

COAST SAFE REPORT 2019

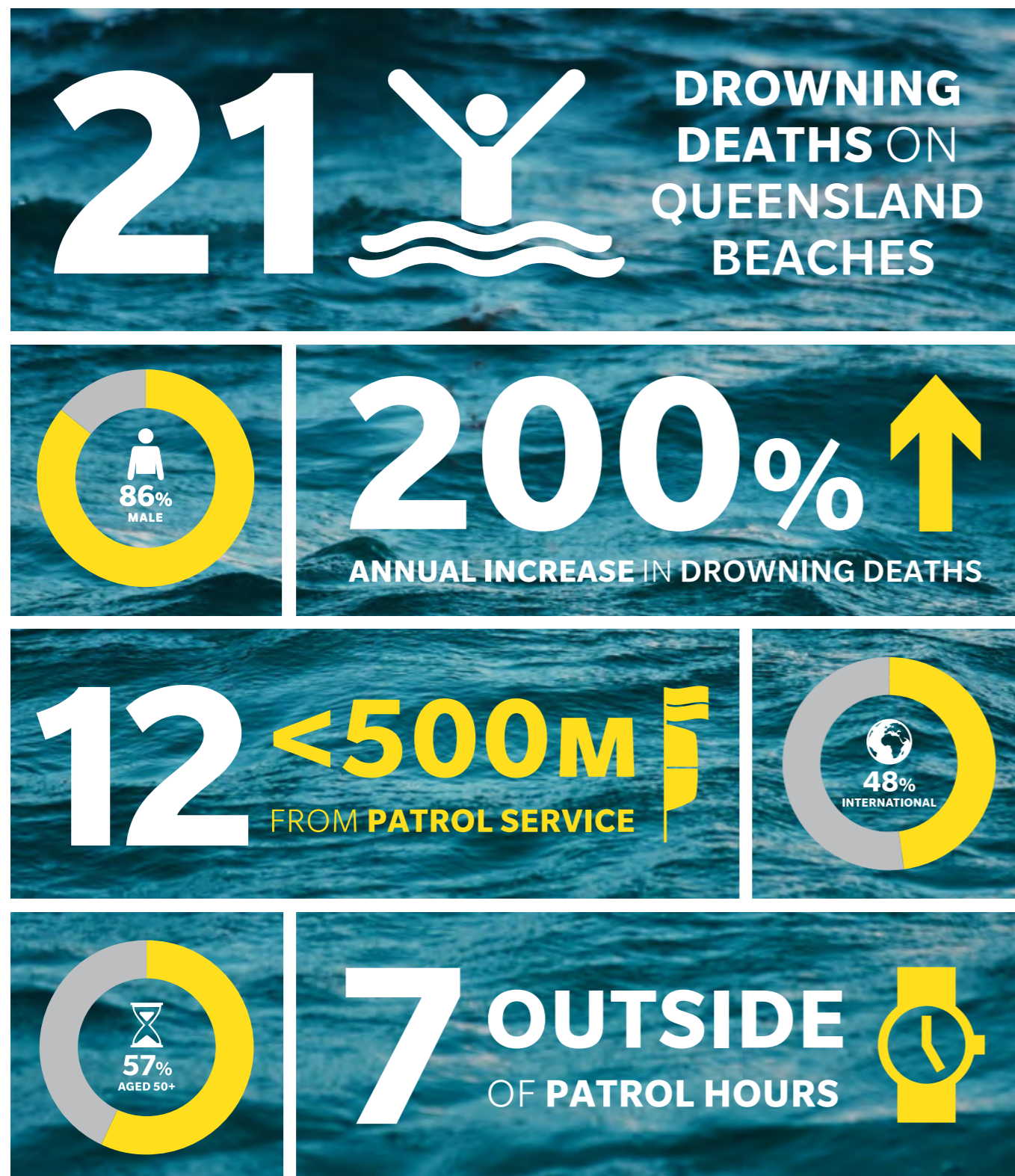


SURF LIFE SAVING
QUEENSLAND



2018/19 DROWNING SNAPSHOT

QUEENSLAND BEACHES



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All care has been taken to ensure the accuracy of statistical information included within this report, as of 31 July 2019. 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 print.

ABOUT SLSQ

Who we are

Surf Life Saving Queensland (SLSQ) is the state's leading authority on aquatic safety and surf rescue, and one of the largest volunteer-based community service organisations in Australia.

From humble beginnings, when the first official rescue was recorded on a Queensland beach in 1909, SLSQ has developed into a groundbreaking and highly innovative organisation encompassing 57 clubs and more than 33,000 members across the state.

SLSQ's volunteer surf lifesavers and lifeguards have directly saved the lives of more than 130,000 people through in-water rescues, and educated in excess of 10 million people about surf and aquatic safety through targeted and grassroots community awareness programs.

As a not-for-profit organisation, SLSQ relies heavily on community support and donations to continue our vital work both on and off Queensland's beaches. It is the generous support of Queenslanders that enables us to help keep beachgoers safe.

SLSQ is directly affiliated with, and is part of, Surf Life Saving Australia (SLSA) and the International Life Saving Federation (ILS).

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 lifesaving service provision, education, sport, beach safety advocacy and community leadership.

Our strategic imperatives

Committed To Our Community: To advocate water safety management and continue to enhance the reputation of SLSQ as the peak body.

Connected To Our People: To recruit and retain the best people through support and development of their skills and knowledge.

Effective In Our Business: To plan and execute our day-to-day operations to an outstanding level of efficiency, with continuous improvement always in mind.

Sustainable For The Future: To ensure SLSQ is equipped for the future through continuous growth, strong financial management and sound governance.

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 grants, subsidies and service agreements.

Our primary target

International and domestic visitors to Queensland's beaches and waterways.



EXECUTIVE SUMMARY

With record crowds flocking to the beach and a significant jump in patrol activity, the 2018/19 season was one of the most challenging periods of time ever faced by Queensland's army of surf lifesavers and lifeguards.

More than 21.56 million people visited Queensland beaches in the 12 months from 1 July 2018 to 30 June 2019, with SLSQ patrols recording 716,215 preventative actions, 65,133 first aid treatments, and 3,894 rescues.

Remarkably, this represents a 9% increase in beachgoers, a 35% rise in rescues, and an 85% spike in the number of first aid treatments performed when compared to the previous year.

These are incredible figures which provide a clear and tangible reminder of the critical service our organisation continues to deliver along Queensland's coastline.

However, while millions of people enjoy our state's beautiful beaches each year, the devastating reality is not everyone makes it home safely.

Tragically, there was also a significant increase in the number of drowning deaths recorded on Queensland beaches in 2018/19, with 21 people losing their lives. This reflects a 200% increase when compared to 2017/18, and also makes it the worst year on record since SLSQ began tracking coastal data.

It is important to note the majority of these drowning deaths occurred at unpatrolled locations and/or outside of designated patrol times.

In addition, a further 33 people drowned at inland aquatic locations and other public waterways in 2018/19.

As far as SLSQ is concerned, even one drowning death is one too many. As we move forward into 2019/20, we remain more committed than ever to delivering a range of services, strategies, and programs to reverse this trend and increase aquatic safety for all.

Some of these initiatives are outlined in the 2019 Coast Safe Report, which also provides a detailed overview of beach-related incidents, drowning deaths, and fatalities from across the past 12 months and 10 years.

Importantly, the data contained within this report will help SLSQ analyse long-term trends, identify high-risk beaches, and develop key surf safety initiatives to underpin our vision of 'Zero preventable deaths in Queensland public waters.'

AUSTRALIAN WATER SAFE STRATEGY FOR 2016-2020

SLSQ continues to embrace the Australian Water Safety Strategy for 2016-2020 in relation to reducing drowning deaths. As part of this, a number of key objectives have been identified to reduce drowning deaths across the country. These have been outlined below, alongside pertinent strategies and initiatives. It is important to note these strategies are in addition to SLSQ regular patrols and beach safety services.

Objective	Key SLSQ strategies
Reduce drowning deaths in children aged 0-14	Continue to build on SLSQ's iconic nippers program, which has educated 250,000+ children since its inception.
	Continue to educate young children via SLSQ's award-winning Little Lifesavers program.
	Directly engage with, and upskill, school students via the Queensland Health Beach Safe Schools Program.
	Deliver key initiatives like Beach to Bush and the Inland Waterways Blackspot Program, providing safety messaging around public waterways.
	Deliver pop-up clinics at key locations through the Surf Crew vehicle program.
	Build upon SLSQ's Watersafe Schools Program, providing aquatic safety skills and awareness to young students.
	Target parents and youth demographics via social media channels and other relevant platforms.
Reduce drowning deaths in young people aged 15-24	Work with key stakeholders including the Department of Education to deliver the International Student Water Skills Assessment to all home-stay students within public high schools.
	Increase engagement within high schools and universities to educate and upskill key demographics.
	Engage with, and educate, Schoolies via targeted presentations and initiatives.
	Continue to deliver dawn and dusk patrols on the Gold Coast.
	Engage with demographics via programs such as On The Same Wave, Water Safe Month, Inland Waterways Blackspot Program, and the Surf Crew vehicle.
	Develop and deliver key campaigns promoting safe swimming behaviours.
	Build upon existing digital media strategy targeted towards key youth demographic on relevant channels and platforms.
Reduce drowning deaths in males aged 25-64	Work with stakeholders including the Department of Education to deliver the International Student Water Skills Assessment to all home-stay students within public high schools.
	Continue to engage with multicultural beachgoers via SLSQ's On The Same Wave program.
	Continue the Surf Crew program on the Gold and Sunshine Coasts, educating beachgoers via pop-up clinics.
Reduce drowning deaths in people aged 65+	Build upon existing digital media strategy targeted towards key demographic on relevant channels and platforms.
	Develop statewide campaign to directly engage with older demographics.
	Work closely with key stakeholders to promote safety swimming practices and regular medical check-ups amongst beachgoers aged 50 and over.
	Continue to rollout airport welcoming services at high-risk locations.
	Facilitation of surf safety presentations.
Reduce boating, watercraft and recreational activity-related drownings	Continued community awareness presence at events relevant to the target demographic.
	Continue to strengthen our relationship with Maritime Safety Queensland.
	Build upon existing digital media strategy targeted towards key demographic on relevant channels and platforms.

Objective	Key SLSQ strategies
Reduce drowning deaths in inland waterways	Work with councils, government, and land managers to review and assess safety and signage at aquatic locations.
	Promote safe swimming and water practices via SLSQ's annual Beach to Bush program.
	Continue to rollout water safety collateral, promoting safe swimming practices at dams, creeks, rivers, lagoons, and other waterways.
	Continue to deliver SLSQ's Inland Waterways Blackspot Program.
	Continue to educate swimmers via SLSQ's annual Water Safe Month.
Reduce drowning deaths in coastal waters	Build upon existing digital media strategy, targeted towards location-specific messaging relevant to inland waterways.
	Continue to roll out SLSQ's surf talks and beach safety clinics.
	Increase community awareness presence at schools, universities, and community events.
	Review and build upon front-line lifesaving services (e.g. surf lifesaving patrols, operations support, lifeguard services).
	Produce and distribute surf safety iMaps for all regions across the state.
	Advocate for safe swimming behaviours through Crocwise and shark safety initiatives.
	Continue to work with councils and land managers to review and implement surf safety signage.
Reduce drowning deaths in strengthening the aquatic industry	Continue to promote the 'Be Snorkelsafe' campaign.
	Integrate the Westpac Lifesaver Rescue Drone Program into beach patrols, expanding SLSQ's reach up and down the coast.
	Actively monitor high-risk and unpatrolled locations through coastal surveillance cameras and emergency response beacons.
	Roll out increased services and extended patrol hours during peak holiday periods.
Reduce alcohol- and drug-related drowning deaths	Work with key stakeholders to advocate for safe swimming practices.
	Build upon SLSQ's Water Safe Month and Inland Waterways Blackspot Program.
	Strengthen and develop working relationship with Royal Lifesaving.
Reduce drowning deaths in high-risk populations	Continue to leverage media coverage to promote safe swimming practices.
	Build upon dawn and dusk patrols at Surfers Paradise on the Gold Coast.
	Build upon existing digital strategy and collaboration in partnership with key agencies, including Queensland Health.
	Continue to engage with multicultural beachgoers via SLSQ's On The Same Wave program.
Reduce the impact of disaster and extreme weather on drowning deaths	Build upon SLSQ's dusk patrol service at Surfers Paradise on the Gold Coast.
	Continue to make use of SLSQ's Surf Speak booklet to engage with multicultural beachgoers.
	Seek to provide surf safety information to new Australian citizens.
	Continue to work with local Indigenous communities, including the Clontarf Academy Bronze Medallion course.
	Continue to build relationships with Local Disaster Management Groups across the state.
	Solidify SLSQ's seat on the State Disaster Management Group and other committees.
	Review and adjust SLSQ policies regarding the closure of beaches during natural disasters and emergency situations.
	Continue to roll out existing digital media strategy and crisis communications plan, including regular social media updates and key safety information during times of natural disaster.



Coastal and Aquatic Safety Snapshot

01

INTRODUCTION

Year in review

As the state's peak authority on coastal and aquatic safety, SLSQ remains committed to building upon services at all levels in a bid to increase protection and eliminate all drowning deaths. This sees SLSQ monitor, track, and analyse all coastal fatalities and drowning deaths across Queensland each year. This process helps SLSQ identify aquatic safety trends, and review the need for additional services and/or technology to support surf lifesavers and lifeguards.

On reflection, the past 12 months proved to be a busy and challenging period of time for SLSQ's surf lifesavers and lifeguards alike, with record crowds flocking to Queensland beaches. In addition to crowd management, patrols were also faced with swarms of marine stingers and periods of unpredictable surf, which combined to place a strain on services at various times of the year.

In the 12 months from 1 July 2018 to 30 June 2019, SLSQ's professional lifeguards and volunteer surf lifesavers combined to watch over more than 21.56 million beachgoers, up from 19.7 million the year before.

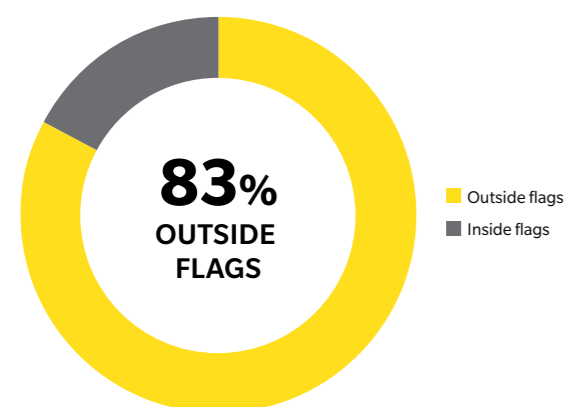
They also performed 716,215 preventative actions and treated 65,133 first aid patients. This reflects a 2% increase in preventative actions and an 85% spike in first aid treatments when compared to the corresponding period of time in 2017/18.

Most importantly, SLSQ patrols directly rescued 3,894 swimmers in distress, representing a 35% increase when compared to 2,865 rescues completed the previous year.

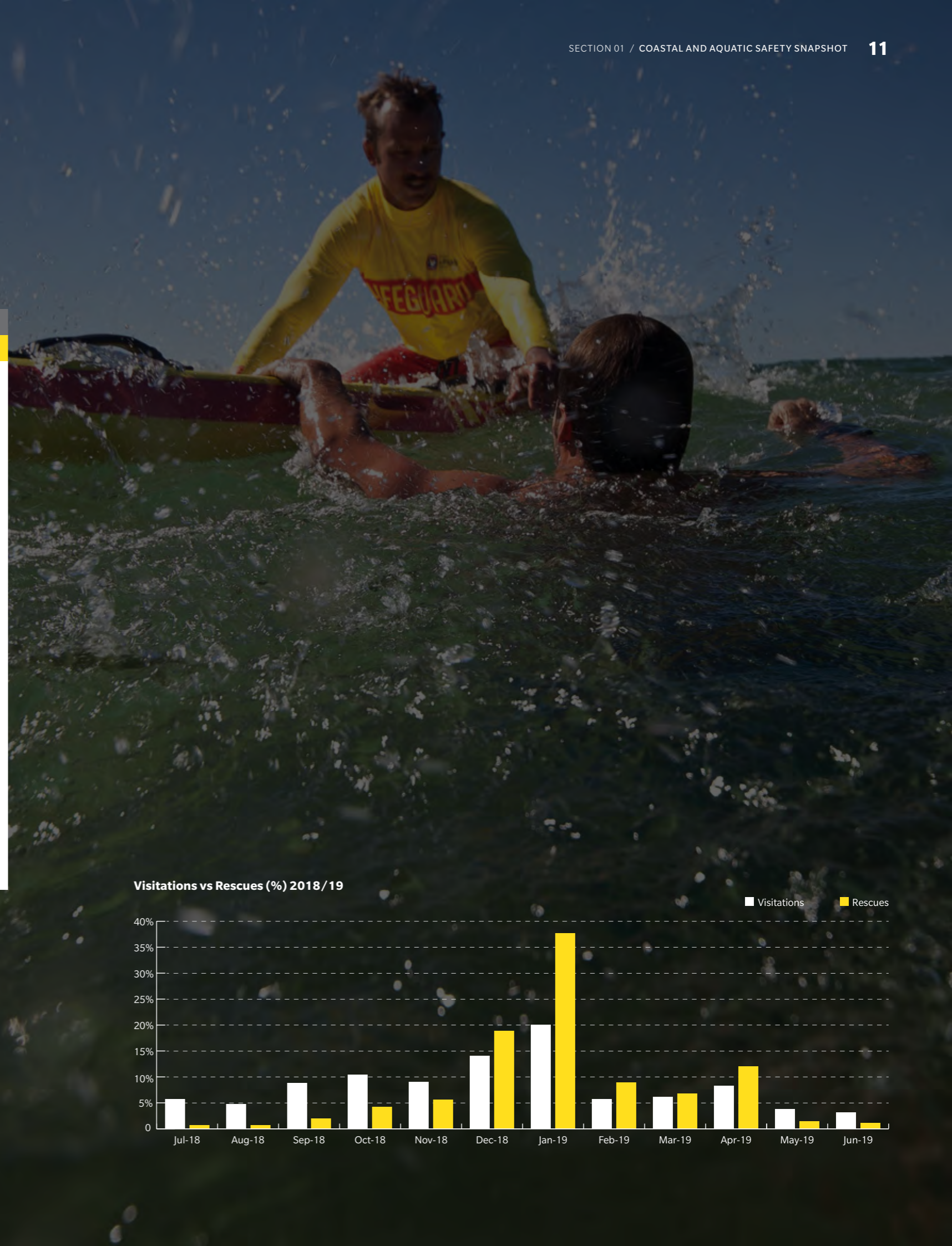
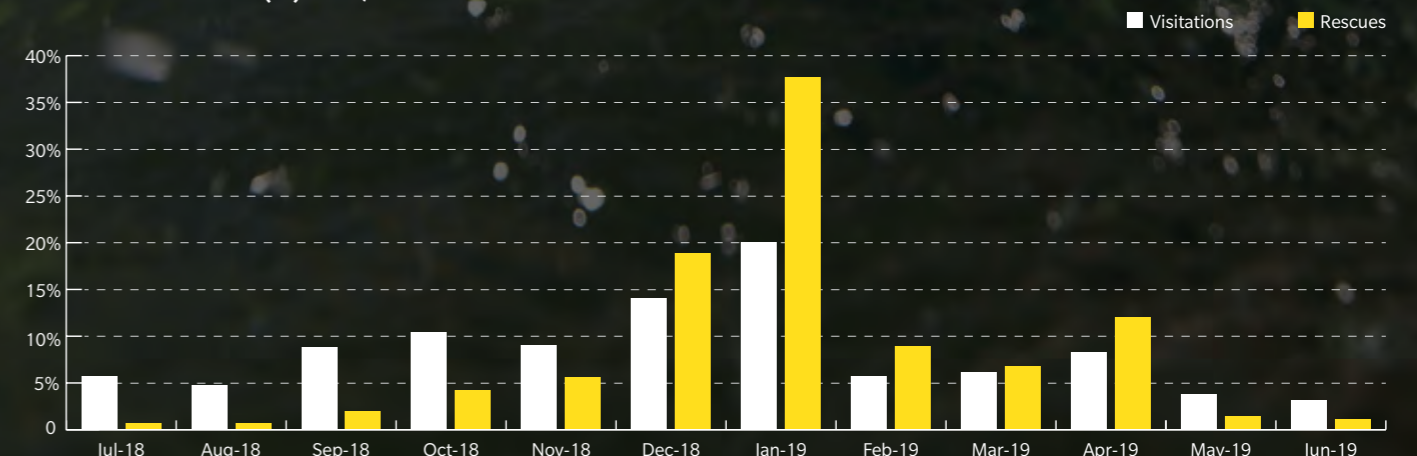
A breakdown of rescue data from across the past 12 months has been provided below.

- Alarmingly, approximately 83% of all rescues occurred outside of the red and yellow flags.
- Almost 58% of all patients rescued were male.
- At least 26% of those pulled from the water were international tourists or recent migrants, with the most common countries of origin being China (193 rescues), Japan (97 rescues), the United Kingdom (82 rescues), and India (81 rescues).
- Not surprisingly, the vast majority of rescues (65%) occurred during the summer months, compared to just 2.5% in winter.
- January was the most common individual month for rescues, with almost 1,500 swimmers assisted from the water.
- At least 1,526 rescues were attributed to rips, making it the leading cause, followed by tidal currents (1,518 rescues), and poor swimming ability (249 rescues).
- Approximately 47% of rescues were completed via jet ski. A further 30% were completed using a rescue board, with 11% completed using a rescue tube.

Location of rescues 2018/19



Visitations vs Rescues (%) 2018/19



BEACH-RELATED DROWNING DEATHS

12 month review

There were 21 drowning deaths recorded on Queensland beaches in 2018/19, representing a 200% increase when compared to seven the year before. Tragically, this makes it the worst year on record since SLSQ began tracking coastal and drowning data.

Historically speaking, young adults have been heavily represented within Queensland's drowning figures; however, this was not the case in 2018/19, with 57% of all victims aged over 50 years. Of these, seven victims were aged between 50-59 years, three were between 60-69 years, and two were aged between 70-79 years. A further four were aged between 40-49 years.

The average age of drowning deaths victims in 2018/19 was 50.4 years, up from 40.3 years in 2017/18.

All regions across Queensland recorded at least one drowning death. The most common regions were the Gold Coast and wider Sunshine Coast, with each recording six. This was followed by North Queensland (4), Wide Bay Capricorn (2), greater Brisbane (2) and North Barrier (1).

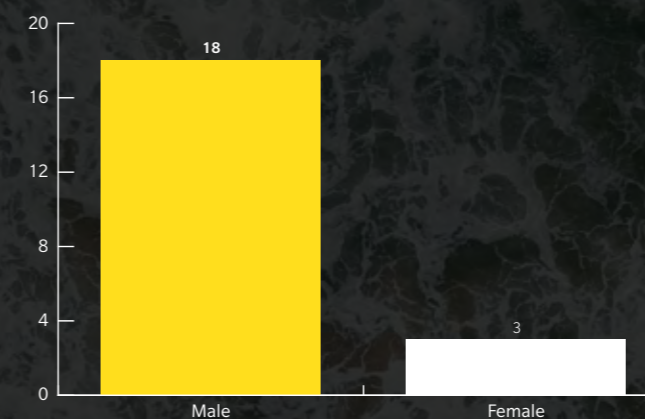
In terms of individual councils, there were six drowning deaths recorded at beaches located within the City of Gold Coast. Meanwhile, Cairns Regional Council (4), Noosa Shire Council (3), Sunshine Coast Council (3), and the Redland City Council (2) also had multiple beach-related drowning deaths occur within their respective boundaries.

The vast majority of drowning deaths occurred at unpatrolled beaches and/or outside of designated patrol times. This includes seven drowning deaths recorded at locations more than three kilometres away from the nearest lifesaving or lifeguard patrol. By comparison, 12 drowning deaths occurred less than 500 metres from the nearest service.

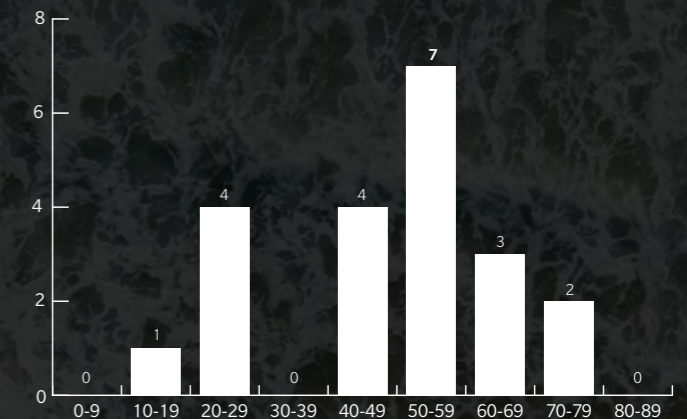
A further breakdown of data has been provided below.

- Males accounted for 18 of the 21 drowning deaths, reaffirming their position as a particularly 'high risk' demographic on Queensland beaches.
- People from culturally and linguistically diverse backgrounds were once again heavily represented within drowning data, with at least 10 victims identified as international visitors or recent migrants (48%).
- Nine drowning deaths were recorded across the summer months of December, January and February. A further seven were recorded in spring, followed by winter (4) and autumn (1).
- Interestingly, only four of the 21 drowning deaths occurred on the weekend. The most common day of the week was Wednesday (5), followed by Monday (4).
- Five victims were engaged in riding craft immediate prior to drowning. This includes, but is not limited to, surf boards, boogie boards, and stand-up paddle boards. A further three victims were snorkelling.
- Despite significant surf safety education and awareness, the data highlights that people are continuing to engage in risky behaviour along Queensland's coastline. At least seven drowning deaths occurred outside of traditional patrol hours, with six of these occurring before 8:00am.

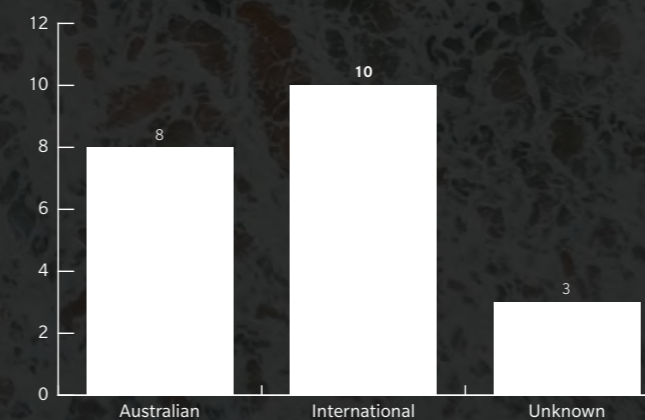
Gender 2018/19



Age 2018/19



Nationality 2018/19



Council 2018/19

Council	Drowning Deaths
Gold Coast City Council	6
Cairns Regional Council	4
Noosa Shire Council	3
Sunshine Coast Council	3
Redland City Council	2
Gladstone Regional Council	1
Great Barrier Reef Marine Park	1
Townsville City Council	1

For the purpose of this report, SLSQ defines a beach-related 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.

BEACH-RELATED DROWNING DEATHS

Ten year review

This part of the report draws on data recorded from 1 July 2009 through to 30 June 2019, and intends to provide a ten year snapshot of coastal drowning deaths during that period of time.

Since 1 July 2009 there have been 101 drowning deaths recorded on Queensland beaches. Of these, 58 occurred during the past five years, compared to 43 in the first half of the decade.

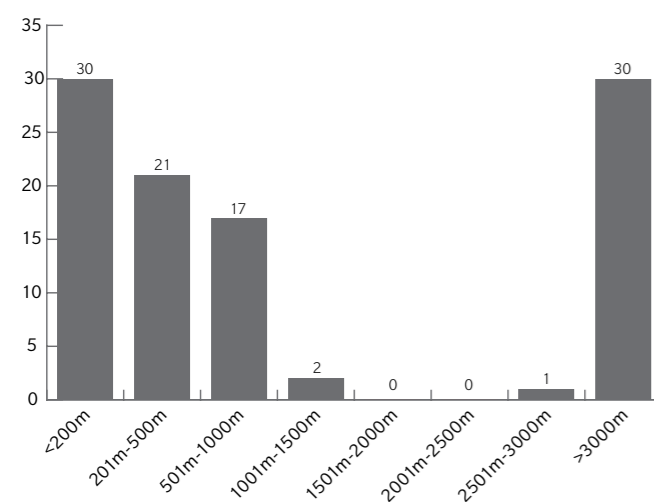
There were considerably more drowning deaths recorded in 2018/19 than any other individual year across the past decade.

A review of the ten-year data reinforces the notion that males are significantly more at risk of beach-related drowning deaths than females. In total, 83% of victims since 1 July 2009 were males. By comparison, females accounted for just 17% of victims.

The Gold Coast was the most common region for drowning deaths during this time, recording 33. This is followed by the wider Sunshine Coast region (32), North Queensland (17), Wide Bay Capricorn (11), greater Brisbane (5), and North Barrier (3).

In terms of individual beaches, the most common location for drowning deaths during this timeframe was Green Island in North Queensland (7). This is followed by Surfers Paradise (6), Southport Spit (4), Northcliffe (3) and Kirra Beach (3).

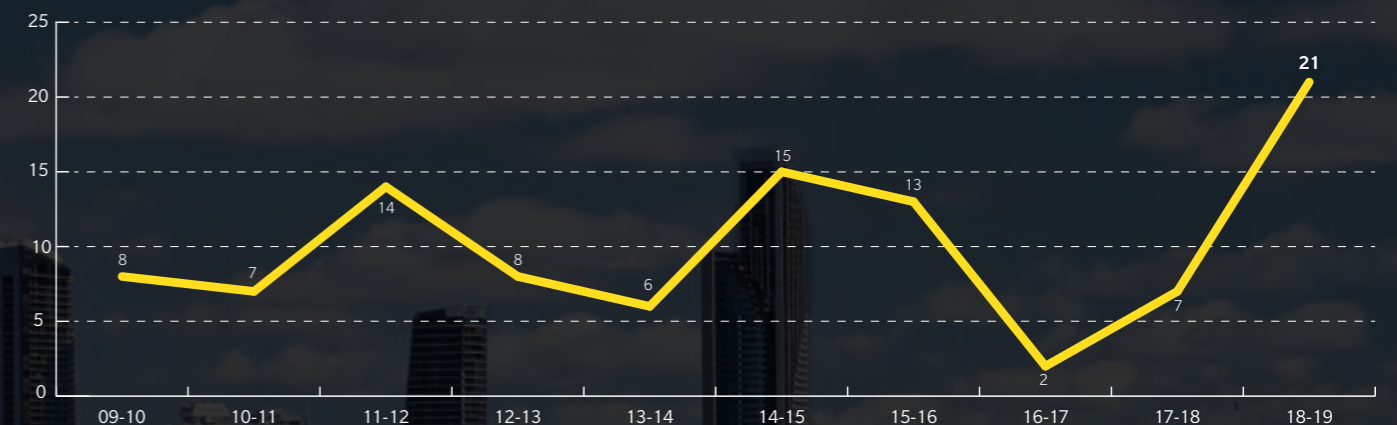
Distance from patrol 2009–19



A further breakdown of data has been provided below.

- At least 31% of all victims were international tourists or recent migrants. By comparison, 62% were Australian-born, while the nationality of six victims was unconfirmed at the time of print.
- Outside of Australian, the most common nationalities of victims were American (6), Chinese (5), Japanese (4), Korean (3), British (3), and New Zealand (3).
- Approximately 42% of victims were under 40 years of age. A further 35% were aged 40-60, while 23% were older than 60.
- Roughly one-third of all drowning deaths occurred during the peak summer season (32%). This is followed by autumn (30%), spring (25%) and winter (13%).
- There were 16 drowning deaths each recorded on Saturdays and Tuesdays, making them the most common days of the week. There were also 15 recorded each on Mondays, Thursday, and Sundays.
- In total, 31 drowning deaths occurred on a weekend.
- A total of 49 victims were actively swimming just prior to drowning. Meanwhile, 17 were engaged in riding craft (including surf boards, paddleboards and body boards) and a further 13 were snorkelling.
- Tragically, 30% of all drowning deaths occurred within 200 metres of a lifesaving or lifeguard service. A further 30% occurred more than three kilometres away from the nearest patrolled beach.
- Approximately 63% of all drowning deaths occurred within standard patrol times (8am-5pm). By comparison, almost 30% occurred after hours, while the exact time of seven drowning deaths remains unconfirmed.

Drowning deaths by year 2009–19



Councils 2009–19

Council	Drowning Deaths
Gold Coast City Council	33
Sunshine Coast Council	19
Cairns Regional Council	14
Noosa Shire Council	8
Gympie Regional Council	4
Redland City Council	4
Fraser Coast Regional Council	3
Gladstone Regional Council	3
Livingstone Shire Council	2
Moreton Bay Regional Council	2
Whitsunday Regional Council	2
Bundaberg Regional Council	1
Dept of National Parks	1
Great Barrier Reef Marine Park	1
Townsville City Council	1
Sarina Regional Council	1
Shire of Douglas	1
Shire of Torres	1

Locations 2009–19 (Top 5)

Location	Drowning Deaths
Cairns Green Island	7
Gold Coast Surfers Paradise	6
Southport Spit	4
Kirra Beach	3
Northcliffe	3

Image courtesy of Tourism and Events Queensland

INLAND DROWNING DEATHS

Five year review

This part of the report draws on data recorded from 1 July 2013 to 30 June 2018, and is intended to provide a five year snapshot of drowning deaths at inland public waters during that time.*

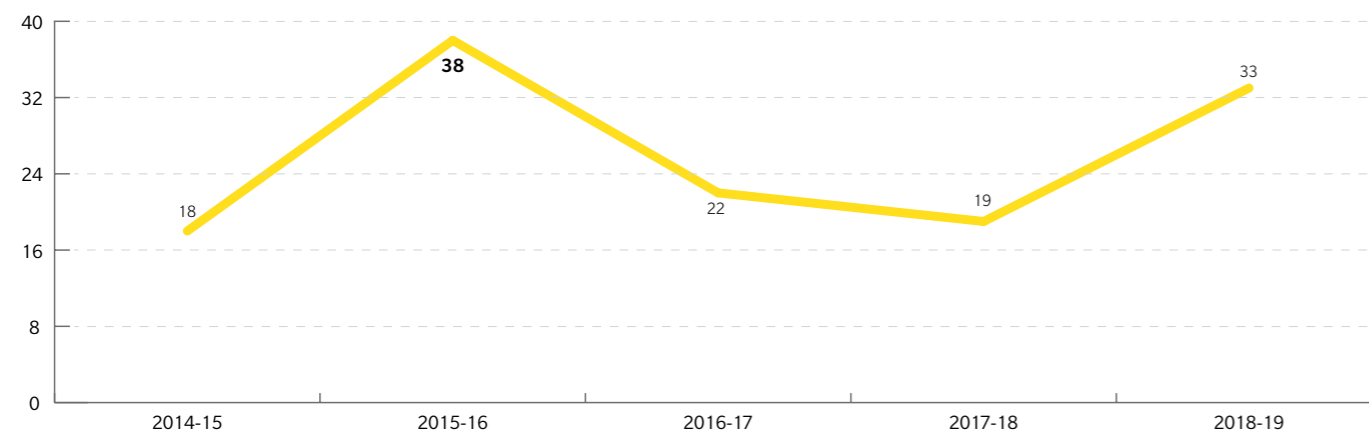
In the past five years there have been 130 drowning deaths at inland locations across Queensland, at an average of 26 per year. The highest annual total was recorded in 2015/16, with 38 drowning deaths. By comparison, there were 33 drowning deaths at inland locations last year.

Drowning deaths were recorded at a wide variety of inland environments over the past five years. The most common aquatic environments during this time were rivers (32%), creeks (18%), dams (8%) and waterfalls (8%).

In terms of locations, there were 23 inland drowning deaths recorded at waterways within the City of Gold Coast across the past five years. Brisbane City Council (15), Townsville City Council (11) and Cairns Regional Council (11) also recorded more than ten inland drowning deaths within their respective boundaries.

Much like beach-related drowning deaths, the vast majority of inland victims were male. In total, there were 106 male victims (82%), compared with just 24 females (18%).

Drowning deaths by year 2014–19

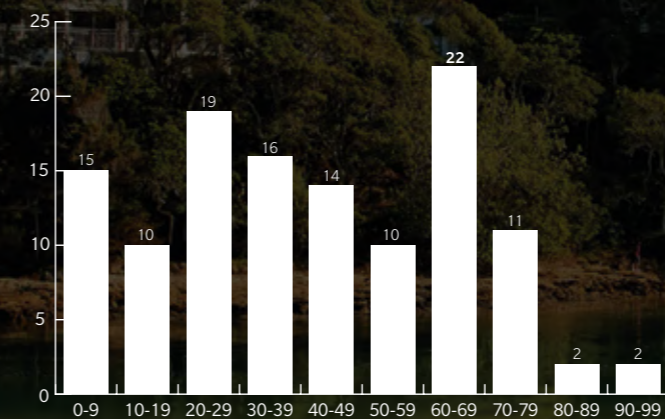


*It is important to note this data excludes drowning deaths at beaches and in public or private pools, but includes all other confirmed cases of drowning deaths which have occurred in Queensland waterways as determined by the Coroner's Office at the time of print.

A further breakdown of data has been provided below.

- At least 28 victims (22%) were identified as international tourists or recent migrants.
- In total, 46% of victims were aged under 40 while 47% were aged 40 or older. The victim's exact age was unconfirmed in nine cases.
- The most common months of the year for inland drowning deaths were December (22) and February (21). There have only been two inland drowning deaths recorded in the month of June over the past five years, making it the least common month.
- Roughly 42% of inland drowning deaths occurred during the summer season, followed by spring (24%), autumn (23%), and winter (11%).
- The most common days for inland drowning deaths were Saturday and Sunday, with each day recording 27.
- The type of activity the victim was engaged in prior to their death was also recorded, where known. In total, 23 people were swimming or wading, while 17 drowning deaths were boating-related.

Age 2014–19



Councils 2014–19 (Top 5)

Council	Drowning Deaths
Gold Coast City Council	23
Brisbane City Council	15
Cairns Regional Council	11
Townsville City Council	11
Moreton Bay Regional Council	6

Locations 2015–19 (Top 5)

Council	Drowning Deaths
Brisbane River Story Bridge (M7) – Centenary Highway (M5)	9
Ross River	4
Tully River	4
King John Creek	4
Tallebudgera Creek	4

Image courtesy of Tourism Queensland

MARINE CREATURES

Irukandji

There were at least six suspected Irukandji stings across North Queensland in 2018/19, representing a decrease from nine the year before. The earliest sting of the season was recorded at Four Mile Beach on 25 November 2018, with the most recent occurring at Norman Reef on 16 April 2019.

There were a further 17 beachgoers who developed Irukandji syndrome after receiving stings in the water off Fraser Island. This represents a significant increase when compared to just one suspected sting recorded on Fraser Island in 2017/18.

IRUKANDJI STINGS - 5 YEAR OVERVIEW*

Year	Stings
2014/15	11
2015/16	35
2016/17	10
2017/18	9
2018/19	6

*This data relates to stings recorded within SLSQ's North Queensland and North Barrier regions, spanning an area from Sarina through to Far North Queensland.

Crocodiles

There were no confirmed crocodile attacks recorded across Queensland in 2018/19. Four Mile Beach was closed four times across the year as a direct result of crocodile sightings, making it the most common location in Queensland. This was followed by Trinity Beach, Pallarenda, Forrest Beach, Yorkeys Knob, and Lamberts Beach, which each had two crocodile-related closures across the year.

The most recent confirmed crocodile-related fatality occurred at Craiglie Creek in 2017.

CROCODILE ATTACKS - 5 YEAR OVERVIEW

Year	Location	Fatal/Non-fatal
2015	Port Douglas Golf Club	Non-fatal
	Lizard Island	Non-fatal
2016	Thornton Beach	Fatal
2017	Johnston River Innisfail	Non-fatal
	Palmer Point Innisfail	Fatal
	Cape Tribulation Beach	Non-fatal
	Craiglie Creek, Craiglie	Fatal

Bluebottles

Swarms of bluebottles over the peak summer months led to a significant increase in the number of stings recorded this season. In total, 47,785 beachgoers were treated for bluebottle stings in 2018/19, representing a 176% increase when compared to 17,307 stings the year before.



Sharks

There were nine confirmed shark attacks recorded across Queensland in 2018/19, up from two the season before. This included one fatality, at Cid Harbour on 5 November 2018. Prior to this, the most recent shark-related fatality in Queensland waters had occurred in 2014 at Port Douglas.

Woorim Beach on Bribie Island was closed three times across the year due to shark sightings. This was followed by Moore Park, Oaks Beach, North Burleigh, Bulcock Beach, Coolum, Kawana Waters, with two shark-related closures each.

SHARK ATTACKS - 5 YEAR OVERVIEW

Year	Location	Fatal/Non-fatal
2015	Nerang River, Surfers Paradise	Non-fatal
	Burleigh Heads	Non-fatal
	Davies Reef, Off Townsville	Non-fatal
	Russell Island, Frankland Islands, GBR	Non-fatal
2016	Miall Island, Yeppoon	Non-fatal
	Heron Island	Non-fatal
	Caloundra	Non-fatal
	Whitehaven Beach, Whitsunday Island	Non-fatal
	Kings Beach, Sunshine Coast	Non-fatal
	Lockhart River	Non-fatal
2017	Northern Tip Of Cape York (Unknown Location)	Non-fatal
	Flaggy Rock	Non-fatal
	Murry Island, Torres Strait (80km east)	Non-fatal
	Hinchinbrook Island	Non-fatal
	North Qld Coast, Weipa	Non-fatal
	Moreton Bay Off Redcliffe	Non-fatal
	Hinchinbrook Island	Non-fatal
	Alma Bay	Non-fatal
2018	Lizard Island	Non-fatal
2019	Cid Harbour, Whitsunday Islands	Non-fatal
	Cid Harbour, Whitsunday Islands	Non-fatal
	Swains Reef, Yeppoon Coast	Non-fatal
	Cid Harbour, Whitsunday Islands	Fatal
	1km offshore, east of Moffat Beach	Non-fatal
	Block Reef, Whitsunday Islands	Non-fatal
	Catseye Beach	Non-fatal
	Catseye Beach	Non-fatal
	Yandaran, Bundaberg region	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.

Drowning Prevention Strategies

02

KEY INITIATIVES – 2018/19

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.

In 2017/18, SLSQ introduced the following initiatives in a bid to reduce drowning deaths at identified blackspot locations.

Blackspot location	Strategies
Sunshine Coast Peregian Beach to Tea Tree Bay	Mid-week jet ski patrols were implemented on weekends during the September, Christmas and Easter holiday periods. A fixed emergency response beacon at Alexandria Bay was upgraded to include new satellite phone technology, providing greater coverage and reliability.
North Queensland Green Island	SLSQ worked with tourism industry operators to increase supervision and protection of recreational snorkelers, and continued to advocate for mandatory and industry-wide use of lifejackets for all snorkelers. Multilingual surf safety messaging was developed for display on passenger ferries travelling to and from the island. Drone technology was trialled within lifeguard operations. Life-Fi technology was trialled to engage with international beachgoers.
Sunshine Coast Noosa River to Double Island Point	Roving jet ski patrols were implemented from Noosa on weekends during the September, Christmas and Easter school holidays. SLSQ worked with Queensland Parks and Wildlife Services to distribute surf safety information with all permits to the area. A mobile emergency response camera and beacon was trialled at Double Island Point during the Christmas and Easter holidays.
Gold Coast Surfers Paradise (Tower 33-35)	Dusk patrols were rolled out during peak holiday periods, with lifesavers stationed on-site until at least 10:30pm. Community educational programs were delivered to proactively engage with beachgoers. SLSQ built upon the success of its Harbour Town Surf Crew program and clinics at Surfers Paradise.
North Stradbroke Island Frenchmans Beach to South Gorge	New and upgraded signage was implemented at Point Lookout Headland and Main Beach areas. Public rescue equipment was installed at high-risk areas around Point Lookout Headland. Surf safety messaging and multilingual videos were developed for display on passenger ferries travelling to and from the island.

CASE STUDY: Surf Crew Program

In addition to its on-beach services, SLSQ continues to focus on increasing surf safety education and awareness in a bid to break the drowning cycle and save lives along Queensland's coastline.

In 2018 SLSQ launched the Harbour Town Surf Crew Car on the Gold Coast, providing lifesavers with an additional weapon up their sleeve to engage with, and educate, beachgoers.

As part of the initiative, lifesavers rove up and down the coast in a dedicated Surf Crew vehicle, stopping at high-usage beaches to deliver free, pop-up clinics about how to stay safe in the water.

In its first summer of operation, the program directly educated almost 35,000 beachgoers, proving so successful that it was expanded in 2019 to include a second vehicle for the Sunshine Coast region.

CASE STUDY: Emergency Response Beacons

Australian-first technology rolled out on Queensland beaches this season is continuing to significantly increase aquatic safety and boost SLSQ's capacity to manage and respond to major incidents.

Late last year SLSQ launched two mobile emergency response beacons and cameras, which were strategically placed at identified blackspots and high-risk beaches along the coast.

The cameras allow surf lifesavers and lifeguards to monitor key locations both remotely and around-the-clock, while the beacons can be activated by members of the public to alert SLSQ if a beachgoer is in danger and/or requires urgent assistance.

Importantly, the technology has already proven valuable when it comes to proactively patrolling beaches and responding to incidents.

In January 2019, SLSQ received an emergency call for help after one of the beacons was activated near the Maroochy River Mouth on the Sunshine Coast. A female patient had slipped and fallen over, suffering multiple compound fractures to her ankle in the process. She was in significant pain and distress, and was unable to move or be moved.

SLSQ's communications centre was able to locate and monitor the patient via its coastal camera, before using beacon's functionality to provide verbal assurance and instructions. A nearby lifeguard was immediately dispatched to assist, while SLSQ also worked closely with the Queensland Ambulance Service to provide detailed information about the patient's location and ongoing condition.



CASE STUDY: Drowning victims – an aging demographic

Historically speaking, younger males have long been overrepresented in Queensland's drowning figures, and have previously been identified by SLSQ as a particularly high-risk group.

However, this trend was reversed in 2018/19, with drowning figures reflecting a clear and significant shift towards an older demographic.

The average age of beach-related drowning victims jumped from 40.3 years in 2017/18 to 50.4 years this season. A further review of data shows that 76% of the 21 victims this season were over 40 years of age, while 57% were older than 50.

These figures could have been worse still, were it not for the quick actions and intervention of an SLSQ lifeguard at Coolum Beach one afternoon last summer.

Sunshine Coast local Colin Blumson, aged 79, was enjoying a swim in the surf when he suffered a medical episode, lost consciousness, and slipped under the water.

"All I remember is going for a swim and then waking up in an ambulance," he later recalled.

Luckily, he was swimming between the flags, providing SLSQ's lifeguard on duty with an opportunity to respond immediately and provide critical CPR treatment. Colin survived and was transported to hospital in a stable condition; however, this story would have certainly ended different had he been swimming at an unpatrolled location.



KEY INITIATIVES – 2019/20

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

- A scattered map of drowning locations, with minimal discernible trends and 21 drowning deaths spread across 17 individual beaches;
- A strong shift towards older demographics amongst beach-related drowning death victims in 2018/19, with 57% aged above 50;
- Continued overrepresentation of international tourists, migrants, and refugees within Queensland's drowning figures, with almost half of all victims this season born overseas; and
- High numbers of beachgoers being rescued or assisted outside of the red and yellow flags.

In 2019/20, SLSQ will seek to introduce the following initiatives to help reduce drowning deaths on Queensland beaches.

Objective	Strategies
Reduce beach-related drowning deaths amongst males aged 50+	Develop and deliver a statewide campaign to directly engage with older males and encourage them to put safety first at all times while in and around the water.
	Work closely with key stakeholders, industry groups, and relevant health organisations to encourage regular medical check-ups amongst beachgoers aged 50 and over.
	Increase surf safety awareness and educational efforts, with a particular focus on targeting older demographics.
	Upskill beachgoers via the delivery of free surf safety clinics featuring first aid and CPR skills.
Reduce beach-related drowning deaths amongst international tourists and migrants	Continue to roll-out key initiatives including dawn and dusk patrols at key beaches, extended patrol services during peak periods, roving patrols, and SLSQ's after-hours emergency response groups.
	Formalise and implement an International Water Skills Assessment within Queensland state schools, equipping students from culturally and linguistically diverse backgrounds with the skillset and knowledge to protect themselves within aquatic environments.
	Work with key stakeholders to develop and disseminate multilingual beach safety information.
	Work with relevant multicultural groups and associations to directly target international tourists, migrants, and refugees.
	Partner with tourism bodies, accommodation providers, and travel networks to reach international groups more effectively.
	Roll-out increased surf safety pop-up clinics, with a particular focus on targeting international tourists.
Increase general beach safety and awareness, and encourage swimming between the flags, with a particular focus on younger age groups	Continue to deliver key safety messaging to beachgoers via SLSQ's On The Same Wave program.
	Continue to roll-out key initiatives including dawn and dusk patrols at key beaches, extended patrol services during peak periods, roving patrols, and SLSQ's after-hours emergency response groups.
	Develop and deliver key programs to increase surf safety awareness within high schools and universities.
	Increase advertising, media, and other targeted promotional activities encouraging safe behaviour and swimming between the flags.
	Maximise existing infrastructure and facilities (including lifeguard huts and flag stands) to communicate key safety information.
	Continue to build upon key community awareness initiatives including, but not limited to, the Surf Crew, Beach Safe Schools, and Inland Waterways Programs.
	Continue to roll-out key initiatives including dawn and dusk patrols at key beaches, extended patrol services during peak periods, roving patrols, and SLSQ's after-hours emergency response groups.

Challenges and Opportunities

03



CHALLENGES AND OPPORTUNITIES

Heading into 2019/20 and beyond, 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:

Each year millions of people flock to Queensland beaches and entrust the 'red and yellow army' of surf lifesavers and lifeguards to keep them safe in and around the water. In addition, there are countless others who enter the surf at unpatrolled locations, or who opt to swim instead at lakes, rivers, dams or creeks with no lifesaving service present.

The challenge for SLSQ is to develop and implement proactive strategies to protect and educate swimmers while, at the same time, working around a variety of challenges including budget and funding constraints, limited resourcing, and increased crowds on Queensland beaches.

SLSQ has identified the following challenges when it comes to eliminating drowning deaths in public waters across Queensland:

- Increased costs of patrolling Queensland beaches;
- Overconfidence and/or complacency amongst many Australians when it comes to surf safety, resulting in a high number of drowning deaths and rescues recorded at unpatrolled beaches and/or outside of designated patrol hours;
- An increased rate of low to poor swimming ability amongst school students aged five to 17 years old, with a significant number of rescues performed across this age group on Queensland beaches;
- A significant increase in the number of international migrants permanently relocating to Queensland, many of whom have limited experience in and around the ocean and other waterways;
- High visitation rates amongst Asian and other international tourists, many of whom have limited swimming ability and/or surf safety awareness;
- An increase in the number of rescues occurring outside of the flags, placing a strain on SLSQ's existing resources at patrolled beaches;
- A number of councils across Queensland opting not to endorse standard recommendations regarding safety signage, emergency beacons, cameras, and drone operations;
- An inconsistent approach to aquatic safety amongst some tourism operators; and
- A limited pool of allocated funding to effectively advocate and manage drowning prevention strategies in Queensland.

Opportunities:

As the state's peak authority on coastal and aquatic safety, SLSQ continues to seek out innovative strategies and solutions to reduce drowning deaths on beaches and within public waterways.

From expanded services and trialling new technology, through to community education programs, SLSQ remains more committed than ever when it comes to breaking the drowning cycle and saving lives across Queensland. With that in mind, SLSQ has identified the following opportunities to help protect residents and tourists alike:

- Work directly with key stakeholders to develop and implement mandatory school-based programs, designed to help improve the swimming ability of Queensland residents;
- Continue to work closely with land managers to increase the use of appropriate and consistent aquatic safety signage at high-risk locations across Queensland;
- Build on SLSQ's century of experience saving lives along Queensland's coastline, and transfer this expertise to protecting swimmers at inland aquatic locations across the state;
- Further develop SLSQ's suite of educational programs, designed to improve public knowledge and understanding of coastal and aquatic dangers;
- Build upon SLSQ's 24/7 emergency response capacity in all key locations across the state;
- Increase communication, collaboration, and integration with key health agencies across Queensland in a bid to improve the accuracy of marine stinger and coastal safety data;
- Seek additional Government funding and support to ensure that SLSQ has the capacity and resources to continue saving lives and eliminating drowning deaths at all public waters in Queensland;
- Work closely with key stakeholders to promote safety swimming behaviours amongst identified high-risk groups of demographics;
- Expand SLSQ's reach at unpatrolled and high-risk beaches through the use of drones, coastal cameras, and emergency beacons; and
- Build closer relationships with tourism industry bodies, operators, and airlines to develop consistent and widespread surf safety messaging for international and domestic travellers arriving in Queensland.

METHODOLOGY, RESEARCH AND ACKNOWLEDGEMENTS

Methodology

Contained within the Coast Safe Report 2019 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 for the period 1 July 2018 to 30 June 2019.

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.

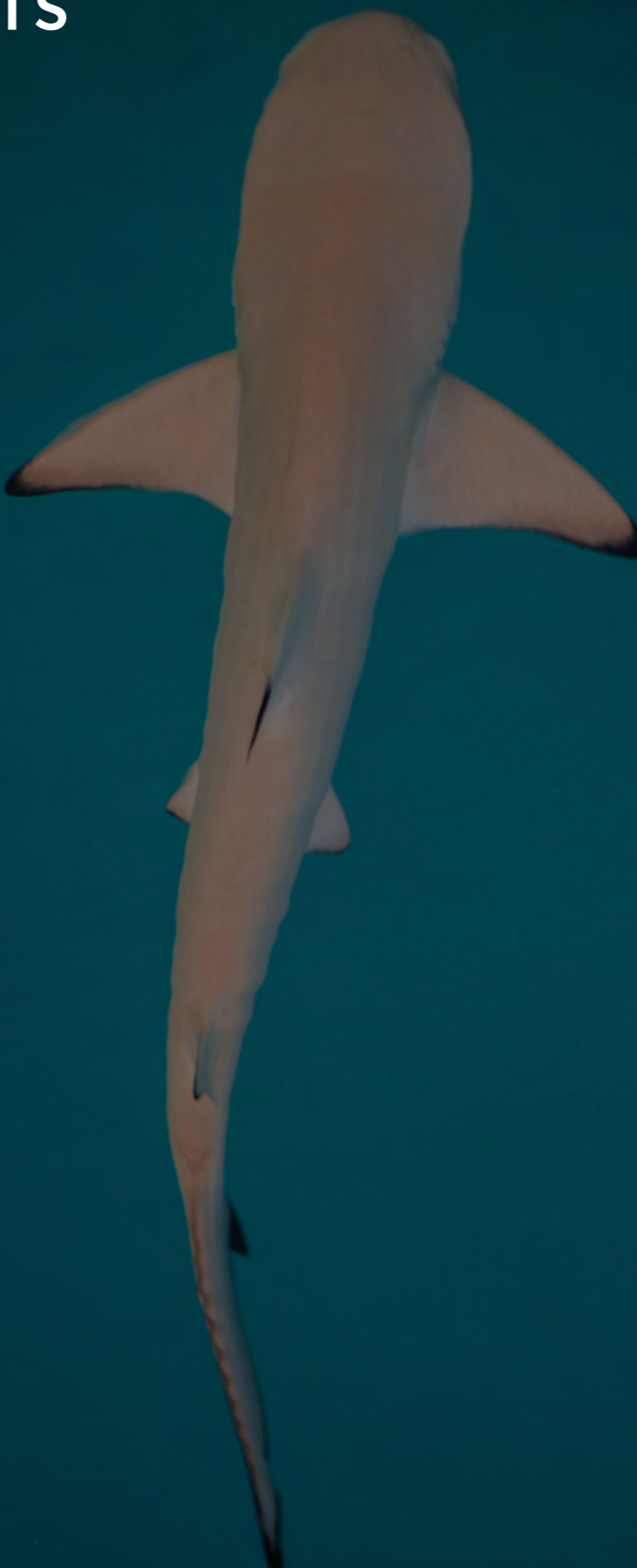
Capability and rescue analysis

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 during the 2018/19 patrol season.

Drowning data analysis

SLSQ collects data and information on key coastal incidents and fatalities from LIMSOC IRDs, SurfCom, SLSA, the NCIS, and 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 beach-related 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;
- The Department of Agriculture and Fisheries for assistance with the collation and analysis of data pertaining to sharks in Queensland waters;
- The Department of Environment and Science and Queensland Parks and Wildlife for assistance with the collation and analysis of data pertaining to crocodiles in Queensland;
- Jamie Seymour and James Cook University for expert advice and guidance regarding Irukandji and other marine stingers;
- Charlie Manolis, Wildlife Management International, for assistance with the collation and analysis of data pertaining to crocodiles in Queensland;
- National Coronial Information System, managed by the Department of Justice and Community Safety; and
- Queensland Coroner's Office.

Funding support

SLSQ 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.

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 and life saving clubs, lifeguards, SurfCom, 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 states due to climatic factors, but in the context of this report, the season is for the period July 2018 to June 2019.

SLSA - Surf Life Saving Australia.

SLSQ - Surf Life Saving Queensland.

SOCC - State Operations and Communications Centre.

Surf Life Saving Club (SLS) - 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.



QUEENSLAND

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