

COAST SAFE REPORT 2022

2021/22 DROWNING SNAPSHOT QUEENSLAND BEACHES



CONTENTS

COAST SAFE REPORT 2022

About SLSQ	2
Executive Summary	6
Australian Water Safety Strategy 2030	8
Section One:	
Coastal and Aquatic Safety	10
Section Two:	
Drowning Prevention Strategies	22
Section Three:	
Challenges and Opportunities	32
Methodology, Research	
and Acknowledgements	34
Glossary	35

All care has been taken to ensure the accuracy of statistical information included within this report. However, it is important to note that data may be amended over time as new information comes to light and/or following the outcome of Coronial investigations that are ongoing at the time of publication.

SURF LIFE SAVING QUEENSLAND'S

STRATEGIC PLAN 2020-2025

WHO WE ARE, WHAT WE DO

We are 36,000+ volunteers in 57 clubs across six regions that save lives with vigilance and service.

We strive for zero preventable drowning deaths on Queensland public beaches. We have returned 149,650 loved ones to their families.

Across our 540 staff, we are; pilots and crew, administrators, lifeguards, trainers and educators, brand custodians and community advocates.

Surf Life Saving Queensland is built on tradition, forged out of passion and focused on the future.

OUR VISION

Zero preventable deaths in Queensland public waters.

Note: Public waters is defined by SLSQ as any freely accessible waterway including, but not limited to, beaches, rivers, creeks, dams, lakes, lagoons and streams; this excludes commercial and private swimming pools, as well as household waters such as bath tubs, sinks and backyard containers.



OUR MISSION

SLSQ will operate as a proactive and effective peak body, leading the way in surf lifesaving service provision, education, sport, beach safety advocacy and community leadership.

OUR PURPOSE

We aim to equip, develop, empower and support our people to deliver vital aquatic rescue and safety services to save lives across Queensland.

OUR MOTTO

Vigilance and Service

OUR FUNDING

SLSQ is a not-for-profit community service organisation that relies heavily on public and corporate support to fund our operations along Queensland's coastline. In addition to public donations and sponsorship, SLSQ also receives financial support from the Queensland Government via Queensland Fire and Emergency Service (QFES), grants, subsidies and service agreements.

OUR PRIMARY TARGET

Domestic and international visitors to Queensland's beaches and waterways.



KEY ELEMENTS OF OUR SUCCESS



OUR VALUES



SAFETY

We will prioritise, and take responsibility for safety at all levels across the organisation, both on and off the beach.



TRUST

We will work to ensure that trust and accountability are the cornerstones of our organisation; through open and honest communication, and by always delivering on our commitments.



COMMUNITY

We will work to build safer, healthier, and stronger communities, underpinned by a commitment to continuous improvement in education and advocacy in relation to water safety.



LEADERSHIP

As the peak body in coastal and aquatic safety, we will lead by example and foster a culture of empowerment, accountability, inclusivity and exceptional standards.



RESPECT

We will treat each other with respect, value each other's contributions, and celebrate our people who strive for excellence.



TEAMWORK

We will work collaboratively; combining our strengths, knowledge and beliefs in the best interests of the communities we serve.

EXECUTIVE SUMMARY

Surf Life Saving Queensland is the peak body in aquatic safety in Queensland and is one of the largest volunteer-based community service organisations in Australia.

The organisation encompasses several diverse arms – lifesaving services, community education, membership services, surf sports, fundraising and commercial training – but they all contribute to one overarching purpose – to save lives.

In 2021/2022, there were more than 20 million visitors to the beaches along Queensland's 6089km of mainland coastline. With international borders reopening in December 2021, inbound tourism demand is again on the rise and there will be even greater demand for SLSQs lifesaving services over the next few years.

It is important to note that surf conditions and lifesaving operations were this year impacted by the La Niña weather event which commenced in Australia in November 2021. As a result, eastern Australia has seen rain and flood records smashed, with Australia experiencing its wettest November in 122 years. La Niña was also associated with record floods that hit southern Queensland and northern New South Wales in late February and early March this year.

Furthermore, the Omicron strain of COVID-19 that impacted Australia over the summer period, affected SLSQs lifesaving capability, particularly through the availability of volunteer lifesavers. Resources were stretched and the organisation had to respond in order to keep beachgoers safe. While SLSQ has continually increased lifesaving capability in Queensland over the last 20 years, with a particular focus on 'blackspots', sadly there were 13 beach-related drowning deaths in 2021/2022 in Queensland. Australian males were overrepresented in these tragedies, especially those aged 20 – 39 years who accounted for 46% of deaths. Twelve out of the thirteen drowning-related deaths occurred outside patrol flagged areas, with 69% occurring less than one kilometre from patrol flags or where they would have been in patrol hours.

With regards to rescues, SLSQ lifesavers and lifeguards carried out 3,101 rescues with 89% of them occurring outside the flagged area. Alarmingly, 723 of these rescues were children under the age of 12 years who were mainly swimming or bodyboarding and 83% were outside the flags.

In addition to beach-related drowning deaths, a further 48 people drowned at inland aquatic locations and other public waterways in 2021/2022, a 100% increase on last year's numbers. This dramatic increase can be attributed to the devastating floods throughout Queensland.

Although there has been a decrease in beachrelated drowning deaths from the previous year, SLSQ strongly believes that even one drowning death is one too many. That is why SLSQ has worked hard to address the risks identified in the 2021 Coast Safe Report and will use the data in this report to develop and implement new programs to address continued trends and new risks. This includes identifying high-risk beaches and demographics, and developing or expanding initiatives to help achieve SLSQs vision of 'Zero preventable deaths in Queensland public waters.'

the IL



AUSTRALIAN WATER SAFETY STRATEGY

2030

SLSQ has embraced the Australian Water Safety Strategy for 2030 in relation to reducing drowning deaths. Over the coming years SLSQ will work to align key objectives with the priority and focus areas identified in the strategy.

PEOPLE

Focusing on the issue of drowning in:

- Children (0- 4 years)
- ▶ Young males (15 29 years)
- Older people (65+ years)

PLACES

Focusing on the issue of drowning at:

- Beaches, ocean and rocks
- Rivers and lakes
- Aquatic facilities



ACTIVITIES

Focusing on the issue of drowning during:

- Boating and watercraft
- Fishing and rock fishing
- Diving and snorkelling



RISK FACTORS

Focusing on the issue of drowning related to:

- Swimming and water safety skills
- Alcohol and drugs
- ▶ Risk taking

POPULATIONS

Focusing on the issue of drowning in:

- Aboriginal and Torres Strait Islander peoples
- Multicultural communities
- Regional and remote communities



COASTAL AND AQUATIC SAFETY SNAPSHOT

and the state of the second second second

RESCUES

Over the 2021/2022 season, SLSQ surf lifesavers and lifeguards were kept busy with approximately 20.7 million visitors to Queensland beaches.

During this period, SLSQ services performed 3,101 rescues, 588,993 preventative actions and 32,996 first aid treatments. This reflects a 15% increase in rescues and an 18% decrease in preventative actions compared to 2020/2021. Similar to the previous season, there were multiple periods of hazardous surf conditions, particularly during peak visitation periods.

Of those 3,101 people rescued, 86% of them were Australian, followed by Chinese, Indian and New Zealanders (top 4). It is important to highlight that international borders were closed for almost two years and therefore there was a significant reduction in the number of international visitors to Australia during this time.

The most concerning aspect of the 2021/2022 research data is the high number of people (89%) being rescued outside of the flags. Although this is only a 1% increase on last year, it is dangerously high number and a trend SLSQ wants to address.

A breakdown of rescue data from the past 12 months has been provided below:

- 89% of all rescues were performed outside of the red and yellow flags, an increase of 1% from the previous year.
- The average age of people rescued was 28.5 years.
- 83% of children under the age of 12 years that were rescued were outside the flagged area.
- 86% of the people rescued in 2021/2022 were Australian residents.
- 57% of all patients rescued were male, 43% female.
- 55% of the year's rescues were performed in December and January – 2% increase on last year.
- Rescue Water Craft (jet skis) were used for 49% of rescues (an 11% increase on previous year), followed by rescue board (33%), rescue tube (8.5%) and IRB (5%).

Location of Rescues 2021/22 89% OUTSIDE THE FLAGS* Outside Flags Inside Flags *Increase of 1% on last year 1300 1200 1100 1000 900 800 700 600 500 400 300 200 100

1000-5000m

Over5000m

101-1000m

0-100m

Between the fast

Other

BEACH-RELATED DROWNING DEATHS

12 MONTH REVIEW

During the 2021/2022 season there were 13 beachrelated drowning deaths recorded on Queensland beaches, a 32% decrease on 2020/2021. While SLSQ strongly believes that even one drowning is too many, this is a remarkable improvement on the previous 12 months which was the second worst year on record since SLSQ began tracking coastal and drowning data.

In previous years, males over the age of 50 years were highly represented in drowning figures. However, in the 2020/2021 season there was a shift in the age demographic trend to younger males, with 75% of victims being aged between 20 to 49. The average age of drowning victims in 2020/2021 was 40 years, down from 50 years in 2019/2020. This trend has continued in 2021/2022 with 42 years being the average age of male drowning victims. Furthermore, those aged 20 – 39 years accounted for 46% of the drownings this season.

Similar to the rescue statistics, Australians made up the majority of drowning victims (62%). Alarmingly, 12 of the 13 beach-related drowning deaths occurred outside of flagged areas, with six of them taking place less than 200 metres from the flags.

Across Queensland, the summer months during the 2021/2022 season saw seven drowning deaths (54%) which is consistent with the results of the previous season.

In terms of regions across Queensland, the Gold Coast once again recorded the highest number of drowning deaths (54%) with seven victims during the 2021/2022 season. The next highest was the Sunshine Coast with three victims. Five councils across Queensland recorded a drowning death at a beach in 2021/2022.



A further breakdown of the 2021/22 data has been provided below:

- 12 of the 13 drowning deaths took place outside of flagged areas with six occurring less than 200 metres from the flags.
- Males accounted for 77% of drowning deaths, reaffirming their position as a 'high-risk' demographic.
- Australian residents accounted for 8 of the 13 drowning deaths with the nationality of two victims unknown.
- The average age of victims was 43.5 years, with 46% of victims aged between 20 to 39 years.
- 38% of drowning deaths occurred outside patrol hours, a 7% decrease on 2020/2021.
- Seven victims (54%) were swimming; two (15%) were riding a craft, one was attempting a rescue, Seven victims (54%) were swimming; two (15%) were riding a craft and three were either attempting a resuce, snorkelling or beach fishing (one was also unknown).
- Seven drowning deaths were recorded across the summer months of December, January and February. There were four recorded in Autumn and one each in Winter and Spring.
- Unlike 2020/2021, there wasn't a predominant day that drownings occurred. There was one each on a Monday and Tuesday, three on a Wednesday and two each on the following days.





Visitations vs Rescues (% DIST) 2021/22



BEACH-RELATED DROWNING DEATHS

5 YEAR REVIEW

SLSQ collates data on rescues and beach-related drowning deaths to identify any trends or risks, and then implement programs or initiatives to respond.

This part of the report draws on data recorded from 1 July 2017 through to 30 June 2022 and will provide a five-year snapshot of beach-related drowning deaths

The past five years have been an interesting time for the world, particularly the last two and a half years as the world has dealt with the impact of COVID-19. From closed international and domestic borders, to nationwide lockdowns and vaccine mandates, COVID-19 has impacted lifesaving operations and beach visitation.

One thing that has remained prevalent over the past five years is the overrepresentation of males in the drowning statistics. While older males were highly represented in 2017 – 2020, in more recent times there has been a shift towards young males.

SLSQ are still seeing similar trends with a higher representation of Australians and drownings occurring outside the flagged areas, most within 200 metres of the patrol flags. A further breakdown of beach-related drowning deaths data from past five years has been provided below:

- Over the five years from 2017 2022, there have been 70 beach-related drowning deaths in Queensland.
- The average age of victims was 45.6 years and males made up 80% of them.
- 43% of beach-related drowning deaths occurred in the summer months (November to February).
- Australians accounted for 56% of the total number of beach-related drowning deaths.
- 69 of the 70 drowning deaths occurred outside of flagged areas, with 21 taking place less than 200 metres from patrol flags.
- 33% of beach-related drowning deaths occurred within the Gold Coast City Council limits.
- The majority of deaths occurred when the victim was swimming (35), followed by riding craft (14), snorkelling (8), Other activities including attempting a rescue, wading and using non-powered craft .The other three are unknown.





BEACH-RELATED DROWNING DEATHS

TEN YEAR REVIEW

This part of the report draws on data recorded from 1 July 2012 through to 30 June 2022 and provides a 10-year snapshot of beach-related drowning deaths.

Since 1 July 2012 there have been 113 drowning deaths recorded on Queensland beaches. The 2018/2019 season recorded more drowning deaths than any other year in the past decade, with 20 lives lost. There was another spike in drowning deaths during 2020/2021 with 19 drowning deaths recorded, making it the second highest yearly total on record. This past season, 2021/2022, saw 13 drowning deaths which equals that of 2015/2016.

As was seen in the five-year review, males continue to be overrepresented in drowning statistics for the past 10 years, with 83% of all victim's male (94 in total).

Over the past ten years, the 50 - 59 age demographic has continued to have a high number of drowning deaths and currently has the highest number with 23 deaths in the past 10 years. This is followed by people between 30 - 39 (22), 20- 29 years (21) and 60 - 69years (17).

Australian residents represent 56% of the drowning deaths over the past ten years, with the Gold Coast recently overtaking the Sunshine Coast to become the most common council area for drowning deaths over the past 10 years, recording 34. The Sunshine Coast Council has recorded 20, followed by Cairns with 14, Noosa Shire with 12 and Redland City with 8. A further breakdown of beach-related drowning deaths data from past ten years has been provided below:

- Approximately 84% of drowning victims aged between 20 39 years were male;
- A total of 59 victims were swimming just prior to drowning. Meanwhile, 21 were engaged in riding a craft (including surf boards, paddleboards or body boards) and a further 13 were snorkelling.
- 31% of all drowning deaths occurred more than three kilometres away from the nearest patrol service. A further 30% of all drowning deaths occurred within 200 metres of a patrol service or where one would have been during patrol hours.
- Over the past 10 years, 43 drowning deaths occurred in the peak summer season, followed by autumn with 34 then spring with 26 and winter with 10.
- March remains the deadliest month over the past 10 years recording 15% of deaths (17).
- Saturday was the most common day of the week for a drowning to be recorded with 24 taking place over the past 10 years. This was closely followed by Sunday (19), Wednesday (18), Tuesday (14), Thursday (14), Monday (12) and Friday (12).
- In total, 43 (38%) drowning deaths occurred on a weekend.
- Outside of Australian residents, the most common nationalities of drowning victims were Chinese (7), American (3), Japanese (3), New Zealander (3), and Philippines (3).





Total Beach-Related Drowning Deaths By Year 2012 - 2022

Councils

COUNCIL	10 YEAR TOTAL BEACH-RELATED DROWNINGS
Gold Coast City Council	34
Sunshine Coast Council	20
Cairns Regional Council	14
Noosa Shire Council	12
Redland City Council	8
Great Sandy National Park	5
Bundaberg Regional Council Gladstone Regional Council Gympie Regional Council Moreton Bay Region Council	3
Fraser Coast Regional Council Livingstone Shire Council Great Barrier Reef Marine Park	2
Townsville City Council Dept of National Parks Shire of Torres Mornington Shire Council	1

Age 2012 - 2022



	LOCATION	BEACH-RELATED DROWNING DEATHS
(Gold Coast – Surfers Paradise	8
(Cairns – Green Island	6
(Great Sandy National Park- Teewah Beach	5
(Gold Coast – Southport Spit	3
(Cairns – Fitzroy Island	3

INLAND DROWNING DEATHS

In addition to beaches, SLSQ analyses drowning deaths at inland waterways, including but not limited to, rivers, dams, lakes, creeks, bays and swimming holes.

This section of the report draws on data recorded from 1 July 2017 to 30 June 2022 however please note the following data does not include public and private pools or beach drowning deaths.*

The collection of data for the past year takes into account the unprecedented floods Queensland experienced and the impact they caused.

Over the past five years there have been 166 drowning deaths at inland waterways across Queensland, with the highest ever annual number recorded in 2021/2022. Tragically there were 48 inland drowning deaths in 2021/2022 which is a 100% increase on the previous year.

Rivers continue to be the most common aquatic environment with 43 inland drowning deaths taking place there. This was followed by falls/gorges with 23, creeks with 17 and dams with 10.

In terms of council locations, City of Gold Coast recorded the highest amount of inland drowning deaths with 21 over the past five years. This is followed by Cairns Regional Council and Brisbane City Council with 19 each, and Townsville City Council with 15.

Similarly, to beach-related drowning deaths, males were highly represented with 81% of victim's male. The most common nationality was Australian with 100 inland drowning deaths and 23 from overseas. A further breakdown of inland drowning data over the past five years has been provided below:

- 60% of the victims were Australian, 14% were international and 26% are unknown.
- The type of activity being undertaken prior to their death was also recorded, where known. In total, 17 victims were driving in floodwaters, while 10 drowning deaths were due to unintentional entry (falls) into the water.
- In total, 50% of victims were aged under 50, while 44% were aged 50 or older. The victim's age was unconfirmed in ten cases.
- 45% of all inland drowning deaths over the past five years have taken place during the summer months.
- The most common days for inland drowning deaths over the past five years were Sunday (33), Saturday (24) and Monday (21) in total 38% of drowning deaths occurred on a weekend.

*It is important to note this data excludes drowning deaths at beaches and in public or private pools, but includes all other confirmed cases of drowning deaths which have occurred in Queensland waterways as determined by the Coroner's Office at the time of print.



Councils 2017 - 2022 (Top 5)

Council	5 Year Total
City of Gold Coast	21
Brisbane City Council	19
Cairns Regional Council	19
Townsville City Council	15
Sunshine Coast Council	8

Locations 2017 - 2022 (Top 4)

Location / Beach	5 Year Total
Brisbane River Sector 2	11
Ross River (Townsville)	6
Nerang River	4
Tully River	4



DANGEROUS MARINE CREATURES

In addition to tracking coastal and inland drownings, SLSQ also monitors and analyses other key incidents along the Queensland coastline, including crocodile and shark bites, and incidents involving marine stingers.

Irukandji

There were at least 18 Irukandji stings across North Queensland in 2021/2022, which is an increase of 200% from the previous year.

Irukandji Stings Five Year Overview 2017-2022*

YEAR	STINGS
2017/2018	9
2018/2019	6
2019/2020	23
2020/2021	6
2021/2022	18

*This data relates to stings recorded within SLSQ's North Queensland and North Barrier Branches, and Wide Bay Capricorn Coast spanning an area from (but not limited to) Fraser Island through to Far North Queensland.

Bluebottles

There was another significant decrease in the number of bluebottle stings recorded this season.

In total, 6,014 beachgoers were treated for bluebottle stings in 2021/22, representing a 36% decrease when compared to 9,470 stings the year before.

This decrease could be due to the weather conditions experienced during the past 12 months.

Crocodiles

In 2021/2022, there were five confirmed crocodile attacks in North Queensland, however there were no fatal attacks.

During the 2021/2022 season there were 30 confirmed crocodile sightings, 15 more than last year.

Crocodile Bites Five Year Overview 2017-2022

YEAR	LOCATION	FATAL/ NON FATAL
2017	Craiglie Creek in Craiglie	Fatal
2017	Lizard Island	Non-fatal
2018	Nagir Island (Torres Strait)	Non-fatal
2019	Captain Billy's Landing (Cape York)	Non-fatal
2020	Lizard Island	Non-fatal
2021	Lake Placid, Cairns Regional Council	Non-fatal
2021	Vyces swimming hole	Non-fatal
2021	Hinchinbrook Island	Fatal
2021	Portlands Road, Cape York Peninsula	Non-Fatal
2021	Portlands Road, Cape York Peninsula	Non-Fatal
2021	McIvor River, Cape York Peninsula	Non-Fatal
2022	Ross River, Townsville	Non-fatal
2022	Lawn Hill National Park	Non-fatal

Disclaimer: It is important to note this publication only reports on marine stings and shark/crocodile incidents that were treated by SLSQ's surf lifesavers or lifeguards, reported to SLSQ, or otherwise confirmed by SLSQ in consultation with external agencies.

Shark Bites Five Year Overview 2017 - 2022

FATAL/

Sharks

There were three confirmed shark bites recorded across Queensland in 2021/2022, down from six the season before.

This season there were no fatalities as a result of shark bites or attacks.

There were 146 confirmed sightings during 2021/2022, which is a 12% decrease from the season prior. The past two years have seen an increase in reported shark sightings as a direct result of the SharkSmart program which uses drones to conduct aerial surveillance patrols to detect sharks. The majority of sightings did not pose a threat to swimmers, however there were some beach closures due to shark sightings.



	YEAR	LOCATION	NON FATAL
	2017/10	Alma Bay	Injured
	2017/18	Lizard Island	Injured
		Cid Harbour, Whitsunday Islands	Injured
		Cid Harbour, Whitsunday Islands	Injured
		Swains Reef, Yeppoon Coast	Injured
		Cid Harbour, Whitsunday Islands	Fatal
2	2018/19	1km off shore, East of Moffat Beach	Uninjured
		Block Reef (Near Hardy Reef), Whitsunday Islands	Injured
		Catseye Beach	Injured
		Catseye Beach	Unknown
		Yandaran (North Of Bundaberg)	Injured
		Bells Esplanade, Pelican Waters, Sunshine Coast	Injured
		Magra Inlet (Cape Granville)	Injured
	2019/20	Reef Near Hook Passage, Whitsunday Island	Injured
		Reef Near Hook Passage, Whitsunday Island	Injured
		North West Island, Gladstone	Fatal
		Indian Head, Fraser Island	Fatal
		Fitzroy Island	Injured
	2020/21	Wutulla, Sunshine Coast	Injured
	2020/21	Grrenmount Beach, Coolangatta	Fatal
		Fraser Island	Injured
		Britomart Reef, Townsville	Injured
		Hook Island	Injured
2021/22	2021/22	Yarrabah, north of Cairns	Injured
		Redcliffe	Injured

DROWNING PREVENTION STRATEGIES

KEY INITIATIVES 2021/22

Each year SLSQ collates and analyses data related to drowning deaths, rescues, and other key incidents along Queensland's coastline. This helps the organisation identify any emerging trends, along with any particular 'high-risk' locations and/or demographics which may need a more targeted approach to surf safety.

Following an extensive review of coastal and aquatic safety data from the 2020/2021 season, SLSQ identified the following areas of concern:

- A continued over-representation of men in beach-related drowning deaths, particularly those aged between 20 49 years;
- A concerning number of Australians being rescued
- A concerning number of people being rescued swimming outside of the flags
- Australian residents accounting for almost all drowning victims in 2020/21



In 2021/2022, SLSQ developed and introduced a range of initiatives to help reduce drowning deaths on Queensland beaches.

OBJECTIVE	STRATEGIES
	 Develop and deliver a state-wide campaign that speaks directly to males. SLSQ will seek to engage a high-profile person who will encourage males to put their safety first and swim between the flags during patrol hours.
Continue to reduce	The campaign will directly target males who think "she'll be right" when swimming alone, outside of flagged areas or before and after patrol hours.
beach-related drowning deaths amongst males	 Work closely with key stakeholders, industry and tourist groups, local government, and relevant organisations.
aged over 50, with an additional key focus on younger males aged	• Continue to deliver our Water Safe Seniors (over 50's) program which is designed to increase the knowledge of local beaches while improving confidence in managing beach conditions and emergency situations.
between 20 – 49.	 Continue to roll out key services including dawn and dusk patrols on the Gold Coast and roving patrols between Noosa North Shore and Double Island Point during peak periods, with the potential capability to extend patrol times.
	• Engage with Year 12 school leavers to educate them on the statistics relating to their age demographic and the risks of swimming under the influence of alcohol.
	 Develop and deliver a state-wide campaign with general messaging that speaks directly to Australians. The campaign will encourage Australians not to be complacent when swimming. Monitor isolated and long stretches of beaches, islands, and access points to gain a greater coverage of roving and surveillance patrols.
Continue to increase surf safety and beach awareness for Australians.	 Conduct signage audits at key and 'at risk' locations, working closely with stakeholders to implement audit recommendations to ensure Australian Standard Signage is utilised.
60% of those who drowned at a coastal	• Increase our Community Awareness programs to 'at risk' locations where people may choose to holiday.
beach location in 2020/21 were Australian.	 Deliver a Coast to Cape program encompassing practical skills and accredited training to remote and regional North Queensland Indigenous and Torres Strait Island communities to leave a lasting impact in the region.
	• Continue to utilise the SLSQ Surf Crew Promotional Car to build awareness at Gold Coast and Sunshine Coast beaches throughout summer. This initiative is tailored towards beachgoers who may not be familiar with Queensland costal conditions and are more at risk of drowning or sustaining an injury at the beach.
Establish foundations	 Identify and engage a partner research company. In consultation with the partner agency identify research objectives and methodologies.
to conduct long term	Conduct a detailed analysis of the initial results.
research to understand public knowledge, attitudes, beliefs, and	• Utilise analysis to support the development of future messaging campaigns targeted towards increasing safety as a factor in decision making around beach visitation and behaviours.
behaviours towards	• Utilise findings to review the future service plan priorities to ensure effective

- Utilise findings to review the future service plan priorities to ensure effective implementation of services/response strategies in blackspot areas.
- Embed research as regular process to gauge the effectiveness of various strategies in impacting behaviour at beaches.

visiting a Queensland beach or waterway.

CASE STUDY COASTAL AUDITING



The Queensland coastline consists of 13,347kms^[1] (6,374kms related to islands) and has approximately 714 accessible beaches. 70 per cent of our international visitors enjoy aquatic and coastal experiences as part of their trip to Australia and therefore it is no surprise that this stunning coastline receives an estimated 50 million visitations each year. Furthermore, Australia ranks #1 in the world for marine wildlife and remote and developed coastal beaches and aquatic locations, however these locations and experiences come with inherent and largely unpredictable risks.

As such, drowning prevention on the coast is best addressed through the adoption of hazard risk management techniques, standadised signage and servicies. The coastal safety and risk assessment techniques developed by Surf Life Saving uses a range of hazard, population and other data inputs to underpin risk analysis and evaluation are now being rolled out across Queensland.

SLSQ has developed and integrated a number of programs, resources, experts, best pactices and guidelines to create a holistic coastal safety solution. The core components include the Australian Beach Safety and Management Program (ABSAMP), Australian and International standard signage, coastal risk assessments, the Lifesaving Service Level Calculator and the Incident Reporting Database to assist Land Managers and Councils to mitigate their aquatic risk.

To assist with drowning prevention across the Queensland coastline, SLSQ offers a service to coastal land managers to provide a comprehensive

assessment and identification of the risks to public safety and detailed recommendations on how to manage those risks. The detailed Coastal Public Safety Risk Assessment report provides:

- Access signage requirements relating to warnings, regulations, and lifesaving services according to identified hazards.
- Individual specialist warning signs for extreme risk hazards.
- Individual production specifications and placement of each sign.
- Recommendations for the removal of unnecessary and non-standard signage.
- Identification of coastal risks, including subsurface reefs, channels and rips, and tidal impacts.
- Risk mitigation strategies and remedies for identified threats to public safety.
- Recommendations on the necessary lifesaving services, including personnel, training, coverage, communications, rescue equipment and emergency back-up.

For example, Gladstone Regional Council engaged SLSQ this year for an audit of their beach signage. They are currently implementing the recommendations from the audit report and updating the necessary signs. Not only does the additional signage educate and warn beachgoers, it also provides new markers for emergency services that are responding to emergency situations.

CASE STUDY

Whilst SLSQs primary objective is to protect the bathing public, from time-to-time our volunteers will use their skills and training to assist with other emergency situations. In recent times, Southeast Queensland and Northern NSW have been particularly impacted by devastating floods.

In late February and early March 2022, many of our volunteer lifesavers from 21 surf life saving clubs joined with other emergency services organisations to assist with the wider flood response.

Over four days, IRB Crews were deployed to complete numerous retrieval and assistance jobs with the SES, assist Energex technicians to restore power to communities, and deliver much needed medical supplies. Our volunteer lifesavers also carried out investigations to confirm evacuations and delivered food and water to those who were trapped in flood areas. The Westpac Lifesaver Rescue Helicopter Service was also utilised to pick up patients and police personnel from various locations.

In addition to these outstanding efforts, many other surf life saving clubs set supply drop-off points and coordinated with local charities to ensure supplies were delivered to those in need. Many lifesavers also participated in the Spontaneous Volunteers Activation on the Gold Coast to assist with the enormous cleanup.

The efforts of our lifesavers is a great example of how the skills and training SLSQ provides can benefit the community beyond the beach and provide assistance in various emergency situations.



CASE STUDY STATE OPERATIONS COMMUNICATION CENTRE EXTENDED HOURS

The data shows that most drownings are occurring outside of patrolling hours or locations, and therefore SLSQ needed to implement a new initiative to respond to this risk. While volunteer lifesavers cannot be at every beach 24/7, SLSQ recognised the benefit in establishing an after-hours coordination centre to provide immediate response and action for emergency situations.

The State Operations Communication Centre (SOCC) was already in operation to enhance SLSQs ability to keep our beaches safe through radio and visual support so it was appropriate for SLSQ to trial an extension of operating hours as a way to address the gap in services.

Prior to this initiative, the SOCC was covering lifesaving services between 6:00am and 6:30pm with afterhours

being serviced by 'call outs' through the 13SURF system. The busy summer season saw an increase in 13SURF call outs and therefore to improve SLSQs ability to respond to emergencies and reduce fatigue of lifesavers, SLSQ extended the hours of the SOCC from 6:30pm to 10:30 pm.

The lifesaver at the SOCC become the contact for after-hours emergency situations and the liaison with QPS/QAS and the Tasking Officers if SLSQ personnel were required. The SOCC was to ensure consistent and thorough documentation, reporting and situational awareness of assets and information. The benefit of this is that the SOCC has visual view through LIMSOC of each asset which can be relayed to the tasking officer.



CASE STUDY COMMUNITY AWARENESS – COME AND TRY



There is no doubt that prevention is always the best cure. As such, SLSQ is committed to providing community awareness programs and training right across Queensland that help beachgoers understand the inherent risks associated with aquatic activities and what to do if they need help at the beach. From Beach to Bush and year-round school programs, to airport surf safety signage and pop-up activations, SLSQ is actively promoting and sharing vital surf safe messages with the community.

Last season, SLSQ lifesavers and lifeguards rescued 723 children under the age of 12. SLSQ already operates an extensive junior activities program, including Nippers and Little Lifesavers. While Nippers is our original junior activities program run by local clubs, Little Lifesavers is an SLSQ run program that helps to educate children about the importance of water safety. Little Lifesavers allows children to increase their confidence and skills in the water through a variety of training and fun activities.

To help even more Queensland children and those on holidays with their families develop basic surf awareness, SLSQ ran five Come and Try Little Lifesaver days at Woorim Beach, Bribie and Settlement Cove, Redcliffe. These events were also a great way to engage with the community and give them a little bit of insight into SLSQ.

Each Come and Try session was capped at 30 participants and all sessions were full. The program ran for two hours and in that time the children did one rotation of each of the following, beach safety talk, tubes, beach games/obstacles, boards, and flags.

The more children who are exposed to lifesaving programs, the more SLSQ can spread our water safety awareness message and equip beachgoers with the skills they need to navigate the beach and ocean.





Number of children under the age of 12 rescued.

The most common activities being undertaken were







were rescued while outside the flagged area

CASE STUDY SHARKSMART

SLSQ has partnered with the Queensland State Government to strengthen the Shark Control Program by improving shark sighting capability and increasing the reach of shark safety messaging.

Lifesavers and lifeguards are trialling the use of drones to monitor Queensland beaches to detect sharks and gather data on shark movements and behaviour. If a dangerous shark is spotted by drone, lifesavers and lifeguards can warn water users and temporarily close the beach if required.

Since the SharkSmart drone trial commenced in September 2020, SLSQ has operated 3669 drone flights, across the five beaches in the trial, flying a total of 1468 km and spotting 174 sharks, including 48 large sharks estimated to be more than 2m in length.

On four occasions, beaches at North Stradbroke Island and Burleigh Beach were temporarily closed to manage the risk to swimmers. Additionally, the drones have been used to rescue swimmers from rips and to assist with missing person searches, highlighting their value as an holistic beach safety tool.

SLSQ are also working with government departments to integrate SharkSmart messaging into community engagement initiatives with the aim of making these messages as familiar as SLSQ's iconic red and yellow flags.

Through this partnership, SLSQ now has the capacity to reach 42,500 people through our Beach Safe community booklets; 60,000 primary school students, high school and university students, through our community programs; 10,000 nippers through the nipper program; and 10,000 active life savers through member programs.



KEY INITIATIVES 2022/23

Following an extensive review of coastal and aquatic safety data from the past 12 months, SLSQ has identified the following areas of concern:

- An over-representation of men aged 20 to 39 years in beach-related drowning deaths;
- High number of beachgoers being rescued when swimming outside the red and yellow patrol flags;
- A concerning number of Australians being rescued;
- Over 50% of beach related drowning deaths taking place on the Gold Coast.

In response to the data and identified trends and risks from the previous 12 months, SLSQ will develop and introduce the following initiatives and programs to help reduce drowning deaths on Queensland beaches.

OBJECTIVE	STRATEGIES
	 Partner with clubs, pubs and other licensed venues to implement a 'Swim Responsibly' campaign that seeks to educate and warn young males about the risk of swimming while under the influence of alcohol and/or drugs.
Change the	• Develop an educational video targeted to Year 12 school leavers that highlights key surf safety messages, including the importance of not swimming under the influence, not swimming after dark, and never swimming alone.
Change the mindset of the male demographic	 With domestic travel increasing, work with local tourism bodies to promote SLSQ's surf safety messages, with a particular focus on camping and caravanning holidaymakers.
between the ages of 20 – 39 years; and	• Expand the locations of the current 'Water Safe Seniors' program which aims to improve the knowledge and surf skills of beachgoers over the age of 50 years.
continue to reduce beach related	 Explore the use of new technology to improve warning systems and public announcements across Queensland beaches.
deaths amongst males aged 50+	 Provide additional training for lifesavers, particularly Club Captains and Patrol Captains, to re-enforce the importance of taking preventative action and communicating safety messages with beachgoers.
	• During peak times, expand the operational capability of the Westpac Lifesaver Rescue Helicopter Service to service remote areas north of the Sunshine Coast.
	• Continue to promote Marine Stinger Awareness through community education, training and signage.
	 Increase SLSQ presence, through additional signage and displays, at international and domestic airports across Queensland, particularly Cairns, Gold Coast and Brisbane.
	 Partner with international airlines to showcase surf safety messages on board international flights carrying passengers to Australia.
	• Work with local governments to expand the current community awareness pop-up clinics at popular beaches in high tourism areas.
	• Continue to conduct coastal audits at key and 'at risk' locations, especially those that attract a large number of international visitors.
With Australian borders reopened, prevent drowning- related deaths of	 Increase surf safety awareness messaging and education for visitors travelling to Green Island, Fitzroy Island, the Whitsunday Islands, Magnetic Island, North Stradbroke Island, Moreton Island, and Fraser Island, through formal partnerships.
international visitors	 Expand SLSQs surf safety brochures and public materials to cover the languages of Australia's top five inbound international visitor markets.
	 Increase the operational capability of the Roving Surf Crews to cover more hotspot areas at peak times.
	 Continue to promote Marine Stinger Awareness through community education, training and signage.
	• Leverage the Lifesaving World Championships being hosted on the Gold Coast in 2024 to build greater relationships with the international lifesaving community and form more 'sister' club relationships.
	 Build on SLSQs state-wide campaigns that promote our surf safety and awareness messages.
	 Partner with the State Government and local tourism bodies on domestic tourism campaigns to ensure the widespread communication of surf safety messages.
Increase surf safety	 Increase Operations Support surveillance patrols outside flagged areas with greater engagement between the operator and members of the public swimming outside flags.
awareness and engagement for all	• Expand operations support services in regional locations, particularly within North Barrier and North Queensland regions.
beach goers	• Increase membership of Brisbane Lifesaving Service to build greater capability to support beach safety from the Sunshine Coast to the NSW Border.
	• Work with the Queensland State Government to continue the SharkSmart program and community awareness campaign.
	• Partner with leading private businesses to spread surf safety messages through their advertising.

CHALLENGES AND OPPORTUNITIES

SR32243QC

Ahead of the upcoming 2022/2023 season, SLSQ has identified a number of key challenges and opportunities when it comes to reducing, and ultimately eliminating, drowning deaths and other fatalities at coastal and inland aquatic locations.

CHALLENGES

- Increased costs of patrolling Queensland beaches, particularly for 'blackspot' locations;
- SLSQ and the 57 clubs, including their supporters' clubs, continue to experience severe financial difficulties due to COVID-19. This could continue to impact the purchasing power of critical lifesaving equipment;
- There is a risk of overconfidence and/or complacency amongst Australians when it comes to beach safety which could result in more rescues and/or drowning deaths;
- Due to COVID-19 people are spreading themselves across the coastline to avoid crowds which results in more people swimming in isolated and unpatrolled areas;
- SLSQ has an ongoing concern about the high number of rescues being performed outside flagged areas and the strain this places on SLSQ's resources at patrolled beaches;

- There is an alarming increase in the number of incidents and drowning deaths occurring outside patrol hours with members of the public swimming at dark and sometimes under the influence of alcohol and/or drugs;
- A number of councils across Queensland have opted not to endorse standard recommendations regarding safety signage, emergency beacons, cameras, and drone operations;
- An inconsistent approach to or lack of awareness of aquatic safety amongst some tourism operators; and
- Increasing demands on SLSQ surf lifesavers and lifeguards.

OPPORTUNITIES

- Continue to work with the Queensland Government to ensure SLSQ has the capacity and resources to continue saving lives and eliminating drowning deaths in Queensland public waters;
- Reinforce key surf safety messaging, including swimming between the red and yellow flags, to all Queenslanders and visitors;
- Educate beachgoers on the dangers of swimming in remote and unpatrolled areas by building relationships with Tourism Queensland, Queensland Parks and Wildlife tourism operators, and local tourism bodies;
- Expand SLSQ's reach at unpatrolled and high-risk beaches through increased roving services and the use of coastal cameras and emergency response beacons;

- Continue to work closely with councils to increase the use of appropriate and consistent aquatic safety signage at high-risk locations across Queensland;
- Partner with private companies to spread awareness and surf safety messages to the general public;
- Work directly with key stakeholders to develop and implement school-based programs, designed to help improve the swimming ability of Queensland residents;
- Further develop SLSQ's suite of educational programs, designed to improve public knowledge and understanding of coastal and aquatic dangers; and
- Work closely with key stakeholders and partners to promote safe swimming behaviours amongst identified high-risk groups and demographics.

METHODOLOGY, RESEARCH AND ACKNOWLEDGEMENTS

METHODOLOGY

Contained within the Coast Safe Report 2022 is information and data obtained by SLSQ's major incident notification forms, as well as witness reports, media analysis, and Surf Life Saving Australia. Where possible, this information has been verified with National Coronial Information System (NCIS) data for coastal drowning deaths.

While all care has been taken to ensure that statistical information included within this report is accurate as of the date of publication, it is important to note that data may be amended over time following the outcome of coronial investigations that are ongoing at the time of print.

SLSQ acknowledges the Department of Justice and Community Safety as the source organisation of the NCIS.

CAPABILITY AND RESCUE ANALYSIS

SurfGuard, the Lifesaving Incident Management System and Operational Console (LIMSOC), the Incident Report Database (IRD), and SurfCom management system are web-based applications making up part of a suite of applications that enables members, clubs, branches and states to enter and access Surf Life Saving data.

This data includes operational (including rescues, preventative actions and first aid treatments), capability (including assets and services), educational, and administrative. Information extracted from LIMSOC can be used to identify how many rescues were performed by volunteers, lifeguards and support services.

DROWNING DATA ANALYSIS

SLSQ collects data and information on key coastal and inland incidents and fatalities from LIMSOC IRDs, SOCC, SLSA, the NCIS, and media (including social media) reports. This information is verified and compiled for analysis by SLSQ's Lifesaving Operations Department.

For the purpose of this report, SLSQ defines a beachrelated coastal drowning death as any death caused directly by immersion or submersion that has occurred in a surf or beach environment within two nautical miles of shore.

DROWNING DATA LIMITATIONS

As part of the NCIS process, some cases are amended prior to their closure, resulting in changes to the classification of cases in our datasets. Therefore, the number of coastal drowning deaths published in this report may differ slightly from annual totals previously reported. It is noted that our current year's data may change with closure of investigations. Once a closure occurs to NCIS cases, SLSQ can modify undetermined cases, those with unknown intent, and those where the cause of death is not drowning.

All deaths known to have occurred in coastal waters have been included as coastal drowning deaths, unless otherwise stated.

INDUSTRY EXPERTS

SLSQ continues to work with industry experts and external agencies when it comes to the collation and analysis of drowning and coastal data. SLSQ acknowledges the support of the following people and organisations:

- Phoebe Meagher, Taronga Zoo, for assistance with the collation and analysis of data pertaining to sharks in Queensland waters;
- Jamie Seymour and James Cook University for expert advice and guidance regarding Irukandji and other marine stingers;
- The Department of Agriculture and Fisheries for their assistance with the collation and analysis of data pertaining to sharks in Queensland waters;
- The Department of National Parks, Sport, and Racing and Queensland Parks and Wildlife for assistance with the collation and analysis of data pertaining to crocodiles in Queensland;
- Charlie Manolis, Wildlife Management International, for assistance with the collation and analysis of data pertaining to crocodiles in Queensland;
- Surf Life Saving Australia;
- National Coronial Information System; and
- Queensland Coroner's Office.

TSLSQ acknowledges and thanks the Queensland and Federal Governments for their continued support and funding of our organisation and its vision of saving lives.

GLOSSARY

ALSQ - Australian Lifeguard Service Queensland.

Aquatic environment - Areas such as coastal and inland beaches and waterways, swimming pools and their facilities, and other bodies of water, slurry and other agricultural and industrial liquids storage.

Beach-related drowning death - A death by immersion or submersion that has occurred in a beach environment.

Blackspot - An area with a high concentration of coastal/ ocean incidents and a high probability/risk of ongoing recurrence.

Coastal drowning death - Where the location of the drowning is on the coast, in the ocean up to two nautical miles (2NM) offshore.

Drowning - The process of experiencing respiratory impairment from submersion/immersion in liquid; outcomes are classified as death, morbidity and no morbidity.

First aid - Assessments and interventions that can be performed by a bystander (or by the victim) with minimal or no medical equipment.

Incident - Any unplanned event requiring lifesaving services intervention.

Inland - An area that is beyond the high waterline or within a landward distance of 5 times the width of the coastal inlet/river mouth and is an aquatic influenced environment located within land boundaries.

International - An individual who is confirmed to reside overseas and/or is a temporary visitor to Australia.

IRB - Inflatable rescue boat.

Lifeguard - An individual that undertakes patrols at a beach or another aquatic environment. This is typically a salaried member, qualified in public safety and aquatic rescue.

Surf Lifesaver - An individual that undertakes patrols at a beach or another aquatic environment. This is typically a non-salaried member, qualified in public safety and aquatic rescue.

Lifesaving service - A coordinated group that exists to provide aquatic safety services to the public. This includes surf life saving clubs, lifeguards, SOCC, drones, rescue water craft, inflatable rescue boats, helicopters, ATVs and 4WDs.

LIMSOC - Lifesaving Incident Management System and Operational Console.

Local Government Area (LGA) - Also known as local councils, LGAs include cities, towns, shires, municipalities or boroughs.

NCIS - National Coronial Information System.

Ocean drowning death - Where the location of the drowning is in the ocean further than 2NM offshore, but no further than 12NM.

Offshore - Beyond the surf zone.

Open ocean - The seabed, water and air space above the water between 2NM and 12NM (the Australian territorial waters limit) offshore.

Operations support - Rapid response rescue units, not affiliated to any specific Surf Life Saving Club.

Patrol - Service undertaken to monitor activities in/around an aquatic environment and respond accordingly through either preventative actions or rescue operations **Preventative action -** Direct action taken to reduce or eliminate the probability of a specific rescue, first aid or other reportable incident from happening in the future. Note: A preventative action will be recorded as the singular activity taken (i.e. clearing the water for lightning will be one action. The number of people warned/altered as a result of this action will be recorded separately as a warning).

Prevention - Where intervention by a lifesaving resource averts a person/s from getting into a potentially life-threatening situation.

Public waters - Any freely accessible waterway including, but not limited to, beaches, rivers, creeks, dams, lakes, lagoons and streams; this excludes commercial and private swimming pools, as well as household waters such as bath tubs, sinks and backyard containers.

Rescue - Retrieving a person in distress, delivering them to a place of safety and the application of first aid and basic life support as may be required.

Rescue water craft (RWC) - A personal water craft (e.g. jet ski) used by lifesavers and lifeguards for performing rescues and preventative actions.

Resuscitation - Preservation or restoration of life by establishing and maintaining a person's airway, breathing and circulation.

Riding craft - A piece of non-powered recreational and/ or sporting equipment used in the surf and other aquatic environments including surfboards and boogie boards.

Rip current - A seaward flowing current of water moving through a surf zone.

Service season and hours - Vary between regions due to climatic factors, but in the context of this report, the season is for the period July 2020 to June 2021.

SLSA - Surf Life Saving Australia.SLSQ - Surf Life Saving Queensland.SOCC - State Operations and Communications Centre.

Surf Life Saving Club (SLSC) - An SLS-affiliated not-for-profit organisation which has volunteer members who provide coastal safety services to the community.

SurfCom - SLS radio communications centre which assists in managing the communications of lifesaving operations and data collection.

Undetermined - Cases that are not associated with a closed Coroner's report on NCIS are often left 'undetermined' until an official cause of death has been determined. Some examples are cases where bodies have been found washed up on the beach; reports of individuals struggling in coastal environments are made and the bodies are not found/ missing persons reports are not made; or a suspected heart attack in a coastal environment rather than death due to immersion. These deaths will all be followed up on and the incident category updated once Coroner determinations are made accessible.

Unpatrolled location - An area that has no service, is not monitored or not patrolled.

Unpowered craft - A piece of non-powered recreational and/ or sporting equipment used in the surf and other aquatic environments. Examples include kayaks and canoes.

Watercraft - A piece of non-powered recreational equipment used in the water. Examples include surfboards, stand-up paddle boards, boogie boards, windsurfers or kayaks.

ZERO PREVENTABLE DEATHS IN QUEENSLAND PUBLIC WATERS

OUR PARTNERS





SURF LIFE SAVING QUEENSLAND

Surf Rescue House, 18 Manning Street, South Brisbane QLD 4101 PO Box 3747, South Brisbane QLD 4101

+61 7 3846 8000 • lifesaving.com.au