NSW COASTAL SAFETY REPORT

2023

SURF LIFE SAVING
NEW SOUTH WALES

COASTAL DROWNING SNAPSHOT

NEW SOUTH WALES 2022/23

48 COASTAL DROWNING DEATHS

**Arrow indicates change from 10-year average*

83% MALE

LOCATION

65% BEACH

23% ROCK/CLIFF

42% LOCAL RESIDENTS

56% >1KM FROM SLS SERVICE

ACTIVITY

40% SWIMMING/WADING

19% ATTEMPTING A RESCUE

13% ROCK FISHING

10% FALL

CONTENTS

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Ask me how
to stay safe
at the beach

INTRODUCTION

On behalf of Surf Life Saving NSW, it is a pleasure to present the SLSNSW Coastal Safety Report 2023.

After consecutive years of cooler weather and heavy rainfall associated with La Niña, 2022/23 saw a return to drier conditions in New South Wales, and subsequently, an increase in coastal visitation compared to the previous year. The full relaxation of COVID-19 restrictions enabled a return to pre-pandemic operations for Surf Life Saving Clubs and Surf Life Saving Branches.

The highest standard of surf life saving and lifeguard services continued to be delivered throughout the state. More than 13 million visitations were recorded on patrolled beaches in New South Wales from 1 July 2022 to 30 June 2023. Surf lifesavers and lifeguards rescued 4,787 people, treated 9,853 people for injuries or medical complaints, and performed 861,882 preventative actions.

Tragically, over 2022/23, 48 coastal drowning deaths were recorded on the New South Wales coastline. Although this is lower than the previous year's total of 52 coastal drowning deaths, this is 12% above the 10-year average of 43. An equal proportion of coastal drowning deaths occurred in metropolitan and regional areas. Sixty-five percent of the coastal drowning deaths occurred on beaches, and rip currents were a causal factor in 27% of incidents. The majority (56%) occurred more than one kilometre from the nearest surf life saving service and/or lifeguard service. Forty percent of coastal drownings involved people who were swimming when they got into difficulty, 13% were fishing from shore platforms, while, concerningly, 19% were bystanders attempting to rescue another person in difficulty. Eighty-three percent of the coastal drowning deaths involved males, with the majority aged over 40 years.

To help reduce the risk of drowning, Surf Life Saving NSW continue to deliver and expand a range of programs and initiatives to educate our communities and support our operations. Following the high number of coastal drowning deaths involving rock fishers in recent years, Surf Life Saving NSW received a grant from the Recreational Fishing Trust for the delivery of a multifaceted, collaborative, and comprehensive rock fishing safety project. This involved the provision of lifejackets, rock fishing safety workshops, multilingual rock fishing safety resources, and newly developed media targeting at-risk communities.

We also continue to invest in innovative technologies to help keep our communities safe. Twelve Emergency Response Beacons (ERBs) were installed in 2022/23, in addition to the 20 ERBs already in operation. These are installed in high-risk locations and, when activated, can significantly reduce the time between an incident and an appropriate water-based response.

The Australian Uncrewed Aerial Vehicle Service (AUAVS) has also expanded its operations. There are now more than 300 UAVs in use by surf life saving services, lifeguard services, and support operations, with extensive training, software support, and maintenance provided by our dedicated UAV team. In addition, a successful Long Range UAV Trial took place at Evans Head in June 2023. We evaluated multiple Beyond Visual Line of Sight (BVLOS) capable platforms, with extensive range and endurance, to examine their effectiveness for multi-use operations in public safety and emergency response.

The statistics in this report show that many people continue to enjoy a multitude of recreational activities along our beautiful coastline, but every life lost is one too many. We believe that this edition of the SLSNSW Coastal Safety Report will prove to be a valuable resource for our members, government, water safety organisations, emergency services, researchers, partners, sponsors, community groups, and media. It aims to inform them of the recent trends in fatal incidents in NSW, and the safety interventions and other preventative measures being undertaken by Surf Life Saving NSW.

I commend this report to you as a vital tool to help us all understand and reduce the risk of drowning along the NSW coastline.

Joel Wiseman
Director of Lifesaving

COMMUNITY

5.5 MILLION
VISITED THE COAST IN 2022/23

200 MILLION +
COASTAL VISITATIONS

1.6 MILLION
UNINTENTIONALLY CAUGHT IN A RIP CURRENT


RESCUE

COASTAL VISITATION & PARTICIPATION

NEW SOUTH WALES TRENDS

5.5M
COASTAL VISITORS

3.6
VISITS/MONTH

2.6
HOURS/VISIT

4.6M
COASTAL ACTIVITY PARTICIPANTS

Figure 1

NCSS2023: COASTAL VISITATION & PARTICIPATION SUMMARY

Australians love the coast. To better understand how the coast is used, the annual National Coastal Safety Survey (NCSS) explores coastal participation, behaviours, and perceptions. In the last twelve months, 5.5 million New South Wales adults (16 years and above) visited the coast on average 3.6 times each month. This suggests that there were over 200 million individual visitations to the coast.

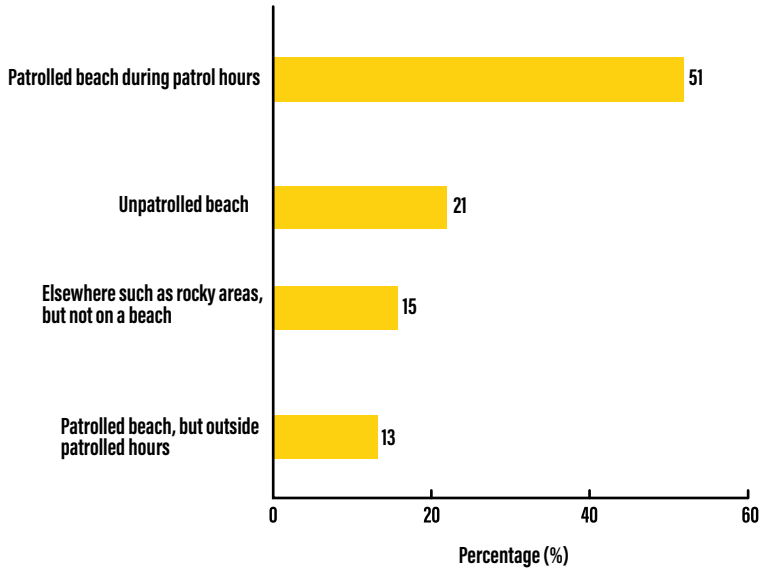


Figure 2

NCSS2023: COASTAL VISITATION BY GENDER & LOCATION OF LAST 10 VISITS

Males and females visited the coast in equal numbers, however, males visited more frequently with an average of 4.1 visits per month compared to 3.2 visits per month for females. 51% of visits were to patrolled locations during patrolled hours, while the remaining 49% were either to patrolled locations outside of patrol hours or to unpatrolled locations.

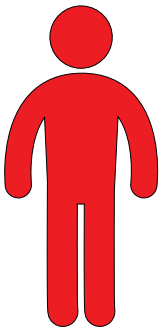
2.8M
COASTAL VISITORS

1.5M
FREQUENT VISITORS

4.1
VISITS PER MONTH

2.7
HOURS PER VISIT

2.5M
COASTAL ACTIVITY PARTICIPANTS



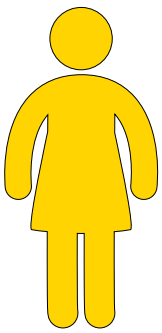
2.7M
COASTAL VISITORS

1.3M
FREQUENT VISITORS

3.2
VISITS PER MONTH

2.6
HOURS PER VISIT

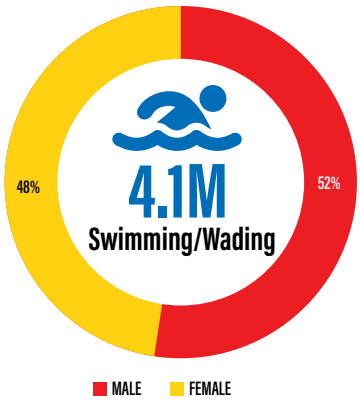
2.1M
COASTAL ACTIVITY PARTICIPANTS

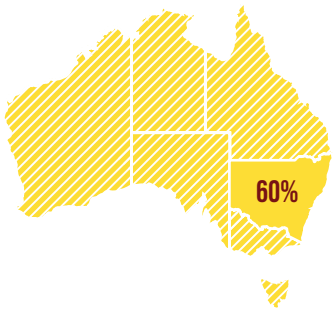


ACTIVITY PARTICIPATION

PARTICIPATION BY GENDER & EXPERIENCE

Coastal participation varies by activity, gender and experience level. These pages show the proportion of male and female participants, the number of annual and summer participants, the experience level of activity participants, and the percentage of the New South Wales population who participate in each activity.



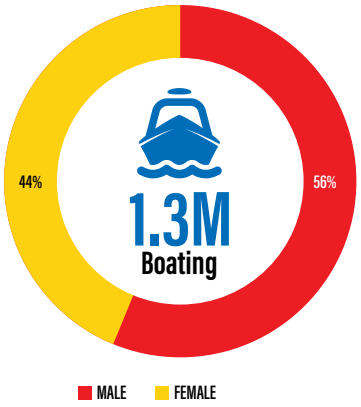


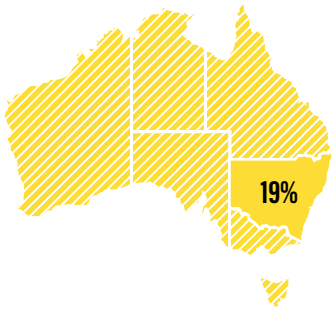
3.5M
Swam in summer 2022/23

51%
Don't always look for rip currents prior to entering the water

13%
Beginners

24%
Advanced



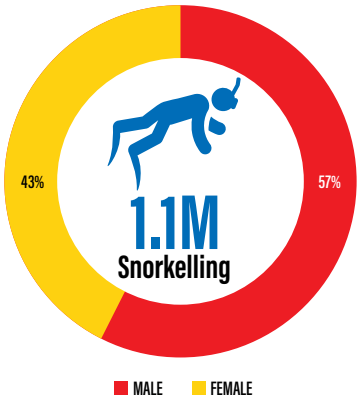


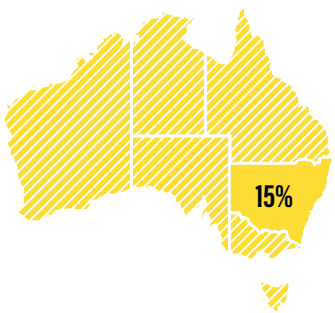
700K
Went boating in summer 2022/23

78%
Always check weather conditions

35%
Beginners

16%
Advanced



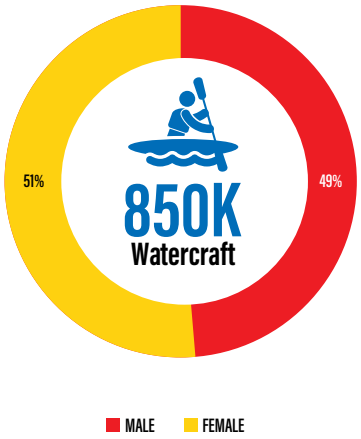


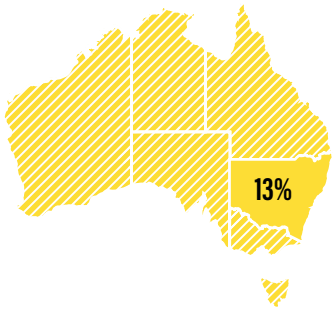
600K
Snorkelled in summer 2022/23

78%
Always snorkel in conditions appropriate for their skill level

25%
Beginners

20%
Advanced



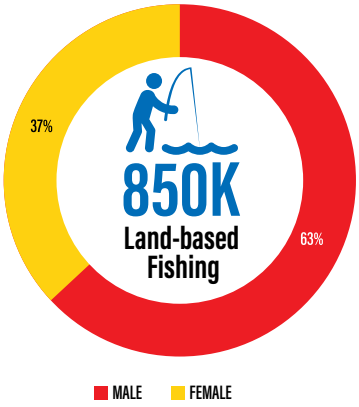


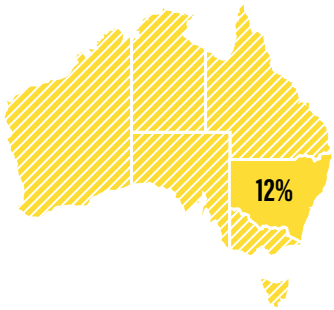
500K
Paddled in summer 2022/23

51%
Don't always go with a buddy

26%
Beginners

12%
Advanced



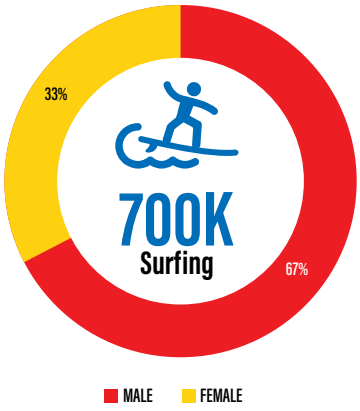


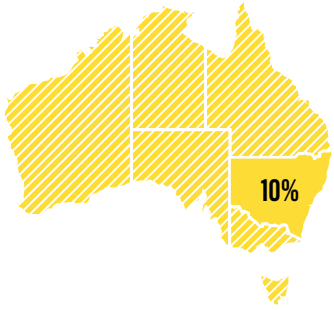
600K
Went land-based fishing in summer 2022/23

35%
Never carry necessary safety equipment

24%
Beginners

26%
Advanced



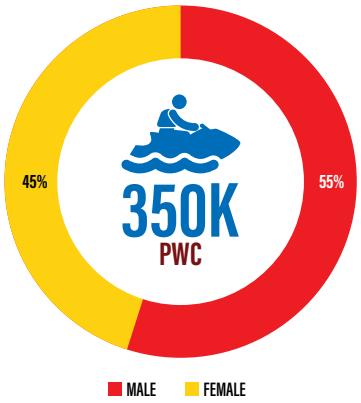


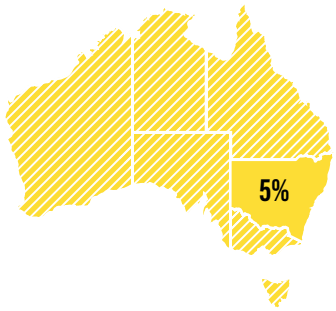
400K
Surfed in summer 2022/23

43%
Don't always use appropriate safety equipment (i.e., leg rope)

27%
Beginners

19%
Advanced



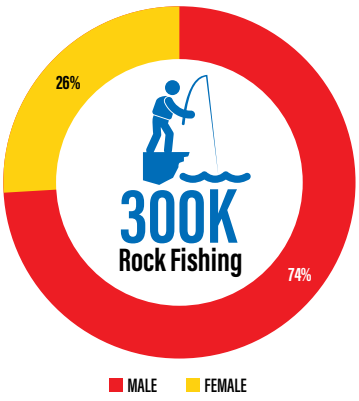


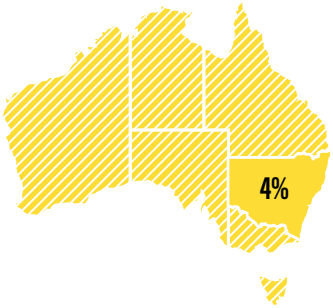
200K
Used a PWC in summer 2022/23

24%
Don't always avoid alcohol/drugs while operating a PWC

33%
Beginners

16%
Advanced



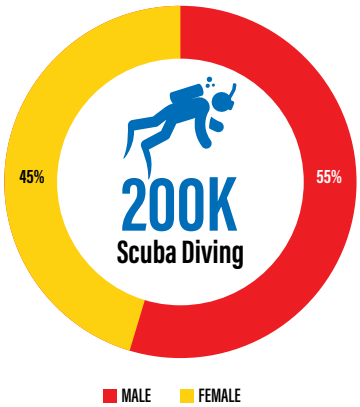


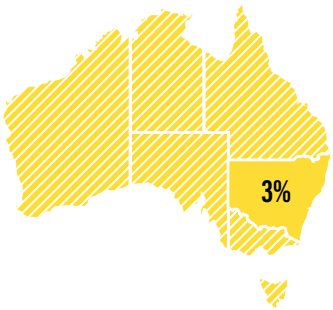
200K
Went rock fishing in summer 2022/23

25%
Never wear a lifejacket

24%
Beginners

25%
Advanced





100K
Went scuba diving in summer 2022/23

81%
Have a dive and emergency plan

27%
Beginners

40%
Advanced

SWIMMING ABILITY & RIP CURRENTS

CONFIDENCE & ABILITY IN COASTAL WATERS

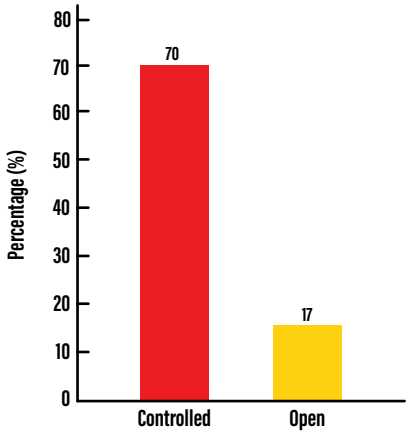


Figure 3

NCSS2023: SWIMMING LESSONS IN CLOSED VS. OPEN ENVIRONMENTS

Many more adults have participated in swimming lessons delivered in controlled environments such as a swimming pool (70%), compared to lessons held in open, uncontrolled environments such as in the ocean, lakes or rivers (17%).

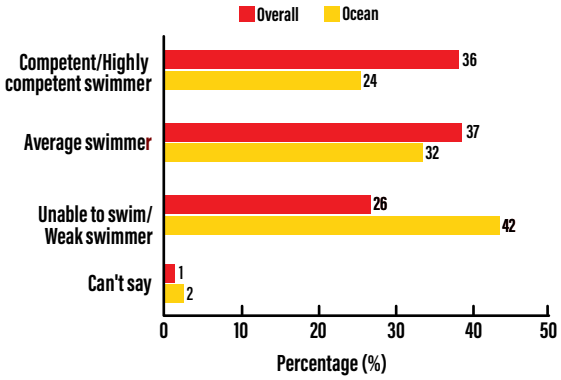


Figure 4

NCSS2023: SELF-RATED OVERALL VS. OCEAN SWIMMING ABILITY

One in three adults (36%) consider themselves to be competent/highly competent swimmers. However, perceived competence is lower in open water environments, with only one in four (24%) considering themselves to be competent/ highly competent in the ocean.

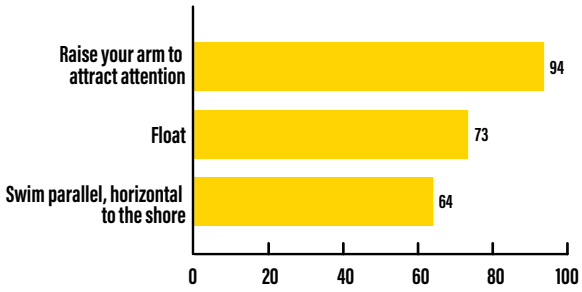


Figure 5

NCSS2023: RECOGNISED STRATEGIES TO ESCAPE A RIP CURRENT

Near all adults (94%) correctly identify raising their arm to attract attention as a valid strategy to escape a rip current, while 73% correctly state to float and 64% to swim parallel to the shore.

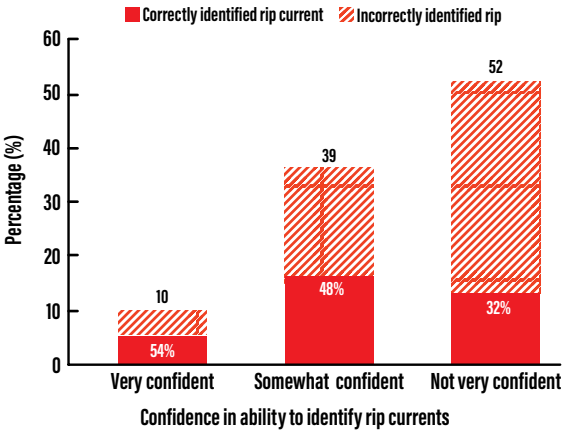


Figure 6

NCSS2023: CONFIDENCE IN ABILITY TO IDENTIFY RIP CURRENTS BY CORRECT IDENTIFICATION

One in ten adults (10%) state they are very confident they can spot a rip current, however, when tested, only 54% of those were able to correctly do so.

COASTAL SAFETY

HAZARDS & SAFE BEHAVIOURS

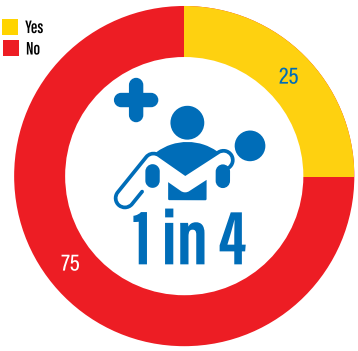


Figure 7

NCSS2023: HAVE YOU EVER EXPERIENCED ANY DIFFICULTY IN THE WATER?

One in four adults have experienced difficulty in the water (25%).

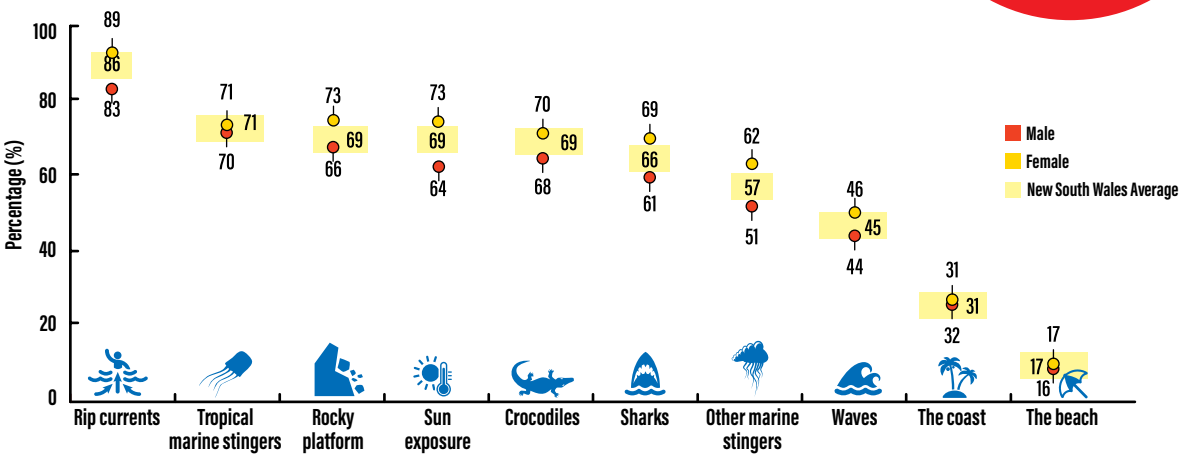


Figure 8

NCSS2023: COASTAL HAZARDS RATED EXTREMELY/VERY HAZARDOUS

Male perception of coastal hazards is consistently lower than that of females. Rip currents remain the number one coastal hazard, with 86% of adults rating them as extremely/very hazardous, followed by tropical marine stingers (71%), then equally by rocky platforms, sun exposure, and crocodiles (69%).

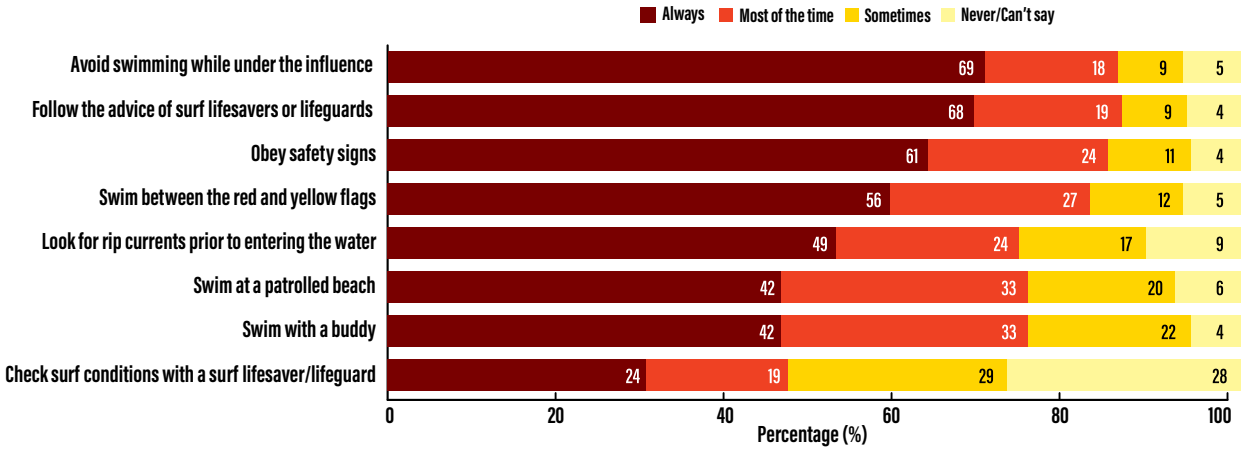


Figure 9

NCSS2021-23: SAFETY PRACTICES

Safety practices while swimming vary. While 69% always avoid swimming while under the influence and 68% always follow the advice of surf lifesavers or lifeguards, 57% only sometimes or never check surf conditions with a surf lifesaver/lifeguard.

SECTION 2

CAPABILITY

4,787
RESCUES

20,417
PROFICIENT MEMBERS

659,131
VOLUNTEER PATROL HOURS

129
SLS CLUBS

89
ALS

2
HELICOPTER SERVICES


SURF RESCUE
DHL

CAPABILITY

Surf Life Saving NSW enables communities and visitors throughout the state to enjoy our coastline by helping to manage their safety. This is achieved through the contribution of Surf Life Saving Clubs and Support Operations and the provision of services through the Australian Lifeguard Service.

SURF LIFE SAVING CLUBS

Surf lifesavers from 129 Surf Life Saving Clubs (across 11 Surf Life Saving Branches) manage the safety of members of the public at patrolled beaches from Fingal Head to Pambula Beach. Between Saturday 24 September 2022 and Tuesday 25 April 2023, 18,652 surf lifesavers amassed 659,131 volunteer patrol hours on weekends and public holidays.

Surf lifesavers actively prevented members of the public getting into difficulty in and around the red and yellow flags through preventative actions (178,528), while also rescuing 3,505 people who got into difficulty. They treated 5,953 people for injuries or medical complaints.

Rescue boards and rescue tubes continued to prove to be highly effective rescue equipment, particularly where incidents occurred close to shore and/or in and around the red and yellow flags. All-terrain vehicles (ATVs) and inflatable rescue boats (IRBs) were used to provide roving surveillance alongshore and assist in the response to incidents further away from patrolled areas as well as difficult rescues, ie., incidents involving multiple patients.

AUSTRALIAN LIFEGUARD SERVICE

The Australian Lifeguard Service manages the safety of beachgoers in and around the red and yellow flags at 89 beaches on behalf of 14 Local Government Areas, NSW National Parks and Wildlife Service and one resort.

Over the 2022/23 season, the Australian Lifeguard Service provided over 114,000 patrol hours, which ranged from long-term services provided throughout the year at some sites, to concentrated services provided only over the summer school holidays at other sites. These lifeguards performed 683,152 preventative actions, rescued 1,021 people, and treated 3,809 people for injuries or medical complaints.

SUPPORT OPERATIONS

Surf Life Saving NSW provides services beyond the red and yellow flags and responds to requests for assistance to help manage the safety of the wider community.

RESCUE WATERCRAFT

Rescue watercraft (RWC) operate within and beyond the surf zone and provide surveillance along the shoreline at both patrolled and unpatrolled beaches. These assets provide critical support to surf lifesavers and lifeguards and can respond effectively to time-critical incidents outside the red and yellow flags.

AUSTRALIAN UAV SERVICE AND WESTPAC LIFE SAVER RESCUE HELICOPTERS

Over the 2022/23 season, the Australian UAV Service (AUAVS) operated Uncrewed Aerial Vehicles (UAVs) at 50 beaches as part of the NSW Department of Primary Industries Shark Management Strategy. This program was implemented to help reduce the interaction between people and sharks, and the UAVs were also used to help identify rip currents and water users at risk of getting into difficulty. In addition, 30 mobile UAVs were provided in emergency response vehicles operated by volunteer Duty Officers to assist with search and rescue operations.

The Westpac Life Saver Rescue Helicopters (Southern) also provided surveillance and response to water-based incidents in NSW. The rescue helicopters operate out of Sydney and the South Coast. The personnel operating the rescue helicopters were involved in 202 preventative actions, 261 rescues, and 91 first aid incidents over the 2022/23 season.

SURF EMERGENCY RESPONSE SYSTEM

The Surf Emergency Response System, which is managed by the State Operations Centre, is a framework for the notification and tasking of surf lifesavers and lifeguards to water-based incidents. The system aims to reduce coastal drowning deaths by increasing the efficiency and effectiveness of the response, and helps ensure that there is clear communication and effective coordination between surf lifesavers, lifeguards and other emergency services. The Surf Emergency Response System is operated by a team of State Duty Officers.

SURF LIFE SAVING SERVICES

129

SURF LIFE SAVING CLUBS

89

ALS PATROLLED BEACHES

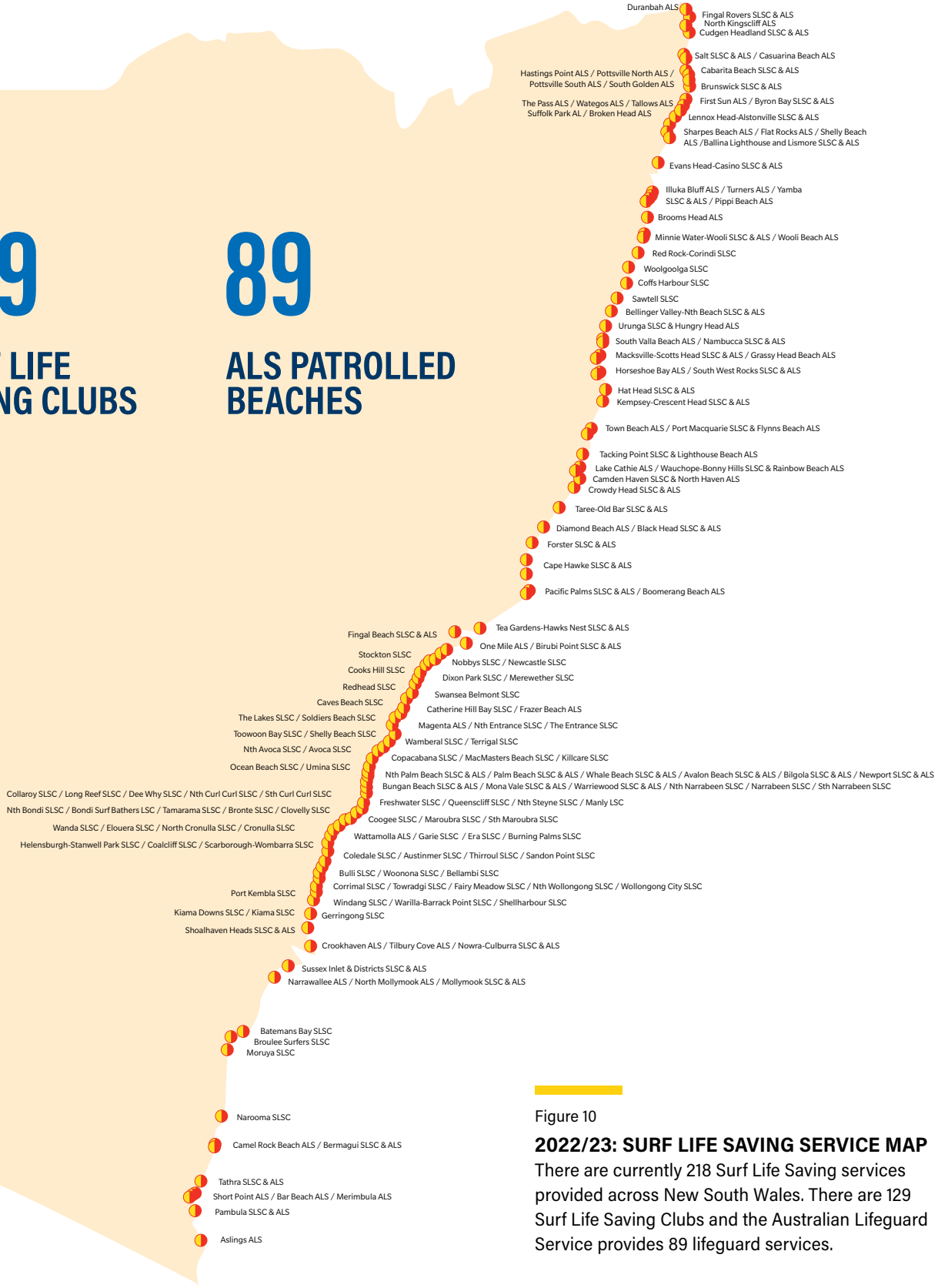


Figure 10

2022/23: SURF LIFE SAVING SERVICE MAP

There are currently 218 Surf Life Saving services provided across New South Wales. There are 129 Surf Life Saving Clubs and the Australian Lifeguard Service provides 89 lifeguard services.

MEMBERSHIP CAPACITY

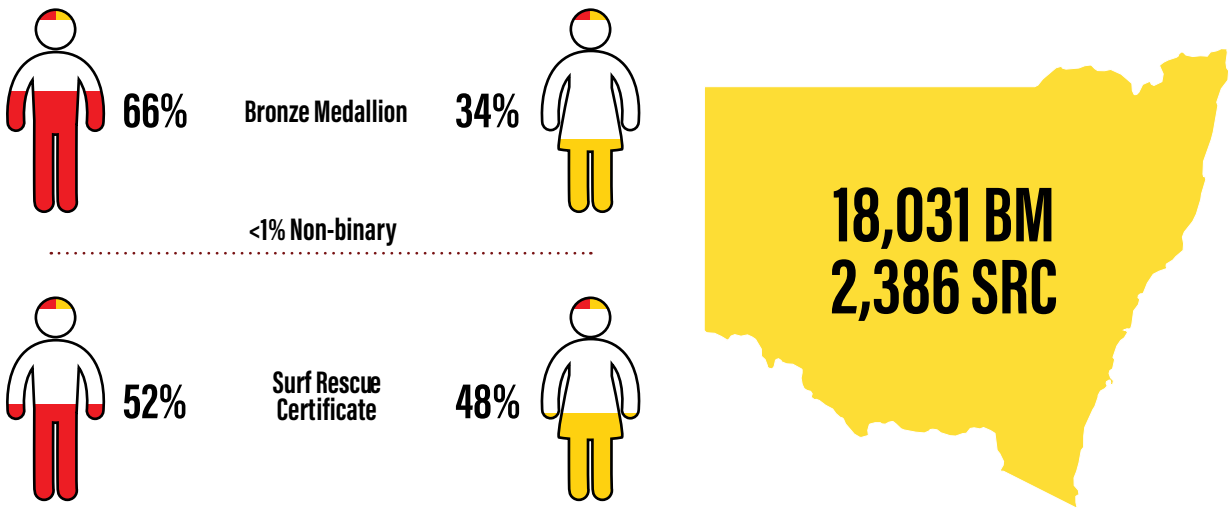


Figure 11

2022/23: PROFICIENT MEMBERS

There were a total of 20,417 proficient members, 18,031 were Bronze Medallion holders and 2,386 held a Surf Rescue Certificate. Of the Bronze Medallion holders, 66% were male and 34% were female. Surf Rescue Certificate holders were more equal, with 52% male and 48% female. Eight proficient members identified with a non-binary gender (<1%).

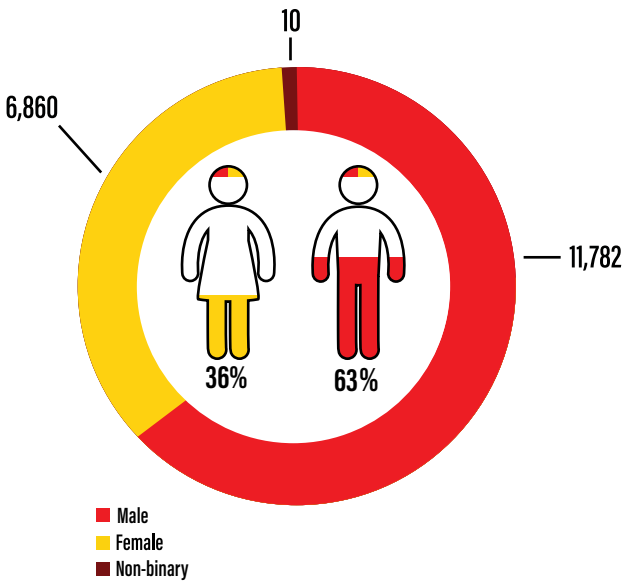


Figure 12

2022/23: PATROLLING MEMBERS

There were 18,652 patrolling members, of which 63.2% were male and 36.8% were female. Ten patrolling members identified with a non-binary gender (<1%).

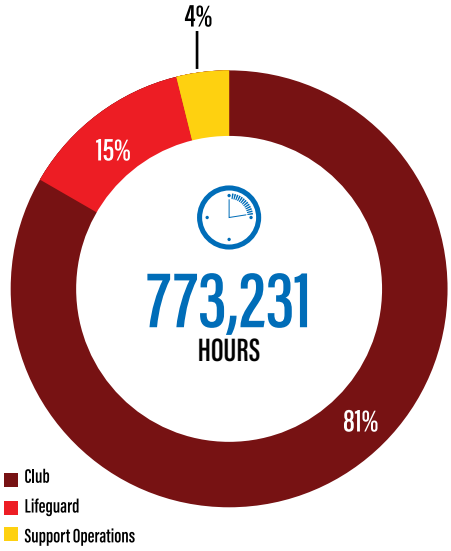
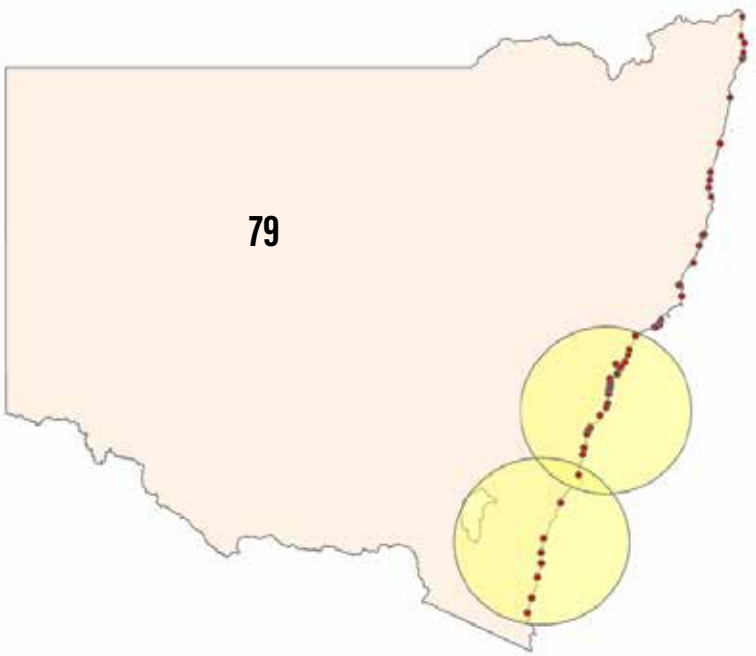


Figure 13

2022/23: PATROL HOURS

New South Wales totalled 659,131 volunteer hours of which 629,303 were conducted on club patrol and 29,827 through support operations. Lifeguard patrol hours totaled at 114,100 hours.

ASSET CAPABILITY



Key to Assets

- Rescue Water Craft (RWC)
- Westpac Life Saver Rescue Helicopter

Figure 14

2022/23: SLSNSW MAJOR ASSET LOCATION AND SERVICE RANGE

SLSNSW maintains a fleet of 77 rescue watercraft (RWC) and two Westpac Life Saver Rescue Helicopters. Their locations and service ranges are depicted on this map.

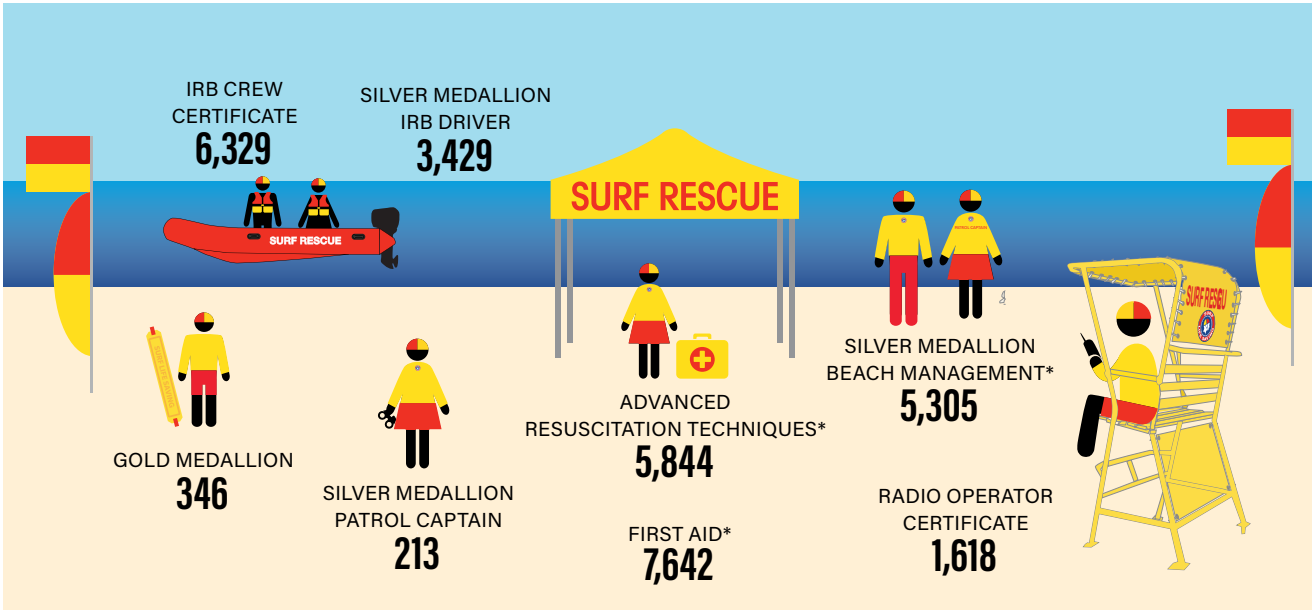


Figure 15

2022/23: ADDITIONAL QUALIFICATIONS HELD BY PATROLLING MEMBERS

Surf Life Saving New South Wales has 18,652 patrolling members, who hold 30,726 additional lifesaving qualifications. This highlights the extent of training our surf lifesavers undertake to ensure they are highly skilled first responders.

** Totals include proficient member holders of multiple similar awards.*

PATROL STATISTICS

PATROL STATISTICS RECORDED BY SURF LIFE SAVING CLUBS, THE AUSTRALIAN LIFEGUARD SERVICE, AND SUPPORT OPERATIONS.

4,787 RESCUES

261 LIFE SAVER HELICOPTER

2,052 RESCUE BOARD

"Every rescue is a near miss, many also represent a life saved."

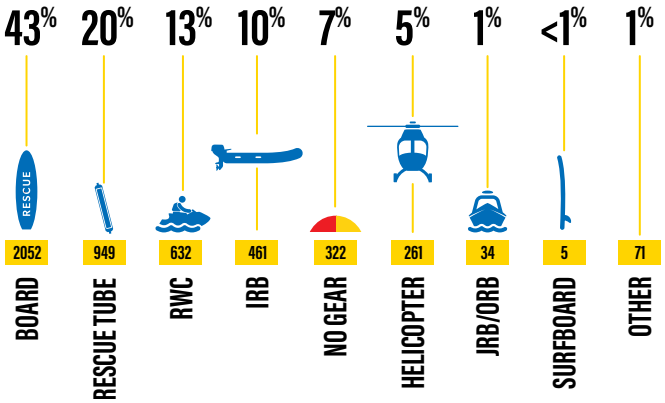


Figure 16

2022/23: EQUIPMENT USED IN RESCUES

Boards were used in 43% of rescues, followed by rescue tubes (20%), and rescue watercraft (RWC; 13%).

861,882 PREVENTATIVE ACTIONS

265 LOST CHILDREN

174 SEARCHES

172 SHARK ALARMS

9,853 FIRST AID TREATMENTS

4,186 MARINE STINGS

171 FRACTURES/ DISLOCATIONS

60 SPINAL INJURIES

SURF EMERGENCY RESPONSE SYSTEM

The Surf Emergency Response System (SERS) was activated 753 times between 1 July 2022 and 30 June 2023, which is higher than the five-year average of 731. These figures represent a considerable contribution made by surf lifesavers, lifeguards, and other emergency services in responding to water-based incidents and emergencies. The interoperability and collaboration provided by SERS enables a more efficient response to those in distress, resulting in many more lives saved.

As with previous years, SERS received the largest proportion of activations over summer (47.5%) and responded to most incidents during the afternoon (56%). The Surf Emergency Response System most frequently responded to swimmers in difficulty (33.5%), followed by members of the public using watercraft (19.3%), and those boating or using personal watercraft (17.4%). These statistics are similar to the five-year averages. These activations resulted in 258 lives being saved.

The SERS also activates personnel to assist with the response to other emergencies, such as floods and Tsunami warnings. The State Operations Centre, Duty Officers, Surf Life Saving Branches, Surf Life Saving Clubs, Australian Lifeguard Service, and the Australian UAV Service provide valuable assistance and service to the community during these difficult times.

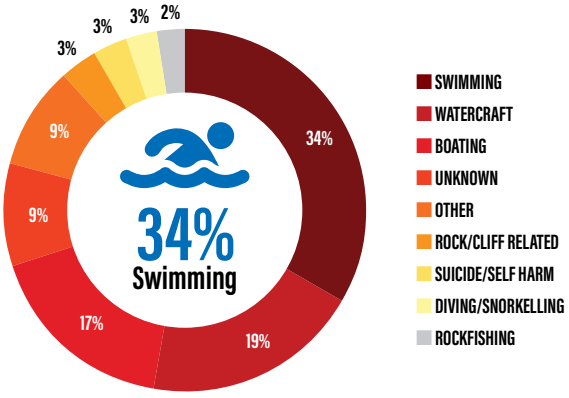


Figure 17

2022/23: NUMBER OF SERS ACTIVATIONS BY ACTIVITY

Swimming (34%) was the most common activity that required a SERS activation followed by Watercraft use (19%) and Boating (17%).

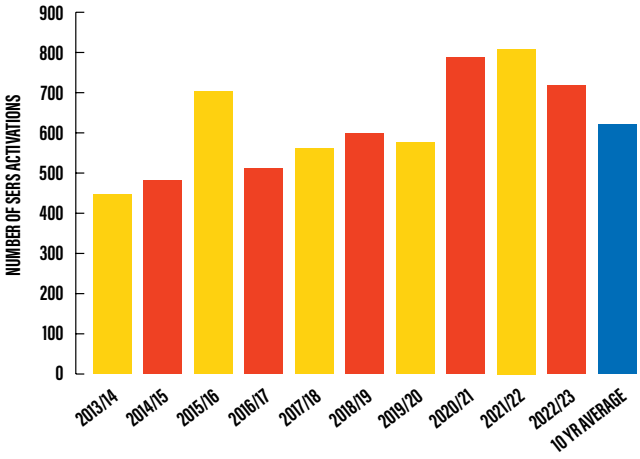


Figure 18

2013-2023: NUMBER OF SERS ACTIVATIONS

Over the last 10 years there have been 6,486 SERS activations.

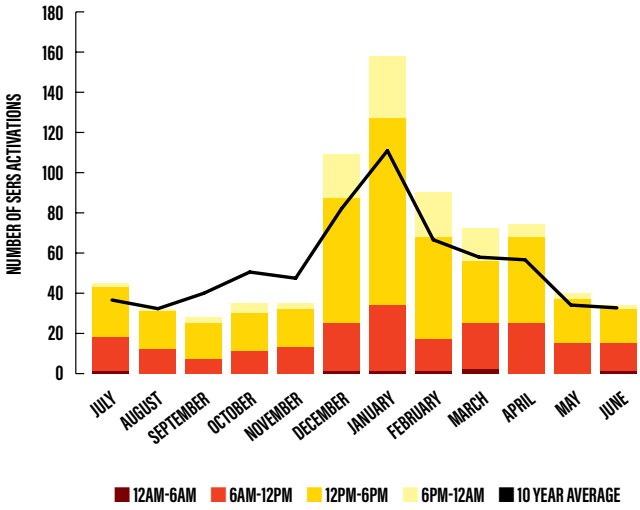


Figure 19

2022/23: NUMBER OF SERS ACTIVATIONS BY MONTH AND TIME OF DAY

This summer there was a 37% increase in SERS activations when compared to the 10-year average.

EMERGENCY RESPONSE BEACONS

Stretching over 1,500 kilometres, including over 800 beaches and 600 shore platforms, managing the safety of those on the New South Wales coastline presents considerable challenges. While surf life saving services and/or lifeguard services are provided at almost 200 beaches, there are many sections of coastline where no services are provided. Furthermore, the vast majority of coastal drowning deaths occur at unpatrolled sites and/or outside of patrol times.

To help address this gap, Surf Life Saving NSW is expanding the network of Emergency Response Beacons (ERBs) at identified high-risk sites. The ERBs include a telephone and camera, and are designed to be activated by a bystander who identifies a person in difficulty and is requesting assistance. This immediately alerts the State Duty Officer from the Surf Emergency Response System (SERS), who then tasks the nearest appropriate asset(s). The use of ERBs can reduce the time between an incident occurring and an appropriate water-based response being provided, as the precise location of the ERB is known, and Duty Officers can extract relevant information from those witnessing the incident.

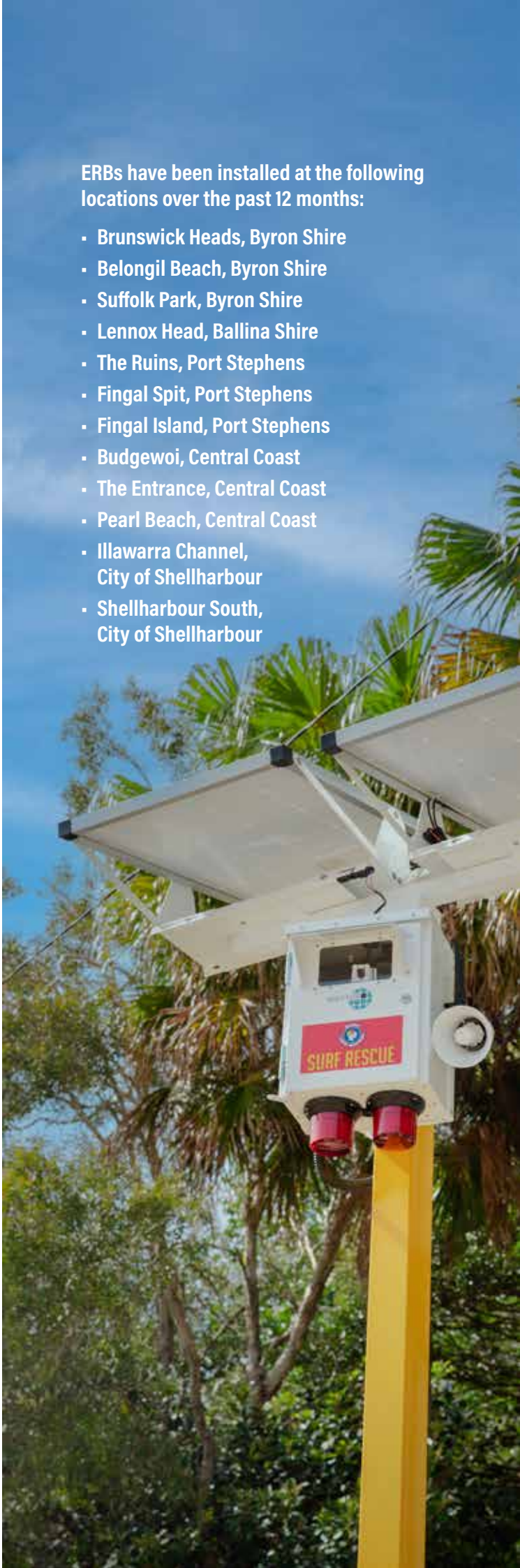
The ERBs are strategically placed where there is a high risk of incidence, no (or limited) provision of surf life saving services and/or lifeguard services, but, when activated, appropriate personnel are able to respond in a timely manner. This expands the area in which surf lifesavers and lifeguards can potentially affect a successful rescue, while maintaining the provision of services at patrolled sites.

The implementation of ERBs requires effective collaboration with a range of coastal safety stakeholders, including land managers (Local Government Areas, NSW National Parks and Wildlife Service, or Crown Lands), surf life saving services, and lifeguard services. The installations must comply with relevant legislation and are typically well received by local communities.

There are currently 32 ERBs along the New South Wales coastline at identified high-risk sites, with an additional 40 proposed for installation over the next four years (of which 15 are upgrades to existing ERBs). To date, the ERBs have been activated 165 times, which has resulted in 22 rescues.

ERBs have been installed at the following locations over the past 12 months:

- Brunswick Heads, Byron Shire
- Belongil Beach, Byron Shire
- Suffolk Park, Byron Shire
- Lennox Head, Ballina Shire
- The Ruins, Port Stephens
- Fingal Spit, Port Stephens
- Fingal Island, Port Stephens
- Budgewoi, Central Coast
- The Entrance, Central Coast
- Pearl Beach, Central Coast
- Illawarra Channel, City of Shellharbour
- Shellharbour South, City of Shellharbour



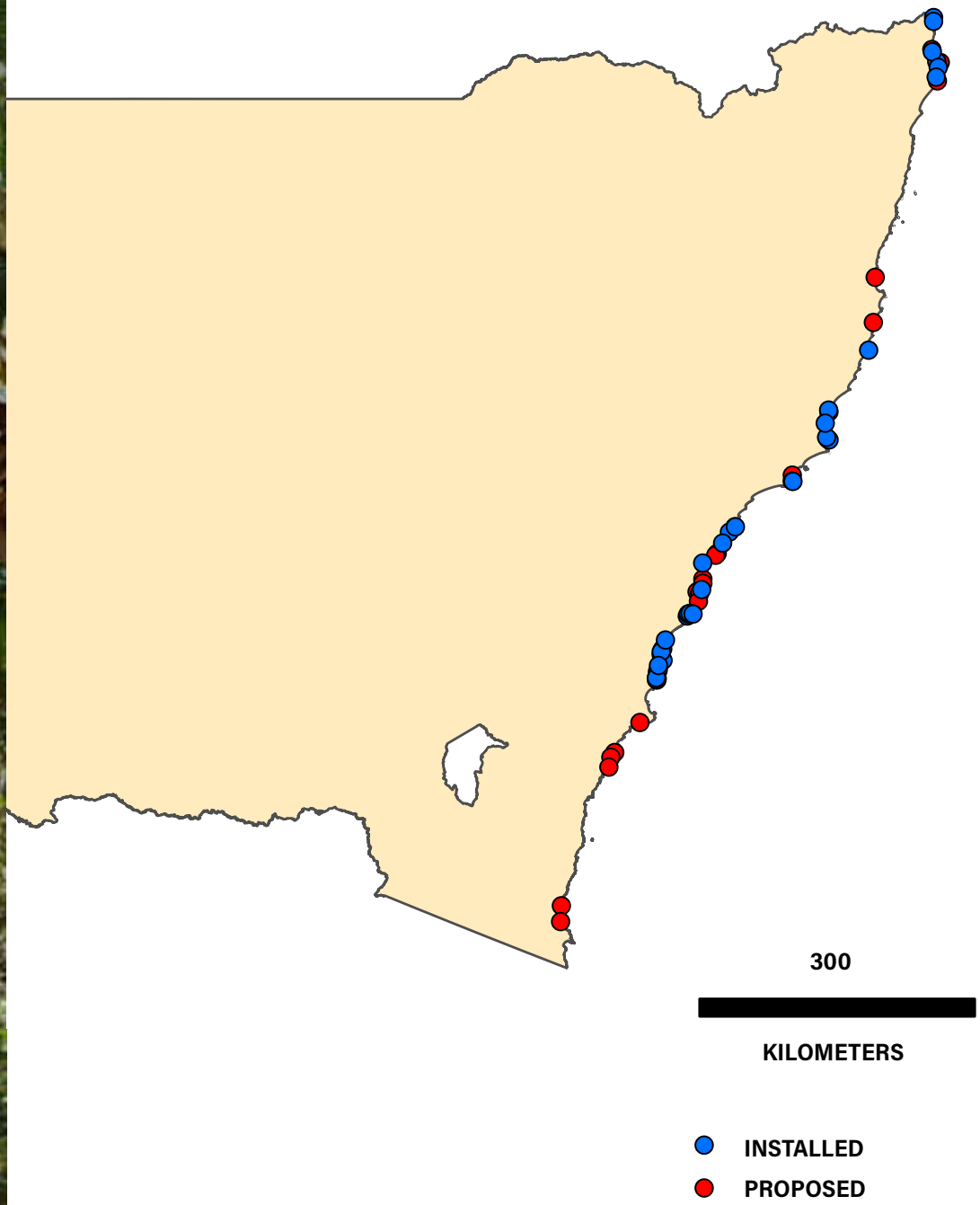


Figure 20

LOCATION OF EMERGENCY RESPONSE BEACONS

Emergency response beacons are installed across 32 sites with a further 40 to be installed over the next 4 years.

AUSTRALIAN UAV SERVICE

The Australian UAV (Uncrewed Aerial Vehicle) Service (AUAVS) continues to provide ongoing training, UAV assets, software and maintenance to Surf Life Saving clubs and members in the last 12 months.

SOME OF THE KEY BENEFITS AND SERVICES PROVIDED TO ASSIST SURF LIFE SAVING NSW FULFIL ITS LIFESAVING ROLE INCLUDE

Provision of **30 UAVs** and maintenance to Branch Emergency Response vehicles;

Provision of **100 UAVs** and maintenance at SLSCs (for use outside paid patrolling periods);

Provision of **4 UAV** Training Kits and maintenance;

Provision of Train the Trainer session to qualify **11 new UAV Instructors**;

Ongoing proficiency and skills upkeep to maintain a further **23 UAV Instructors**;

Provision and support of **14 UAV Operator Induction Programs** (OIPs) to members;

Collecting and collating expressions of interest and providing them to Branches for **training of new members**;

Providing Branches and SLSCs with **risk management software**, logins, and auditing checks;

Running in-person practical **proficiencies for 279 members**, noting Branch UAV Coordinators and UAV Instructors will now be running these into future years in line with increased volunteer capability;

Creation of a **Branch UAV Coordinator Guide** and updated Position Description;

Creation of the **AUAVS Guide** to SLSC Use of UAVs;

Assisting all Branches with the creation of a **Branch UAV callout team** as a key capability within the SLS Emergency Response System (SERS).

STRATEGIC PARTNERSHIPS

SLSNSW continues to work closely with other emergency services, enabling the UAV capability within each Branch to be used in emergency situations. We also continue to position and profile Surf life Saving NSW's UAV capability within the emergency services sector.

The capability, skill set, and resourcing of the Australian UAV Service continues to expand and develop, allowing delivery of a range of industry leading services to partners and clients. Continued testing and trialling of various new technologies in this space will contribute to achieving our strategic aims in regard to drowning prevention and public protection measures.

LONG RANGE UAV PROJECT

The NSW Department of Primary Industries (DPI) partnered with the AUAVS for the delivery of a Long Range UAV Project. Phase 1 of this Project over the past 12 months included a NSW Parliament Showcase along with a Long Range UAV Trial. This Phase aimed to stimulate the market, gauge industry standards and inform future decision making.

The Project Showcase publicly launched the Project on 31 May at NSW Parliament House. The event was attended by a number of key industry guests, relevant Ministers and the NSW Premier.

This was followed by a very successful Long Range UAV Trial which took place at Evans Head in June. The objective of the trial was to safely evaluate multiple Beyond Visual Line of Sight (BVLOS) capable platforms with extensive range and endurance to examine their effectiveness for multi-use operations in public safety and emergency response.

Four vendors showcased their cutting-edge UAVs and participated in a series of rigorous scenario-based tests. These scenarios included shark detection and ID, fire spotting, search and rescue missions inland, at night and on the water, endurance tests and orthomosaic generation.

Guided by the lessons of Phase 1, Phase 2 aims to position the AUAVS for long term deployment of a comprehensive and multi-purpose long range capability network. This will include a number of incremental steps involving drone in a box trials, statewide BVLOS approvals in advance, crew training and establishment of a remote operations centre. The centralised network and capability developed as a result of this Project will provide a crucial piece of connective infrastructure to support public safety and emergency response at our beaches and across the state.

380+ UAV PILOTS

300+ UAVS

39,000+ FLIGHTS

123,000+ KILOMETRES

9,300+ FLIGHT HOURS

220+ SHARK SIGHTINGS

65 BEACH CLOSURES

141 NEW UAV PILOTS

12 NEW UAV INSTRUCTORS

DROWNING ANALYSIS

2022/23

48
COASTAL DROWNING DEATHS

83%
MALE

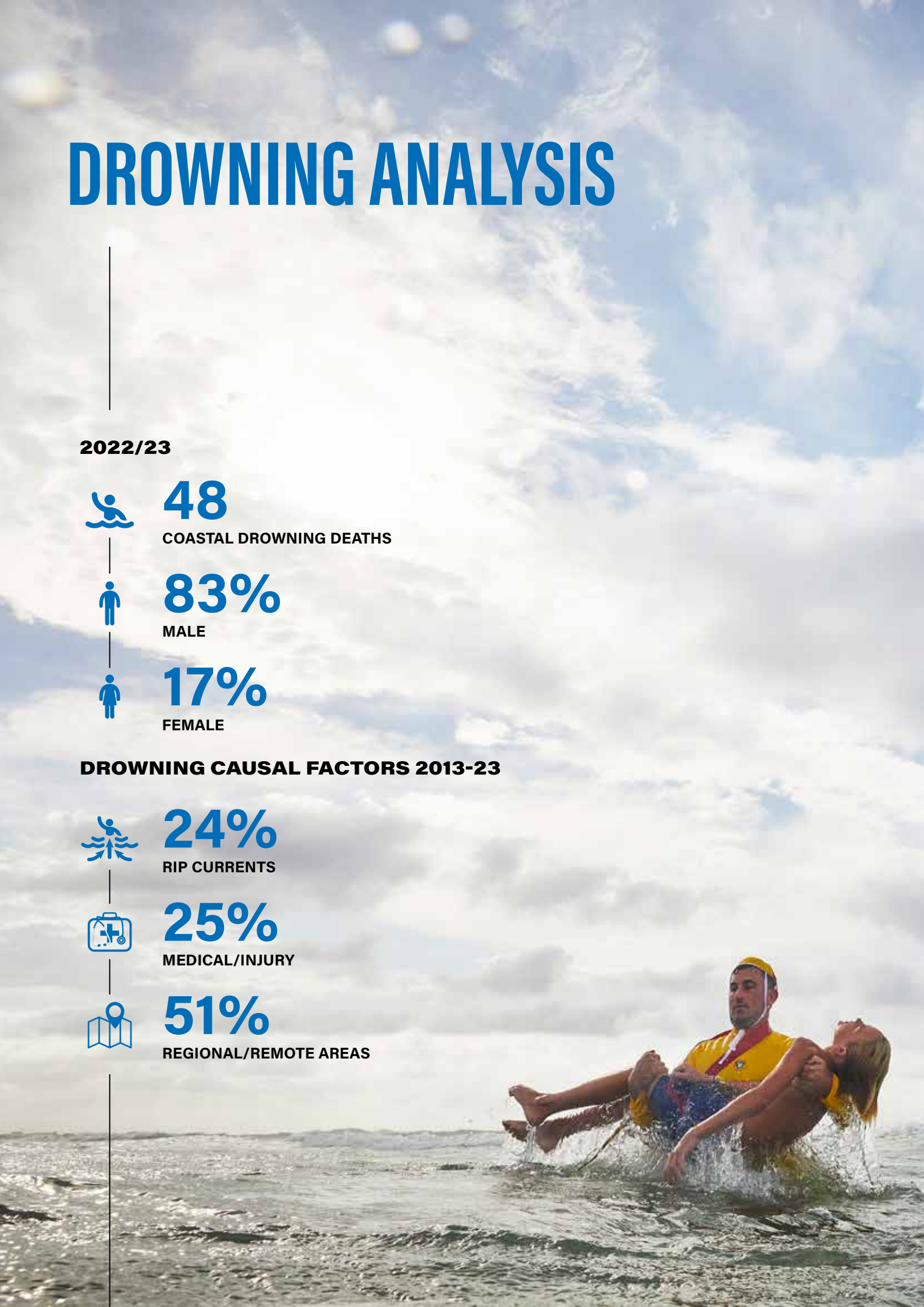
17%
FEMALE

DROWNING CAUSAL FACTORS 2013-23

24%
RIP CURRENTS

25%
MEDICAL/INJURY

51%
REGIONAL/REMOTE AREAS



COASTAL DROWNING & FATALITY

2022/23: YEAR IN REVIEW

Surf Life Saving responds to all types of incidents that occur along the New South Wales coast, regardless of their cause. As such, to better inform Surf Life Saving operations and to understand the full burden of coastal deaths and their impact on the New South Wales community and SLS members, both drowning deaths and other coastal fatalities that occur along the New South Wales coastline are monitored.

A total of 91 coastal deaths were recorded across New South Wales in 2022/23, on par with the ten-year average (n=90). One in two were due to drowning (53%, n=48), while of the remaining 43 coastal fatalities, 25 were unintentional. In total, New South Wales accounts for 41% of the national coastal mortality burden. This is a devastating outcome but may have been far worse with over 4,787 rescues and 861,882 preventative actions performed by Surf Life Saving New South Wales.

Coastal incidents including major rescues, traumatic injury and fatal events can have lasting effects on the health and wellbeing of families and communities, as well as on Surf Life Saving personnel. Long-term monitoring and research are crucial to identify current and emergent risk factors, and to provide evidence to underpin and direct future prevention strategies.

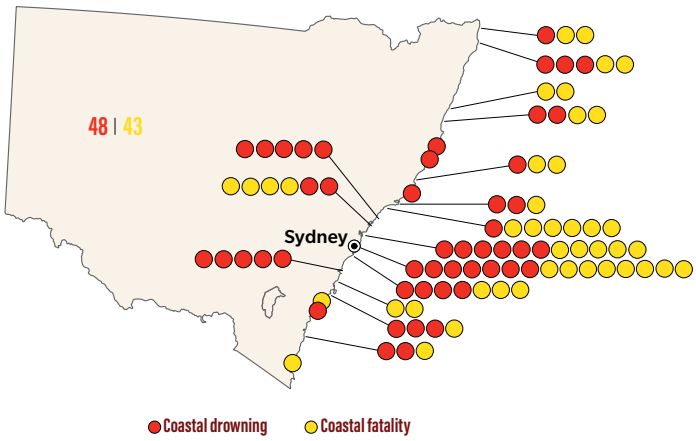


Figure 21

2022/23: COASTAL DEATH LOCATIONS

In 2022/23, 48 coastal drowning deaths and 43 other coastal fatalities were recorded. Red and yellow numbers indicate the number of drowning deaths and fatalities respectively.

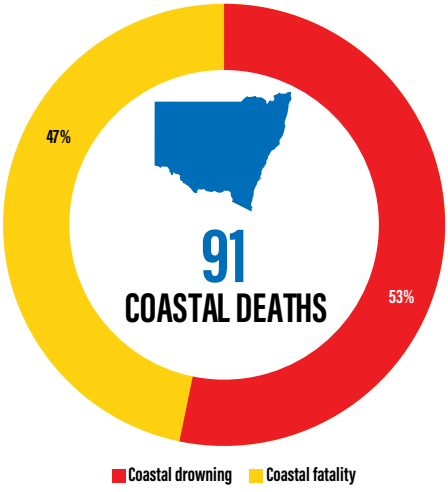
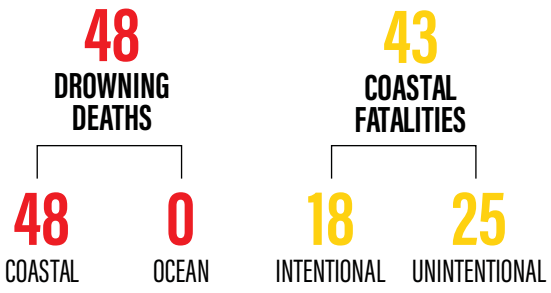


Figure 22

2022/23: OVERVIEW OF COASTAL DEATHS

Overall, 91 coastal deaths were recorded in 2022/23, with a mortality rate of 1.12/100,000 pop.



2022/23: LOCAL GOVERNMENT AREA BLACKSPOTS

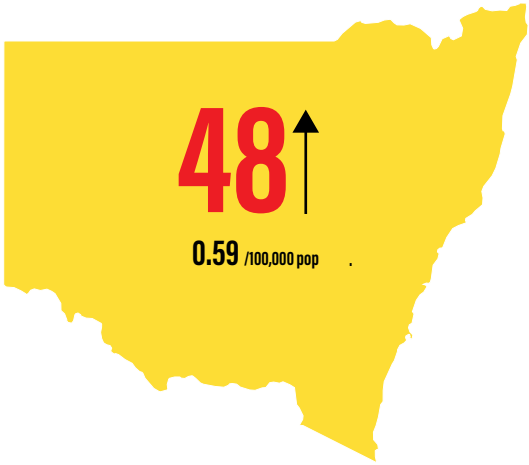
A blackspot is an area where a concentration of incidents are recorded and have a high probability/risk of ongoing re-occurrence. These LGAs below recorded the highest number of fatal coastal incidents (both drowning deaths and other fatalities) in 2022/23.

Northern Beaches (6)
Newcastle (5)
Sutherland (5)
Waverley (5)
Randwick (4)
Central Coast (4)
Shoalhaven (4)
Woollahra (4)

Note: there were also 12 coastal drowning deaths in lands managed by NPWS.

COASTAL DROWNING

NEW SOUTH WALES 2022/23: YEAR IN REVIEW



NB: Arrow indicates change from 10-year average

Figure 23

2022/23: COASTAL DROWNING DEATHS

48 coastal drowning deaths were recorded (drowning rate of 0.59/100,000), 12% above the 10-year average of 43.

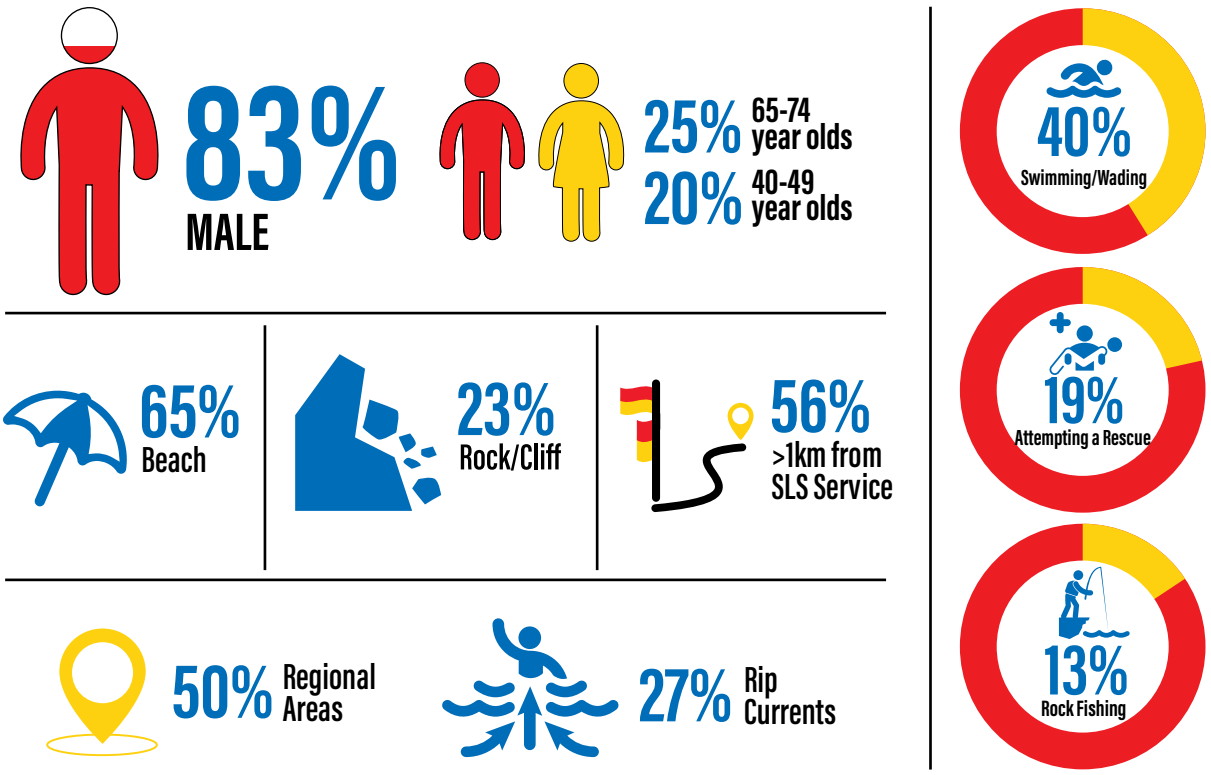
Across New South Wales, 107 drowning deaths were recorded in 2022/23, 38% of which occurred in coastal environments (n=48). This is a welcomed 8% decrease from last year (n=52), but is still 12% above the ten-year average (n=43).

Males continue to be overrepresented in coastal drowning statistics, accounting for 83% of drowning deaths. Of concern is the increasing prevalence of drowning deaths among older Australians, with 65-74 and 40-49 year olds accounting for 25% and 20% of New South Wales' coastal drowning deaths respectively.

Swimming and wading accounted for two in five coastal drowning deaths (40%), followed by fatal bystander rescue attempts (19%), then rock fishing (13%). Rip currents remain the number one coastal hazard, involved in at least 27% of drowning deaths.

Most coastal drowning deaths occurred on beaches (65%), with a further 23% at rocky or cliff locations. One in two incidents occurred more than 1km away from a Surf Life Saving service (56%), and 100% occurring outside of flagged areas. Similarly, 50% occurred in regional and remote areas, places which are harder to access with limited resources.

It is important to recognise that while we encourage the community to swim between the flags, for many, this is not always feasible. With this in mind, when heading to the beach please remember to STOP and check for rips, LOOK for other dangers, and PLAN how to stay safe in case of an emergency.



GONE FISHING PROJECT

In 2021 and following several consecutive and tragic drownings of rock fishers, Surf Life Saving NSW applied for and successfully received a grant from the Recreational Fishing Trust for the delivery of a multifaceted, collaborative and comprehensive rock fishing safety project.

This project delivered targeted rock fishing safety education through the provision of free lifejackets, rock fishing safety workshops, classroom-based education, family targeted school programs, multilingual rock fishing safety resources and newly developed media targeting at-risk communities.

"I am really grateful for the life jacket because normally I would not be able to afford it. I have been going without it due to finances. Now I go rock fishing and feel extra conscious of safety as I now am equipped with the knowledge and safety gear that I have been provided." –

Rock fishing safety session participant.

1,080

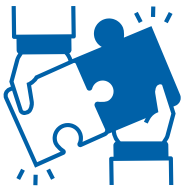
lifejackets were provided into the community

3,737

people were educated in rock fishing safety

18,300

people are estimated to be reached with rock fishing safety messaging as a result of this project



45

organisations and community groups collaborated to deliver this project

Data, survey responses and anecdotal evidence, clearly highlight that this project has significantly increased rock fishing safety knowledge awareness and positive behaviours.

94%

of coastal safety session participants identified that they were more confident in how to stay safe while rock fishing since attending the session.

98%

of coastal safety session participants in the follow up survey indicated that they had worn their new lifejacket while rock fishing.

95%

of coastal safety session participants identified that they had learnt something new about rock fishing safety.

VIEW THE FULL PROJECT REPORT HERE

DYING TO HELP

COASTAL DROWNING DEATHS INVOLVING BYSTANDER RESCUERS

A bystander rescue occurs when a member of the public identifies a person in difficulty in the water and intervenes to return them to a place of safety. The bystander could be another swimmer, surfer, or beach user, unknown to the person in distress, but is often a family member or friend. There are many bystander rescues where a positive outcome is achieved, and the rescuer and person in difficulty return to shore safely. However, in recent years, there has been an increase in the number of incidents where the bystander rescuer succumbs to fatal drowning.

From 1 July 2013 to 30 June 2023, there were 32 coastal drowning deaths involving bystander rescuers. Concerningly, eight of these incidents occurred in 2022/23, which is 2.5 times higher than the 10-year average (3.2 per year).

Of the 32 coastal drowning deaths recorded over the past 10 years, the vast majority occurred at beaches (91%). The highest proportions of incidents occurred in December (25%) and January (22%); 91% percent occurred in the afternoon, with 31% after 5:00pm. Forty-one percent of the coastal drowning deaths occurred along coastline managed by New South Wales National Parks and Wildlife Service. In addition, there was a high prevalence of incidence in the City of Coffs Harbour (five), City of Shoalhaven (four), and Eurobodalla Shire (four).

A bystander rescuer's awareness and competence in the surf are significant factors in the success of the rescue attempt. Experienced water users can better evaluate the hazardousness of the conditions and are less likely to overestimate their ability. They typically have greater competence in the surf and provide a more effective response while managing their own safety, i.e., by using a form of floatation. In contrast, those with less experience are more likely to enter the water regardless of the conditions and without a form of floatation, especially when a family member or friend is in difficulty.

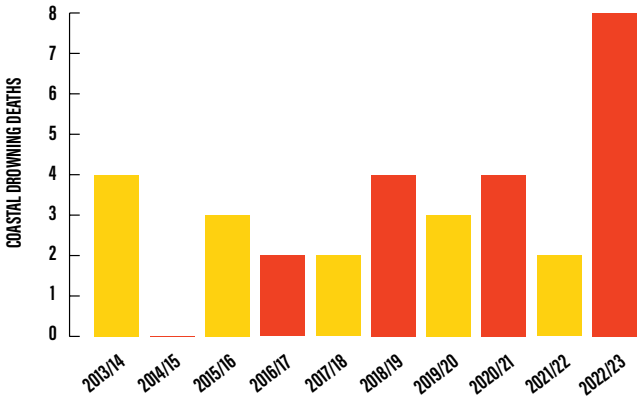


Figure 24

2013-2023: BYSTANDER RESCUE COASTAL DROWNING DEATHS

In the 2022/23 season bystander drowning deaths were 150% higher than the 10-year average (n=3.2) and was the highest number of incidents recorded in this category since 2004.

COASTAL DROWNING

NEW SOUTH WALES 2013-23: 10-YEAR ANALYSIS

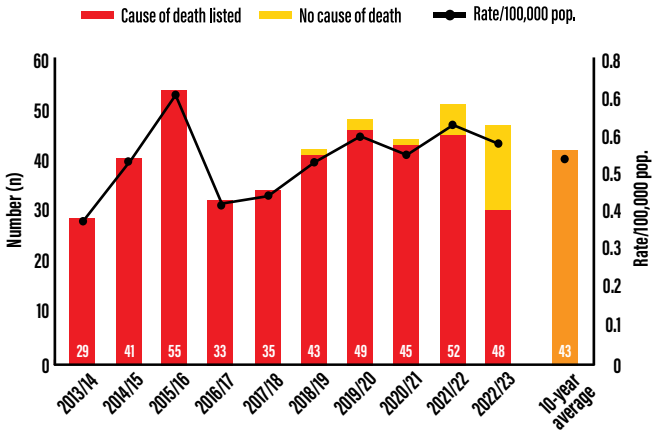
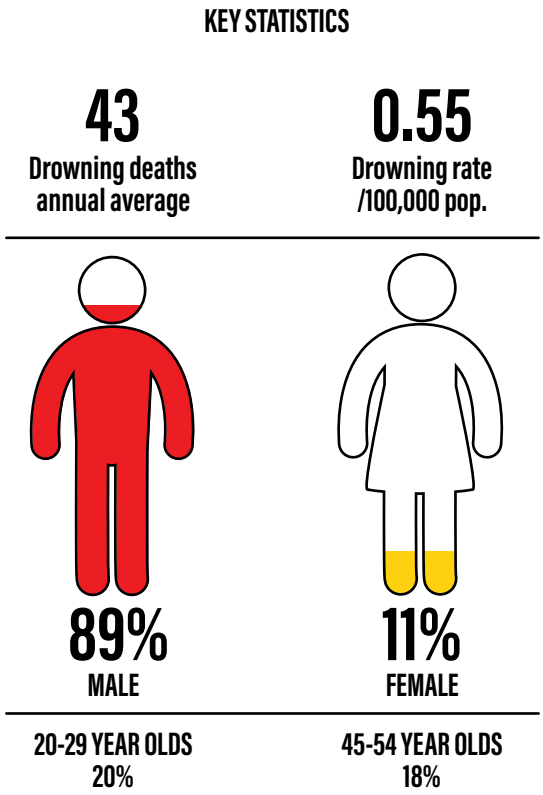


Figure 25

2013-23: COASTAL DROWNING DEATH TRENDS (N=430)

Annual trends of coastal drowning deaths and rates are illustrated above. 48 coastal drowning deaths were recorded in 2022/23, above the 10-year average (43). Likewise, the 2022/23 coastal drowning rate (0.59/100,000 pop.) was above the 10-year average (0.55/100,000 pop.).



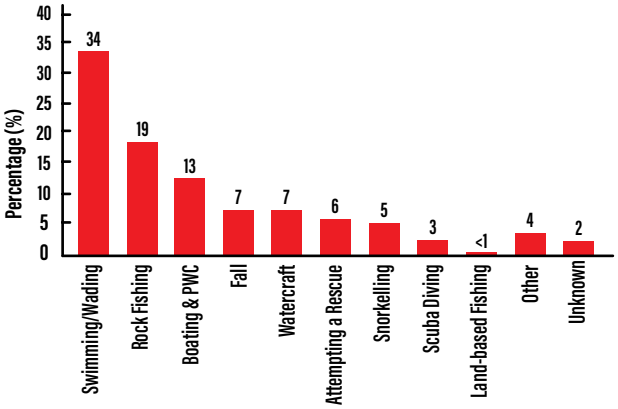


Figure 26

2013-23: DROWNING DEATHS BY ACTIVITY

Drowning prevalence varies by activity and over time. Since 2013, swimming/wading has recorded the most coastal drowning deaths (34%, n=146), followed by rock fishing (19%, n=81), then boating & PWC (13%, n=55).

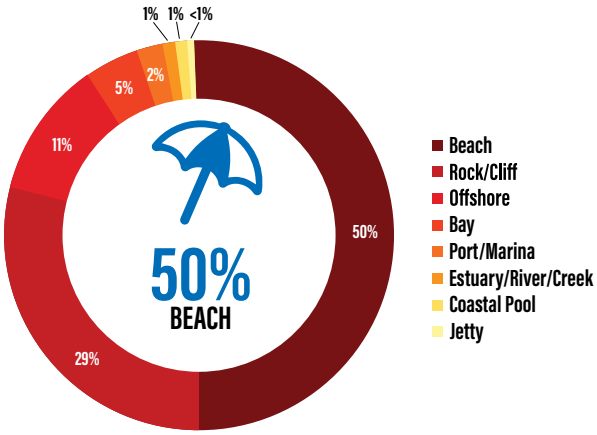


Figure 27

2013-23: DROWNING LOCATION CATEGORY

Beaches are the leading drowning location (50%, n=217), followed by rock/cliff (29%, n=126), then offshore locations (11%, n=47).

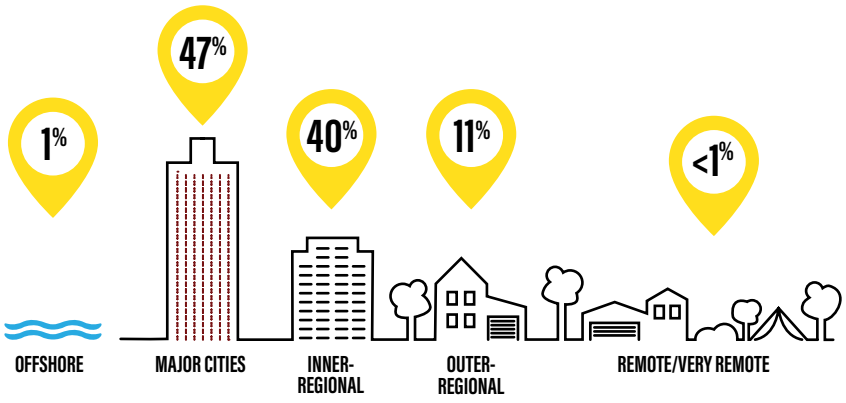


Figure 28

2013-23: REMOTENESS CLASSIFICATIONS

Most coastal drowning deaths occurred in regional areas (51%, n=220), followed by major cities (47%, n=203). The remoteness classification of an incident location was coded to the Australian Statistical Geographical Standard Remoteness Areas.

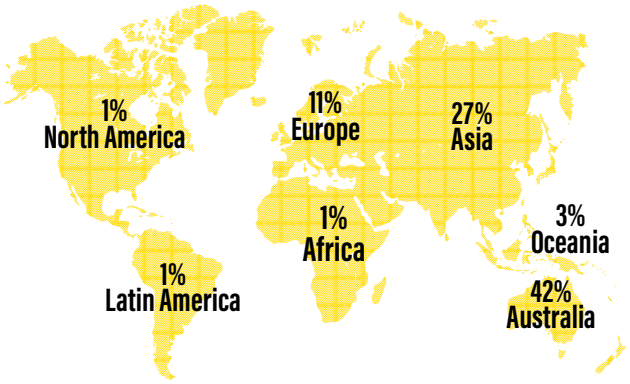


Figure 29

2013-23: BIRTH CONTINENT OF DECEDENT

Australian-born decedents account for 42% of coastal drowning deaths (n=182), while 44% were born overseas (n=191). One in four were born in Asia (27%, n=117), and 11% were born in Europe (n=46). Birth continent remains unknown for 13% of coastal drowning deaths (n=57).

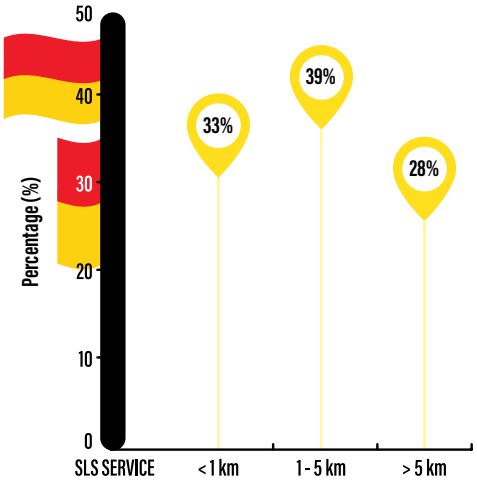


Figure 30

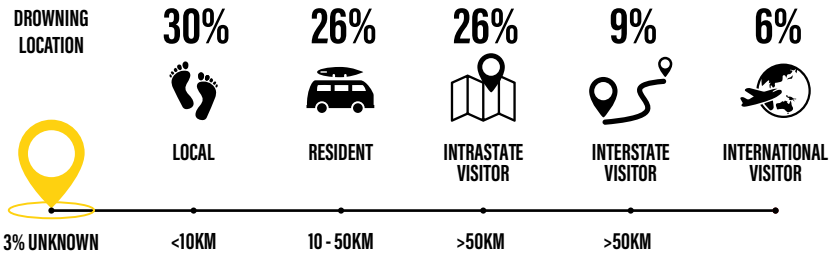
2013-23: DROWNING DISTANCE FROM SURF LIFE SAVING SERVICE

Two in three coastal drowning deaths (67%, n=287) occurred more than 1km from a Surf Life Saving service.

Figure 31

2013-23: DROWNING LOCATION DISTANCE FROM RESIDENCE

One in three decedents lived locally to the drowning location (30%, n=129), followed by nearby residents (26%, n=112), then intrastate visitors (26%, n=111).



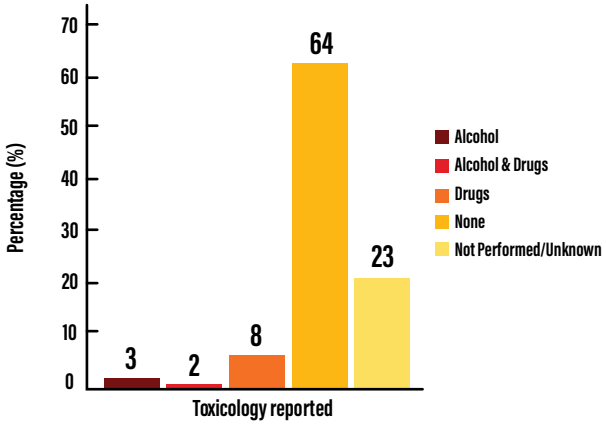


Figure 32

2013-23: COASTAL DROWNING, ALCOHOL & DRUGS

Alcohol and drugs are known to contribute to 13% of coastal drowning deaths (n=55), but this number could be higher as toxicology is unknown for 23% of cases (n=98).

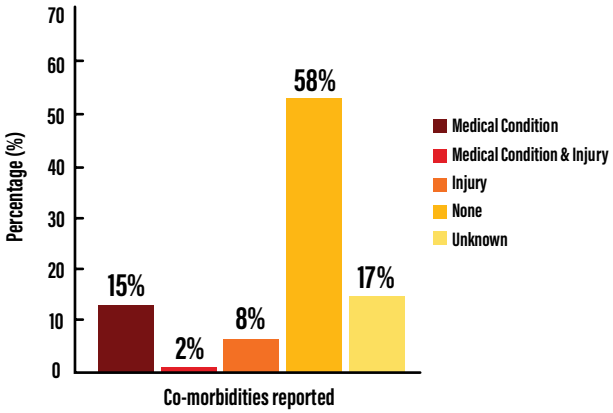


Figure 33

2013-23: MEDICAL CONDITIONS, INJURIES & DROWNING

Medical conditions and injuries are considered co-morbidities for one in four coastal drowning deaths (25%, n=106), with involvement currently unknown for a further 17% of incidents (n=73).

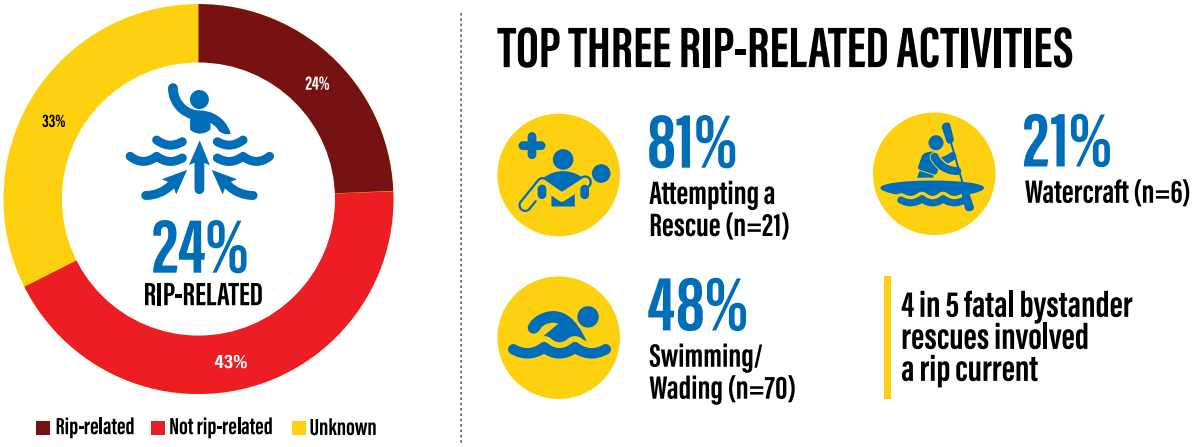


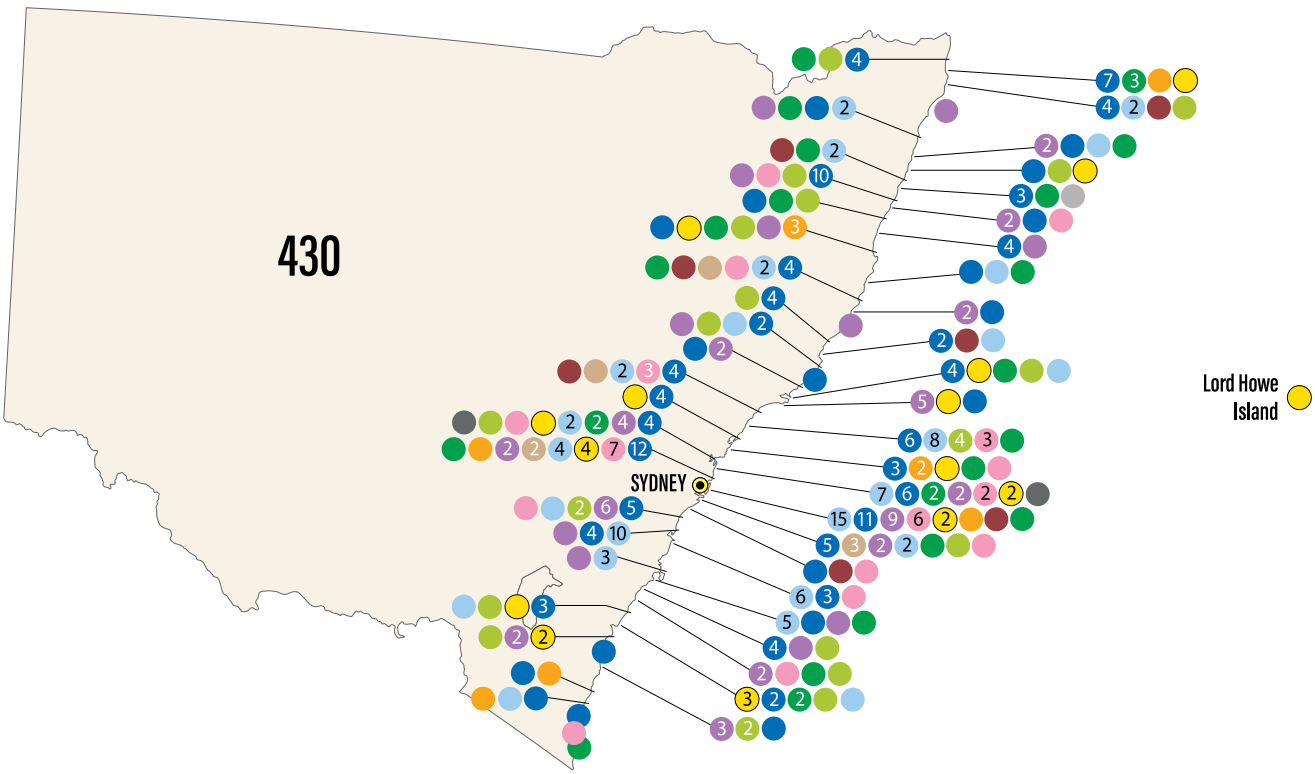
Figure 34

2013-23: RIP CURRENTS & DROWNING

Rip currents are known to contribute to one in four coastal drowning deaths (24%, n=105), but this is likely to be much higher with rip involvement unknown for 33% of cases (n=141). Rip currents are more prevalent in certain activities, involved in four of five fatal bystander rescues (81%, n=21), 48% of swimming/wading drowning deaths (n=70), and 21% of watercraft drowning deaths (n=6).

DROWNING LOCATIONS

NEW SOUTH WALES 2013-23: 10-YEAR REVIEW



Key to Drowning Activity

- Attempting a Rescue
- Boating & PWC
- Fall
- Jump
- Land-based Fishing
- Non Aquatic Transport
- Rock Fishing
- Scuba Diving
- Snorkelling
- Swimming/Wading
- Watercraft
- Other
- Unknown
- 4 Multiple instances per activity at the same location
- Capital City

UNINTENTIONAL FATALITY

NEW SOUTH WALES 2013-23: 10-YEAR ANALYSIS

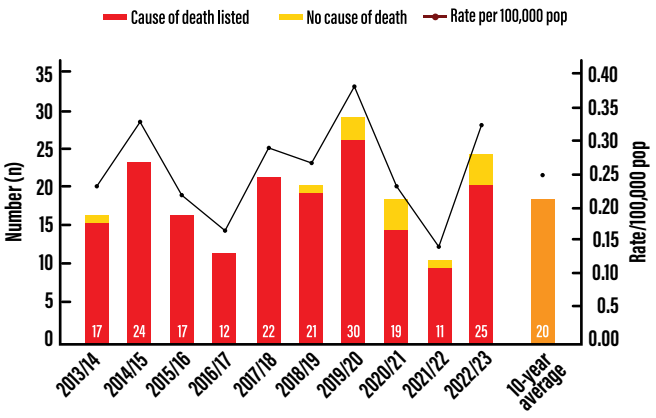


Figure 35

2013-23: COASTAL FATALITY TRENDS (N=198)

Annual trends of unintentional coastal fatalities and rates are illustrated above. 25 coastal fatalities were recorded in 2022/23, above the 10-year average (n=20). Similarly, the 2022/23 fatality rate (0.31/100,000 pop.) was above the 10-year average (0.25/100,000 pop.).

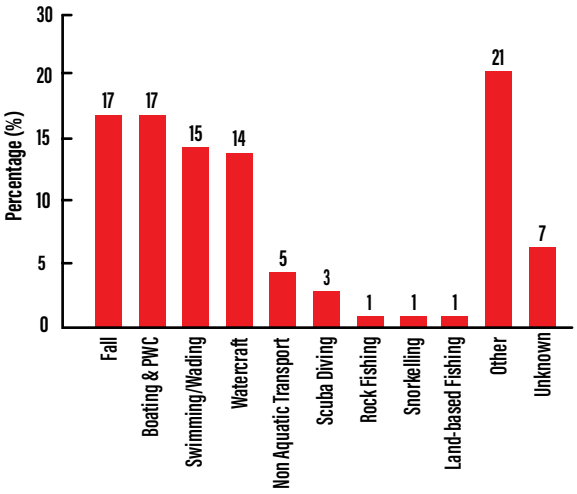


Figure 36

2013-23: FATALITIES BY ACTIVITY

Fatality numbers vary by activity and over time. The greatest number of fatalities have been attributed to falls (17%, n=34), followed by boating & PWC (17%, n=33), then swimming/wading (15%, n=29).

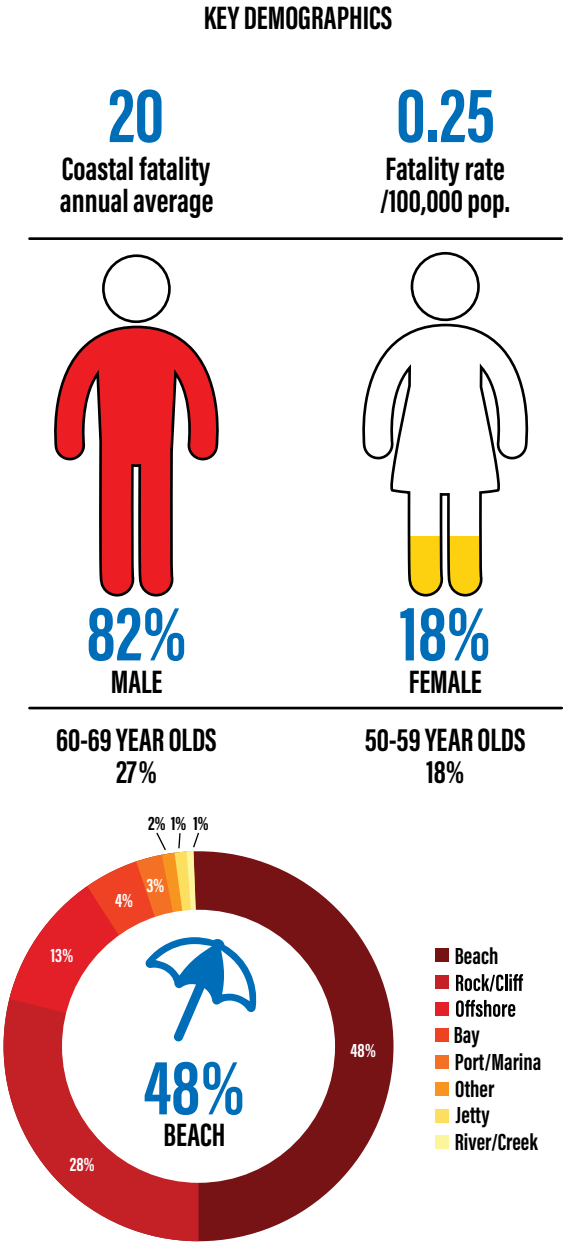


Figure 37

2013-23: FATALITY LOCATION CATEGORY

Beaches are the leading location for coastal fatalities (48%, n=96) followed by rock/cliff (28%, n=56), then offshore (13%, n=26) locations.

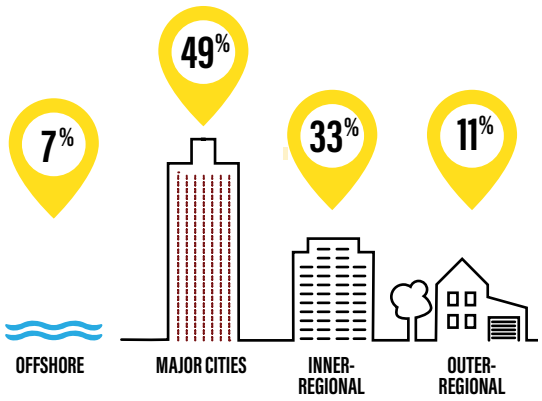


Figure 38

2013-23: REMOTENESS CLASSIFICATIONS

One in two coastal fatalities occurred in major cities (49%, n=97), followed by regional areas (44%, n=87). The remoteness classification of an incident location was coded to the Australian Statistical Geographical Standard Remoteness Areas.

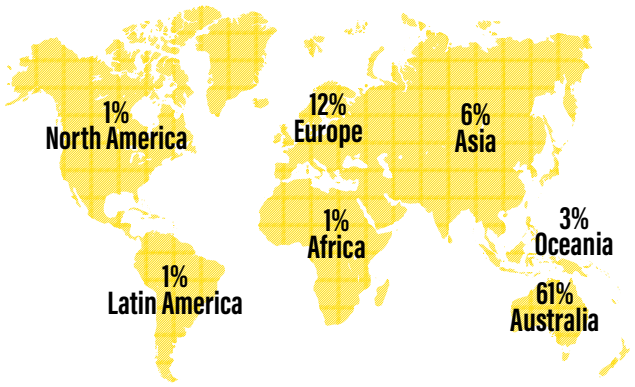


Figure 39

2013-23: BIRTH CONTINENT OF DECEDENT

Australian-born decedents account for 61% of unintentional coastal fatalities (n=120), while 24% were born overseas (n=46). One in ten were born in Europe (12%, n=23), and 6% were born in Asia (n=12). Birth continent remains unknown for 16% of unintentional coastal fatalities (n=32).

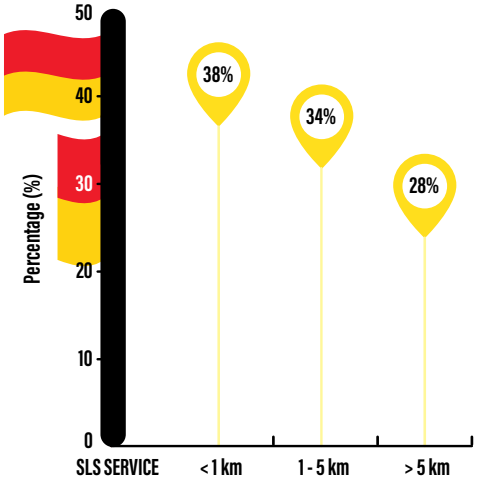


Figure 40

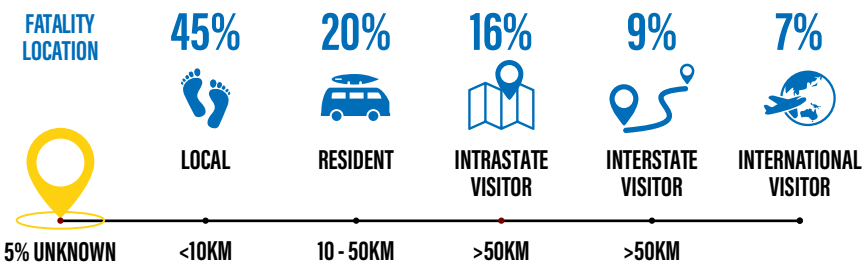
2013-23: FATALITY DISTANCE FROM SURF LIFE SAVING SERVICE

Two in three unintentional coastal fatalities (62%, n=122) occurred more than 1km from a Surf Life Saving service.

Figure 41

2013-23: FATALITY LOCATION DISTANCE FROM RESIDENCE

One in two decedents lived locally to the fatality location (45%, n=89), followed by nearby residents (20%, n=39), then intrastate visitors (16%, n=31).



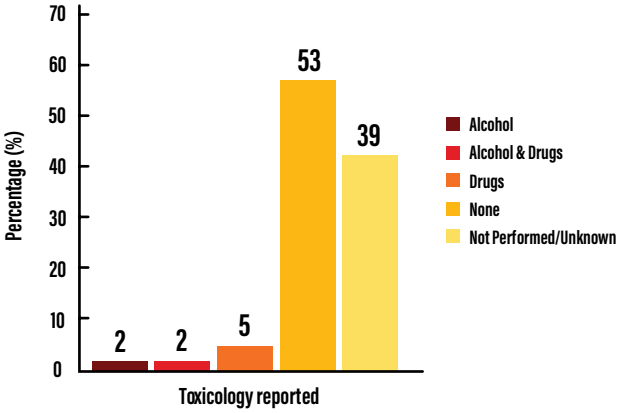


Figure 42

2013-23: COASTAL FATALITY, ALCOHOL & DRUGS

Alcohol and drugs are known to contribute to 9% of coastal fatalities (n=17), but this is likely higher given toxicology is unknown for 39% of cases (n=77).

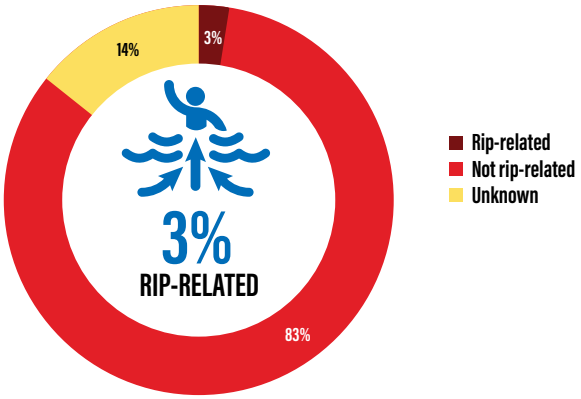


Figure 43

2013-23: RIP CURRENTS & COASTAL FATALITY

Rip currents are significantly less prevalent in coastal fatalities, known to contribute to only 3% of cases (n=5), although this could be higher with rip involvement unknown for 14% of cases (n=28).

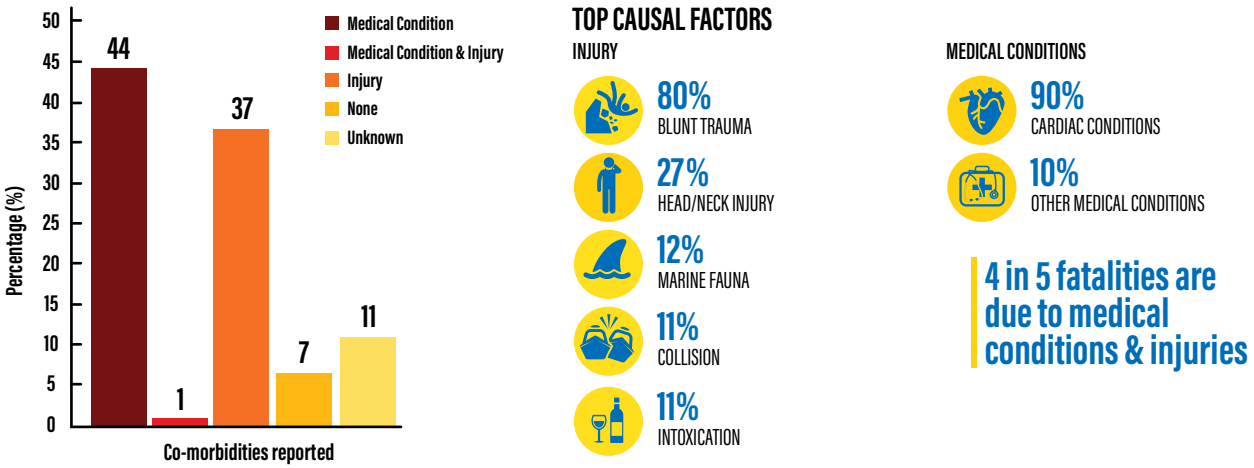


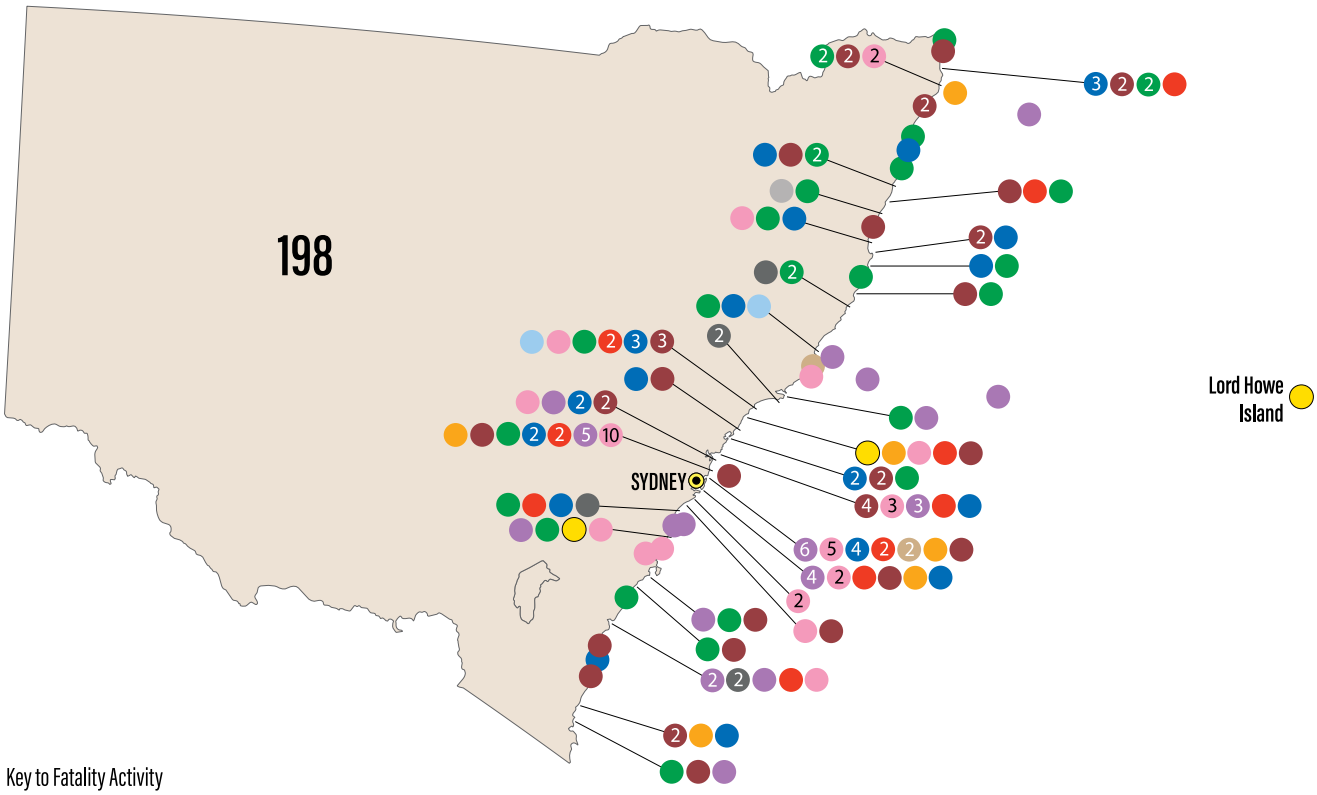
Figure 44

2013-23: MEDICAL CONDITIONS, INJURIES & COASTAL FATALITY

Medical conditions and injuries are considered co-morbidities in four out of five coastal fatalities (82%, n=163), with a further 11% of incidents currently unknown (n=22). For known cases, blunt force trauma is a causal factor in 80% of injury-related fatalities, while cardiac conditions are reported in 90% of medical-related coastal fatalities.

FATALITY LOCATIONS

NEW SOUTH WALES 2013-23: 10-YEAR REVIEW



Key to Fatality Activity

- Attempting a Rescue
- Boating & PWC
- Fall
- Jump
- Land-based Fishing
- Non Aquatic Transport
- Rock Fishing
- Scuba Diving
- Snorkelling
- Swimming/Wading
- Watercraft
- Other
- Unknown
- 4 Multiple instances per activity at the same location
- Capital City

GLOSSARY

Adult – For the purpose of this report, adult refers to a person 16 years of age and over.

Advanced Resuscitation Techniques – A certification providing the skills and knowledge required to use specialised equipment in the provision of resuscitation in line with the Australian Resuscitation Council (ARC) guidelines.

ALS – Australian Lifeguard Service.

Apply First Aid – A certification providing the skills and knowledge required to provide a first aid response to a casualty.

Aquatic Fatality – refer to non-drowning related incidents which have occurred at a coastal location in the water.

Attempting a rescue – Trying to retrieve a person in distress and deliver them to a place of safety.

AWSC – Australian Water Safety Council also Australian Water Safety Conference.

AWSS – Australian Water Safety Strategy.

Bay – A body of water partially enclosed by land but with a wide mouth, affording access to the sea.

Beach – A wave-deposited accumulation of sediment –usually sand, but ranging in size up to boulders, deposited between the upper swash limit and wave base.

Blackspot – An area where incidents are concentrated and a high probability/risk of ongoing recurrence.

Boating – Using either a powered vessel or sailing boat for recreation and/or fishing.

Bystander – A person who is present at an incident but not part of it initially.

Coastal – Describes the foreshore, seabed, coastal water and air space above a large body of water (harbour/bay/inlet), including areas up to 3nm offshore and of which the landward boundary is the line of mean high water, except where that line crosses a river/inlet, the landward boundary at that point shall be the point upstream that is calculated by multiplying the width of the river/inlet mouth by five. (Adopted from the Resource Management Amendment Act 1993 New Zealand).

COD – Cause of death.

Dangerous surf warning – An alert issued by the Bureau of Meteorology indicating that surf conditions in an area are unsafe for coastal activities. The warnings are calculated based on wave height, swell direction and swell period and must exceed the predetermined limitations to be in effect.

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

Drowning death – A fatal drowning incident arising from the process of respiratory impairment as a result of submersion/immersion in liquid.

Drugs – A medicine or other substance which has a physiological effect when ingested or otherwise introduced to the body. The category includes therapeutic, over-the-counter and illicit drugs.

Emergency response – An action taken by an SLS entity in response to a call for assistance from an emergency management organisation.

Falls (trips/slips) – Events that result in a person coming to rest inadvertently on the ground or other lower level.

Fatality – A fatal incident arising from circumstances other than drowning (eg. Medical condition, injury, self-harm, marine creature).

First Aid – Assessments and interventions that can be performed by a bystander (or by the victim) with minimal to no equipment.

Fishing – The act of attempting to catch fish from anywhere except coastal rock platforms

Foreign ethnicity – Describes an individual who identifies with a cultural group other than Australian based on heritage, language or shared customs. This identification is extrapolated from reported data such as the individuals' country of birth and the main language spoken at home.

Hazard – A source of potential harm.

ILS – International Life Saving Federation.

Incident – Any unplanned event requiring lifesaving services intervention.

Inland – An area that is beyond the line of mean high water or within a landward distance of five times the width of the coastal inlet/river mouth.

Inshore – The coastal water area within 500m of the low tide area of the foreshore.

Intentional fatality – Any intentional incident, including homicide and self-harm related incidents.

International – Describes an individual who is confirmed to reside overseas and/or is a temporary visitor to Australia.

IRB – Inflatable rescue boat.

IRD – Incident report database. A web-based portal used by SLS services to electronically record incident reports.

Jetty – An artificial structure that projects out into the water from land.

Jump(ing) – The activity of launching off a cliff, rock platform, pier, jetty. Aka tombstoning (UK/Europe/North America).

Lake – An inland body of water surrounded by land.

Lifeguard – An individual who undertakes patrols at a beach or another aquatic environment. He/she is typically a salaried member, qualified in public safety and aquatic rescue.

Lifejacket – A buoyant or inflatable garment or device designed to keep a person afloat in water and increase their likelihood of survival.

Lifesaving Service – A coordinated group that exists to provide aquatic safety services to the public. This includes Surf Life Saving Clubs, Lifeguards, SurfCom, RWCs, RIBs, Rescue Helicopters and 4WD units.

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

Marina – a man-made boat basin having sea walls or breakwaters and offering dockage and other services for water vessels.

Medical – For the purpose of this report, medical refers to an aquatic incident that was caused by a medical episode, e.g. a heart attack or epileptic seizure.

Mortality rate – A comparative rate of mortality to the size of the population for a given area or activity.

NCIS – National Coronial Information System.

NCSS – The National Coastal Safety Survey conducted annually to gather information about Australian coastal participation, swimming ability, risk perception, behaviours and attitudes to coastal safety.

Non aquatic fatality - Non-aquatic fatalities refer to non-drowning related incidents which have occurred at a coastal location but not in the water.

Non aquatic transport – Any form of transport that is not meant for the water such as airplanes, bicycles, and motor vehicles.

Ocean – The seabed, water and air space above the water beyond 3nm and up to 12nm (the Australian Territorial Sea) offshore.

Offshore – Describes the coastal water area beyond the surf zone and inshore area from 500m to 200nm.

Other – An uncommon known activity not otherwise listed (e.g., paragliding, jogging).

Patrol – Service undertaken to monitor activities in/around an aquatic environment and respond accordingly through either preventative actions or rescue operations.

Patrol flags – Red and yellow horizontally divided flags which are set after performing a risk assessment to determine the most suitable area for swimming. The flags identify a zone for swimming and bodyboarding within a patrolled location.

Patrolled location – A location supervised by a lifesaving service.

Preventative action – Direct action taken to reduce or eliminate the probability of a specific rescue, fir st aid or other reportable incident from happening in the future.

PWC – Personal water craft, also known as a jet ski.

Rescue – The retrieval of 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.

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

RIB – Rigid-hull inflatable boat.

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

River – A natural stream of water flowing into an ocean, lake or other body of water.

Rock/cliff – A rock platform that may or may not have a high steep face.

Rock fishing – The act of attempting to catch fish from a coastal rock platform .

Rock shelf – A section of rock above or below the water level that projects out from the coast.

RWC – Rescue water craft.

Scuba diving – Swimming underwater with the aid of scuba equipment for recreational or commercial purposes.

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 2022 to June 2023.

Snorkelling – Swimming with a snorkel and face mask. Includes freediving and spearfishing.

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

Surf lifesaver – An individual who undertakes patrols at a beach or other aquatic environment. They are typically a nonsalaried member qualified in public safety and aquatic rescue.

Surf Life Saving Club – A SLS affiliated not-for-profit organisation that has volunteer members who provide coastal safety services to the community.

Swimming – Moving through water by moving the body or parts of the body.

Territorial seas – The seaward limits of Australia's maritime zones, from the coastline to 12nm from the low tide line.

Total Service Plan – An assessment of current and future lifesaving resources, trends, national blackspots and coastal safety issues combined with evidence-based mitigation strategies to address these issues.

Toxicity – The degree to which a chemical substance or a particular mixture of substances is toxic or poisonous to an organism. In the context of this report, toxicity refers to alcohol or drug use by a victim.

Unintentional fatality – Deaths other than drowning deaths (such as medical incidents, injury, accidents, or marine creature), excluding homicide and self-harm related incidents.

Wading – Walking through water while partially immersed.

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

REFERENCE

METHODOLOGY

The Surf Life Saving New South Wales Coastal Safety Report 2023 contains information on Australian community behaviours and attitudes to the coast; SLSNSW capability and membership capacity; rescues and emergency response; and coastal drowning deaths and other fatalities that occurred along the New South Wales coast during the period of 1 July 2022 to 30 June 2023. This information is correct as of 15 August 2023. All care is taken to ensure the statistical information included within this report is correct. However, pending the outcome of ongoing coronial investigations and as SLSNSW update their operational information, this data may be amended. Data in figures may not always add up to 100% due to rounding. Total mortality rates were calculated using the number of deaths divided by the population (per head of 100,000) from Australian Bureau of Statistics.

THE AUSTRALIAN COMMUNITY ANALYSIS

Information about community swimming ability, behaviours, and attitudes to coastal safety, risk perceptions, safety strategies and rescues was gathered from the SLSA National Coastal Safety Survey. Conducted by Omnipoll Market Research, the latest survey was run online over the period 6 - 30 April 2023 among a national sample of 3,118 respondents aged 16 and above. The study was carried out in compliance with AS-ISO 20252 - Market, Social and Opinion Research. To reflect the population distribution, results were post-weighted (on age, gender, geographic strata, and education) and projected to Australian Bureau of Statistics data (Census 2021). The Australian population aged 16 and above (the reference population for this survey) is 20,434,000. For this report, data has been summarized using New South Wales participant responses within the National Coastal Safety Survey 2023.

CAPABILITY & RESCUE ANALYSIS

SurfGuard, the Incident Report Database (IRD), and SurfCom management system (SurfCom) are web-based applications and part of a suite of applications that enable members, clubs, branches, state offices and SLSA to enter and access SLS operational (including rescues and first aids), capability (including assets and services), educational and administrative data. Information was extracted from SurfGuard to identify how many rescues were performed by volunteers, lifeguards and lifesaving services during 2022/23; and how many active surf lifesavers and award holders there were during 2022/23. The data was verified by SLSNSW. Information about assets and services were gathered from SLSNSW.

DROWNING & FATALITY DATA ANALYSIS

SLSA collects incident data from SurfGuard, the IRD, SurfCom, the National Coronial Information System (NCIS) and by monitoring media reports for coastal and ocean incidents. The information is verified with the assistance of SLSNSW and compiled for analysis by SLSA's Coastal Safety Department. The following variables are used to match fatal incidents from more than one data source: incident date; location; age; gender; and incident description. The NCIS is considered the 'gold standard' when there is a discrepancy in the detail collected from different data sources. Deaths are excluded as a coastal drowning if they are reported as 'intentional deaths', they occur at inland locations, or 'drowning/ immersion' is not a contributory factor as noted by the coroner. Coastal incidents that are deemed intentional or not due to drowning/immersion are logged as coastal fatalities instead. This report presents information on drowning deaths and other non-drowning fatalities that have occurred along the New South Wales coast. We explore incidents that have occurred between 1 July 2013 – 30 June 2023. The authors are responsible for the use made of the data in this report.

DROWNING & FATALITY DATA LIMITATIONS

Over years of investigation 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 be different from annual totals previously reported. In an effort to produce a timely report on our current year's data we acknowledge that these figures will change. Each year, the changes that occur in the previous year's report will be made transparent. The data in this current report are not the final figures as 85% of 2022/23 New South Wales coastal drowning deaths and 74% of 2022/23 New South Wales coastal fatalities recorded remain open cases and 26% of 2022/23 New South Wales cases do not yet have a cause of death (COD) listed. Once NCIS closes a case, SLSA modifies those with unknown intent and those where the cause of death is not drowning, from 'coastal drowning' to 'coastal fatality'.

The incidents are included in our annual totals and analysis, and they will remain so until a COD is listed other than drowning/immersion.

CHANGES FROM PREVIOUS REPORTS

As part of the NCIS investigation process, some cases are amended prior to their closure and have resulted in changes to our datasets. This year SLSA has commenced a thorough review of its coastal and ocean fatality database to update all cases to the same inclusion standards. See the below table for annual case numbers.

	2019 NSWCSR	2020 NSWCSR	2021 NSWCSR	2022 NSWCSR	2023 NSWCSR
2013/14	29	29	29	29	29
2014/15	39	41	41	41	40
2015/16	56	56	55	55	55
2016/17	33	33	33	33	33
2017/18	36	34	35	35	35
2018/19	44	43	42	43	43
2019/20		49	49	49	49
2020/21			45	45	45
2021/22				55	52
2022/23					48

SUGGESTED CITATION

Surf Life Saving Australia and Surf Life Saving New South Wales, 2023. Surf Life Saving New South Wales Coastal Safety Report 2023. Surf Life Saving, Sydney.

REFERENCES

- Australian Bureau of Statistics. National, state and territory population [Internet]. Canberra: ABS; 2022 December [cited 2023 August 15]. Available from: https://www.abs.gov.au/statistics/people/population/national-state-and-territory-population/latest-release.
- Australian Bureau of Statistics. Population: Census [Internet]. Canberra: ABS; 2021 [cited 2023 August 24]. Available from: https://www.abs.gov.au/statistics/people/population/population-census/latest-release.
- SLSA National Coastal Safety Survey 2023

ACKNOWLEDGEMENTS

Surf Life Saving Australia and Surf Life Saving New South Wales wish to thank the following organisations and people for their contribution to the Surf Life Saving New South Wales Coastal Safety Report 2023: the Australian Government (Department of Health); National Coronial Information System (Jessica Bryan); Department of Justice and Community Safety; Omnipoll (Frederic Anne); and SLSA major national corporate partners (Ampol, DHL, Isuzu, and Westpac).

SLSNSW also wish to thank the NSW Government, NSW Department of Primary Industries, NSW Ministry of Health, and Office of Sport for funding essential coastal surveillance, public safety, and drowning prevention programs and initiatives. In addition, SLSNSW would like to thank coastal Local Government Areas and NSW National Parks and Wildlife Service.

Finally, thanks to the Surf Life Saving Clubs, Surf Life Saving Branches, Support Operations, and other emergency services in New South Wales for their efforts to reduce the risk of drowning and injury on our coastline.

This report was compiled by Surf Life Saving Australia and Surf Life Saving New South Wales, in particular the following: Shane Daw, General Manager - Coastal Safety; Jasmin Lawes, Researcher; Sean Kelly, Research Assistant; Belinda Cooper, Project Coordinator Coastal Safety; Rhiannon Brinckman, Project Officer Coastal Safety; Jamie Findlay, Lifesaving Operations Manager; and Kirk Patton, Coastal Safety Support Officer (Surf Life Saving Australia). Nick Mulcahy, Coastal Risk and Research Manager; Chris Twine, Geospatial Analyst; Meagan Lowe, Coastal Risk and Research Officer; Paul Hardy, AUAVS Manager and Chief Remote Pilot; Julia Kiss, Community Education Manager; Elise Hancock, Senior Graphic Designer; and Donna Wishart, Communications and Engagement Manager (Surf Life Saving New South Wales)

Cover image: Australian UAV Service

Maps: John Frith, Flat Earth Mapping

Design: Melissa Conchar, OnDemand Design

CONTACT INFORMATION

SLSA and SLSNSW receives Government funding to commence valuable initiatives and programs. However, we rely on the generosity of the community and corporate support to ensure they continue.

For more information:

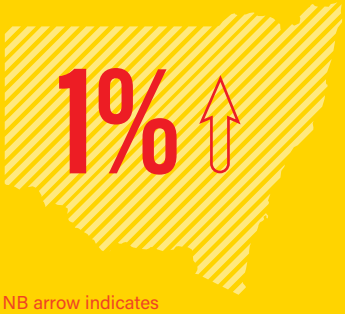
Surf Life Saving Australia—sls.com.au

Surf Life Saving New South Wales—surflifesaving.com.au

COASTAL DROWNING & FATALITY SNAPSHOT

NEW SOUTH WALES 2022/23

91
COASTAL DEATHS



NB arrow indicates change from 10-year average

53%
DUE TO DROWNING

58%
>1KM FROM A SLS SERVICE

LOCATION

49%
BEACH

36%
ROCK/CLIFF

ACTIVITY

24%
SWIMMING/WADING

14%
FALL

NB Intentional fatalities account for 20% of coastal deaths

SURF LIFE SAVING NSW & AUSTRALIAN LIFEGUARD SERVICE

861,882
PREVENTIVE ACTIONS

20,417
PROFICIENT MEMBERS

4,787
RESCUES

9,762
FIRST AIDS