

Katoa Lake Rotorua RAMS <i>updated August 2025</i>										
Risk	Hazard	Likelihood	Consequence	Score (before controls)	Eliminate or Minimise	Controls in place	Likelihood (after controls)	Consequence (after controls)	Score (after controls)	Final rating (after controls)
Slips, trips and falls	office related	Possible	Minor	6	M	Yellow grip on steps. Wheelchair access. Any rips in carpet are repaired immediately. Any spilt liquid is cleared up immediately.	Unlikely	Negligible	2	Low
	Walkway between office and jetty	Possible	Moderate	18	M	Reporting to RLC about any damage or obstruction or new hazards. Lime gravel, creates a non slippery surface even in rain. Staff to point out any new hazards to customers.	Unlikely	Negligible	2	Low
	Workshop entrance and area	Likely	Moderate	12	M	Any damage to workshop is notified to the Landlord. Only staff or landlord allowed in premises. All objects clear from door both sides. Spills dealt with as soon as possible. Workshop floor to be kept free of any equipment and any equipment used needs to be put away after use.	Possible	Negligible	3	Low
Chemical burns	Customer exposure to hazardous chemicals	Possible	Major	12	M	No chemicals left out. Staff put away after use. Jetty shed/staff only kept shut when not in use.	Rare	Negligible	1	Low
Fire	Fire in office	Possible	Catastrophic	15	M	Electrical products meet safety standards. Discontinue use and replace faulty electronics. Fire evacuation plan in place. Fire extinguishers in office. No open flames at office.	Unlikely	minor	4	Low
	Fire safety on jetty	Possible	Catastrophic	15	M	No open flames are permitted on the jetty. All chemicals to be stored away when not it use.	Rare	Major	4	Low
	Fire on any vessel	Likely	Catastrophic	20	M	Daily checks on all vessels.	Rare	Major	4	Low
Poor air quality	Poor air quality in the office	Unlikely	Minor	4	M	Keeping main slide door open as much as possible. Windows that can be opened. Installed ceiling fan for air circulation.	Rare	Negligible	1	Low
	Poor air quality /circulation in lifejacket shed	Unlikely	Minor	4	M	Small air mover that can be turned on. Doors offer good opening for airing out if needed. Prevents mould build up.	Rare	Negligible	1	Low
Inappropriate/aggressive behaviour	Aggressive behaviour towards staff or customers (physical and verbal)	Possible	Major	12	M	Watchdog and RotoruaNZ security staff have a presence down here at the lakefront. Staff are to call Police if anyone at the lakefront is showing aggressive or erratic behaviour etc.	Rare	Minor	2	Low
	Unacceptable/aggressive behaviour from customers whilst on trip which can risk safety for themselves or others	Possible	Major	12	M	Customers are screened before boarding boat, and can be refused to board if they are showing unacceptable/aggressive behaviour. Drivers are to stop trip and return to shore if they believe a customer is showing unacceptable/rude behaviour. They are to Radio base and ask them to call for police assistance.	Rare	Minor	2	Low
	Potential harm to customers coming back from a trip if someone at the lakefront is being aggressive	Possible	Major	12	M	Office staff are to report to drivers on a trip about any potential hazard on the lakefront that could put the driver or customers at risk. Drivers are to remain out on the lake or find alternative mooring options if the risk is unlikely to subside soon.	Rare	Minor	2	Low
	Staff using inappropriate behaviour or language to staff or customers	Possible	Major	12	M	Staff are to go through an extensive interview process before hiring this includes Fit and Proper assessment and interview. Staff will go through the correct disciplinary action process if they use inappropriate behaviour or language towards a customer.	Rare	Negligible	1	Low
	Customers using inappropriate behaviour or language to other customers or staff	Possible	Major	12	M	Staff can ask any customer or member of the public to leave the premise or call the Police if need be, if a customer feels uncomfortable or threatened. Staff are encouraged to report all incidents to management. Staff to evaluate situation and step in before escalation.	Unlikely	Minor	4	Low
Injury from maintenance equipment	Injury caused by any equipment left on jetty	Likely	Major	16	M	No equipment is to be left out on jetty when not in use. Staff are to advise others when they are to use equipment at office or Jetty. No customer is allowed on the jetty when equipment is in use.	Rare	Minor	2	Low
Operational/environmental risk	Objects falling off shelves and causing injury	Possible	Moderate	9	M	Any damaged shelving to be repaired or removed. All tools/equipment have allocated areas for storage.	Unlikely	Minor	4	Low
	Any Injury obtained by wood or nails/screws on jetty	Likely	Moderate	12	M	Jetty is to be checked every morning by staff, they should be checking for damage or obstacles and any issues should be noted with the Maintenance Manager to be fixed. Any nails to be hammered in if sticking out from the jetty boards. All remaining nails and screws to be put away after any maintenance has taken place.	Rare	Negligible	1	Low
	Injury to any customer/member of the public when boarding or exiting any vessel	Likely	Major	16	M	All vessels are to be securely moored to the jetty when not in use. Post around jetty for customers and staff to use as support when entering and exiting the boat. Customers are not allowed to board boat until the staff have told them to do so. Customers are not allowed to exit the boat until staff have told them to do so. Staff are to always offer light assistance only when customers are boarding or exiting the boat. Customers are advised how best to board or exit the vessel. Staff are to securely tie up the boat before customers are allowed to exit. Fenders are to be used where necessary.	Rare	Minor	2	Low
	Injury to staff whilst loading customer on boat from jetty	Possible	Major	12	M	All staff are trained by the Operations Manager and are signed off at every 6 monthly refresher training, this training includes being observed by the Operations Manager and potential hazards when helping customers into the boat can be addressed. Grip strips on the side of the boat.	Unlikely	Minor	4	Low

Likelihood	
Rare	1
Unlikely	2
Possible	3
Likely	4
Almost certain	5

Rating
Low
Medium
High
Extreme

Consequence	
Negligible	1
Minor	2
Moderate	3
Major	4
Catastrophic	5

	Injury to staff whilst boarding boat from jetty	Possible	Minor	6	M	We do not run trips in very rough weather. Staff are trained by the Operations Manager, they are shown the safest ways to board the boat depending on the lake conditions and which jetty you are on.	Unlikely	Minor	4	Low
	Any injury obtained by wood or nails/screws on jetty at Lake Rotoiti Hot Pools.	Possible	Moderate	9	M	Lake Rotoiti Hot Pools Jetties are constantly checked and maintained for damage. All drivers are first aid trained and first aid kits located on boat and on site.	Rare	Minor	2	Low
	Any injury to customer caused from the Ohau Channel wall	Possible	Major	12	E	Drivers are to follow route and stay at least a metre away from Ohau wall.	Rare	Negligible	1	Low
	Any injury caused to customers whilst offloading/boarding vessel at jetty at hot pools	Possible	Major	12	M	Drivers follow usual procedures of securing the boat to the jetty before off-loading. Drivers are to offer customers assistance if they need it. Jetties at Lake Rotoiti Hot Pools are kept in good condition. Drivers are first aid trained and Lake Rotoiti Hot Pools have first aid kits onsite and on boat.	Unlikely	Minor	4	Low
	Any injury sustained by anyone whilst at Lake Rotoiti Hot Pools grounds	Possible	Major	12	M	Lake Rotoiti Hot Pools has signs informing staff and visitors of dangers. Life ring available. De-FIB on site located in the office. Up to date First Aid Cert. Our drivers are all First Aid trained and stay on premises with customers.	Rare	Minor	2	Low
On water related risks	Customers in distress from any trip	Almost certain	Minor	10	M	Drivers are to check customers are comfortable to continue trip after first spin. If a customer is in distress, drivers are to reassure customers, Radio base and return to Katoa's jetty at slow speed.	Rare	Negligible	1	Low
	Injury to passengers with less mobility (e.g. disabilities, elderly) in turns, fast speed, and rough weather	Likely	Major	16	M	Trips are to be cancelled if weather becomes too rough. Drivers will place elderly and limited mobility customers in the middle of the rows. Packers provided. Driver can drive trip to suit the customer.	Rare	Minor	2	Low
	Injury to younger passengers from dynamic vessel manoeuvres	Likely	Major	16	M	Staff can stop any customer going on a trip if they believe they are at risk of being injured due to participants age or physical ability. Trips are to be cancelled if weather becomes too rough - SOP has these limits. Drivers will place elderly and limited mobility customers in the middle of the rows. Packers provided. Driver can drive trip to suit the customer. Driver will return to shore if they believe a customer is refusing to follow safety procedures that could lead to injury, loss or death.	Rare	Minor	2	Low
	Injury caused to any customer when off-loading to another boat when boat had broken down	Likely	Catastrophic	20	M	Drivers have 6 monthly drill training with includes off-loading boat to boat. They are to follow the SOP procedure and be vigilant of customers needing assistance. With importance of customers communication. Drivers are first aid trained and all boats have a fully stocked first aid kit.	Rare	Minor	2	Low
	Any injury to person whilst entering Ohau Channel from Lake Rotorua	Possible	Major	12	E	During safety briefing customers are informed to keep hands inside the vessel and not put them out to the side. In the unlikely event of injury, drivers are first aid trained and all boats have stocked first aid kits on board.	Unlikely	Minor	4	Low
	Any injury to person whilst exiting Ohau Channel onto Lake Rotorua	Possible	Major	12	M	During safety briefing customers are informed to keep hands inside the vessel and not put them out to the side. In the unlikely event of injury, drivers are first aid trained and all boats have stocked first aid kits on board.	Unlikely	Minor	4	Low
	Injury to customer from bridge whilst going under bridge through Ohau Channel	Possible	Major	12	M	Drivers are trained to use specific routes, this also includes lining up to the bridge before going under so you are clear of both sides. During safety briefing customers are informed to keep hands inside the vessel and not put them out to the side. In the unlikely event of injury, drivers are first aid trained and all boats have stocked first aid kits on board.	Unlikely	Minor	4	Low
	Injury to customer when responding to people in distress on the lake/in Ohau Channel	Possible	Major	12	M	We do not take customers when responding to distress on the lake unless life is likely to be lost without quick response. Customers will be asked reassured and informed of the situation. Under no circumstance will a driver respond to a distress signal with customers if the person in distress is being aggressive or unsafe.	Rare	Major	4	Low
	Volcanic Air Operational Zone: Potential collision with Helicopter tail when parked on east jetty pad.	Possible	Catastrophic	15	M	We have good communication with Volcanic Air, particularly surrounding working within the same areas. Jet Boat Drivers are to wait parked at the jetty or out of the shared operational zone when the helicopter is landing/parked/taking off from their east jetty pad. Although drivers are to be conscious of their surrounding at all times, extra attention paid to do a final check if helicopters are coming in to east jetty pad. Helicopter should wait till Jet Boat is out of the shared operational zone if the Jet Boats are already in transit departing or enter the jetty area (specifically the Jet Boat channel). In the event that weed has blown into the lakefront area, Jet Boat drivers know to take extra precautions.	Rare	Catastrophic	5	Medium
	Volcanic Air Operational Zone: Potential collision with Float Planes	Possible	Catastrophic	15	M	We have good communication with Volcanic Air, particularly surrounding working within the same areas. 5 knots within 50m from floatplane. Although drivers are to be conscious of their surrounding at all times, extra attention paid to where the float planes are parked or operating. Jet Boat, or float planes appropriately wait till the other is clear. If this is not possible, a wide berth is taken. In the event that weed has blown into the lakefront area, Jet Boat drivers know to take extra precautions.	Rare	Catastrophic	5	Medium
Exposure	Exposure whilst waiting on jetty	Possible	Moderate	9	M	Customers are only taken down to vessel or hot sunny days when trip is 'ready' and scheduled for departure, late customers have until trip departs to avoid boarded customers prolonger exposure.	Unlikely	Negligible	2	Low

	Exposure to customer/staff whilst on any vessel	Almost certain	Moderate	15	M	Customers are only taken down to vessel or hot sunny days when trip is 'ready' and scheduled for departure, late customers have until trip departs to avoid boarded customers prolonger exposure. Suncream is available at the office. Trips are 30 minutes long. Customers are encouraged to dress appropriately for the outside weather.	Possible	Negligible	3	Low
	Exposure whilst at Lake Rotoiti Hot Pools	Almost certain	Moderate	15	M	Lake Rotoiti Hot Pools has ample cover to shade customers and staff from exposure. Suncream is available at their store along with refreshments.	Unlikely	Minor	4	Low
Natural disaster	Natural hazards e.g. Earthquake, eruption etc.	Possible	Catastrophic	15	M	Emergency Response guides are in place for such events (refer to Safety Management Systems file). In the event of any natural disaster occurring within the region or that may affect Rotorua, all drivers are to immediately return to base or closest shore if safest to do so. For high impact/major natural disasters all operations to close until further notice. Staff must follow all National Emergency instructions.	Possible	Major	12	High
Severe weather	rough weather causing injury/death to customers	Almost certain	Catastrophic	25	M	Staff and drivers to regularly check weather forecast and make prejudgment on cancelling trips. If weather becomes severe on trip, drivers are to return to base immediately. Trips to be cancelled and boats put away in severe weather. SOP sets out what is considered severe weather.	Rare	Major	4	Low
	Any rough weather conditions on the day	Almost certain	Catastrophic	25	M	Drivers and staff are to regularly check the weather forecast throughout the day. Trips are cancelled in severe weather or if it is imminent.	Possible	Negligible	3	Low
	Any new unforeseen rough weather conditions appearing on trip	Almost certain	Catastrophic	25	M	Drivers and staff are to regularly check the weather forecast for guidance. Trips are cancelled in severe weather or if it is imminent. However, forecasts can be unreliable so best judgement based on actual weather is important (whether it seems more or less severe than the forecast). Drivers are to radio and return back to base if the lake conditions start to become too rough.	Possible	Negligible	3	Low
	Any new severe weather whilst on Lake Rotoiti Hot Pool trip	Almost certain	Catastrophic	25	M	Driver and office staff to check weather forecast regularly. However, forecasts can be unreliable so best judgement based on actual weather is important (whether it seems more or less severe than the forecast). If weather looks like it may become severe, drivers can call short the trip and return the base. In unforeseen extreme severe weather down the channel, driver is the moor at Ramada and off-load customers and call for road transport.	Unlikely	Minor	4	Low
Over turning	Over turning on Hamilton spins	Almost certain	Major	20	M	Drivers are trained and then signed off with Maritime when deemed competent. They are trained how to perform a Hamilton spin, under what conditions and to be aware of lake conditions and weight balance in the boat. 'Customer loading' is to be followed as per training and SOP to ensure safety of more vulnerable passengers i.e. elderly, infants, disabled.	Unlikely	Minor	4	Low
	Capsizing whilst on a trip	Possible	Catastrophic	15	M	Daily preflight checks on all vessels. 50, 250 and 1000 hour services on all boats - 1000 hour includes critical parts to be replaced as per Maritime requirement. Yearly Maritime audit. Trips are cancelled in rough weather. Drivers are to follow emergency procedures in SOP	Rare	Major	4	Low
Navigational Hazard	Hitting any channel marker/other objects clearly mark in water	Likely	Catastrophic	20	M	Drivers are to follow all Maritime regulations and be signed off by maritime. If a driver hits any clearly marked object, they are to be stood down and the situation investigated. Further training will be given.	Rare	Major	4	Low
	Hitting any underwater hazards	Possible	Catastrophic	15	M	Drivers are to follow specific routes for trips. Any variation is by Operation Manager discretion. Drivers are to adhere to Maritime rules of 5 knots within 200m of shore. Radio available plus phone. All customers are to be given lifejacket. All drivers are first aid trained.	Rare	Major	4	Low
	Any new/ongoing hazards affecting usual route	Almost certain	Major	20	M	In the event that the driver notices any new hazards affecting usual route, they are to assess the situation. If safe to do so, use an alternative route, radio base and inform them of the hazard and Operations Manager to confirm new route. Office staff are then to inform the Harbour master or the immediate hazard and the other operators on the lakefront. If Drivers are unsure or believe it is a major hazard they are to turn around and return to Lake Rotorua and Katoa base. They are to radio the office and inform them of the hazard and office staff are to inform the Harbour master and the other operators on the lakefront.	Unlikely	Negligible	2	Low
	Any change to the Ohau Channel that can cause damage to vessel	Possible	Major	12	M	In the event that the driver notices any new hazards down the Ohau Channel, they are to assess the situation. If they have decided to hazard is minor they can continue if safe to do so, radio base and inform them of the hazard. Office staff are then to inform the Harbour master. If Drivers are unsure or believe it is a major hazard they are to turn around and return to Lake Rotorua and Katoa base. They are to radio the office and inform them of the hazard and office staff are to inform the Harbour master.	Unlikely	Minor	4	Low
	Any new fallen trees or bank erosion in the Ohau Channel	Likely	Major	16	M	In the event that the driver notices any new hazards down the Ohau Channel, they are to assess the situation. If they have decided to hazard is minor they can continue if safe to do so, radio base and inform them of the hazard. Office staff are then to inform the Harbour master. If Drivers are unsure or believe it is a major hazard they are to turn around and return to Lake Rotorua and Katoa base. They are to radio the office and inform them of the hazard and office staff are to inform the Harbour master.	Unlikely	Minor	4	Low
Customer compliance	Customers not listening to safety briefing	Almost certain	Catastrophic	25	M	Driver is to make sure all customers are showing full attention during safety briefing. Briefing cards provided in different languages. Drivers are to stop trip and return to shore if they believe a customer refuses to listen to safety briefing.	Rare	Negligible	1	Low
	Customers reusing to follow safety procedures whilst on trip	Likely	Major	16	M	Drivers are to stop trip and warn customers to following the safety briefing. Driver will return to shore if they believe a customer is refusing to follow safety procedures.	Rare	Minor	2	Low

	Any customers not returning to vessel when time to leave	Possible	Minor	6	M	Customers are aware of when they need to return to vessel. Drivers can give a warning timer to customers. If a customer refuses to return to the vessel, the driver must contact base immediately and steps will be taken then on.	Rare	Minor	2	Low
	Customer being intoxicated on trip	Possible	Major	12	E	Staff can deny any potential customer from booking if they appear intoxicated. Staff are strongly encouraged to stop a trip at any point if they suspect a customer to be intoxicated a posing H&S to themselves or others. Staff encouraged to report all incidents to management.	Rare	Negligible	1	Low
Medical emergency	Customers experiencing any need of urgent medical attention whilst on trip	Possible	Catastrophic	15	M	Notices in office and on booking confirmation regarding injury screening. Drivers and guides are all first aid trained and there is a fully stocked first aid kit on all boats. AED is located at Office. Radio and mobile available for communication. Situated near hospital. Follow medical emergency procedure in Section 20.2 of SOP.	Unlikely	Minor	4	Low
Poor visual	Poor visual in dusk trips, possibly hitting object, other vessel or jetty/shore	Likely	Catastrophic	20	E	Staff and drivers are to follow Maritime guidelines. No trips are to be going out after sun begins to set.	Rare	Negligible	1	Low
Man overboard	Man over board	Possible	Major	12	M	Safety briefing from customers that informs them to remain seated and other safety requirements to follow to minimise this risk. Drivers are training 6 monthly in there drills which includes man overboard. Drivers are to follow the man overboard procedure in the SOP and radio base.	Rare	Minor	2	Low
Biosecurity	Biosecurity risk (Island is a bird sanctuary)	Almost certain	Major	20	M	Katoa Lake Rotorua is to ensure all staff and customers adhere to biosecurity checks before they board the vessel if any. No longer landing on Mokoia Island.	Rare	Minor	2	Low
Staff misconduct	Driver failing to control the vessel in different flow than a lake within the Ohau Channel	Possible	Major	12	M	Driving through the Ohau Channel is incorporated as part of driver training. Drivers are also to take a specific route, detailed in the SOP to follow the flow and reduce the risk of touching the sand bars. Drivers are to following Maritime rules and adhere to the 5 knot rule through the channel.	Rare	Minor	2	Low
	Staff coming into work under the influence of drugs or alcohol	Possible	Catastrophic	15	M	Staff are drug screened at the start of employment. All staff are to adhere to Katoa Lake Rotorua's Drug and Alcohol policy. Staff complete a fit and proper assessment before employment. Staff are sent home immediately and stood down until further noticed if deemed under the influence of alcohol or drugs. Staff are given a disciplinary and further action to be decided upon full investigation.	Rare	Major	4	Low
	Driver operating trips under the influence of drugs or alcohol	Possible	Catastrophic	15	M	Staff are drug screened at the start of employment. All staff are to adhere to Katoa Lake Rotorua's Drug and Alcohol policy. Staff complete a fit and proper assessment before employment. Staff are sent home immediately and stood down until further noticed if deemed under the influence of alcohol or drugs. Staff are given a disciplinary and further action to be decided upon full investigation.	Rare	Major	4	Low
	Staff showing lack of understanding of Health & Safety	Possible	Catastrophic	15	M	Staff are fully trained by the Operations Manager and signed off by Maritime when they are deemed competent. This training will include all Health and Safety training. 6 monthly refresher training for drivers will show any area where the driver is lacking understanding for Health and Safety procedures. Remedial action is taken by the Operations Manager. All employees have to read and sign the SOP when there are any updates and changes.	Unlikely	Minor	4	Low
	Staff showing lack of understanding of other operational procedures	Possible	Major	12	M	Staff are fully trained by the Operations Manager and signed off by Maritime when they are deemed competent. 6 monthly refresher training for drivers will show any area where the driver is lacking understanding for operations procedures. Remedial action is taken by the Operations Manager. Any issues from both employee and employer can be brought up in requested meeting. All employees have to read and sign the SOP when there are any updates and changes. Other documents must be reviewed by staff when major changes have been made.	Possible	Negligible	3	Low
	Staff intentionally ignoring Health & Safety procedure or other operational procedures	Possible	Catastrophic	15	M	Staff are to go through an extensive interview process before hiring this includes Fit and Proper assessment and interview. Staff are fully trained by the Operations Manager and signed off by Maritime when they are deemed competent. This training will include all Health and Safety training and the importance of it. 6 monthly refresher training for drivers will show any area where the driver is not following Health and Safety procedures. Remedial action is taken by the Operations Manager and if continued the correct disciplinary action will be taken on case by case basis. All employees have to read and sign the SOP when there are any updates and changes. Other documents must be reviewed by staff when major changes have been made.	Rare	Major	4	Low
Drowning	Drowning whilst doing on-water activity or trip	Possible	Catastrophic	15	M	Safety briefing from customers that informs them to remain seated and other safety requirements to follow to minimise this risk. Drivers are training 6 monthly in there drills which includes man overboard. Drivers are to follow the man overboard procedure.	Rare	Moderate	3	Low
	Potential for someone to fall in lake whilst on jetty	Likely	Catastrophic	20	M	Posts surround the jetty and are to be maintained. Customers are not to be on the jetty without permission or a staff member present (there are gates to minimise this risk). Customers are to be given a lifejacket when on the jetty. Staff are to be vigilant with customer whereabouts on the jetty.	Rare	Major	4	Low
	Customers injured or drowning whilst in the Lake Rototiti Hot Pools	Possible	Catastrophic	15	M	Lake Rototiti Hot Pools has signs informing staff and visitors of dangers. Life ring available. De-FIB on site located in the office. Up to date First Aid Cert. Our drivers are all First Aid trained and stay on premises with customers.	Unlikely	Minor	4	Low
Lake emergencies	Responding to vessel distress calls on RT and on Lake Rotorua can be insufficiently prepared	Rare	Minor	2	M	Staff to gather as much information as possible before action is taken. Tow rope is always to be taken to any call out.	Rare	Negligible	1	Low

[illegible]