't intimate that it hasn't been carried out. The Report should clarify what definition is being used regarding 'formal' and 'informal'.
- 3.42 Correction needed.
- How can Club Coaches be expected to carry out risk assessment when Rowing Ireland didn't provide training of risk assessment / hazard identification prior to the accident? There is no proof whatsoever that Athlunkard Boat club received this safety Documentation. If Athlunkard Boat Club never received it, then they could not have made me aware of it.
- 3.43 Correction needed. Did Rowing Ireland receive guidelines from FISA? Did Rowing Ireland ever circulate FISA Guidelines to affiliated clubs? It is clear that Athlunkard Boat club has never had any contact with or from FISA. Athlunkard Boat Club never received these guidelines from Rowing Ireland or FISA.
- 3.44 Correction needed. Groups of rowers never act independently to the training plan without a Safety Boat being present. Coaches set the agenda, not the Rowers.
- 3.47 It's not only novice / trainee rowers that are instructed to stay with the capsized Boat and to mount the hull after capsize. It is an instruction to all rowers that capsize their Boats.
- 3.50 "Rowing Ireland water Safety code" is not listed as a document on Rowing Irelands Website and does not appear on the Rowing Ireland site when searched. It appears only once when searched in google and references back to the CoP. A circular problem exists resulting in poor dissemination of safety information.
- 3.51 Correction needed.
- It is also noted that there is no mention of a knife being required by Rowing Ireland within their safety manual, which in itself does not adhere to the guidelines contained in the CoP.
- 3.52 Correction needed. Did FISA ever send these guidelines to Rowing Ireland? It should be noted as a critical matter of fact that Rowing Ireland did not circulate these guidelines to Athlunkard Boat Club? Did Rowing Ireland circulate these to other Boat Clubs? It should be noted here as a fact that Rowing Ireland's Safety Manual at Appendix 7.13 does not cross reference together the COP or FISA guidelines, both of which include the requirement for a knife, but nowhere is a knife mentioned by Rowing Ireland.
- One cannot choose to adhere to guidelines requirements if one has not been made aware of its existence by the national and world rowing governing bodies.
- 3.54 Correction needed. Whilst I agree with the content of the first paragraph, MCIB refers to the CoP and **NOT** to Rowing Irelands requirements. This is a critical issue as Rowing Ireland's

Correspondence 8.1 Coach

Requirements do not include the requirement for a knife to be carried, and do not cross refer to the COP (of their own Department) or the FISA Guidelines. This should be highlighted by the MCIB as a serious Departmental failing in addition to the incredible failure to implement the previous MCIB investigators' recommendations that the COP be made mandatory. Had this been carried out, this accident would not have happened and it is only right that such a failure that had such consequences for me and everyone else involved is included in this report and acted upon urgently. Additionally, Rowing Ireland failed to advise Athlunkard Boat Club to subscribe to Marine Notices, which, given the emphasis and reliance by the Transport Department and the MCIB on Marine Notices is an extraordinary failing that must be highlighted in this report as a finding of fact, and an urgent recommendation made to rectify this failing, and to ensure that Marine Notices are no longer relied upon as the medium for highlighting critical information about safety. In any event it is clear these recommendations should be mandatory.

3.57 Correction needed. Rowing Ireland was not aware of the contents of the CoP either. Rowing Ireland as the national governing body did not circulate the content of the CoP to affiliated clubs.

3.59 MCIB quotes Rowing Ireland manual content but omits to report that Rowing Ireland did not provide Safety training at all, never mind training re' Hyperthermia risks.

It is also a very important fact that Athlunkard Boat Club did not receive Marine Notices, and Rowing Ireland did not advise Rowing Clubs to subscribe to Marine Notices, which, given the emphasis and reliance by the Transport Department and the MCIB on Marine Notices is an extraordinary failing that must be highlighted in this report as a finding of fact, and an urgent recommendation made to rectify this failing.

3.60 **Correction Needed.** At no time was Rower 3's hair ever in a Ponytail before or during the accident. This is completely inaccurate. At no point in the previous draft report or within any of submissions received by MCIB did anyone ever state that Rower 3's hair was tied up in a ponytail.

Where did this misrepresentation come from?

MCIB indicate in this report that loose hair was a causative factor to subsequent injuries. MCIB has to be very clear that it was the MAJOR Causative factor of Rower No 3 becoming trapped under water and was the MAJOR Causative factor for the injuries sustained

3.62 MCIB notes that it is the position that *"Rowing Ireland has a responsibility to develop and maintain a culture of safe practice to advise all our clubs that they can support everyone involved in the sport in their efforts to achieve this"*

This was clearly not implemented by Rowing Ireland as no safety training was provided throughout the country. MCIB fails to mention this in this section. In addition, Rowing Ireland did not even operate an effective communication system. Why was this important Safety manual document allegedly for the attention of affiliated Clubs, not sent out by registered post? Rowing Ireland should have sent their Safety Manual to all 78 affiliated

Correspondence 8.1 Coach

clubs by registered port, which is well within their means of €3M income per annum. In regard to funding

Rowing Ireland Yearly income in 2019 is approx.	€3,000,000
Of which RI collects national membership fees of	€55,000
Rowing Ireland yearly spend on Coach Education nationally was	<u>€60,000</u>
Less membership fees collected Rowing Ireland nett contribution to Coach education in 2019 was	€5,000
Rowing Irelands spend re Safety Training in Limerick in 2019 was	€0
Athlunkard Boat Club income from fundraising is	€10,000
Rowing Ireland funding to Athlunkard Boat club in 2019 was	€0
Payment to Coaches per year is	€0
Sports Ireland Funding for Safety equipment	€0
Rowing Ireland Funding for Safety equipment	€0

MCIB needs to mention from a funding perspective that Athlunkard Boat club does not receive any funding from Rowing Ireland. This fact is crucial in that it is completely opposite to how other national sporting bodies operate. For example, the GAA pays a yearly grant to each of their affiliated clubs to help in the provision of facilities, safety and help towards operating costs. Rowing Ireland in 2019 had an income of approximately €3million of which ZERO was allocated to Athlunkard Boat Club. Given the fact that the clubs income for costs etc was €10,000.00, a significant portion of yearly income is sent to Rowing Ireland for affiliation fees. If it were the case that Athlunkard Boat Club had actually received a grant from Rowing Ireland, and proper guidance additional safety measures would clearly have been in place. MCIB was informed of this issue within the Safety Boat Coach's previous submissions to the first draft report, but the substantive issues do not appear in this report. MCIB have been asked to examine why national exchequer funding is given to a national sporting organisation that is being solely reserved for the use of high-performance athletes rather than being used and distributed to clubs throughout the country. Is the pride of seeing some athletics represent Ireland more important than Safety within the sport of Rowing?

Furthermore, MCIB has been asked to investigate why Sports Ireland funding is limited to buildings and Boats. Sports Ireland funding rules states that this funding cannot be used for walkie-talkies or other necessary Safety equipment. Sports Ireland Funding cannot even be used to purchase Personal flotation devices, Safety bags, thermal blankets or knives. This report does not seem to have investigated this issue which is a major contributory factor in relation to this accident?

- 3.63 Correction needed. MCIB needs to mention in this section that there was not any level 1, 2 or 3 training carried out in limerick City in the 2.5 years leading up to the accident. Post-accident, Rowing Ireland advertised a level one course to be run in Limerick in February 2020. Rowing Ireland has a duty to provide Coach Education and, in this case, they failed to provide any training in Limerick between Jan 2016 to Feb 2020. Notwithstanding that the Coach

Correspondence 8.1 Coach

Education modules prior to the accident did not contain Safety training, risk assessment and identification and hazard assessment.

3.70 Page 22 Correction needed. **Report numbering out of sequence. Accordingly, all parties need to be able to properly cross reference to the correct paragraph numbering in these comments and I reserve the right to receive a further draft with correct paragraph numbering in order to do so, in the interest of justice under Section 36.**

3.71 Page 22 **Report numbering out of sequence. Accordingly, all parties need to be able to properly cross reference to the correct paragraph numbering in these comments and I reserve the right to receive a further draft with correct paragraph numbering in order to do so, in the interest of justice under Section 36.**

These documents were never received by Athlunkard Boat Club from Rowing Ireland. Safety training was not carried out by Rowing Ireland in regard to the content and responsibilities contained within same.

3.64 This section does not appear to exist in this revised 2nd draft report.

3.69 Correction needed. Rowing Ireland updated the Safety manual in 2019, post-accident, and changed from a Safety Committee to a Safety Advisory Committee, which appears to be a clear attempt to distance itself from its governance role over affiliated clubs. This is alarming given this organisation has a yearly budget of three million and is a national sports governing body. Does the overseeing Government Department and Sports Ireland need to reconsider the extent of funding made available to Rowing Ireland if they cannot ensure that the sport is carried out to the highest level of safety for all involved?

3.70 Page 25 Correction needed. In relation to partial funding of training course fees. As stated elsewhere, if Rowing Ireland did not carry out any training courses in Limerick, then the club would have received zero funding from Rowing Ireland. The partial funding comment is misleading. How much partial funding did Athlunkard get from Rowing Ireland in the previous year?

3.78 Correction needed. Club Coaches could not be aware of the CoP when Athlunkard Boat Club wasn't aware of it? Furthermore, Rowing Ireland didn't seem to be aware of the CoP content themselves because Rowing Ireland's Safety Manual does not adhere to all of the requirements of the CoP such as the critical requirement of a knife. Rowing Ireland is not mentioned as a contributory organisation to the drafting and modification of the CoP guidelines as acknowledged within the acknowledgement Section of the CoP. Did Rowing Ireland engage with the drafting of this document or did they decide not to contribute?

Is the CoP reviewed at the required frequency by the overseeing Department?

Please add the following addition to the end of the paragraph "because these policy documents were not sent to them"

4 Analysis

4.1 Summary

4.2 Planning the training session including Risk assessment

Correspondence 8.1 Coach

- 4.2.6 Correction needed. The Safety Boat Coach did indeed say that Thomond Weir was derelict and dangerous in nature and posed a risk hazard but this statement in regard to the dereliction and dangerousness of Thomond Weir but this was solely based on investigations carried out post-accident. The Safety Boat Coach never stated prior to the accident that he considered this structure derelict. Please correct MCIB's misrepresentation of the Safety Boat Coach opinion in this instance. For the record, the Coach of the Safety Boat has only ever travelled through the Weir during the months of the summer when tide, flow and weather conditions permit same. If the statutory powers enforced their obvious obligations to ensure that this Weir was removed prior to the accident or even flagged it up as a hazard, then the deceptive fast flow would not have existed and there would not have been any piers to crash into. This is a **major causative factor** that led to the accident

It was not possible to discuss the derelict state of the Weir with other Coaches pre-accident due to it only became known to me after the accident.

Did MCIB investigate this fact with the owners of the Weir as part of this investigation?

4.3 Quad Crew and Coach Factors

- 4.3.1 Correction needed. Section 2.3.1 states that the three of the five rowers were experienced but yet in this section it highlights them as trainees and novices. This needs amending throughout the document.

4.4 Equipment

- 4.4.1 As referred to at 3.54, MCIB refers to the CoP and FISA's guidelines but not to Rowing Ireland's requirements. This is a critical issue as Rowing Ireland's Requirements do not include the requirement for a knife to be carried, and do not cross refer to the COP (of their own Department) or the FISA Guidelines. This should be highlighted by the MCIB as a serious Departmental failing in addition to the incredible failure to implement the previous MCIB investigators' recommendations that the COP be made mandatory. Had this been carried out, this accident would not have happened and it is only right that such a failure that had such consequences for me and everyone else involved is included in this report and acted upon urgently. Additionally Rowing Ireland failed to advise Athlunkard Boat Club to subscribe to Marine Notices, which, given the emphasis and reliance by the Transport Department and the MCIB on Marine Notices is an extraordinary failing that must be highlighted in this report as a finding of fact, and an urgent recommendation made to rectify this failing, and to ensure that Marine Notices are no longer relied upon as the medium for highlighting critical information about safety. In any event it is clear these recommendations should be mandatory.

- 4.4.2 Correction needed. Safety bag requirement. The Safety Boat Coach actually stated that he was not made aware of the Safety bag requirement. Furthermore, the Safety Boat Coach was also not made aware of Athlunkard Boat club H&S plan as it was never brought to his attention. If the Safety Boat Coach had known of its requirement, then he would have purchased his own Safety bag and equipment.

4.5 Actions around the incident

Correspondence 8.1 Coach

- 4.5.2 Comment. The Safety Boat Coach agrees with MCIB's comment in relation to the additional crew member in the Safety Boat was desirable to have during the accident.

The Safety boat Coach agrees with all the potential actions of the second helper as listed but note that the main benefit of this helper was not listed. As the Safety Boat Coach has described previously to MCIB multiple times, this helper could have latched onto the rigger of the Quad prior to contact with the Weir enabling the safety boat to tow the Quad away from the Weir. If this has happened, the accident and resultant injuries to both parties would never have happened

To say that the recommendations to Safety Boat manning is ambiguous in the Guidelines is an understatement of the reality. There is no guidance in relation to this issue in any guidance / advisory document.

- 4.5.3 Correction Needed. At no time was Rower No.3's hair ever in a Ponytail before or during the accident. At no point in the previous draft report or within, its following sets of submissions did anyone ever state that Rower 3's hair was tied ponytail.

Where did this misrepresentation come from?

MCIB mention elsewhere that this was a causative factor to Rower No 3's subsequent injuries. MCIB has to be very clear that it was the MAJOR Causative factor of Rower No 3 becoming trapped under water and was the MAJOR Causative factor for the injuries sustained

- 4.5.4. Correction needed. Knives are not required by to be held on Safety Boats in accordance with the Rowing Ireland Safety Manual. **The report erroneously states that the requirement for a knife is in RI's Safety Manual at Appendix 7.13** This is a critical issue as Rowing Ireland's Requirements do not include the requirement for a knife to be carried, and do not cross refer to the COP (of their own Department) or the FISA Guidelines. This should be highlighted by the MCIB as a serious Departmental failing in addition to the incredible failure to implement the previous MCIB investigators' recommendations that the COP be made mandatory. Had this been carried out, this accident would not have happened and it is only right that such a failure that had had such consequences for me and everyone else involved is included in this report and acted upon urgently.

Additionally Rowing Ireland failed to advise Athlunkard Boat Club to subscribe to Marine Notices, which, given the emphasis and reliance by the Transport Department and the MCIB on Marine Notices in respect of information about PFD's and the COP as highlighted in this report, is an extraordinary failing that must be highlighted in this report as a finding of fact, and an urgent recommendation made to rectify this failing, and to ensure that Marine Notices are no longer relied upon as the medium for highlighting critical information about safety. In any event it is clear these recommendations should be mandatory.

- 4.5.5 MCIB needs to reflect the Safety Boat Coach comments as detailed above in this section

- 4.6 **Safety Environment, Compliance / Non-compliance**

Correspondence 8.1 Coach

- 4.6.2 Correction needed. For clarity, please replace “Coach” in sentence 2 to Head Coach.

Safety training was not available from Rowing Ireland, Sports Ireland Coaching or any other government training body.

The Head Coach is an excellent Coach and well-meaning and decent individual and I can categorically say that during my time at Athlunkard, he always appeared to act in a manner that demonstrated a consciousness in his approach to safety.

- 4.6.6 Correction needed. The last sentence needs to be amended to reflect the actual situation. *“The Coach had not completed the Level One training Course because Rowing Ireland had not made that training course available in Limerick from the time that he joined rowing in 2016 to February 2020”*. The safety boat coach was willing to undertake this training but was not afforded the opportunity to undertake it. Levels 1, 2 and 3 training courses prior to the accident are more relevant to the art of rowing and did not deal with Safety, risk assessment and hazard identification. Accordingly, it is pointless to highlight that the Safety Boat Coach did not have Level One training course undertaken as it had no relevance to the accident occurring in the first instance. It is both a causative factor and a contributory factor that Safety training was not provided by Rowing Ireland.

If there was no minimum level of qualification stipulated anywhere to be considered a Coach by Rowing Ireland, then the Safety Boat Coach fully met the requirements as a Coach. The Safety boat coach had completed one of four available courses with Rowing Ireland.

- 4.6.7 Correction needed. It is not documented anywhere by Rowing Ireland that individuals have to be level One certified to train young groups. The Safety Boat Coach’s first crew was within the 15 to 18 age range. Specifically stating that the Safety Boat Coach was not level One trained is again, misleading and irrelevant.

As stated at the MCIB interview in summer 2019, the Safety Boat Coach was never given a copy of the health and Safety Plan. Post-accident, the Safety Boat Coach became aware of the H&S plan and its reference to the Safety bag. Had the Safety Boat Coach known before the accident that a Safety bag was required; he would have purchased this Safety bag and the required contents out of his own resources for use on the river. As the Safety Boat Coach had not been involved in any rowing accident previously, the Safety Boat Coach had no requirement for any interaction with the accident book.

MCIB states that that it appears that the Safety Boat Coach had little interaction with the club officers in regard to Safety management. The Safety Boat Coach was not responsible for Safety management but did liaise with the Club Captain, Club Secretary, Head Coach / health and Safety officer and other Coaches on a continual basis in relation to Safety. MCIBs inference to lack of interaction is inaccurate, and misleading.

- 4.6.8 Comment. Why is it not possible for Rowing Ireland to back up their position? They can’t even produce an email with its alleged attachment. One must question given why a very important document was sent by email without a read receipt, or indeed by email alone. Is this alleged method of communication the correct format to disseminate such important documents to affiliated membership paying clubs? Surely, it should have been delivered by registered post if it was considered applicable to affiliated Clubs,

- 4.6.9 Correction needed. Surely the content of this section in the report is a causative factor in the occurrence of this accident. Both emails, regarding Safety, from Rowing Ireland to

Correspondence 8.1 Coach

Athlunkard Boat Club were in fact sent to an email address that did not exist. This demonstrates Rowing Ireland's lack of prioritisation of the importance of Safety in general, and a fundamental governance failure by Rowing Ireland and the responsible Department.

- 4.6.10 Correction needed. Communication from Rowing Ireland to Athlunkard Boat Club is not fit for purpose and Athlunkard Boat Club has confirmed that they had never received these emails from Rowing Ireland. MCIB surmises that Athlunkard Boat Club may have received them directly or indirectly and that the Club had little regard to the content of the emails. To be clear, Athlunkard Boat Club never received any of these emails. This is a critical issue and a finding of fact and should be stated as so. The delivery email address was incorrect and the report should state clearly that they were never received because a wrong email address was used.

4.7 Regulatory oversight Environment

As a general comment under this section, the failures by Rowing Ireland are staggering, with very serious consequences. As referred to at 3.54, 4.4.1, and 4.5.4, Rowing Ireland's Requirements do not include the requirement for a knife to be carried, and do not cross refer to the COP (of their own Department) or the FISA Guidelines. This should be highlighted by the MCIB as a serious Departmental failing in addition to the incredible failure to implement the previous MCIB investigators' draft recommendations that the COP be made mandatory. Had this been carried out, this accident would not have happened and it is only right that such a failure that had such consequences for me and everyone else involved is included in this report and acted upon urgently. Additionally, Rowing Ireland failed to advise Athlunkard Boat Club to subscribe to Marine Notices, which, given the emphasis and reliance by the Transport Department and the MCIB on Marine Notices is an extraordinary failing that must be highlighted in this report as a finding of fact, and an urgent recommendation made to rectify this failing, and to ensure that Marine Notices are no longer relied upon as the medium for highlighting critical information about safety. In any event it is clear these recommendations should be mandatory.

5.0 Conclusions

5.1 The Causative Factors

- 5.1.5 **Correction needed.** Rower No.3 never had her hair in a Ponytail, before or during the accident. MCIB statement that Rower No.3 had her hair in a ponytail is inaccurate. At no point in the previous draft report or within any of the submissions was it stated that Rower No.3 hair was tied in a ponytail.

5.2 The Contributory factors

- 5.2.1 Correction needed. There was a plan. There was no deviation from the plan by the smaller group. They followed the usual course. As explained to MCIB several times, even if all three Quads departed at the same time, the two other Quads would have travelled at a much quicker rate and separation was always going to occur.

Correspondence 8.1 Coach

5.2.8 Correction needed. The Safety Boat Coach only became overwhelmed when the up-turned Quad rotated which resulted in the rigger angling deeper into the river. This resulted in Rower No.3 becoming deeper in the river and efforts to raise the rigger failed in that the Safety Boat Coach could not raise the rigger sufficiently to get Rower No.3's head back up above water.

5.2.12 Correction needed. As stated at the MCIB interview in summer 2019, the Safety Boat Coach was never given a copy of the health and Safety Plan. Post-accident, the Safety Boat Coach became aware of the H&S plan and its reference to the Safety bag. Had the Safety Boat Coach known before the accident that a Safety bag was required; he would have purchased this Safety bag and the required contents out of his own resources for use on the river. As the Safety Boat Coach had not been involved in any rowing accident previously, the Safety Boat Coach had no requirement for any interaction with the accident book.

MCIB states that that it appears that the Safety Boat Coach had little interaction with the club officers in regard to Safety management. The Safety Boat Coach was not responsible for Safety management but did liaise with the Club Captain, Club Secretary, Head Coach / health and Safety officer and other Coaches on a continual basis in relation to Safety. MCIBs inference to lack of interaction is inaccurate, and misleading.

5.3 Other Findings

5.3.6 Correction needed. This paragraph must include the fact that Rowing Ireland did not provide comprehensive safety training in place at all.

6 Safety Recommendations

6.2 That Rowing Ireland

6.2.11 Correction needed. How is it appropriate to tell Athlunkard Boat Club at 6.1.13 that they must have a minimum of two people in the Safety Boat, yet MCIB's is asking ROWING IRELAND to consider the merit of adopting a requirement for minimum manning levels for Rescue Boats? MCIB position should be the same for both Athlunkard Boat Club and Rowing Ireland. All Rowing Clubs must have the same requirements in regard to Safety. MCIB were further advised that there are some rowing clubs that does not even put a Safety Boat on the water at training sessions. What is the recommendation for these clubs? Regulation and guidelines have to be consistent to all

6.2.13 Comment. I think this should be a requirement,

6.2.14 Comment. I think this should be a requirement,

6.3 That the Minister of transport

6.3.1 and 6.3.2

Correspondence 8.1 Coach

The actual physicality of wearing such a device whilst rowing needs to be explored in significant detail prior to actioning within the sport. Furthermore, when a rower hits the water underneath the capsized Rowing Boat, any subsequent complications that arise in regard to entrapment would have to be examined in detail prior to the recommendation being actioned.

- 6.3.3 MCIB recommendation for Athlunkard Boat Club is different to MCIB recommendation for Rowing Ireland in Sections 6.1.13 and 6.2.11 respectively. Surely, it should be the same requirement for all clubs nationally. Has MCIB investigated the consequences of having a minimum number and its knock-on reduction to the Safety Boats capacity to rescue rowers? The Safety Boat used on the day was the largest type of Safety Boat utilised within the sport of rowing in Ireland. Rowing Boats come in variable crew sizes and these are outlined hereafter.
- 6.3.5 If this is a recommendation, MCIB also needs to direct this to Sports Ireland so that they can amend their strict policy in regard to not funding the purchase of Safety equipment for sporting organisations in Ireland?
- 6.3.6 Correction needed. This statement needs to qualify the reference to ensure that Coaches are suitably qualified. In terms of Rowing Ireland Coaching standards, The Safety Boat Coach was and still is a suitably qualified Coach. Please clarify.
- 6.3.7 No Comment

Additional Recommendations

That Rowing Ireland

4. Immediately amend their Safety Manual to include reference for the requirement of a knife, in line with the COP and FISA Guidelines.
5. Immediately instruct all affiliated Rowing Clubs to subscribe to Marine Notices; and
6. Immediately revise their expenditure plans by prioritising safety in affiliated rowing clubs both for equipment and educational training.

That the Department of Transport and the Minister without delay:

3. Given the emphasis and reliance by the Transport Department and the MCIB on Marine Notices in respect of information about PFD's and the COP as highlighted in this report, urgently ensure that Marine Notices are no longer relied upon as the medium for highlighting critical information about safety that should be disseminated more generally and efficiently to the public; and.
4. Make the Code of Practice for The Safe Operation of Recreational Pleasure Craft mandatory as a matter of urgency in line with previous MCIB Investigators' recommendations.

7 appendices

- 7.5 Safety Boat plate is unreadable
- 7.6 Its incorrect to suggest that the high tide mark is indicated on the piers. The accident occurred 53 minutes after the turn of the tide and hence the water level at the time of the accident would have been lower. Did MCIB ever establish the actual height of the water at

Correspondence 8.1 Coach

the time of the accident and its actual reflection of this water level on the Weir? The photos are not date stamped. When was this photo taken?

- 7.7 The annotation on the Thomond Weir – downstream view is incorrect and does not identify the actual span of the bridge where the accident occurred. This correction is required for accuracy.
- 7.9 The information as supplied by ESB and referenced appendix 7.9 refers to 25th of February 2019. This accident occurred on the 23rd of February. Only accurate / relevant information must be published within this accident report.

Total combined flow via Parteen Weir (Ardnacrusha and the old river) was recorded as 250m³ per second which is actually only 62.5% of the maximum flow rate recorded during the previous year leading up to the accident. Maximum flow rate was 390 m³ per second

This graph as supplied by ESB outlines that the river flow was actually lower than what this investigation actually implied.

High tide 09.19am Height of water at Limerick docks was 6.40

Low tide 15.38pm Height of water at Limerick docks was 0.3m

Range 6.10m time taken from high to low tide in minutes = 379

Drop in water height per minute was 0.016095m

This accident occurred approximately 53 minutes after high tide. This time period post high tide resulted in a reduction of the height of water at Limerick docks by 0.853metres. Furthermore, this resulted in an actual datum height of water level at Limerick Docks at 10.12am of 5.247m.

This reduction in level resulted in a 13.98 % reduction in volume of water passing through the Weir when compared to the volume of water at high tide.

Did MCIB undertake such calculation into the reduction in volume of water in the river at the Weir at 10.12am? MCIB have implied that there was this huge volume of water coming down the river when in fact, the river contribution was only 62.5% of the maximum recorded that year prior to the accident and the tide had dropped 0.853m resulting in a 13.98 % reduction in volume.

It is appropriate to deduce that the problem in relation to the alleged huge volume was not the quantity as such but rather the constriction of the river in itself.

The river at Thomond Weir is 146m in width. Thomond Weir traverses the river at this point and contained 20 number in river piers, each with a width of 1.5m. The total width of piers is therefore 30m

30m removed from the overall width of river at this point is actually a 20.55% reduction in the available room for the river water pass through.

Appendix 7.9 indicates that the flow through Ardnacrusha and at Parteen Weir was 250m³ per second. This equates to 250000 litres per second plus the retreating tidal water was

Correspondence 8.1 Coach

forced through a constricted river with of 116m as opposed to the action river width of 146meters.

There is no doubt that the reduction in available river width caused by Thomond Weir rather than the volume of the river flow caused the increase in river water speed in the immediately upstream of the Weir.

- 7.11 It is noted that the Level one coaching course outlined within appendix 7.11 was for the locations of Galway and Offaly. Limerick was not listed on the course even though it has 5 affiliated rowing clubs consisting of approximately 15% of the rowing community membership in Ireland

Correspondence 8.2 Solicitors for Rowing Ireland

MCIB,
Marine Casualty Investigation Board
By e-mail only: info@mcib.ie

Your Ref: MCIB286

Our Ref: CMCD/EC/06303

24th May 2021

**Re: Draft Report into Incident involving an Olympic Style Rowing Boat
near the Salmon Weir Thomondgate, Limerick on the 23rd of February 2019**

Dear Sirs,

As you are aware we act on behalf of Rowing Ireland (RI) in the above-entitled investigation. We have now had an opportunity to review the draft report with our clients who instructs us as follows:

Firstly RI would like to emphasise, the extremely unusual circumstances of this tragic accident, which shocked the entire rowing community in Ireland. Neither RI, nor the world governing body for rowing (FISA/World Rowing) who RI consulted with in relation to this accident, was aware of any similar serious accidents involving hair entanglement in a rowing boat, occurring previously. Our client's heartfelt sympathies go to the victim of the accident and to her family.

On the content of the report itself, the responsibilities of Rowing Ireland Safety Committee are correctly identified in the report (3.67). These responsibilities include consultation with regional and club safety officers, arranging Safety Courses for members and providing templates for emergency plans and assessments to support an environment where all club members, safety officers and coaches jointly contribute to health and safety at a club level. RI has complied with its responsibilities in that regard and vehemently refutes the findings within the report which alleges that it has a prescriptive / compliance role in respect of safety at a local club level (3.69, 4.6.3). Our client's role, particularly in light of its limited resources, is as outlined to the MCIB, advisory in nature. The report accuses RI of failing to promote a culture of safety (4.6.3), which therefore contributed to incident in 2019 (4.6.3, 4.6.8, 4.6.10). This does not correlate with the repeated proactive efforts referred to in the report of RI issuing and communicating safety guidelines in accordance with its policies. The report also makes a number of assertions which we respectfully suggest are not supported by any evidence or do not correlate with discussions between RI and the MCIB, including that: "RI officers could not describe the RI organisations safety culture", "RI does not disseminate safety issues to Club Safety Officers", and that "communication feedback from clubs is not encouraged and not administered (3.7.1) or that "RI had little interest in advocating issues including safety matters" (4.6.2)." We respectfully would ask that the report be amended to either clarify, or remove any such assertions, as we cannot see on what factual basis they have been made.

The report further identifies or suggests a failure in the administrative processes of RI to communicate both the Safety Statement and Policy to the Club (4.6.9). Our client has a specific record showing the email attaching the Safety Manual and follow up message advising of recommended responsibilities of Club Safety Officers was issued to the correct address, which

Correspondence 8.2 Solicitors for Rowing Ireland

address was provided to RI by the Club. All emails were sent to the correct email address for the Club and evidence of this can be provided. RI advises that Athlunkard BC has received all emails to the stated email address since 2017 and that it has received responses to emails from the Club from the email address in question. One can only assume that there was a failure on the part of the club to take ownership for monitoring or managing their Club Safety Officer's email account and/or to ensure its own safety procedures and Risk Assessments were in place and/or communicated at club level. Specifically, and as acknowledged in the report, despite the fact that the CoP, FISA, RI and the club's own guidelines required a Safety Bag to be carried in the Safety Launch, this requirement was not effectively followed by the Club – whose representatives claimed ignorance of all of the above, including their own policies. Furthermore members of the Club and indeed, very experienced members, would have been aware of the safety and risk requirements before excursions are planned and subsequently undertaken. Finally, irrespective of any alleged administrative /email receipt issues, you will be aware that the Safety Manual was publicly accessible on RI's website which would have been known to the club in question. It is completely incorrect to suggest that any alleged failure of an e-mail correspondence could have any contributory factor on the Club's actions when it is evidentially apparent from RI's records that there was no such failure on their part, and irrespective of this, where the materials were publicly available and the Club's officers had a clear responsibility for (a) providing up to date email contacts that were being checked and reviewed by the Club Officers and for (b) proactively engaging with RI published safety materials.

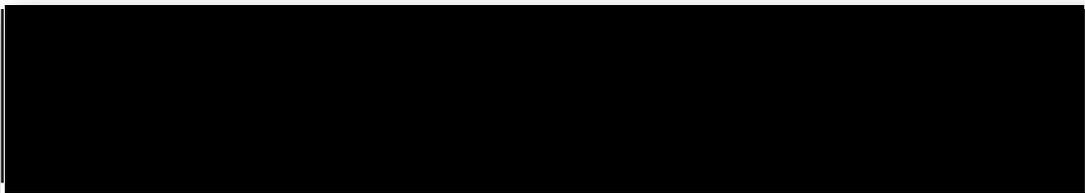
It is refuted entirely that there was any failure on the part of RI or indeed, any inaction on the part of RI to "push down" the implementation of the national governing body's Safety Policy (2017) and its Safety Manual (2017) to the relevant club, which unfortunately appear to ignore not only publicly available guidance, but guidance provided to it directly by RI, not to mention the Club's own safety policy. In light of the Club's actions, it is not a sustainable argument that RI's actions or inactions could have been a contributory factor to the incident that occurred.

The incident that occurred on the date in question was an isolated, tragic incident, involving a crew, none of whom were formally RI members at the time. The Club's failure to follow safety materials provided directly to it and/or readily available to it, or to follow its own safety policies, including a failure to carry out a Risk Assessment, or to carry an appropriately stocked safety bag are matters for the Club. RI is an advisory body; it cannot take any responsibility for individual excursions that local clubs plan, particularly where not involving RI members. The report itself identifies that the Club's position is that "coaches are familiar with river navigation and hazards through narrative, discussions and experience over time" (3.45). This position is supportive of the autonomous role that clubs have in their own safety development and risk assessment at a local level. In light of the above, we would respectfully request that the draft publication would be reviewed and revised to address our client's observations as detailed above.

Please note our client would also ask that copies of any further reports and/or correspondence would also be issued to their offices directly as they did not receive a copy of the report from the MCIB and would appreciate if this request could be facilitated. We look forward to hearing.

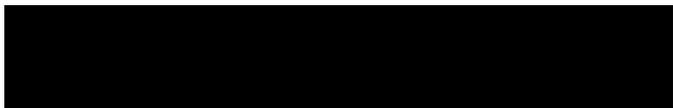


Correspondence 8.2 Solicitors for Rowing Ireland



Yours faithfully,

This letter is sent electronically and accordingly bears no signature



Correspondence 8.3 Solicitor for Casualty

[Redacted]

Marine Investigation Board
Marine Casualty Investigation Board
Leeson Lane
Dublin 2
info@mcbi.ie

Our Ref

M212/02

Your Ref

Date

21st April 2021

Re:

[Redacted]

Dear Sirs

We refer to the above matter and to the draft report that was recently furnished to us.

You might note that our clients have no observations to make on foot of the draft report. We look forward to receipt of your final report in due course.

Yours faithfully

Sent via email so accordingly bears no signature

[Redacted]
Solicitor
[Redacted]

[Redacted]

Correspondence 8.4 Limerick Fire & Rescue



Seirbhís Dóiteáin,
Comhairle Cathrach agus Contae Luimnigh,
Tuar an Daill,
Luimneach

Fire Service,
Limerick City and County Council,
Dooradoyle,
Limerick

t: +353 (0) 61 496 859
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e: fireservice@limerick.ie

[REDACTED]
Secretariat

Marine Casualty Investigation Board

Leeson Lane

Dublin 2

9th April 2020

Re: Draft report into an incident near the Salmon Weir Thomondgate, Limerick 23 February 2019

Dear [REDACTED]

I wish to acknowledge receipt of the document 'Draft report into an incident near the Salmon Weir Thomondgate, Limerick 23 February 2019' from the MCIB. Having reviewed the report, I would be grateful if the Board would consider my comment as follows:

- The inflatable boat operated by Limerick Fire and Rescue Service is referred to as 'Swift Rescue' in the draft report, however its designated name is 'Fire Swift'. I would request that references to 'Swift Rescue' pertaining to the fire service inflatable boat within the report be amended to 'Fire Swift'.

Yours faithfully,

[REDACTED]

Senior Assistant Chief Fire Officer

Ceanncheathrú Chorparáideach, Cé na gCeannaithe, Luimneach
Corporate Headquarters, Merchants Quay, Limerick

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