



Maritime



LIFEJACKET REFORMS

SAVING LIVES THROUGH SAFER BOATING



Lifejacket reforms – saving lives through safer boating

A discussion paper was provided to the boating community for input into a series of proposals about when a lifejacket should be worn when boating in NSW. These proposals were made to NSW Maritime by various individuals and groups, including the NSW Coroner, and advisory bodies (the Recreational Vessels Advisory Group (RVAG) and the Maritime Ministerial Advisory Council (MMAC)).

There are already nationally consistent regulations about how many and what type of lifejackets must be carried on a boat but there are different rules around Australia about when they must be worn. It is very unlikely there will ever be national agreement on this because the regulations in each jurisdiction reflect an array of risks, based on their unique boating conditions.

Education about lifejackets is important but the long term statistics from around Australia show that in just 7% of boating fatalities the victim was wearing a lifejacket – so the message just hasn't got through. Whilst many factors contribute to a boating fatality you can never say with certainty that wearing a lifejacket would save your life. But if you do end up in the water your chances of survival increase dramatically if you're wearing a lifejacket.

After consultation it is clear there was very strong support for some changes to regulation that focus on boating activities that are broadly accepted as being “**HEIGHTENED RISK**” activities.

It will not be a requirement that lifejackets be worn at all times. The goal is to ensure when there is an identifiable heightened risk situation, people know a lifejacket can save their life and they wear it before it's too late.

The foundation for all the proposed changes is the concept of heightened risk.

A heightened risk situation is when boating conditions suggest wearing a lifejacket could make a difference if something goes wrong.

The lifejacket reforms detailed in this paper will take effect in NSW from 1 November 2010, with a 12 month advisory period.

NOTE: This lifejacket reform does not apply to commercial vessels in survey.



Crossing bars is a time of heightened risk

Lifejackets

The primary purpose of any lifejacket is to increase safety. They assist the wearer to float – and ultimately can prevent them from drowning. For this to be achieved the lifejacket must be:

- the correct type for the situation
- the right size
- correctly maintained
- accessible, and
- worn.

Simply carrying lifejackets on board vessels does not save lives because capsizes, man-overboard, or other unexpected situations occur suddenly and without warning. Locating and donning lifejackets once in the water can be difficult or impossible, depending on the experience of those involved and other factors such as current, wave action and/or water temperature.

Wearing a lifejacket does not always prevent a fatality, but even when it doesn't it can help with the recovery operation and reduce risk for emergency services. An early recovery also reduces distress for the family and friends of a missing person.

There are many factors that contribute to a boating fatality and it is impossible to conclude absolutely that wearing a lifejacket would save a person's life in the event of a boating incident. However, there is an international consensus amongst boating safety organisations that a person's chance of survival can be dramatically increased by wearing a lifejacket.



Types of lifejackets

Lifejackets recognised under NSW regulations:



Lifejacket type 1

A type 1 lifejacket provides the highest level of buoyancy, designed to keep the wearer's head above, and out of the water when unconscious. They are mainly used when boating in open waters and must comply with the relevant Australian or overseas standards. At left is an example of a type 1 lifejacket.



Lifejacket type 2

A type 2 lifejacket is a buoyancy vest. They are not designed to keep the wearer's head above and out of the water but are manufactured using high-visibility colours and in comfortable styles. Type 2 lifejackets are mainly used when boating in more sheltered enclosed or inland waters. A type 2 lifejacket must comply with the relevant Australian or overseas standards. At left is an example of a type 2 lifejacket.



Lifejacket type 3

A type 3 lifejacket is a buoyancy vest with the same overall buoyancy as a type 2 lifejacket. It is not required to be made in high-visibility colours. Type 3 lifejackets are mainly used for aquatic sports such as waterskiing where comfort and style are important. A type 3 lifejacket must comply with the relevant Australian or overseas standards. At left is an example of a type 3 lifejacket.

What lifejackets must I carry on my boat?

Current regulations require all recreational vessels in NSW to carry an appropriate size and type of lifejacket for each person on board. They must be stored or placed to allow quick and easy access.

Open (ocean) Waters

For boats operating on open waters, a type 1 lifejacket must be carried for everyone on board, and must be worn when crossing a coastal bar.

For a PWC or sailboard operating on open waters either a type 1 or type 2 lifejacket must be carried, or worn when required.

For a kayak or canoe on open waters either a type 1, 2 or 3 must be worn at all times.

Enclosed Waters

For vessels operating on enclosed waters the minimum requirement is for a type 3 lifejacket to be carried for everyone on board.

For a PWC, kayak, canoe or sailboard operating on enclosed waters the minimum requirement is for a type 3 lifejacket to be carried, or worn when required.

When will it be a requirement to wear a lifejacket?

Situation	New Requirement from 1 November 2010
Children under 12 years of age	<ul style="list-style-type: none"> on a vessel less than 4.8 metres at all times on a vessel less than 8 metres and in the open area of a vessel when underway
Heightened risk boating situations in vessels less than 4.8m	All persons wear a lifejacket: <ul style="list-style-type: none"> at night on open (ocean) waters on alpine waters when boating alone when the boat is used as a tender more than 400 metres from shore
Heightened risk situations in all vessels	When the master judges a heightened risk exists and requires passengers to put on their lifejacket. For example in deteriorating weather, in rough seas, at night, if a passenger can't swim, or when a vessel is broken down
Water sports involving towing	All persons wear a lifejacket when being towed on the water, for example wakeboarding or waterskiing
Canoe/kayak	When greater than 100 metres from an accessible shore in sheltered waters, and at all times in ocean waters
Off the beach sailing vessels, for example centreboard boats and catamarans	When used in open (ocean) waters
Kitesurfing	When greater than 400 metres from shore when kiting alone
Existing Requirement	
Canoe/kayak, sailboard or kiteboard	When more than 400 metres from shore
Personal Water Craft (PWC or jetski)	At all times
Crossing ocean bars	At all times

What are the laws in other States?

The rules vary from no regulatory requirement, to a requirement to wear a lifejacket at all times. Many of these requirements reflect the inherent heightened risk of bad weather and cold water found in Australia's southern waters.

Other jurisdictions – examples of current legislative requirements

Jurisdiction	Lifejackets are required in the following circumstances:
Queensland	<ul style="list-style-type: none">• all occupants of open vessels less than 4.8m while navigating coastal bars;• all children under 12 years of age in an open vessel that is underway and less than 4.8m in length;• all occupants of a personal watercraft (PWC); and• when being towed.
Tasmania	<ul style="list-style-type: none">• all occupants in an open area of any recreational motor boat or motor-propelled tender that is under 6m in length and underway;• children under 12 years of any recreational motor boat or tender of any length while underway; and• all occupants of a PWC.
Victoria	<ul style="list-style-type: none">• all occupants of power driven vessels up to 4.8m in length when underway and in an open area of the vessel;• at times of 'heightened risk' (e.g. crossing ocean bars; when operating alone or at night) in vessels between 4.8m and 12m in length;• all children under 10 years when in an open area of a vessel that is underway;• all occupants of off-the-beach sailing vessels;• all occupants of a PWC;• all occupants of a canoe, kayak or rowing boat;• all occupants of a pedal boat or fun boat;• all kiteboarders and sailboarders; and• all occupants of a recreational tender.

What does the evidence say?

Analysis of fatal boating incidents in NSW

Of the 174 boating fatalities in NSW in the last 10 years, 91 (52%) were from a person falling overboard or a vessel capsize. Drowning is the primary cause of death in both of these types of incidents and only 11 (7%) were known to have been wearing a lifejacket at the time of the incident.

National statistics and initiatives

In Australia, the National Marine Safety Committee (NMSC) comprises the maritime safety bodies of each jurisdiction. It has a small number of staff employed independently of any jurisdiction who drive the development of national standards, and undertake research.

The NMSC analysed national incident data for the period 1999-2004. That research shows of the 241 boating related fatalities during that period, drowning was the stated cause in 85% (205) of cases. Only 12% (25) of these people were known to have been wearing a lifejacket.

The report concludes that once a person is in the water, wearing a lifejacket is likely to double the chances of survival.

Full report at: <http://www.maritime.nsw.gov.au/publications/publications.html>

Why make changes?

Change: Children less than 12 years old:

- At all times in a vessel less than 4.8 metres in length
- When underway in an open area of a vessel less than 8 metres in length.

Why? It is common practice for a vessel master as well as parents to insist on children wearing a lifejacket. Even so, it is still common to see children in high risk situations without a lifejacket on. In the last 10 years there have been six deaths involving young children. There is little doubt some of these deaths could have been prevented if a lifejacket had been worn.

The highest risk situation for children is when they are on small boats and when on larger vessels that are underway. These risks are significantly mitigated when a lifejacket is worn, and parents benefit from the peace of mind brought by the knowledge their child is safe if they fall in.

There are some circumstances where a lifejacket would not have to be worn. For example, children who can swim would not have to wear a lifejacket when a larger vessel is anchored and a dinghy is being used to access a beach. In other words, tenders to large vessels, operating in highly sheltered and shallow waters with low traffic, and in close proximity to the parent vessel, would be exempt because it is not a heightened risk situation. NSW Maritime will work with boating groups to make sure the regulations make sense.



Change: When in a vessel less than 4.8 metres in length:

- At night
- On open (ocean) waters
- On alpine waters
- When boating alone
- When being used as a tender more than 400 metres from shore.

Why? Whilst it is common practice for boaters to wear a lifejacket on small vessels, drowning events from this kind of boating are overly represented in the statistics. In the last 10 years there were 33 fatalities (19% of all fatalities) involving small boats under 3m in length.

Few people can comfortably swim more than the length of an Olympic pool when fully clothed and many do not have the skills to stay afloat for prolonged periods once they are in the water. In open waters the risk of hypothermia is high for much of the year, as is the risk of being swept away from the craft by swell and current. In these circumstances wearing a lifejacket keeps the person afloat, and increases their visible profile.

Small vessels are more likely to capsize than larger vessels, particularly in open waters due to their lower stability which makes it more difficult to re-board after capsize.



If they live to tell the tale, boaters involved in a capsizing of a small boat often say “it happened so quickly”, “I never thought it would happen to me”, and “it was so unexpected”. The facts show small boats can be a lot safer if you wear a lifejacket.

Too many of these incidents occur after dark. This is a particularly dangerous time because even if you’re on the surface and safe, no one can see you, so there is no one to organise a rescue. The extra hours a lifejacket can bring you can make all the difference.

Drowning from boating incidents involving small boats on NSW alpine waters has overly featured in the fatal incident statistics from July 1999 to June 2009. During this period there were 11 boating fatalities on alpine waters, of which seven occurred on Lake Eucumbene.

In alpine areas a common reason small boats capsize is the rapid change in weather conditions. All of the drownings occurred from either a person falling overboard or a vessel capsize.

While air temperatures may be 40°C, water temperatures in alpine waters are cold all year round and can often be between 4°C and 10°C. The effects of cold water immersion can disable a person very quickly through cold water shock and then hypothermia.

A lifejacket can keep a person afloat until help arrives and can assist the person in getting to land or their vessel. This is particularly important if a fisherman is wearing waders while on-board the vessel which fill up with water upon immersion.

Wearing a lifejacket in cold waters can also assist survival by retaining up to 50% of body heat. The NSW Coroner has recommended the compulsory wearing of type 1 lifejackets in alpine waters for vessels less than 5m in length.

Whilst Queensland has adopted a 4.8 metre rule for completely open vessels only, NSW Maritime’s view is that cabins on small vessels do not offer significantly increased protection or reduce the likelihood of either capsizing or falling overboard.

Change: Skipper Judgement and Direction

NSW Maritime advises skippers they should wear a lifejacket, and encourage their passengers to wear a lifejacket, at times of **heightened risk**.

Skipper responsibility will state that skippers may use their judgement to determine when a heightened risk situation exists and therefore when to put on a lifejacket. The skipper would be given the power to direct passengers to wear a lifejacket. A passenger who did not follow a skipper’s direction would be breaking the law.

Examples of situations where the skipper judgement and direction provision would apply include:

- When weather conditions deteriorate rapidly including periods of low visibility due to heavy rain or fog, or when a strong wind or gale warning has been issued.
 - Because things can go wrong quickly and it’s one less thing to think about in an emergency
- If your vessel is assisting in a rescue or if you are broken down and awaiting assistance
 - Because there is potential risk to either your vessel’s stability or passenger safety
- If you or a passenger would be unable to reasonably assist in your own rescue
 - Because you or a passenger cannot swim or because of age, disability or other condition
- When making a journey at night
 - Because the chances of a prompt rescue are reduced and would rely on notification of an overdue return, rather than visual signals, or a radio call for assistance.

Change: When being towed, e.g. waterskiing and wakeboarding:

Why? Even though it is normal practice for persons being towed behind vessels to wear a lifejacket, it is not currently a legal requirement.

Towing activities such as water-skiing usually involve speed so a mishap can result in a high impact fall. A person can be rendered unconscious simply falling off at high speed without colliding with any object.

A lifejacket:

- keeps a person afloat if they are disoriented or injured;
- prevents drowning if a person is knocked unconscious from the fall, or is winded;
- protects the torso from the impact of a fall;
- increases the visibility of the person in the water by the occupants of the towing boat and other vessels aiding swift re-boarding; and
- reduces the potential for secondary contact injuries such as propeller strikes.



Change: When operating a kayak or canoe:

- In sheltered waters, when more than 100 metres from an accessible shore.
- In open (ocean) waters, at all times.

Why? Current rules require a lifejacket to be worn when more than 400 metres from shore. There have been a small number of fatalities involving these kinds of craft and their use is increasing dramatically. The risks associated with this type of boating are significantly mitigated by wearing a lifejacket.

For the majority of people it would be an insurmountable challenge to swim 400 metres, especially so if the weather was rough, they were wearing clothes, and they were disorientated following a capsizing.

If you were operating close to shore in sheltered waters it would still be okay not to wear a lifejacket. But if more than 100 metres from an accessible shore, or in open (ocean) waters, a lifejacket would have to be worn.

Change: When in an “off-the beach” vessel operating in open (ocean) waters:

Why? An “off the beach” vessel is a relatively small craft, often designed to achieve significant speeds. It is defined as an un-ballasted, sail-only vessel and includes centreboard dinghies, skiffs or multi-hulled vessels. Many are designed to be operated by one person and can be launched from a variety of locations, including surf beaches.

These types of vessels can, and do, capsize easily and whilst they are not a major feature in the incident statistics, their use is becoming more popular and they are regarded as high potential risk when operated in ocean waters and when a lifejacket is not worn.



Other changes

Some other sensible changes to the regulations will be introduced that make it either easier or safer for boaters. These include:

- Passengers on a PWC being used for tow-in surfing will be allowed to wear a type 3 lifejacket instead of a type 1 lifejacket. Because these are slimline this will encourage them to be worn during the ride in, as well as the tow.
- When operating a kiteboard a lifejacket is not required to be worn if the person is wearing a kitesurfing harness with a level of flotation similar to a lifejacket type 3, unless kiting alone in open (ocean) waters more than 400 metres from shore when a lifejacket must be worn.
- When kayaking, canoeing, and kitesurfing a type 3 lifejacket can be used. This will minimise the impact on the operation of the craft.
- When operating an off the beach vessel and sailboards on open (ocean) waters a type 2 lifejacket can be worn.
- When operating in open (ocean) waters a type 2 lifejacket can be worn, even though type 1 lifejackets must be carried on board.
- Because the weather on alpine waters is so changeable, and because hypothermia is such a real threat, it is important to have a lifejacket on that will either support your head when you are weakened by cold, or become unconscious, or is highly visible. Persons on vessels of less than 4.8 metres when operating in alpine lakes will be required to wear either a type 1 lifejacket (which can help keep your head up and out of the water) as a standard equipment requirement or a type 2 lifejacket (which has more visible colouring than a type 3 jacket).
- Because waders fill with water if you fall in the water, any person wearing either thigh or chest fishing waders will be required to wear a type 1 lifejacket at all times, in any length vessel.
- Lifejackets can be an encumbrance and a potential safety risk when racing small sail craft. For organised sailing events operating under an aquatic licence, and where a rescue boat is present, organisers can seek an exemption providing the participants wear a buoyant wetsuit deemed to offer an equivalent level of safety.
- A lifejacket type 1, 2 or 3 is to be carried on an outrigger canoe.
- Current regulations require vessels to carry an appropriate size and type of lifejacket for each person on board, and they are stored or placed to enable quick and easy access lifejacket to be readily accessible. There are many occurrences where there has not been sufficient time to access them from a hold or storage space. If lifejackets are not being worn, for vessels under 8 metres and underway this will be changed to being readily accessible **and either** visible to passengers **or** with their location marked by an unobstructed and clearly visible sign saying **LIFEJACKETS**.

Summary of consultation statistics

What was the consultation feedback?

A total of 3,615 responses were received and support for the proposals was:

Measure	Support
Children less than 12 years	86%
In vessels less than 4.8 metres	
• On ocean waters	77%
• At night	75%
• Boating alone	74%
• Alpine lakes	73%
• Tender more than 400 metres from shore	70%
Skipper responsibility	93%
When being towed	92%
Canoeing/kayaking	
• 100 metres from an accessible shoreline	76%
• open (ocean)	62%

Furthermore, the proposals received unanimous support from the Maritime Ministerial Advisory Council and the Recreational Vessels Advisory Group.

What are the statistics about drowning?

- In the last 8 years in NSW, 206 boating fatalities have involved boats 5 metres or less, around three quarters of these could have had **a different outcome** if a lifejacket had been worn.
- Nationally, of nearly 500 (478) people who have drowned in the past 18 years, only 1 in 10 was wearing a lifejacket.
- More than 50% of boating fatalities involves a person falling overboard.
- The National Marine Safety Committee states that you double your chance of survival if you wear a lifejacket.



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