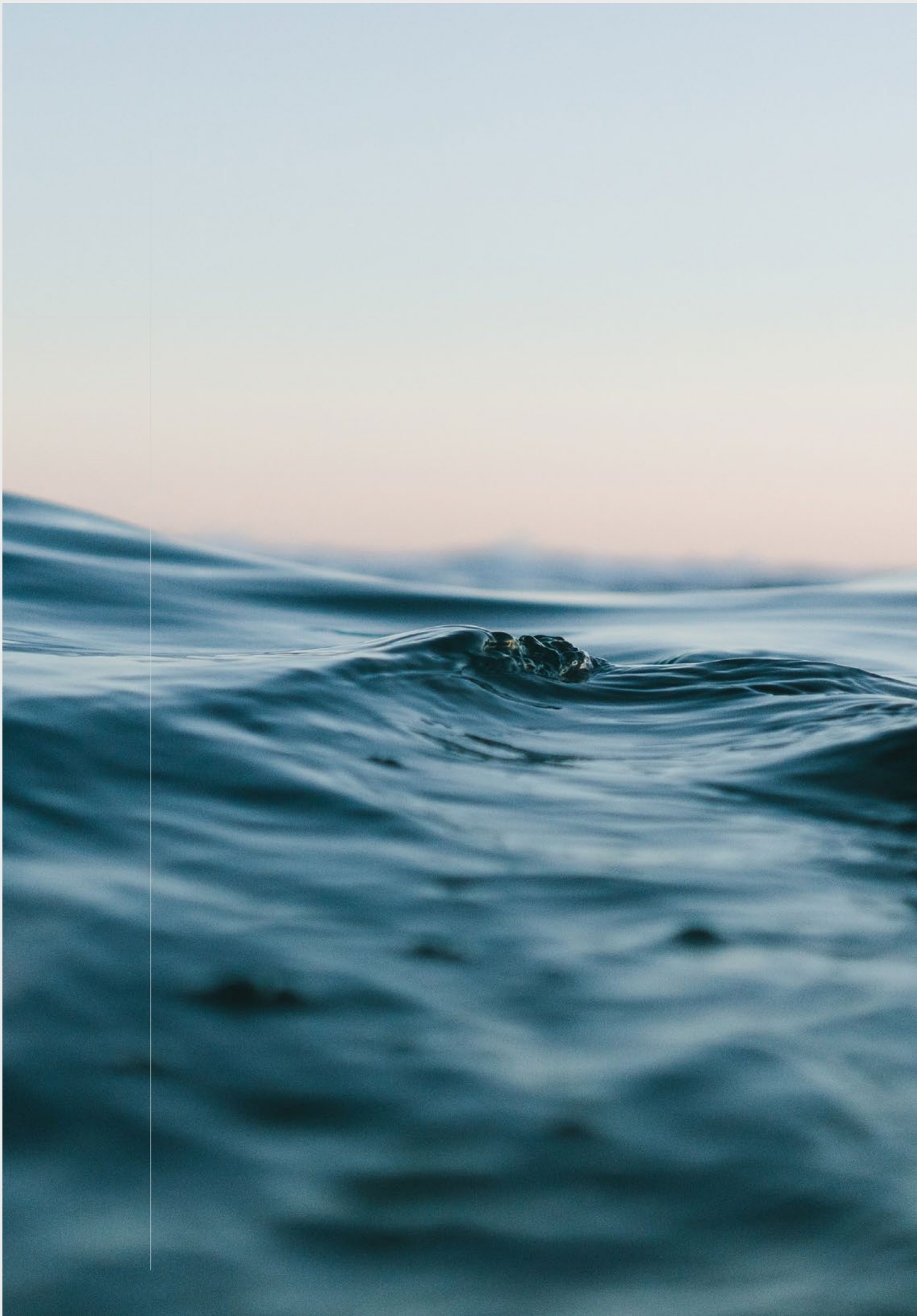


Maritime Safety Plan 2026

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Transport for NSW and each of its operating agencies, recognises Aboriginal and Torres Strait Islander peoples, as the First Peoples of Australia. Acknowledging their continuing spiritual, cultural, social and economic connection to our lands and many waterways. We recognise the Aboriginal cultural landscape values of waterways, the survival of freshwater and saltwater culture in NSW and the importance of waterways to the health and wellbeing of Aboriginal people.



Minister's foreword

In NSW we are fortunate to have some of the most magnificent waterways in the country and boating, one of the most popular recreational activities attracting more than two million people annually, continues to grow along with other popular water activities such as cruising, fishing, sailing and paddling.

Our waterways not only deliver enormous benefits to those connecting with nature through boating or using recreational watercraft for exercise, they are also the economic life-line for commercial fishing vessels and tourist operators.

In recognition of the health and economic benefits our waterways bring to local communities, we have committed significant investment to deliver safer and more accessible maritime infrastructure through our \$205 million Maritime Infrastructure Stimulus Program and Boating Now Program which have delivered more than 240 projects.

Whilst boating is a wonderful experience, waterways can be unpredictable, and incidents do occur. Tragically, 17 people died on our waterways to the year ended 30 June 2021.

Our long-term vision is zero fatalities and serious injuries on our waterways. We have successfully delivered a large number of safety initiatives over the past five years, including:

- a behaviour change program to promote correct lifejacket wear and servicing of lifejackets
- new boating safety alerts such as Variable Messaging Signs at boat ramps and Deckee app, which provide general safety and weather alerts
- establishment of the Maritime Safe System Data Excellence Program to expand our maritime safety evidence base and data insights to inform safety initiatives and operations.

The Maritime Safety Plan 2026 builds on these achievements and continues the internationally recognised Safe System approach. The feedback provided to us during public consultation has informed the actions identified in this plan.

We know 83 of the 138 recreational boating fatalities (60 per cent) that occurred in the ten years to June 2021 were 'preventable drownings'. These lives lost might have been saved had these people been wearing a lifejacket at the time of the incident. For this reason, a key focus of this plan is to continue to investigate options regarding the wearing of lifejackets to reduce often preventable fatalities and improve safety outcomes.

During the next five years we will also be focussed on exploring how technology can contribute to safer boating.

Finally, we must always remember that maritime safety is a shared responsibility. Our industry partners, stakeholders and waterway users are critical in helping us move towards our goal of zero fatalities and serious injuries on NSW waterways.

A great day on the water is a safe day on the water.

The Hon. David Andrew Elliott MP
Minister for Transport,
Veterans and Western Sydney

Plan at a glance

Our evidence base and feedback from our stakeholders and partners has led to the identification of four priority safety areas to guide the delivery of actions to work towards zero. Key actions we will deliver under those Priority Areas are:

Priority Area 1 — Safer lifejacket wear and equipment

- ▶ Building on the feedback from consultation, we will investigate options so that the law is easier to understand and more lives can be saved
- ▶ Continue to support lifejacket wear and servicing through partnering education programs around choosing the right lifejacket and ongoing service requirements
- ▶ Introduce minor amendments to equipment requirements and standards, including the mandating of a kill switch lanyard by persons operating a PWC and the carrying of GPS equipment for offshore boating.

Priority Area 2 — Safer boating through technology

- ▶ We are committed to simplifying boating safety information to make it more accessible and easier to understand
- ▶ Explore enhanced digital connectivity for on-water boaters to aid safe navigation and explore emergency contact functionality
- ▶ Investigate the potential application of drones to improve maritime safety through search and rescue.

Priority Area 3 — Safer waterway access and infrastructure

- ▶ Continue to deliver the significant program of funded projects under the Boating Now and Maritime Infrastructure Stimulus Program
- ▶ Explore potential opportunities from low-cost and other technologies to monitor boating infrastructure assets and to provide improved data on infrastructure condition, performance and uses
- ▶ Establish a long-term, sustainable dredging program to support boater access to key waterways

Priority Area 4 — Growing our safety culture together

- ▶ Continue working with industry and the community to enhance understanding of risks associated with boating — and how to safely manage them
- ▶ Develop an updated licensing framework by introducing practical training and experience requirements to improve the skills and judgement capability of new PWC drivers
- ▶ Build real-time messaging capabilities near highly-trafficked waterway access points to promote continuous boater judgement.

Further details and actions are outlined in each priority area section.

Maritime Safety Plan 2021

In 2018 the NSW Government released its coordinated strategic plan that aimed to reduce the trauma on NSW navigable waterways. The Maritime Safety Plan 2021 established a long-term maritime safety vision adopting the internationally-recognised Safe System approach to the maritime environment to prevent and manage potential harm.

The Safe System approach appreciates that there are many interacting elements when considering safety on the water. For the best safety outcomes, we will need to consider each element as part of the larger picture. Parts of the Maritime Safe System approach includes Safe People, Safe Vessels, Safe Waterways and Safe System.

The Maritime Safety Plan 2021 identified the issues that were contributing to fatalities and serious injuries and a range of actions designed to address these issues and work towards zero fatalities and serious injuries by 2056.

Key achievements delivered through implementation of the plan include:

- ▶ A behaviour change program to promote correct lifejacket wear and servicing of lifejackets, including establishment of inflatable lifejacket self-service clinics at key boating locations and a retail partner program.
- ▶ The establishment of the Maritime Safe System Data Excellence Program to expand our maritime safety evidence base and data insights to inform safety initiatives and operations.
- ▶ The delivery of the Boating Now program which has added increased accessibility and safety across NSW Waterways through the delivery of more than 240 infrastructure projects.
- ▶ New boating safety alerts – Transport for NSW has developed new ways of reaching boaters with general safety and weather alerts. Three trial Variable Messaging Signs (VMS) were installed at high-traffic boat ramps across the state from September 2020. In November 2021, six new VMS signs were installed across the state which provide live swell and wind information from the Bureau of Meteorology. This is coupled with new safety alerts and targeted alerts via social media.
- ▶ The Aboriginal Maritime Safety Plan was launched in November 2020. Its aim is to help reduce Aboriginal representation in boating trauma. It acknowledges the need for ongoing collaboration with Aboriginal communities together with the design and implementation of culturally-appropriate boating safety programs.
- ▶ Enhanced digital engagement: Transport for NSW launched a new boating safety website (<http://lifejacketwearit.com.au>) in October 2020. This has enhanced utilities for customers such as interactive tools to select a suitable lifejacket, finding the nearest lifejacket-servicing location and rich educational content around priority boating safety issues.
- ▶ Refreshed and updated NSW Boating Handbook in 2021 to make boating rules and regulations clearer for boaters.

Transport for NSW will continue to deliver these initiatives on an ongoing basis to support maritime safety outcomes.

Transport for NSW has delivered 73 targeted actions as part of the *Maritime Safety Plan 2021* in consultation with partners across government, industry and non-government organisations as at 30 June 2022.

Maritime Safety Vision

The Maritime Safety Plan 2022–2026 (MSP2026) will continue working towards zero fatalities and serious injuries on navigable waterways in NSW by 2056. This ambitious vision is the only one the NSW Government will accept as even a single incident of trauma on waterways in NSW is one too many.

This vision is part of the NSW Government's Future Transport strategy which aims to have a NSW Transport network with zero trauma by 2056. This plan is also informed by Transport for NSW's five building blocks:

- ▶ Embracing world-leading technology, data analytics, artificial intelligence (AI) and sustainability
- ▶ Adopting innovative business models, partnerships and engagement
- ▶ Setting policy and regulation to enable change
- ▶ Delivering a \$72 billion services and infrastructure program
- ▶ Delivering safe, reliable and resilient operations.

On our path to delivering this vision, we have established aspirational targets.

Aspirational targets can also be viewed as navigation markers as we travel towards our 2056 destination of zero fatalities.

The Maritime Safety Plan 2026 seeks to reduce waterway fatalities and serious injuries by 30% by FY2025–2026 (based on 2019–2021 average levels). This is reflected in the following targets:

- ▶ Less than 13 fatalities in 2025–26
- ▶ Less than 215 serious injuries in 2025–26



Our maritime customers and waterways

Boating remains a popular pastime for many NSW residents. More than 500,000 people hold a licence to drive a powered vessel, and there are nearly 250,000 registered vessels in the state. Almost one in five NSW households own a boat or watercraft¹ and it is estimated two million people go boating each year on the state's waterways.² Additionally, our waterways are used by a significant number of visitors from other states, particularly along our borders.

Through detailed customer research we know more about how and why people choose to spend time on our waterways. We know that powered boats and paddle craft are the most common vessels used on boating trips and that fishing remains the most popular purpose of boating trips in NSW. Boating is an activity that offers people the chance to spend quality time with friends and family. For others, it offers the chance to enjoy solitude while spending time outdoors. All waterway users described the ultimate benefit of boating as providing them with a sense of freedom.

While we acknowledge the range of strong, positive emotional benefits of boating, being on the waterways involves managing risks. Customer research into the understanding that boaters have of weather conditions shows that while most boaters claim to be highly safety conscious, they sometimes push their limits with regards to safety. There is clearly a 'grey area' when it comes to taking risks while boating. In particular, risk-taking can be exacerbated when boaters have firm plans in place, are with others who are relatively inexperienced or when they are in familiar locations.

It's also important to acknowledge that experience can work both ways when it comes to safety. While some experienced skippers show an abundance of caution because they have had a near-miss or seen others go wrong, others can have an inflated sense of skill which, in turn, reduces the perceived need to be cautious.

Considering the impacts of the COVID-19 pandemic restrictions over the 2020–2021 period, the increased appeal in the freedom associated with boating is understandable. As of 31 December 2021, there were 460,970 general boat driving licence holders in NSW — an increase of 0.07% since 31 July 2021. In addition, there were 78,324 personal watercraft (PWC) driving licence holders — an increase of 4.6% since 31 July 2021.

¹ Recreational Boating Behaviour. Report prepared for Transport for NSW by IPSOS. October 2019

² NSW Boating Industry Association

The increase of new and inexperienced boaters and PWC riders has resulted in a vulnerable user group using NSW waterways during a particularly busy period. PWC remain heavily over-represented in boating incidents overall and especially in recreational-boating serious-injury incidents in the last 10 years. Of incidents reported to Transport for NSW, PWC were involved in 16.8% serious injury incidents and 9.3% of recreational incidents overall — but they made up nearly 5.5% of registered recreational vessels over the same period.

Since the implementation of the first Maritime Safety Plan, boaters over the age of 70 have emerged as another vulnerable user group accounting for about one in five boating fatalities. This plan explores ways to further develop the safety issues facing these emerging vulnerable user groups and how they can better negotiate common on-water risks.



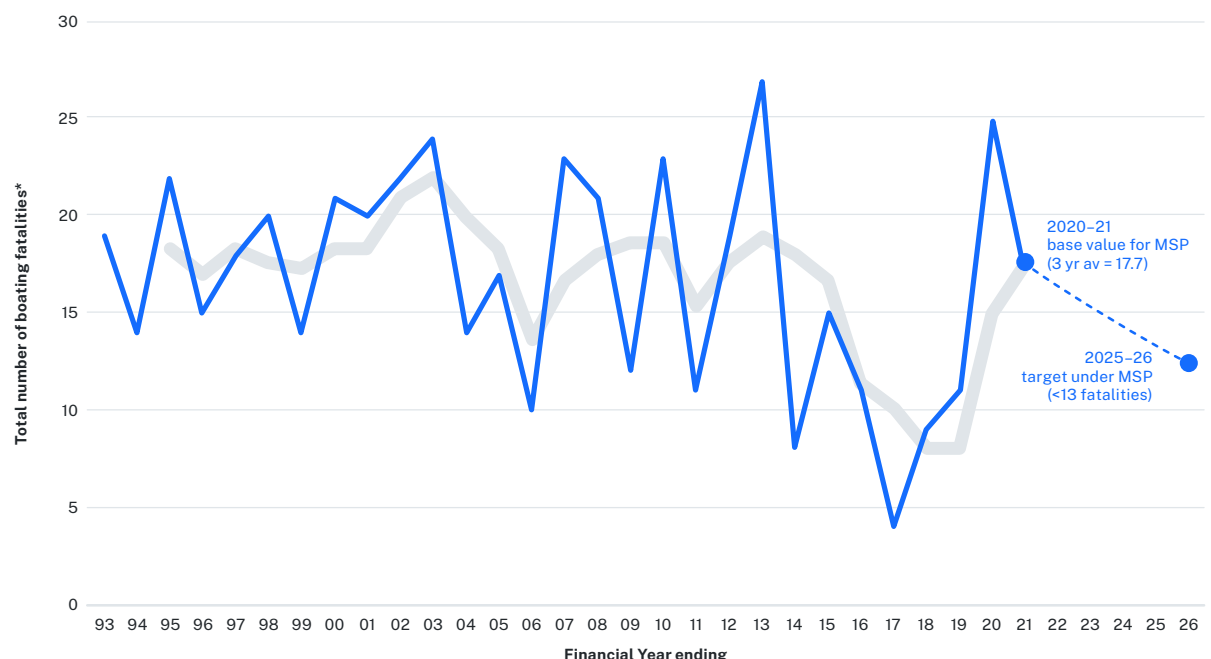


The waterway drowning and trauma challenge in NSW

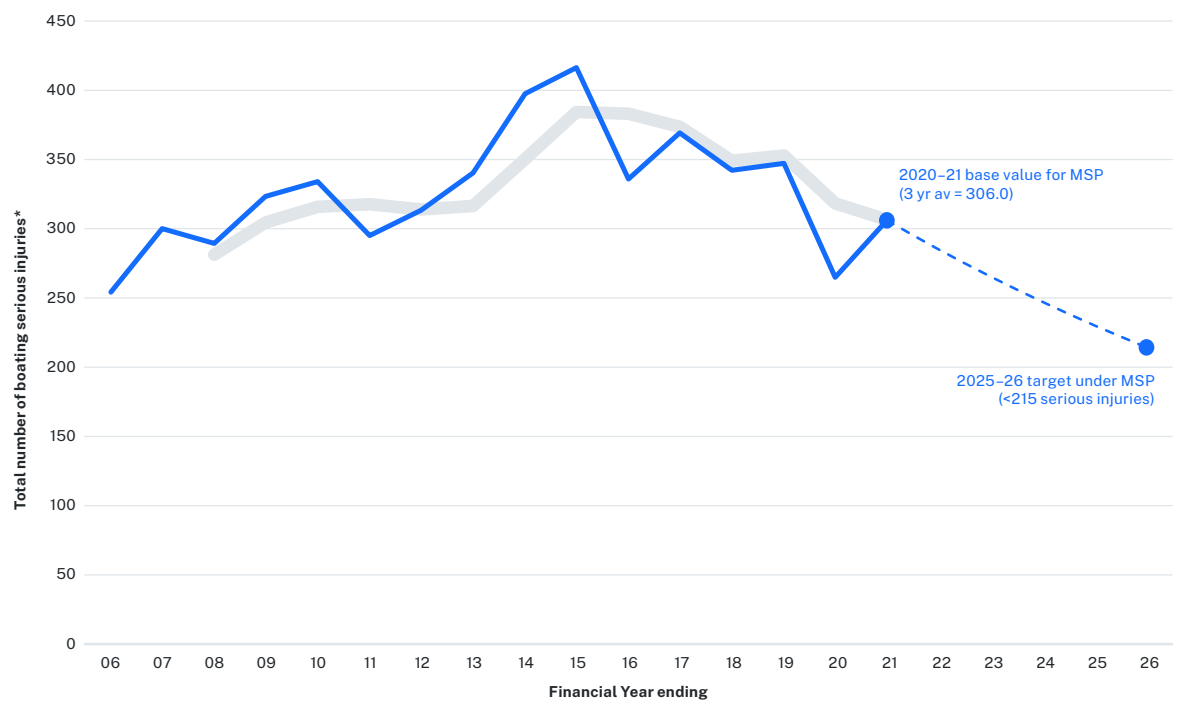
Boating fatalities and serious injuries continue to occur on NSW waterways, leading to drowning and trauma incidents that are almost always preventable. In 2020–21, of incidents reported to Transport for NSW, there were 17 fatalities and 52 serious injuries in boating. In 2021–22, there were a further 14 boating fatalities and 47 serious injuries reported. Over the last 10 years there were 146 fatalities and 646 serious injuries in boating, with 62 boating fatalities and 195 boating serious injuries in the period 2017–18 to 2020–21.

Serious injuries are often self-reported, meaning that many are not included within the data held by Transport for NSW. Hospital data, administered by NSW Health, contains a more complete record of serious injuries in boating in NSW. There were 306 serious injuries reported to NSW Health in 2020–21 and 3,386 such injuries over the 10-year period to 30 June 2021.

For the four years ending June 2021 there were almost 170,000 vessel inspections by NSW Maritime and over 42,000 engagements with boating customers providing both education messages and informal warnings. In terms of compliance, NSW Maritime and NSW Police Marine Area Command issued over 32,000 official cautions and over 13,000 penalty notices. **This activity serves to reinforce and promote safe boating on our waterways.**



*As reported to Transport for NSW.

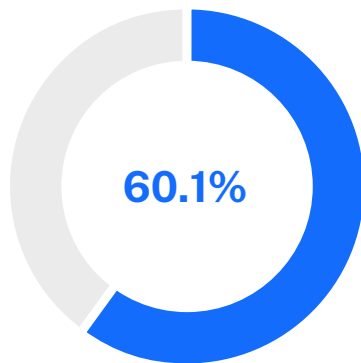


*As reported to Transport for NSW.

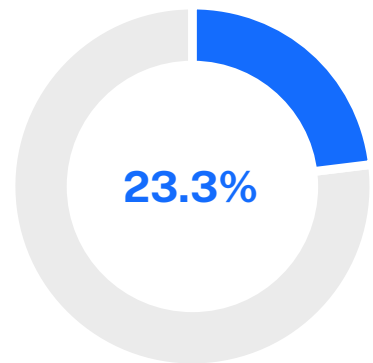
We will also continue to monitor closely the five focus safety areas to determine how the actions in plan are delivering better outcomes.

Contributions to recreational boating fatalities/fatality incidents — the five focus safety areas*

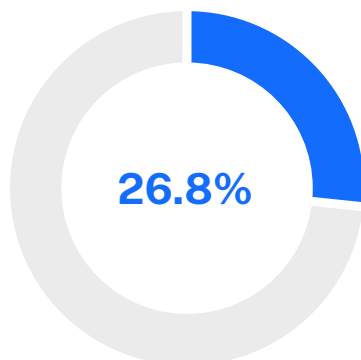
Lifejacket wear (N=138)



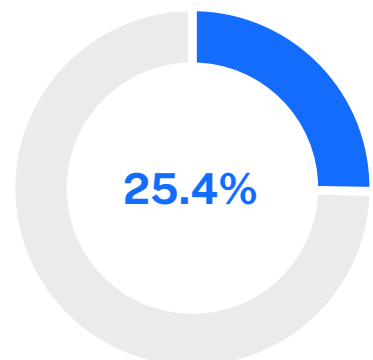
Weather conditions (N=120)



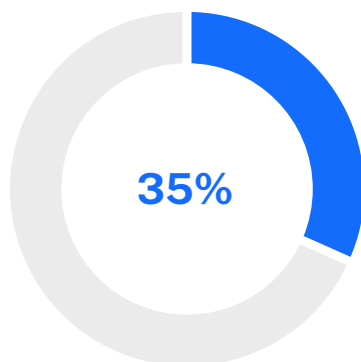
Older boaters, 65+ (N=138)



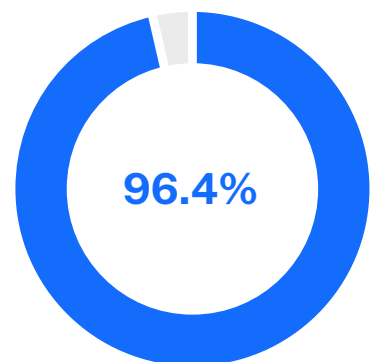
Trauma (N=138)



Open runabouts (N=120)



At least one area (N=138)



* Where N=138, data refers to recreational boating fatalities; where N=120, data refers to total boating fatality incidents.

* Percentage of fatalities/fatal incidents over 10-year period to 30 June 2021.

These five focus safety areas are based on an evidence-based analysis and ranking of the 10 priority safety areas covered in the Maritime Safety Plan 2021 along with an 11th priority safety area (older boaters, 65+) identified subsequently.³ These were ranked according to available data related to fatalities, serious injuries, total incidents, total infringements and total complaints.

Lifejacket Wear: A significant share of boating fatalities are the result of drowning. Many of them may have been preventable had people been wearing lifejackets. Over the 10-year period to 2020–21, 83 lives might have been saved had all people presumed drowned in recreational boating incidents been wearing a lifejacket. This represents 60.1 per cent of all recreational boating fatalities over this period. More than seven out of 10 people presumed drowned in recreational boating incidents over this period were not wearing a lifejacket.

Weather conditions: These have long been a significant, long-term safety issue, with weather conditions being a factor in 28 (23.3 per cent) fatal boating incidents over the 10-year period to 30 June 2021. When adding the cause “hazardous waters” — which usually relates to weather conditions at least indirectly — the number of fatal incidents is even higher (55 incidents, or 45.8 per cent of fatal recreational boating incidents over the 10-year period).

The importance of weather was reinforced in 2020–21, it being a factor in five (36 per cent) of the 14 fatal incidents recorded. When adding “hazardous waters”, the number of fatal incidents in 2020–21 that were at least indirectly related to weather is nearly two-thirds (nine incidents, 64 per cent of the total).

Weather conditions were directly associated with an estimated 12 per cent of recreational serious injury incidents over the 10-year period to 30 June 2021.

Older boaters: Older boaters, particularly those aged 70 and above, are strongly over-represented in recreational boating fatalities. Such boaters accounted for 26.8 per cent of recreational boating fatalities over the 10-year period to 30 June 2021 but only 8.6 per cent of boat licences.

Given the ageing population in NSW, it is likely that a greater number of older people will participate in boating in coming years — a trend that is already apparent in licencing data. The modal age of boat licence holders has increased by approximately eight years in a period of just under 10 years. This points to a potential for an increased number of fatalities in this age group.

Trauma-related incidents: Trauma-related fatalities can be thought of as all those that don’t involve a presumed drowning but which instead typically involve injuries related to collisions or other sudden impacts. The rate of recreational non-drowning fatalities has not changed significantly over the last two-and-a-half decades, despite an approximately 55 per cent decline in the rate of drowning fatalities.

There were 33 trauma-related (i.e. non-drowning) recreational boating fatalities over the 10-year period to 30 June 2021. This represents 25.4 per cent of all recreational boating fatalities over this period.

3 Prioritisation of safety issues ahead of next Maritime Safety Plan, Transport for NSW, August 2020.



Open runabouts: These vessels are over-represented in serious injury and fatality incidents. For the 10-year period to 30 June 2020, open runabouts accounted for 39.5% of the recreational vessels involved in recreational fatal or serious injury incidents – compared with their estimated contribution to recreational vessel trips (27 per cent)⁴. Their ability to operate at high speeds, along with their susceptibility to immersion-related incidents, makes them among the most vulnerable of the major vessel types.

Over the same 10-year period, there were 42 recreational fatal boating incidents in which the victim(s) was/were on board or associated with an open runabout. This represents 35 per cent of such incidents over the 10 years.

Other important safety areas: There are several other important safety areas identified that also contribute to boating fatalities but not identified above. These include lack of judgement, cold water, personal water craft, towing activities, excess alcohol, paddle craft, excessive speed and no proper lookout. Each of these ties into one or more of the five focus safety areas. For example, judgement and cold water are often relevant to weather-related risks and the wearing of lifejackets, while personal water craft, towing activities, excessive speed and no proper lookout are highly relevant to trauma incidents.

⁴ Recreational Boating Behaviour. Report prepared for Transport for NSW by IPSOS. October 2019; percentages derived from question about type of boat or watercraft used on most recent trip, taking into account surveys undertaken in 2018 and 2019.



Lifejackets save lives

Lifejackets are the most important piece of safety equipment for survival in boating incidents where persons are forced into the water. Over the 10 years to 2020–21, more than seven out of 10 people presumed drowned in recreational boating incidents were not wearing a lifejacket.

When anyone without a lifejacket is forced into the water unexpectedly, he/she is likely to feel the effects of cold shock — even in water as warm as 22 degrees. Severe cold shock is likely at temperatures below about 16 degrees. Depending on the circumstances, they may experience immediate panic, uncontrolled breathing and loss of airway control.

Without a lifejacket, a person subject to severe cold shock is at high risk of drowning, especially if the water is choppy. After a person is forced into the water, a lifejacket provides support during the initial cold shock stage, allowing the person to protect his/her airway and to regain composure.

“When I went to put the lifejacket on, because I had so many clothes on, the belly strap wouldn’t do up. In a frantic move I clipped it up under my breast, over my chest. When I got into the water, the surging of the waves was trying to push the lifejacket up and over my head because it was buckled up too high on my body. My mate got one of the older foam lifejackets and put it on back-to-front under my arms and tied it behind my back with the string off the EPIRB (Emergency Position Indicating Radio Beacon) so I wouldn’t sink. I was fully clothed I had my boots and everything on,”

— A near-drowning survivor from Nambucca Heads

Understanding this risk, there is a legal framework in place in NSW that requires boaters to wear lifejackets under certain situations. This framework, which has been in place since 2010, is part of a wider package of measures used to support lifejacket safety. This includes ongoing public education campaigns to promote the

safety benefits of wearing a lifejacket, how to perform annual lifejacket self-services and to heighten boater awareness of the rules.

These measures resulted in improved lifejacket wear rates among boaters. However, in recent years, the safety outcomes related to lifejacket wear have worsened. The rate of recreational drowning fatalities has increased for three consecutive years since 2016–17. There was a tragic and unacceptable high number of recreational boating fatalities in 2019–20, with a majority of these related to the non-wearing of lifejackets.

Feedback we have received is that the laws need to be less complex and need to promote the best possible safety outcomes. For this reason, building on the feedback from consultation, we will investigate options to reduce complexity.

As experienced boaters know, a lifejacket won’t ruin your day on the water, but it can prevent your day ending in tragedy.

“All of the lifejackets we have on board have a personal EPIRB, leg straps, a light and a whistle. We have a policy, as soon as it starts to become dark, lifejackets go on and I’m so glad because in this instance, if the lifejacket had been sitting next to you, there would never have been the opportunity to reach for it.”

— Neville Wittey, former Olympic sailor



Safe System framework

This Plan will continue to incorporate the Safe System approach to risk mitigation, prevention and safety management. Safe System is an internationally-recognised and adopted methodology to reduce trauma. It focuses on understanding and countering issues that cause trauma on the water and takes a holistic view of the interacting elements. The elements include Safe People, Safe Vessels and Safe Waterways.

The Safe System methodology is guided by four principles:

- ▶ **People make mistakes** — some boating incidents are inevitable.
- ▶ **People are vulnerable** — human bodies have a limited ability to withstand crash forces, submersion and exposure to weather conditions.
- ▶ **Safety is a shared responsibility** — system designers and the maritime public share responsibility for managing boating incidents.
- ▶ **All parts of the system must be strengthened** — including vessel design, safety equipment, infrastructure, access points, communication and aids to navigation. If one part fails, other parts will still protect the people involved.

Working with our partners

Adopting the Safe Systems approach means continuing to work with industry partners, stakeholders, boaters and across government to help grow the maritime safety culture. A three-phased stakeholder engagement program has informed the development of this Plan. This has involved two maritime safety forums, followed by several workshops with stakeholders representing 29 agencies, associations and industry bodies.

Maritime safety is a shared responsibility, and we acknowledge that several organisations play a vital role in promoting safety on NSW

waterways. These include, but are not limited, to NSW Maritime, Marine Area Command NSW Police, Marine Rescue NSW, State Emergency Services, the Boating Industry Association as well as training providers and community and volunteer organisations. TfNSW values the ongoing support of these organisations and the significant contributions they have made, and will continue to partner and collaborate with them over the next five years. We will also continue to utilise expertise from the Maritime Advisory Council and maritime safety agencies across Australia and New Zealand.



Priority Area 1 – Safer lifejacket wear and equipment

Having the right safety equipment and knowing how it works is essential in dealing with unexpected situations or emergencies. The equipment required in NSW depends on the vessel you're on and where you are undertaking your voyage. Lifejackets are a particularly important piece of safety equipment, with their non-wear being the leading cause of fatal incidents in NSW. Other safety equipment also plays a critical role in managing the safety of NSW boaters, particularly when in higher-risk, offshore environments.

Given the importance of lifejackets in preventing fatalities, there is a regulatory framework in place that requires boaters in NSW to wear lifejackets in certain circumstances. Failure to do so can result in a penalty notice being issued.

While the compulsory requirements to wear lifejackets are limited, the message to the public has been to encourage lifejacket wear irrespective of the circumstance. This message has been reinforced through public education campaigns such as the 'Wear a lifejacket' advertising campaign that was introduced in 2012 which helped raised awareness of the need to wear a lifejacket.

Modern lifejackets come in a range of models, including jackets, vests, yoke or bag styles. They are more slim-fitting and comfortable than in the past and won't restrict your movement, whether you're boating, fishing or riding a jet ski.

Lifejackets, particularly those that are inflatable, require regular servicing. To encourage this, lifejacket self-servicing clinics were launched in 2018. To date, these have educated almost 1,500 boaters on how to service their lifejackets through practical instruction on care and maintenance.

Other equipment also needs to be carried on vessels when they are on the waterways. The exact requirements depend on the vessel and the location of a voyage. Powerboats or sailing

vessels that are offshore have more exhaustive equipment requirements than other vessel types, reflecting the higher risk in that environment. These vessels are required to carry safety-critical equipment such as marine radios and emergency position-indicating radio beacons (EPIRBs).

Key statistics

- ▶ Of the 138 recreational boating fatalities that occurred up to 2020–21, 83 (60 per cent) were 'preventable drownings'. These lives lost might have been saved had these people been wearing a lifejacket at the time of the incident.
- ▶ The rate of recreational drowning fatalities has increased for three consecutive years since 2016–17 and has only decreased slightly in 2020–21.
- ▶ Just two out of the 16 fatalities recorded in 2020–21 (i.e. 13%) were known to have been wearing a functional lifejacket at the time of the incident.
- ▶ In 2021–22, there were a further 14 boating related fatalities on NSW waterways. In 10 of those cases, the victim was not wearing a lifejacket.

What we know about the key statistics

Recent trends in lifejacket non-wear in fatal incidents highlight the need to revisit lifejacket-wear laws so that the law is easier to understand and more lives can be saved.

Feedback from stakeholders indicates NSW's lifejacket laws are considered overly complex, with this potentially being a contributing factor to non-compliance and to the plateauing wear rates.

Other equipment requirements also need to be considered in the context of changes to lifejacket laws. Work was undertaken as part of the Maritime Safety Plan 2021 to review the appropriateness of other equipment on all vessel types. This work has shown that while equipment requirements in NSW are comprehensive and aligned with what is happening in other jurisdictions, there is scope for improvement.

"You must know your safety gear and know how to use it. A cylinder for your lifejacket costs under \$20 normally. Get in your lifejacket, jump in the water and set it off so you know how it works. If the lifejacket had legs straps, it would have made it a lot better. We've learnt that. On the boat we had six lifejackets, two EPIRBs, flares — everything. The best prepared person can always come unstuck. You just don't know what's going to happen. So be prepared."

— NSW boater and near drowning survivor from Nambucca Heads

Case study — The 30-Second Challenge

As part of the inaugural National Safe Boating Week which ran at the start of the 2020/21 Boating Season, the 30-Second Challenge was launched in NSW. The 30-Second Challenge is an initiative to encourage boaters to be able to access and activate their safety equipment in 30 seconds. An instructional video featuring Boating Safety Officers was shared on the NSW Maritime Facebook page as well as the Centre for Maritime Safety and www.lifejacketwearit.com.au websites.

The video demonstrates the difficulties of locating the required safety equipment in a tight time frame if you do not have it stored somewhere that is safe and accessible. This challenge is exacerbated if you don't know how to use it.

The purpose of the challenge is to highlight that, if you are not already wearing a lifejacket when an emergency strikes, you may not have time to put it on and activate any additional safety equipment as required. The 30-Second Challenge has been promoted on social media throughout the season. It's also been used as an engagement tool on compliance campaigns where Boating Safety Officers have encouraged boaters to take the challenge to demonstrate how quickly and efficiently you need to access safety equipment in an emergency.

Would you succeed at the 30-second challenge?



What we will do

Our priority is about having a set of standards for equipment that support safety outcomes. Our aim is to establish the right set of lifejacket-wear requirements to deliver a step-change improvement in safety outcomes and to prevent further fatalities on NSW waterways.

Acknowledging stakeholder feedback around the complexity of lifejacket laws, we are committed to revisiting the law so it is easier to understand and more lives can be saved.

Any changes will be supported by a significant new program of supporting maritime safety measures, such as education and public awareness campaigns to support lifejacket wear and servicing.

The safety opportunity is significant and this needs to be borne in mind when considering future lifejacket laws. Analysis indicates that 83 lives might have been saved in the last 10 years if every drowning victim had been wearing a lifejacket at the time of the incident.

Preventing such fatalities will not occur simply by changing lifejacket laws in NSW. There will still be people who either don't know the laws or, even where they do, they may not be sufficiently incentivised to wear a lifejacket. This is why a holistic approach needs to be taken to drive improved lifejacket wear among boaters.

Education is an important pillar of such an approach, with a goal of inspiring a culture of "always on" lifejacket wear. Considerable work has been done to educate boaters already. We will continue to support lifejacket wear and servicing through partnering education programs around choosing the right lifejacket and ongoing service requirements. We will deliver a renewed lifejacket program to provide boaters with information on how to self-service or service their lifejacket, access spare parts and receive customised advice.

Innovations in lifejacket standards have helped design lifejackets that are comfortable, compatible and easier to wear. These changes and further evolution in lifejacket design will support an increase in lifejacket wear in NSW. The safety benefits of these inflatable lifejackets can only be delivered to boaters when they are properly serviced at appropriate intervals. Considerable work has already been done to enable this, including through the establishment of lifejacket self-servicing clinics. **We will explore further opportunities to make lifejacket care and lifejacket servicing easier for boating customers.**

Many boaters will do the right thing irrespective of the laws and penalties in place. That said, there will always be a small proportion who need additional incentives to abide by the waterway rules. This is why penalties exist and why they are issued by authorised officers. However, we need to **ensure the regulatory compliance framework reflects the importance of safety factors on our waterways.**

Lifejackets are not the only piece of equipment critical to the safety of boaters on NSW waterways. Boaters are also required to carry various pieces of equipment to help mitigate risk when they get into trouble. Boating offshore is typically considered higher risk than when boating inland and the equipment requirements reflect the difference in risk. Following the recent review of equipment requirements, we intend on **introducing minor amendments to equipment requirements and standards. These amendments include the mandating of a kill switch lanyard — by persons operating a PWC and the carrying of GPS equipment for offshore boating.**

We support opportunities to make safety equipment easier to use and comply with the rules. We have heard that flares present challenges for users and regulators across Australia, particularly when it comes time to dispose of them. In response to this, **we will investigate options to improve the management of flares, including the potential for new emergency signal technology, such as digital and chemical flares.**

Priority Area 2 – Safer boating through technology

Technology has facilitated safety improvements across all aspects of the Safe System in maritime and now makes it much easier to prepare, anticipate and respond to risk on the waterways. Technology continues to evolve and we are seeking to accelerate the adoption of future advances in technology to deliver both an enhanced boating experience and, more importantly, further safety improvements.

The maritime sector has historically been slower to adopt and adapt to new digital, computing, sensor and telecommunications technologies than other sectors. In the context of recreational boating, the factors driving technology adoption differ from land-based transport. Unlike other transport services that exist to provide people with access to people, jobs, services and amenities, recreational boating is an end in itself – it is about the boating experience.

That is not to say technology isn't having an impact on boaters. There are already various ways new technology is penetrating boating – in vessels themselves, in on-board systems and equipment and in mobile devices (such as apps and wearables). These technologies are making a meaningful difference to the safety of boaters and are helping to prevent fatalities and serious injuries on NSW waterways.

One of the most significant improvements in recent years has been the ability of boaters to access real-time weather data that inform safety-critical decisions of boaters on the waterways. Another significant improvement has been the development of comfortable and convenient auto-inflatable lifejackets.

The role of the NSW Government in adapting to technology and innovation

The NSW Government has an important role in creating the conditions for successful innovation and uptake of technology. This includes investing and participating in the innovation process itself, setting parameters for innovation that delivers public good, and managing the safe adaptation and transition to novel technologies and services.

Transport for NSW is putting in place the strategic framework in order to successfully fulfil this role, not only in maritime transport but across all modes of transport. The Future Transport Technology Roadmap 2021–2024 provides this framework and outlines the NSW Government's ambition to strengthen the state's global leadership in transport innovation. It will also aim to create new uses of technology and data analytics for the safe and efficient movement of passengers and freight.

Partnerships are a core element of this framework. We want to build on our successful track record of partnerships with industry at all stages – in early-stage pilots, proofs of concept and scaled-up service procurement. We welcome new partnerships with businesses at all scales and with researchers and communities to help bring this ambitious vision to life.

Keeping our maritime workers safe at Transport

Transport for NSW is committed to supporting safe and sustainable boating for all waterway users. NSW Maritime work all over NSW with Boating Safety Officers delivering on-water compliance activities, environmental services teams cleaning key waterways and survey teams supporting infrastructure. Transport for NSW is using technology to keep our people safe while they keep waterways safe, clean and open for everyone.

Transport for NSW developed the Maritime Safety Application to provide live reporting capability for the completion of vessel pre-operational checks, vessel logs, vessel defects, drills and inductions across the NSW Maritime fleet to assist Masters of vessels comply with the National Law requirements associated with Marine Order 504.

Through implementing the use of the Maritime Safety Application to appropriately record relevant information, Transport for NSW is able to ensure that staff are operating in accordance with relevant State and National marine and work health and safety legislation. This also ensures compliance with applicable TfNSW and Maritime guidelines, policies and procedures while providing our people with an intuitive digitised solution.

Emerging trends and opportunities

A future transport technology horizon scan was undertaken in 2021 to understand how technologies are likely to impact recreational boating over the next five to 20 years. Key findings include:

- ▶ Digital and data-related trends are a significant area of priority for boating and boating safety, encompassing a range of trends that present opportunities both operationally and for the wider safety of boaters and vessels.
- ▶ Data harvesting and analytics technologies, in particular, offer major opportunities to improve the range, scale and quality of boating data and to leverage this to enhance policy and operational insights, planning and decision-making.
- ▶ Novel vessel types are an area of priority. There are an increasing range of vessels that vary in power output, speed and control. These may require specific regulatory consideration to manage their safety risks. Other novel vessel types include aerial and marine drones, which both offer possible opportunities, for example in data-gathering, compliance and enforcement.
- ▶ New technologies, such as wearable technology, as well as improvements in existing technologies like safety beacons (e.g. EPIRBs) may help mitigate the most severe impacts of boating incidents.
- ▶ Automation and digital connectivity have the potential to disrupt recreational boating. Although fully-autonomous vessels may have limited immediate relevance to recreational boating, there are potential safety and other benefits from increasing partial automation of vessels and significant opportunities from digital connectivity and Internet of Things (IOT) technologies on vessels.

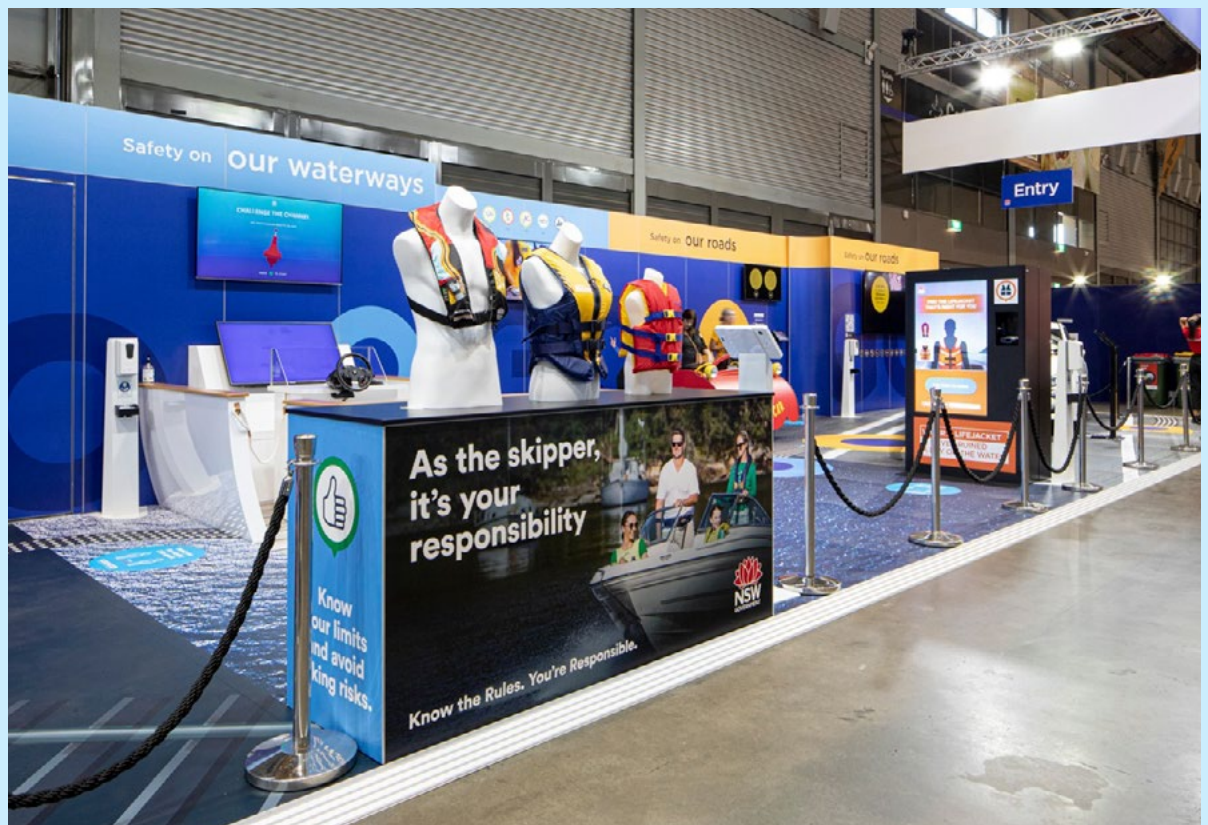
Case study — Lifejacket Wear It website

Ahead of the 2020/21 Boating Season, the Centre of Maritime Safety invested in revamping the customer-facing, boating-safety website www.lifejacketwearit.com.au. The website was initially home of the Lifejacket Selector Tool, an interactive function that allows customers to find the right lifejacket for them through a series of filters including activity (PWC, sailing, general boating or paddling), location (enclosed or open waters), buoyancy level, inflation type, visibility and size.

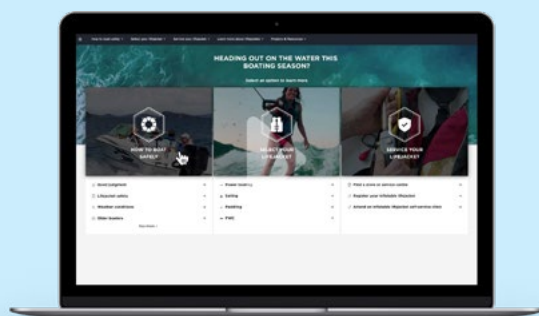
The website now has three key functions including information on how to boat safely, how to select your lifejacket and how to service your lifejacket.

Once customers have used the tool to select the right lifejacket they can sign up to register their inflatable lifejacket for annual servicing reminders. They can also search for the nearest servicing agent in their location if they are unable to self-service their lifejacket.

The purpose of the development of this website was to increase the ease and ability for customers to select the right lifejacket, understand the lifejacket servicing requirements, find local servicing agents and advice on how to manage common on-water risks. The website provides a complimentary service to, and links back to, the rules and regulations found on the roads-waterways.transport.nsw.gov.au website and within the Boating Handbook.



Heading out on the water?



The Lifejacket Selector Tool has also been developed into a Lifejacket Virtual Mirror. The Lifejacket Virtual Mirror allows customers to snap a selfie with the correct lifejacket superimposed on themselves. The Lifejacket Virtual Mirror is a great engagement tool to further promote lifejacket wear at events such as the Sydney Royal Easter Show and boat shows.

What we will do

While progress has been made in recent years to leverage new technologies, there is still a way to go until we realise the full benefits on NSW waterways.

We are not only committed to building on existing programs, but also on delivering new programs of work to utilise the potential benefits new and existing technologies.

Over the next five years **we will promote safer vessels and safer vessel technologies**. In this way we will leverage existing innovations and progress being made to ensure that boaters are fully aware of the developments and opportunities provided by new technologies.

One of the key areas of progress has been the utilisation of digital technologies, for example through social media or variable messaging signage. But the platforms and services available to customers continues to evolve and can present risks in terms of message simplicity and consistency. This is why we are committed to **simplifying boating safety information to make it more accessible and easier to understand**.

There is also a need to ensure that boaters have access to real-time communications and messaging to ensure they are able

to respond to emerging risks as soon as practicable. We have heard from some boaters that there are currently barriers to the uptake of some devices. This is why we will **explore enhanced digital connectivity for on-water boaters to aid safe navigation and explore emergency contact functionality**.

A very exciting part of our role is providing a platform for innovators to develop their ideas and progress them to scale to enable sufficient market penetration. We are committed to **engage with technology innovators to explore the specific innovation challenge of harnessing new data sources to enhance insights on boating activity and waterway use**.

A technology that is already having considerable penetration and impact across other sectors is that of aerial drones. There is a real opportunity to explore ways in which this technology can be implemented at scale to improve the safety of boaters on NSW waterways. With this goal in mind, **we will investigate the potential application of drones to improve maritime safety through search and rescue**.

An overarching role of government is to ensure that our regulatory framework supports the uptake of new technologies, while balancing the need to protect our customers and manage unintended risks that technologies may bring. This is why we will **ensure the policy and regulatory framework is fit for purpose to facilitate the introduction of technologies that will support safer boating**.

We are data-driven and committed to making ongoing improvements to maritime safety programs based on robust research and evaluation practices. To support this, **we will continue to improve our information technology systems, including data-sharing, research and evaluation, to improve safety outcomes**.

Given the dynamic nature of technology, we need to ensure we are well placed to evolve alongside the inevitable innovation and change that technology brings. We will constantly monitor advances in technology that can promote and improve boating safety.

Priority Area 3 – Safer waterway access and infrastructure

All boaters start and end a day on the water through access to infrastructure. Whether launching a tinnie at one of the state's 700-plus boat ramps, rowing out to one of the 23,000 moorings or jumping on board a whale-watching vessel from a public wharf, all of these boaters rely on safe and convenient access.

The NSW Government is committed to improving access for all boaters to the state's coastal and inland waterways and it makes a significant investment in boating access infrastructure and amenities. A significant investment is also made to dredge navigable waterways and install aids to navigation to clearly identify channels and hazards to navigation.

The NSW Government also has a role to play in balancing the increasing demand for on-water storage with the impacts of moorings on the environment. This is in addition to ensuring safe and responsible access to the water for new and innovative on-water experiences such as short-term rental accommodation.

Achievements

Maritime Infrastructure Plan

In December 2018, the NSW Government released the Maritime Infrastructure Plan (MIP) which sets out a more strategic and coordinated approach to prioritising and delivering the NSW Government's investment in maritime infrastructure across agencies. The plan identified investment priorities to be delivered under future Rounds of the Boating Now Program aimed at maximising benefits for recreational and commercial boaters and at supporting broader social and economic outcomes.

Boating Now

The NSW Boating Now Program provides grant funding to improve maritime infrastructure and facilities across NSW. Projects funded under the program include upgrades to boat access infrastructure such as ramps, jetties and floating pontoons, and other facilities that improve access to waterways such as sewage pump-outs, boat trailer parking and lighting.

The program is open to councils, community groups, other government agencies and the private sector. Since 2015, the Boating Now Program has supported over 330 boating infrastructure projects, which have been completed or are currently being delivered. Find the most up to date information on the Boating Now program at roads-waterways.transport.nsw.gov.au/maritime/projects/boating-now/

Safety benefits of the Boating Now Program

In addition to enhancing the overall boating experience by providing convenient and modern infrastructure and amenities, this investment also delivers important safety benefits including:

- ▶ Safer launching of vessels from new floating pontoons at existing boat ramps
- ▶ Safer movement of cars and boat trailers around boat ramps as a result of improvements to boat ramp car and trailer parking
- ▶ Safer launching of vessels at night from improved lighting at boat ramps

- ▶ Safer access to the water for all people including older boaters and those with disabilities
- ▶ Improvements in safety outcomes as a result of separating different user groups — for example powered and non-powered vessel operators.

Maritime Infrastructure Delivery Office

To improve the efficient delivery of all maritime infrastructure and dredging projects, the NSW Government has consolidated all maritime infrastructure functions previously shared between TfNSW and the Crown Lands Division of DPIE into the Maritime Infrastructure Delivery Office (MIDO). The MIDO now provides a one-stop shop and a centre for excellence for the delivery of all maritime infrastructure across NSW.

Maritime Infrastructure Stimulus Program

In October 2021, the NSW Government announced the \$205 million Maritime Infrastructure Stimulus Program. This program will deliver broad improvements to TfNSW-owned maritime infrastructure plus certain navigation channels across NSW to enhance usability, accessibility and amenity at regional harbours and other maritime infrastructure managed by TfNSW. The program will also generate long-term benefits by activating maritime and foreshore precincts and attracting more visitors and private investment in these areas.

Key Statistics

- ▶ \$126 million allocated to Boating Now Rounds 1–4 since inception in 2015.
- ▶ 248 projects completed under Rounds 1–3 (as of November 2021) and 70 projects currently being delivered.
- ▶ Under Rounds 1–3, the following project types have been announced:
 - 161 new and upgraded boat ramp facilities (including car/trailer parking, lighting, wash-down facilities, minor dredging to improve access)
 - 61 new and upgraded jetties, wharves and pontoons (not linked to other boat ramp upgrade projects)
 - 27 new and upgraded non-powered vessel launch facilities for kayaks, canoe, SUPS etc.
 - 63 investigation works including reviews, concept designs, feasibility studies, detailed designs.
 - 9 Sewage pump-out related projects
- ▶ \$825,000 allocated to the first round of dredging under the Boating Access Dredging Program.
- ▶ \$8 million allocated to dredging under the Maritime Infrastructure Stimulus Program.

What we will do

We will continue to deliver the significant program of funded projects under the Boating Now and Maritime Infrastructure Stimulus Program.

We will also continue to invest in new boating infrastructure to support safer access to the waterways and other enhancements commencing with Round 4 of the Boating Now Program, which was announced in December 2021.

The Maritime Infrastructure Plan will continue to provide the strategic guidance to prioritise future boating infrastructure investment. However, there are opportunities to further improve how future investments are prioritised and delivered through better understanding of the condition of the existing infrastructure and how it is used throughout the year.

Technologies are emerging that allow such measurements to be taken using low-cost sensor and other technologies such as drones to monitor boating infrastructure assets and to provide improved data on infrastructure condition, performance and uses. Such technologies also present opportunities to obtain real-time information about waterway usage and/or weather and other factors contributing to safety on the waterway.

We will explore potential opportunities from low-cost sensor and other technologies to monitor boating infrastructure assets and to provide improved data on infrastructure condition, performance and uses.

While the government continues to make a significant investment in dredging, there are opportunities to improve how dredging is funded and delivered in NSW. This is required to improve efficiency, to reduce red-tape and costs and to enable more consistent and frequent dredging. We will therefore **establish a long-term, sustainable dredging program to support boater access to key waterways.**

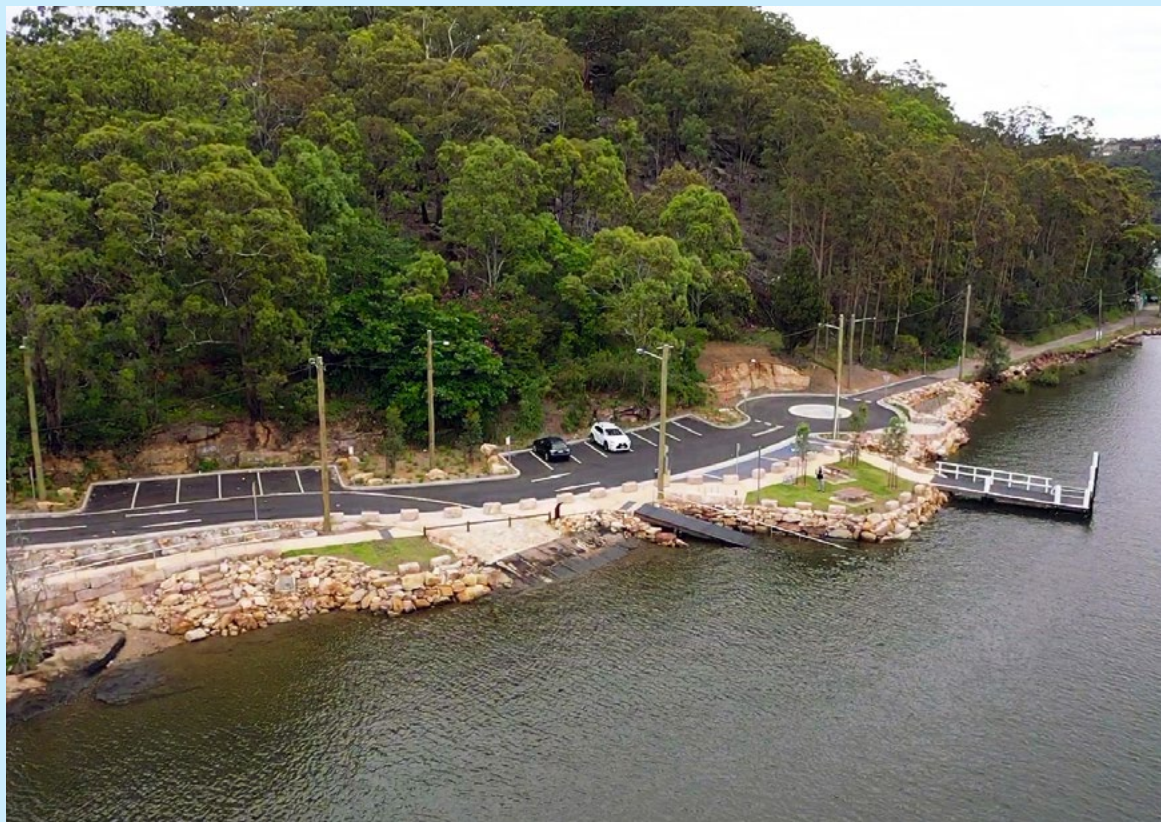
Key to improving boating access to the waterways is providing adequate storage for all types of vessels. As demand for on-water storage increases, the NSW Government must balance increased demand with environmental impacts. Opportunities to enhance the uptake of environmentally-friendly moorings will be considered among other initiatives in the mooring reform program. In addition, opportunities will also be explored to better manage end-of-life vessels (ELVs) which are stored on moorings and preventing other active boaters from storing their vessels on the water. We are **committed to implementing mooring and ELV reforms.**

We are committed to implementing measures to enhance access to and protection of NSW waters.

The Marine Pollution Act 2012 was recently amended to improve protection of NSW waterways from marine pollution from vessels. New requirements in the legislation include all on-board sewage equipment must be in a good working order, garbage may not be dumped into the water from a boat and boat owners, masters, crew and service technicians can each be charged for a pollution offence if it is found that their actions resulted in a pollution incident.

Maritime sharing-economy activities, that include boat-sharing and trip-sharing operations, are increasing around the world as a more economic and accessible option to experience boating. There is also increasing interest in the use of vessels for overnight accommodation.

Maritime Short Term Rental Accommodation (MSTRA) provides a new way for people to experience boating in an affordable and easily accessible way. However, there are a number of safety, environmental and infrastructure considerations that will need to be addressed before this model could operate lawfully in NSW. In response, we are committed to **investigating the potential to expand maritime sharing economy initiatives including MSTRA.**



Case study — Boating Now project to upgrade the Old Ferry Road Reserve at Illawong wins Excellence in Engineering Award.

In April 2021, the \$1.7 million upgrade to the Old Ferry Road small craft launch facility at Illawong on the Georges River was awarded the Heritage Award at the Institute of Public Works Engineering Australasia Engineering Excellence Awards.

This upgrade of the historical former ferry landing site on the Georges River at Illawong includes a launching ramp for small craft such as kayaks, surf skis and paddle boards, a new car park, a roadway and a roundabout, picnic facilities and pedestrian paths. There is also an all-abilities-access connection from the road to the launching ramp.

This project was delivered by Sutherland Shire Council in 2020 with the support of a \$541,000 grant under Round 2 of the Boating Now Program. Council applied for funding in response to community feedback for improved access facilities for launching small water craft in the Georges River. Council engaged in extensive

consultation on the project including with the Gandangarra Local Aboriginal Land Council to protect the known Aboriginal heritage of the site. It also carried out significant research into the site's European heritage to ensure the broad cultural history was respected and maintained.

The award is a testimony to the success of the program which injects much needed NSW Government funding to enable the delivery of boating access projects that have the support of the local community.



Priority Area 4 – Growing our safety culture together

Building a strong and positive safety culture is a joint responsibility. All waterway users need to have safety foremost in their minds when venturing out. We will use a combination of education and regulatory tools to work with the boating community and our safety partners to drive behaviours that lead to improved safety outcomes.

The diversity and increase of activities on our waterways mean that the potential for conflict and safety risks is heightened. There are around over 220,000 recreational vessel registrations in NSW, almost 18,000 PWC vessel registrations and an estimated 150,000 additional unregistered vessels such as rowing dinghies, off-the-beach sailing craft, canoes and kayaks.

The impacts of the COVID-19 pandemic and subsequent travel restrictions have resulted in an increase in boating activity levels. This includes both novice boaters and returning boaters who have not engaged in recreational boating activities for some time.

Current licensing requirements do not capture all waterway users – including those returning to our waterways – so we must look at how best we can target these users. Education resources can create the opportunity to refresh returning boaters’ understanding of their obligations on the waterways. Such resources can simplify, prioritise and strengthen education topics which are closely linked to fatal and serious injury trauma.

Alongside inexperienced boaters, older boaters are another vulnerable user group on NSW waterways. People aged 70+ are over-represented in boating trauma, accounting for about one in five fatalities. Customer research into this demographic shows that while few older boaters could identify risks that only apply to older boaters, most believe they are simply more susceptible to the on-water risks that all boaters face. There are opportunities to better engage with this age group through tailored education resources or engaging with safety ambassadors who reflect the target demographic.

“As you get older, the enjoyment is still the same, but the body gets weaker. With boats you need a lot of energy. Safety is an important factor, now that am I getting older. I am looking out for myself more than what I used to,”

— 65-year-old, NSW waterway user from Canley Heights.

Using Personal Water Craft (PWC) has become an increasingly popular activity in NSW with ridership almost doubling over the last 10 years. PWC licence holders tend to be younger and less experienced than general boat licence holders. PWC account for a disproportionate share of serious injury incidents.

We must consider how to best engage with this user group and how to ensure that they are equipped with the required safety knowledge and skills to operate these vessels safely on our waterways.

Integral to building a positive safety culture is ensuring our vessels are safe.

Feedback indicates that there is a need to better regulate the condition of older vessels to ensure they are seaworthy. Currently there are no ongoing inspections of recreational boats as part of the registration process. This makes it hard for owners, particularly those who have purchased their vessel second-hand, to know whether their vessel is safe and fit-for-purpose.

It is important to acknowledge that the operating environment is unpredictable. No matter how experienced we are – or how safe our vessel is – incidents can occur that challenge boater judgements around managing on-water conditions.

Poor weather is associated with one in three fatal incidents on NSW waterways. Periods of ambiguous and poor weather can pose unforeseen safety risks which need to be considered by skippers prior to heading out. Recent customer research into weather showed that, despite most skippers having a strong understanding of the risks associated with poor weather, there are occasions when they do 'push their luck'. This can happen, for example, when on familiar waterways or to follow plans where they have committed to using their boat in advance or to travel to their boating destination.

For some boaters, making a judgment based on information is a 'grey area' unless conditions are explicitly labelled as severe weather warnings.

Results from the Variable Messaging Signage Trial in place at boat ramps in NSW reinforced this with up to 59% of boaters indicating they would cancel their trip if they saw messages warning of strong winds, dangerous conditions, dangerous bar crossings or large swells forecast. As part of the ongoing Variable Messaging Signage program, work is underway to display warnings in a number of languages as well as incorporating digital imagery such as iconography to reinforce weather condition messaging.

"If you don't pay attention or judge the conditions right, you will have no control over the boat. If there are really heavy winds, I might not be able to safely get around. With stronger tides forecast, I had to plan a week prior to understand which way the tide was running. Had to plan when and where to be at what time so it was safe."

— 55-year-old NSW boater from Bexley.

Technology has an important role to play in supporting a safe waterway culture. The promotion of technology among boaters presents opportunities to complement and enhance boater judgement particularly with respect to improving continuous boater judgement as well as to maintaining a safe vessel environment.

Emerging trends and opportunities

The plan will be underpinned by a strong and growing partnership between NSW Government, our safety partners and the community. In recognition of this, we have already engaged with key stakeholders to better understand what is required to build our safety culture. It is clear that the boating safety environment is not static and that **we will continue working with the industry and the community to enhance understanding of risks associated with boating and how to safely manage them.**

Acknowledging that the diversity and the rise of activities on our waterways increases the potential for conflict and safety risks, we will **continue to facilitate education programs around right-of-way (COLREG) rules to ensure all users are sharing the waterways safely.**

PWC licence holders account for a disproportionate share of serious injury incidents and poor judgement, poor lookout and poor handling — or a combination of them — are key factors contributing to incidents involving this user group. **We will develop an updated licensing framework to address this by introducing practical training and experience requirements to improve the skills and judgement capability of new PWC drivers.**

We will also investigate and develop an improved regulatory framework to support increased safety for juvenile PWC operators and boat operators.

Industry-based training and accreditation programs provide practical knowledge and experience for managing common safety risks alongside specific skill development, as well as safe practical training environments for less experienced boaters. **Supporting increased awareness of these learning and training programs could help to build further competency.**



We are seeing more people participating in boating, including people experiencing boating for the first time or reconnecting with the activity. Education programs have an important role to play in supporting these boaters, particularly for activities that do not require formal licensing. **We will develop tailored resources for new and returning boaters — incorporating key rules and safety advice.**

While experience is commonly acknowledged as the primary mechanism for developing proficiency as a vessel skipper, many experienced boaters continue to take risks when on the waterways. **We will continue to promote safe decision making, particularly with respect to managing weather and waterway conditions.**

We also understand that larger sailing vessels are exposed to higher safety risks which can result in fatal and serious injury incidents. **We will investigate further whether additional safety measures are required for sailing vessel skippers.**

Emerging digital technologies have the ability to enhance boater education and training outcomes by providing immersive and realistic learning environments for managing on-water risks. **We will trial emerging digital technologies to enhance the effectiveness of boater education and training.**

Emerging telecommunications technologies provide the opportunity to work with industry to aid on-water connectivity beyond traditional

means. This could encompass enhancing mobile data connectivity across open and enclosed waters, and app-based distress connectivity to emergency service responders. A maritime safety app may consider including weather, warning and conditions regulations.

There is particular scope to promote the uptake of other navigation assistance technologies, with a view to ensuring such technologies are able to recognise and communicate with other navigation-related infrastructure, such as channel and hazard markers on NSW waterways. There is also an opportunity to use technology to help our waterway users make safer decisions by **building real-time messaging capabilities near highly-trafficked waterway access points to promote continuous boater judgement.**

The availability of online trading platforms makes it easy to buy vessels without any proper condition checks. This can result in boats that are not fit for resale being onsold to vulnerable consumers who do not have the financial means or the necessary knowledge or skills to fix the vessel. **As part of the national framework, we will ensure our vessel fleet remains safe and fit-for-purpose by investigating measures to improve vessels standards as well as implement a compliance monitoring framework to support Edition 5 of the Australian Builders Plate.**

Developing the new plan

As outlined in the *Maritime Safety Plan 2021*, closer co-ordination and collaboration between maritime safety partners is vital as we work towards the *Future Transport* vision of zero trauma on our waterways. Engaging with Transport for NSW's key stakeholders has continued to be a priority throughout each stage of developing this plan, ensuring we are capturing knowledge and insights from across the industry and community to shape the best approach to maritime safety for all waterway users in NSW.

An initial consultation period started in December 2020. As part of this, Transport for NSW held a Boating Safety Forum and seven online workshops with key stakeholders participating in both and providing further feedback via an online portal. This allowed the Centre for Maritime Safety to share the latest research and trends on serious injuries and trauma incidents. It also enabled the Centre to consult experts from international, interstate and other NSW Government agencies, training providers, industry associations, boating businesses, boating interest groups, volunteer associations and safety program partners.

A stakeholder workshop was held in April 2021 with 60 attendees across virtual and physical locations. Key stakeholders were able to discuss, provide input and help prioritise the draft countermeasures.

Polling and surveys were also utilised to finalise the countermeasures included in the *Maritime Safety Plan 2026*, which was shared with the broader community through a consultation process.



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