

**Risk Assessment**

<b>Event</b>	<b>Torpid Rowing On</b>	<b>Date:</b>	<b>17/02/2023</b>
<b>Author</b>	<b>Oliver Hedges (last edit Natasha Smith)</b>	<b>Rev:</b>	<b>13/12/2022</b>

No:	Hazard	Reduce the probability that a Hazard causes a Hazardous Event		Hazardous Event	Reduce the Severity of Harm caused by the occurrence of a Hazardous Event		Harm	Severity (1-5)	Probability (A-E)	Level of Risk (L/M/S/I)	Action Owners												
		Barriers	Action to maintain barriers		Controls	Action to maintain controls					Race Secretary	Race Committee	Incident Co-Ord.	Launch Drivers	Senior Umpire	Marshals	Other	if other, who?					
<b>Water</b>																							
1	Boats afloat for racing	Coaches and crews must have read the safety briefing and circulation plan before going afloat for practice or racing. Marshals to check all boats for adequate buoyancy measures before boating.	Prepare and provide safety briefing and inform coaches and crews that they must read it. Coxes to attend pre-event safety briefing. Marshals briefed on boat checks. Crews or athletes/coxes may be removed from racing if they are deemed to be unsafe.	Capsize or sinking	Marshals to fire klaxon if race is in progress. Rescue with launch. Administer first aid. Warm casualty up slowly.	A fully equipped safety launch in attendance at all times. Ensure that there is sufficient safety cover. Check equipment prior to use.	Cold water immersion leading to mild hypothermia	2	C	Low	X	X		X		X	X		Coaches, coxswains, crews				
2	Boats afloat for racing	Crews to be aware of and follow circulation plan. Marshals to direct crews. During racing, crews set off in approximate speed order and with sufficient gaps between them so boats should not be near each other. Race klaxon if racing line unavoidably blocked and/or collision is imminent.	Prepare and provide safety briefing and inform coaches and crews that they must read it. Coxes to attend pre-event safety briefing. Coxes must be registered with OUCS. Race Committee/Secretary/marshals to remain vigilant for incorrect circulation and communicate to crews circulating incorrectly. Crews or athletes/coxes may be removed from racing if they are deemed to be unsafe. Marshals briefed on circulation pattern and when to klaxon.	Collision with bank or another boat	Marshals to check all boats for bowballs and backstays, which minimise severity of damage in a collision. Rescue damaged boat with launch if necessary. Administer first aid.	Marshals briefed on boat checks. A fully equipped safety launch in attendance at all times. Ensure that there is sufficient safety cover.	Damage to boats	2	C	Low	X	X		X		X	X		Crews, coxswains, coaches				
					Marshals to check all boats for bowballs and backstays, which minimise severity of damage in a collision. Rescue injured athlete with launch if necessary. Administer first aid.	Marshals briefed on boat checks. A fully equipped safety launch in attendance at all times. Ensure that there is sufficient safety cover.	Injury to crews	2	C	Low	X	X		X		X	X		Crews, coxswains, coaches				
					Rescue with launch. Administer with first aid. Warm casualty up slowly.	A fully equipped safety launch in attendance at all times. Ensure that there is sufficient safety cover.	Athlete knocked into the water. Cold water immersion leading to mild hypothermia	2	C	Low	X	X		X		X	X		Crews, coxswains, coaches				
3	Boats afloat for racing with people in the water	No individuals to voluntarily enter the water during the event. Crews expected to be competent enough to avoid being ejected from their boat	Marshals to report people in the water during river checks. SU shall not start racing if people are in the water. Crews or athletes/coxes may be removed from racing if they are deemed to be unsafe. Marshals to immediately fire klaxons if anyone ends up in the water during racing	Collision between boat and person in water	Rescue with launch. Administer with first aid. Warm casualty up slowly.	A fully equipped safety launch in attendance at all times. Ensure that there is sufficient safety cover.	Injury, unconsciousness, water aspiration, drowning	4	B	Moderate	X	X		X	X	X	X		Crews, Coxswains, Other River Users				
4	Athletes who are unable to swim being present in racing crews	All college crews must have passed an OURCs swim test. All non college crews must enter a declaration of swimming ability or proof of passing an OURCs standard swim test.	Entries system prevents college crews with non-swim-tested crews being entered for racing.	Athletes who are unable to swim falling into deep water	Rescue with launch following each division	A fully equipped safety launch in attendance at all times. Ensure that there is sufficient safety cover. Check equipment prior to use.	Water aspiration, drowning	4	A	Low	X			X			X		Club secretaries				
5	Poor rowing technique	Athletes expected to be sufficiently competent	Athletes may be removed from racing if they are deemed to be dangerous	Ejector crab	Marshals to klaxon race immediately if someone enters the water. Rescue with launch, administer first aid, warm up slowly	A fully equipped safety launch in attendance for every division and at hand during warm up. Check there is sufficient safety cover.	Cold water immersion leading to mild hypothermia	2	B	Low	X	X		X			X		Crews				

6	Debris in the river	Move any small object in the river that can cause an obstruction, using the launches if necessary. Protect the crews from larger, immovable, objects or suspend racing while it is moved.	Inspect course before start of racing. Race officials and marshals to remain vigilant for new objects entering	Collision with objects, Capsize	Rescue with launch if necessary. Use launch to escort damaged boats to closest landing stage.	A fully equipped safety launch in attendance at all times. Ensure that there is sufficient safety cover. Check equipment prior to use.	Damage to boats, cold water immersion leading to mild hypothermia	2	B	Low	X	X	X	X				
7	Launches afloat	All launch drivers operating during the hours of racing are to be RYA2 trained	Refresher training available if required	Capsize of launch	All people on board launches must wear lifejackets. Second launch available to assist. Rescue with launch. Administer first aid. Warm casualty up slowly.		Cold water immersion leading to mild hypothermia	2	B	Low		X	X					
8	Launches afloat	All launch drivers operating during the hours of racing are to be RYA2 trained	Refresher training available if required	Collision involving launch	Second launch available to assist and tow damaged launch.		Damage to launch	2	C	Low		X	X					
					Second launch available to assist. Rescue with launch. Administer first aid.		Injury to launch crew	2	B	Low		X	X					
9	Launches afloat	All drivers or passengers to be seated or holding on to something.	Passengers to be instructed on how to stay safe whilst on a launch.	Falling out of launch	Lifejackets worn by everyone, kill cord worn by the driver at all times. Rescue with launch. Administer first aid. Warm casualty up slowly.	A reminder of life jackets and killcords to be given to all launch drivers. A fully equipped safety launch in attendance at all times. Ensure that there is sufficient safety cover. Check equipment prior to use.	Cold water immersion leading to mild hypothermia	2	C	Low		X	X		X		All launch passengers	
10	Launches afloat	Kill cord worn by the driver at all times	A reminder of kill cords given to all launch drivers	Uncontrolled driverless launch	Second launch available to recover and tow first launch	A second launch is available at all times	Uncontrolled launch collides with boats/obstacles	3	B	Low		X	X					
11	Spare launch afloat outside of racing hours	All spare launch drivers operating outside the hours of racing to have been instructed in required competencies for the role.	Refresher training available if required	Capsize of launch or collision involving launch	All people on board launches must wear lifejackets. Second launch available to assist. Rescue with launch. Administer first aid. Warm casualty up slowly.		Cold water immersion leading to mild hypothermia. Damage to launch.	2	C	Low		X	X					
12	Debris in river	Crew to clear river of debris as appropriate.	Marshals and all launch users to be vigilant for debris in river	Failure of engine due to fouling of propeller. Stranded launch.	Self-rescue of launch using paddle. Rescue with another launch. Remove debris from propeller.	Launch to carry British Rowing recommended safety equipment, including a knife and paddle. Two launches in operation.	Damage to launch	2	B	Low			X		X		All launch passengers	
<b>Weather</b>																		
1	Possibility of electrical storm	All crews to leave the water immediately, instructions from Race Secretary or Senior Umpire using radios carried by launch drivers.	"30-30 Rule" to be used as advised by BR. Senior Umpire issues instructions to everyone at river by radios. Coxes briefed on what to do in the event of an electrical storm at pre-event briefing	Rower or official struck by lightning	Provisions for first aid, medical treatment, and casualty evacuation to hospital. AEDs mounted on University BH, and upstream side of Balliol BH.	Medical personnel to be competent and properly equipped.	Electrical burns, shock	3	B	Low	X			X				
2	Bad weather causing un-rowable	Modified flag system to be followed (see below).	Senior Umpire to assess weather and conditions in consultation	Crews swept into obstacles.	Boats equipped with bowballs and backstays. A fully equipped safety launch in attendance at all times. Rescue with launch. Administer first aid. Warm casualty up slowly	Ensure that there is sufficient safety cover. Check equipment prior to use.	Equipment damage Rowers injured Cold water immersion leading to mild hypothermia	3	D	Moderate	X	X	X	X	X		Coxswains, crews, coaches	

4	and/or dangerous conditions	Cancellation or restrictions to be implemented if appropriate.	with EA and other advisors to decide if race is safe to occur.	Boats capsizing or swamping	Boats have floatation compartments. Rescue with launch. Administer first aid. Warm casualty up slowly	A fully equipped safety launch in attendance at all times. Ensure that there is sufficient safety cover. Check equipment prior to use.	Cold water immersion leading to mild hypothermia	2	B	Low	X			X	X				
3	Extreme* heat (* indicates subjective conditions, as decided by the SU team)	Athletes and officials to wear suncream and stay hydrated	Pre-event coxing briefing and emails before and during the event to be sent if forecasts suggest likelihood of hot weather	People unprotected from sun	Administer first aid, keep casualties cool and hydrated	Water available at boathouses, all marshals have radios to summon first aid if needed	Heatstroke, sunburn	2	B	Low	X	X				X	X		Crews, Coxswains
4	Extreme* cold (* indicates subjective conditions, as decided by the SU team)	Athletes to wear sufficient layers during warm up and racing. Delays, cancellation, or restrictions on racing to be implemented if appropriate.	Senior Umpire to monitor conditions with the help of event committee and marshals	Athletes becoming too cold on the water	Rescue with launch if needed, administer first aid. Warm up casualties slowly.	A fully equipped safety launch in attendance for every division and at hand during warm up. Check there is sufficient safety cover. Hot water for drinks available at race desk.	Mild hypothermia, injury due to cold muscles before racing	2	B	Low	X	X			X	X	X		Crews, Coxswains
		Officials to wear sufficient layers during shifts. Delays, cancellation, or restrictions on racing to be implemented if appropriate.	Senior Umpire to monitor conditions with the help of event committee	Officials becoming too cold	Provide adequate first aid cover. Regularly check marshals etc. are ok	Welfare team to be set up by Event committee to distribute hot drinks and monitor marshal and umpire wellbeing if necessary	Mild/moderate hypothermia, slowed response time to incidents due to cold	3	C	Moderate	X	X			X	X	X		Umpires
5	Low Visibility	Use adequate lighting on boats If visibility is reduced to less than 100m on any part of the racing course then racing is suspended or cancelled.	Organisers to monitor conditions Crews to be warned before the race if low visibility is likely to occur	Crews crashing into obstacles or other boats or other river users	Rescue with launch. Administer first aid. Warm casualty up slowly	A fully equipped safety launch in attendance at all times. Ensure that there is sufficient safety cover. Check equipment prior to use.	Equipment damage Rowers injured Cold water immersion leading to mild hypothermia	3	B	Low	X	X		X	X		X		Coxswains, crews, coaches
6	Icy Conditions	Safety launches used to clear small quantities of ice from the racing course. Racing cancelled if launches cannot sufficiently clear the race course of ice.	Race officials and marshals to monitor weather conditions.	Boats collide with ice	Rescue with launch If necessary. Use launch to escort damaged boats to closest landing stage.	A fully equipped safety launch in attendance at all times. Ensure that there is sufficient safety cover. Check equipment prior to use.	Damage to boats	3	B	Low	X	X		X		X			
7	Significant ice on towpath	No bank riding. Crews requiring bank riders not allowed to race.	Senior Umpire and Race Secretary monitor conditions and make decision	Slipping on ice. Cyclist collides with bystander, cyclist or fixed object	Event-related cyclists (if permitted) should wear helmets. Administer first aid	Provide adequate first aid cover	Injury from slipping or collision	2	B	Low	X					X	X		Bankriders
<b>Other water users</b>																			
1	Other River traffic	Signs visible to river traffic displayed at the entry points onto the course .Senior Umpire to check river is clear using marshals, and ensure other river users on the racing course are static before starting racing. Marshals to make sure crews stick to the sides of the river, as shown by the circulation pattern leaving the centre free. Ensure crews do not spin in front of cruisers. Moor cruisers up at when a race is about to go off. Coxes observe the circulation pattern and do not spin in front of cruisers. Racing to be stopped by marshals if river traffic seems likely to cause a hazard to racing crews.	Pre-event contact made with other river users alerting them to the event (see event plan). Install signs displayed at the entry points onto the course. Brief Marshals to make sure crews stick to the sides of the river, as shown by the circulation pattern leaving the centre free. Also not to allow crews to spin in front of cruisers. Key marshals equipped with megaphones to hail crews, and all marshals to communicate to other river users entering the course. Create holding points to moor cruisers up at when a race is about to go off. Brief coxes to observe the circulation pattern and not to spin in front of cruisers. Brief coxes and crews to be aware of small craft such as paddleboarders and/or swimmers.	Collison between a crew and another river user	Rescue damaged boat with launch if necessary. Administer first aid.	A fully equipped safety launch in attendance at all times. Ensure that there is sufficient safety cover.	Damage to boats	2	B	Low	X	X			X	X	X		Coxswains, other river users
					Rescue injured athlete with launch if necessary. Administer first aid.	A fully equipped safety launch in attendance at all times. Ensure that there is sufficient safety cover.	Injury to crews	2	B	Low	X	X			X	X	X		Coxswains, other river users
					Rescue with launch. Administer with first aid. Warm casualty up slowly.	A fully equipped safety launch in attendance at all times. Ensure that there is sufficient safety cover.	Athlete knocked into the water. Cold water immersion leading to mild hypothermia	2	B	Low	X	X			X	X	X		Coxswains, other river users
<b>Handling boats on land</b>																			

1	Boats being moved on the land	Crew and coxwains to remain aware of spectators on land whilst moving boats	Clubs aware of responsibilities for any supporters and spectators	Collision between boats or blades and spectator	Administer first aid	Ensure adequate Medical Cover present. Marshals available at boathouses with radios to contact medical cover.	Injury to bystanders	2	C	Low								X	Coxswains, crews	
					Administer first aid. Warm casualty up slowly.	Ensure adequate Medical Cover present. Marshals available at boathouses with radios to contact medical cover.	Person knocked into river. Cold water immersion leading to mild hypothermia	2	B	Low								X	Coxswains, crews	
2	Boats being moved on the land	Crews recommended to lift with a straight back and use good technique. Coxswains to monitor safe technique	Coxwains recommended to observe crew lifting boat and check for safe technique	Lifting boats with poor technique	Administer first aid	Ensure adequate Medical Cover present. Marshals available at boathouses with radios to contact medical cover.	Spinal or other injuries	3	B	Low								X	Coxswains, crews	
<b>Faulty, incorrectly set and poorly maintained equipment</b>																				
1	Heel restraints broken or too loose	Boat checks to be conducted by marshals and crews	Ensure that Marshals checking equipment have instructions and a checklist	Rower trapped in capsized boat	Rescue with launch	A fully equipped safety launch in attendance at all times. Ensure that there is sufficient safety cover. Check equipment prior to use.	Becoming trapped in boat	3	B	Low							X	X	X	Crews, coxswains, coaches
2	Cox wearing broken or poorly fitted lifejacket	Clubs to maintain lifejackets. Coxes to fit lifejackets correctly. Marshals to check that coxes are wearing lifejacket over outer layer.	Instructions to marshals and competitors. Coxes briefed on importance of lifejackets in pre-event briefing.	Lifejacket does not inflate when required	Rescue with launch following each division. Administer first aid.	A fully equipped safety launch in attendance at all times. Ensure that there is sufficient safety cover. Check equipment prior to use.	Water aspiration, drowning	4	B	Moderate							X	X	X	Club safety officers, coxswains, crews
3	Cox wearing incorrect lifejacket	Coxes in bow loaded boats are not permitted to wear lifejackets that inflate automatically.	Instructions to competitors. Coxes briefed on importance of lifejackets in pre-event briefing.	Cox trapped in capsized boat	Rescue with launch	A fully equipped safety launch in attendance at all times. Ensure that there is sufficient safety cover. Check equipment prior to use.	Becoming trapped in boat	3	A	Low							X		X	Coxswains, crews
4	Other poorly maintained parts of rowing boat (e.g. steering cables, rudder, gates, riggers)	Boat checks for these issues to be conducted by crews, with marshals pointing them out if noticed during marshal boat checks (for heel restraints, backstays, floatation compartments and bowball).	Coxes and crews reminded in pre-event briefings to check equipment before boating.	Equipment failure. Possible collision or capsize.	Rescue with launch Administer first aid Warm casualty up slowly	A fully equipped safety launch in attendance at all times. Ensure that there is sufficient safety cover. Check equipment prior to use.	Damaged equipment Mild hypothermia	2	C	Low							X		X	Coxswains, crews
5	Poorly maintained launch	Launch to be serviced regularly.	All launch users to be vigilant of any abnormal launch behaviour, and report it.	Mechanical failure. Stranded launch.	Self-rescue of launch using paddle. Rescue with another launch.	Launch to carry British Rowing recommended safety equipment, including a knife and paddle. Two launches in operation.	Damage to launch	2	B	Low							X		X	All launch passengers
<b>Pre-existing health conditions and low levels of fitness</b>																				
1	Strenuous exercise	Rowers should warm up on land and warm down and stretch. Coaches and captains to take into account medical history when selecting crews. Rowers should not compete if they feel unwell or are injured		Over-exertion	Marshal contacts Race Desk, who summons launch to assist and alerts First Aid by radio. Administer first aid	Ensure that Marshals are properly briefed and equipped and that there is medical cover	Hyperventilation, pulled muscles, cramp, back injury	1	D	Low	X							X	X	Coxswains, crews, coaches, captains
2	Pre-existing health conditions	Crew members are responsible for carrying their own medication if required (e.g. inhaler)	Brief competitors	Collapse of athlete on landing stages (e.g., asthma attack or serious fall)	Marshal contacts Race Desk, who summons launch to assist and alerts First Aid by radio. Administer first aid	Ensure that Marshals are properly briefed and equipped and that there is medical cover	Serious health implications for competitor	3	B	Low	X							X	X	Coxswains, crews, coaches, captains
3	Pre-existing health conditions	Crew members are responsible for carrying their own medication if required (e.g. inhaler). Athletes with pre-existing conditions are (along with their club) expected to be managing these in line with medical and BR guidance and taking appropriate precautions		Collapse of athlete during a race (e.g., asthma attack)	Marshal contacts Race Desk, who summons launch to assist and alerts First Aid by radio. Marshals to klaxon a race if immediate first aid is needed.	Ensure that Marshals are properly briefed and equipped and that there is medical cover.	Serious health implications for competitor	3	C	Moderate	X			X				X	X	Coxswains, crews, coaches, captains,
<b>Towpath Use</b>																				

1	Bankriders cycling fast to accompany crews	Only one bankrider allowed with each crew unless a second is allowed by Race Committee to train a novice cox. Racedesk to keep a list of crews allowed two bankriders to ensure total number of bankriders stays low. Bankriders must have attended bankrider briefing in past 18 months. Bankriders to keep a good look out. Bike marshal warns towpath users of imminent race. Bankriders to make sure bikes have working brakes.	Bankrider briefing must be re-attended each 18 months. Event Committee to make intermittent checks on the number of bikes accompanying crews.	Collision involving accompanying cyclists	Marshal contacts Race Desk, who summons launch to assist and alerts First Aid by radio. Administer first aid	Ensure that Marshals are properly briefed and equipped and that there is medical cover	Injury to cyclists and pedestrians	1	D	Low	X							X	X	Bankriders
					Rescue with launch if necessary, administer first aid, warm casualties up slowly	Fully equipped safety launch available during warm up and racing	Someone falls in river, cold water immersion leading to mild hypothermia	2	B	Low	X						X	X	Bankriders	
2	Bike marshal cycling fast along towpath	Marshal briefed both in advance and on the day; marshal to keep a good look out and to make sure bike has working brakes	Marshal told to cycle slowly, avoid pedestrians, and get off bike to talk to large groups of pedestrians	Collision involving bike marshal	Bike marshal to wear a helmet. Marshal contacts Race Desk, who summons launch to assist and alerts First Aid by radio. Administer first aid	Ensure that Marshals are properly briefed and equipped and that there is medical cover	Injury to cyclists and pedestrians	1	D	Low	X							X		
					Rescue with launch if necessary, administer first aid, warm casualties up slowly	Fully equipped safety launch available during warm up and racing	Someone falls in river, cold water immersion leading to mild hypothermia	2	B	Low	X						X			
<b>Contagious Diseases</b>																				
1	Contagious diseases	Following National Health Service advice and government advisories	Sabbatical to remain aware of national health emergency news	Participants needing to be hospitalised	Follow national health advice at the time	Follow national health advice at the time	Potentially serious health issues	2	A	Low	X	X	X	X	X	X	X	X	Members of competing clubs	

In the event of the Environment Agency (EA) displaying Amber or Red Boards at the local locks which indicates a Strong Stream, OURCs have developed a range of

Controls in place to reduce risks	Persons responsible for ensuring controls in place
<p><b>Blue Flag (2-3 bucks)</b>  <b>Good conditions (high water, but low stream and wind):</b> Full Programme  <b>Poor conditions (high stream or winds):</b> Senior Umpire to consider whether coxing restrictions, coxless-boat restrictions or small-boat racing restrictions are required, with the aid of the Captain of Coxes for coxed crews. The course may be shortened on the SU's advice. Crews may be permitted to withdraw with no financial penalty at the discretion of the Race Secretary.</p> <p><b>Amber flag (4 bucks)</b>            No Novice status coxes. SU to consult with the OURCs Captain of Coxes regarding any further coxing restrictions. SU may restrict small-boat or coxless boat racing depending on the precise conditions. The course will be shortened on the SU's advice and consideration given to not permitting any above-Gut crew to go through the Gut. Crews may be permitted to withdraw with no financial penalty at the discretion of the Race Secretary. The race may be completely cancelled at the SU's</p> <p><b>Red Flag (5+ bucks)</b> No Racing – event is cancelled</p>	Race Committee, Race Secretary, Senior Umpire

		<b>People</b>	<b>Assets</b>
<b>Severity</b>	<b>1</b>	Slight injury or health effect <i>(Requires little or no treatment; no need to take time off rowing or training)</i>	Minor damage to equipment (<£100)
	<b>2</b>	Minor injury or health effect <i>(Requires First Aid or rest; potentially a few days off rowing or training)</i>	Damage repair costs low (£500)
	<b>3</b>	Moderate injury or health effect <i>(Requires treatment beyond simple First Aid; potentially a week or so off rowing or training)</i>	High damage repair costs (>£1000)
	<b>4</b>	Major injury or health effect <i>(Requires hospital treatment for more than one day; potentially a few weeks off rowing or training)</i>	Very high damage repair costs <i>(loss of boat, 3rd party damage)</i>
	<b>5</b>	Fatality or Life Threatening Injury or Health Effect <i>(could end a rowing career or cause hospitalisation for a few months)</i>	Major damage & major costs <i>(loss of several boats, high 3rd party damage)</i>

<b>Low</b>	An acceptable level of risk
<b>Moderate</b>	An acceptable level of risk
<b>Substantial</b>	An unacceptable level of r
<b>Intolerable</b>	An unacceptable level of r

Probability			
A	B	C	D
<b>Highly improbable</b> <i>(has not been known to happen in rowing)</i>	<b>Improbable</b> <i>(has been known to happen in rowing)</i>	<b>Possible</b> <i>(could happen to about 1% of the club's active members per decade)</i>	<b>Probable</b> <i>(could happen to about 1% of the club's active members per year)</i>
Low	Low	Low	Low
Low	Low	Low	Moderate
Low	Low	Moderate	Substantial
Low	Moderate	Substantial	Intolerable
Moderate	Substantial	Intolerable	Intolerable

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↳ that should be reviewed.

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<b>Highly probable</b> ( <i>could happen to about 10% of the club's active members per year</i> )
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<b>Moderate</b>
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<b>Substantial</b>
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<b>Intolerable</b>
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<b>Intolerable</b>
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<b>Intolerable</b>
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