



Impact Analysis Statement

Summary IAS

Details

Lead department	Office of Industrial Relations
Name of the proposal	Remake of the <i>Recreational Diving, Recreational Technical Diving and Snorkelling Code of Practice 2018</i>
Submission type	Summary IAS
Title of related legislative or regulatory instrument	<i>Safety in Recreational Water Activities Act 2011</i> <i>Safety in Recreational Water Activities Regulation 2011</i> <i>Recreational Diving, Recreational Technical Diving and Snorkelling Code of Practice 2024</i>
Date of issue	2024

What is the nature, size and scope of the problem? What are the objectives of government action?

Recreational diving and snorkelling in Queensland

The Great Barrier Reef is one of Australia's most important natural assets and one of the most significant contributors to the Australian economy. It has a total economic, social and icon asset value of \$56 billion and contributes more than \$6.4 billion each year to the Australian economy including around 64,000 full-time jobs¹. Although recreational diving and snorkelling occurs throughout Queensland, the Great Barrier Reef has the most concentrated industry presence.

It's estimated that over 1 million people undertake recreational diving and snorkelling activities each year in Queensland². With the important contribution recreational diving and snorkelling makes to Queensland's and regional economies, it is in the interests of all Queenslanders to ensure we continue to have one of the safest recreational diving and snorkelling industries in the world.

Workplace Health and Safety Queensland (WHSQ) estimate that there are approximately 140 dive operators in Queensland. The dive operators vary in size and structure.

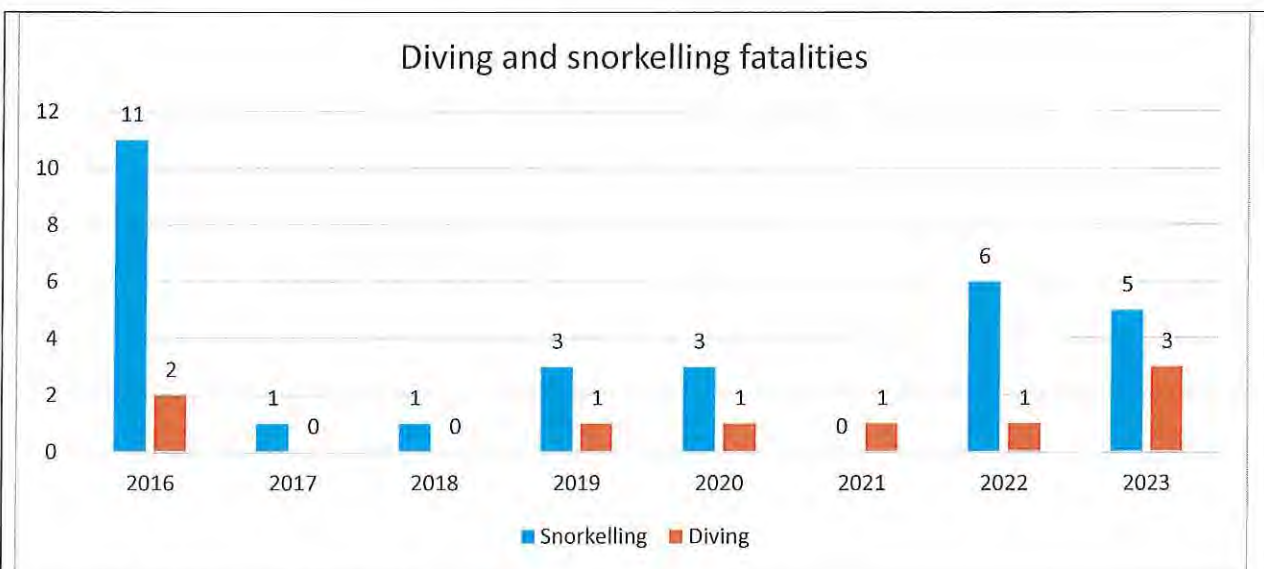
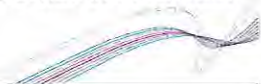
Fatalities in snorkelling and recreational diving

Between 2016 to 2023, there were 39 notified fatalities within the jurisdiction of WHSQ. This number is comprised of 9 diving fatalities and 30 snorkelling fatalities; noting that more people undertake snorkelling than diving.

Most of the fatalities were contributed to or caused by pre-existing or unknown medical conditions suffered by the snorkeller or diver and did not include failures by the dive operator. However, 3 fatalities involved a failure by the dive operator under SRWA Act and/or Regulation (either causative or contributed to the fatality) with a further 6 were still under investigation or not known.

¹ Reef facts | gbrmpa

² The recreational dive and snorkelling industry in the Great Barrier Reef: profile, economic contribution, risks and opportunities Great Barrier Reef Marine Park Authority, Jim Binney



Fatalities in resort/non-certified diving

Non-certified diving (otherwise known as resort diving) is a type of recreational diving that is an introductory diving experience where the diver usually has little or no prior experience and does not hold any certification.

There have been six fatalities in non-certified diving since 2003. Out of these six fatalities, four were attributed to separation of the diver from the diving instructor, with three of these involving poor visibility. One of these fatalities was the death of Bethany Farrell.

Coronial Inquest into the death of Bethany Farrell

One of these fatalities was the death of Bethany Farrell which was the subject of a coronial inquest. The coronial investigation examined the circumstances around how Ms Farrell became separated from her dive instructor while undertaking a resort dive and subsequently drowned.

In response to the coroner recommendations the then Minister for Education and Minister for Industrial Relations, the Honourable Grace Grace made a commitment to review and update the 2018 code of practice to identify changes that could be made to the code to improve safety outcomes.

Coronial inquest – Andrew Thwaites

A coronial inquest was conducted into the diving related death of Mr Andrew Thwaites in August 2016 involving an experienced group of divers and a charter boat.

The Coroner noted there was confusion and ultimately no agreement about which individuals were performing the various roles and about the applicability of various legislation. The Coroner, recommended that boat charterers provide a checklist to boat hirers about what services are provided, and what services are not provided.

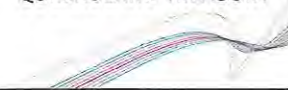
Consequential updates due to the sunset review of the SRWA Regulation

A sunset review of the SRWA Regulation has been undertaken and the proposed remade regulation has some minor amendments which need to be incorporated into the code of practice. The sunset review is the subject of a separate Impact Analysis Statement.

Objectives of government action

The objective of government action is to maintain Queensland’s high standards of safety for the recreational water activities industry and respond to the Coroner’s recommendations in the Farrell and Thwaites inquests to minimise the risk of injuries and fatalities.

The code of practice also needs to be updated to incorporate the changes to the remade Safety in Recreational Water Activities Regulation 2011 (SRWA Regulation) following a sunset review. This will ensure the code of practice reflects modern terminology and practices, provide accurate guidance for the



industry to comply with the SRWA Regulation and will ensure consistency for WHSQ to undertake compliance activities.

Background

The Safety in Recreational Water Activities Act 2011 (SRWA Act) and Safety in Recreational Water Activities Regulation (SRWA Regulation) together support the *Recreational Diving, Recreational Technical Diving and Snorkelling Code of Practice 2018* (2018 code of practice), which is an approved code of practice under section 274 of the SRWA Act. The 2018 code of practice provides practical guidance for dive operators on how to meet the requirements of the SRWA Act and SRWA Regulation for recreational diving and recreational snorkelling activities.

For recreational diving, recreational technical diving and snorkelling, the code of practice gives specific advice on:

- counts that are made for all persons on vessels;
- emergency plans, rescue, first aid and oxygen provision;
- risk assessments;
- medical fitness;
- supervision of divers and snorkellers;
- advice to snorkellers;
- skills and knowledge of the divers;
- instruction and advice to non-English speakers;
- equipment required;
- decompression management;
- dive logs; and
- risks and hazards related to diving and snorkelling.

The code of practice is given effect by the *Safety in Recreational Water Activities (Codes of Practice) Notice 2011* (Codes of Practice Notice) - <https://www.legislation.qld.gov.au/view/html/inforce/current/sl-2011-0261>. Consequently, amendments to the Codes of Practice Notice will be required to acknowledge the *Recreational Diving, Recreational Technical Diving and Snorkelling Code of Practice 2018* has been remade. This process does not require a further Regulatory Impact Statement process as it is machinery in nature.

Jurisdictional comparison

Queensland is the only jurisdiction with a comprehensive framework to specifically regulate recreational diving and snorkelling given the prevalence of this activity and tourism in Queensland.

What options were considered?

Option 1: Maintain the status quo. Retain the 2018 code of practice as is without any amendments.

Option 2: Update and remake the code of practice to respond to the Farrell and Thwaites inquest recommendations as well as incorporate consequential changes from the remade SRWA Regulation.

Option 3: Repeal the code and rely on the SRWA Regulation and guidance material relating to recreational diving and snorkelling.

What are the impacts?

Option 1 – Maintain the status quo (base case)

Option 1 retains the 2018 code of practice in its current form. This option would mean no changes for dive operators, their workers, WHSQ or persons who are participating in these activities.

The 2018 code of practice provides direction to dive operators on how to fulfil their duty to ensure recreational water activities are provided in a manner that protects the persons participating against harm to their health, safety and welfare. If the code of practice is retained in its current form, there is no additional burden on the dive operator or their workers.

However, this option does not address the objective of government action to maintain Queensland's high standards of safety for the recreational water activities industry or to respond to the findings of the Farrell and Thwaites coronial inquests. This option would result in an inconsistency between the remade SRWA Regulation, creating difficulties for WHSQ compliance activities and would not be an up-to-date code of practice that industry could have confidence in.

Option 2 – Update the code of practice (preferred option)

Option 2 updates and remakes the code of practice in response to recommendations by Magistrate D J O'Connell, Coroner from the Farrell inquest and Christine Clements, Brisbane Coroner Thwaites inquests and makes consequential changes from the remake of the SRWA Regulation.

Updates proposed to the code of practice have the majority support from the industry working group and their impact on operators, their workers, WHSQ and persons participating in recreational diving and snorkelling activities will be minimal. The updates will ensure safety standards are maintained consistently throughout the industry and that these safety standards reflect current best practice.

Key proposed changes address a number of recommendations made by Magistrate D J O'Connell, Coroner:

Rescue of a person diving/snorkelling

Magistrate D J O'Connell, Coroner recommendation 1(h)

That safety measures include that the 'Surface Watch' person has an emergency 'grab bag' which includes a weighted lost diver marker, and that dive instructors carry on their person (whilst conducting the dive) a suitable underwater marker system to indicate underwater the last known position that the separated diver was seen.

The 2018 code of practice already provides guidance for dive operators to consider the availability, locality and appropriateness of rescue equipment such as tenders, flotation devices and ropes. The code of practice provides that equipment must be maintained in a ready condition and positioned so they can reach a missing or in distress diver with minimum delay.

It is proposed to provide further guidance on ways to identify a search area and reduce the response time for locating a missing diver. An example has been added to the code of practice for an emergency grab bag with a surface marker buoy to be kept in the tender so it can be quickly deployed at the location where the separation occurred. To meet this guidance, dive operators may need to make a small purchase of a bag, float, line and weight. These items are reuseable and cost between \$20.00 - \$65.00 and is tax deductible for the operators. The number of dive operators that may need to purchase an emergency grab bag will vary depending on whether the dive operator already has equipment of this nature.

The code of practice has also been amended to state that dive instructors in an area without a defined route should carry an underwater lost diver marker system such as a weighted surface marker buoy to mark the position of where the lost diver was last seen. A lost diver marker costs approximately \$59.00 - \$110.00 and is tax deductible for the operator. However, dive operators can also choose to implement their own measures to eliminate and reduce the risk to the same standard in a way that better suits their business practices. WHSQ estimates 50%-80% of dive operators have a defined route and therefore will not require a lost diver marker system.

The purpose of this amendment is to assist dive operators in identifying a search area and reduce the response time for locating a missing diver. Although there may be a small cost involved in implementing the examples provided above, the safety benefit of being able to quickly locate a lost diver outweighs this cost.

Dive site risk assessments

Magistrate D J O'Connell, Coroner recommendations 1(f), 1(d) and 1(g):

That diving groups are staggered, and that routes are determined in a way to avoid dive group interaction whilst underwater;

Dive instructors must do a dive site assessment, including:

- a. Assessing visibility with a Secchi disk and*

b. Conducting an in-water (at depth) visual inspection for horizontal visibility, and to assess current, to determine if the site is suitable for introductory divers and to determine the Introductory Diver: Dive Instructor, ratio.

That the dive instructors solely have the final decision on whether a dive proceeds, or is terminated, and that it not be the skipper, nor the tour operator (who may have commercial considerations influencing their judgement).

The code of practice already provides for an assessment to be undertaken to determine the number and location of lookouts and supervisory personnel for a particular site by taking into account factors including environmental conditions, number of people diving, and the size, type and location of the dive site.

The Farrell inquest findings raised concerns around inadequate assessment of the dive site and conditions prior to the dive commencing and the way the non-certified dive group could become mixed with a certified diver group from another vessel, resulting in possible confusion amongst the divers as to which group to follow.

It is proposed to amend the code of practice to:

- Clarify the dive site risk assessment process so that it is a documented two-part process that involves (i) assessing environmental conditions, and (ii) an actual in-water dive site risk assessment to verify environmental conditions before the dive commences. The dive site risk assessment should include the scoring of environmental conditions that provide a recommended non-certified diver to instructor ratio. For example, strong current and poor visibility results in a higher score that guides the decision-making process to revise ratios, reduce ratios, or cancel the dive. Dive operators are already required under the code of practice to conduct an assessment and modify or cancel a dive where normal control measures will not eliminate or minimise the risk faced by divers and therefore there is no increased cost or burden on dive operators as a result of the proposed amendments.
- Ensure the in-water dive site risk assessment takes place within an hour prior to the dive starting and requires the dive operator to assess actual visibility. Two examples are provided of measuring visibility – using a reference point for horizontal visibility, and a Secchi disk for vertical visibility. These are examples only and dive operators have the flexibility to determine how best to measure visibility taking into account their circumstances and dive site requirements. The cost of a Secchi disk is approximately \$80.00-\$190.00. There is no cost for using a reference point (like a black line or mark) on a vessel for horizontal visibility assessment as an alternative method.
- Provide an example template for a documented environmental dive site and in-water risk assessment as an appendix. This is an example only and dive operators can develop their own risk assessment to take into account their specific circumstances and dive site requirements.
- Require that the dive supervisor should consider the personal abilities, knowledge and confidence of individual dive instructors as part of the pre-departure risk assessment and the adoption of more conservative measures such as using certified assistants, diving in favourable conditions and reducing non-certified diver to instructor ratio.
- Require that the dive instructor should be authorised to make a final decision on whether a dive should proceed after the in-water dive site risk assessment is completed. Ensure that the decision to reduce non-certified diver to instructor ratio or cancel a dive should not be impacted by commercial pressures.
- Require that the dive supervisor should consider the risk of dive group interaction underwater if there are multiple dive groups at the one site.
- Require that the dive supervisor should ensure that divers can be easily identified underwater. This can easily be achieved cheaply by using a reusable coloured spiral hose wrap for approximately \$8.00 per diver or coloured rashies for approximately \$45.00 per diver or another method that achieves the same result.