NEW ZEALAND SEARCH AND RESCUE





New Zealand Search and Rescue Council

annual report 2019-2020

















Aviation



Coordination + Support



CONTENTS

CHAIR'S REPORT	1
WHO WE ARE	2
WHAT WE DO	3
WHERE WE DO IT	4
NEW ZEALAND'S SEARCH AND RESCUE REGION	5
WHAT WE ACHIEVE	6
VOLUNTEER HOURS	7
WHAT WE USE	8
WHAT IT COSTS	9
OUR STRATEGY	10
SECURING OUR FUTURE	11
DATA CAPTURE AND ANALYSIS	13
SUPPORTING VOLUNTEERISM	15
VOLUNTEER SNAPSHOTS	17
ALWAYS IMPROVING	19
A COLLECTIVE RESPONSE TO COVID-19	22
CELEBRATING SUCCESS	24
LEARNING FROM EXPERIENCE	27
SMARTENING UP OUR PRESENCE	29
SAR IN THE WIDER REGION	30
SECRETARIAT'S REPORT	31
GOVERNANCE	32
OUR SECTOR	33

CHAIR'S REPORT

"He spotted his mum and they were hugging and crying and it was an emotional time, and for the searchers too. Then when he realised everyone in the tent had been looking for him, he was up there giving them high fives."



These were the words of Roger Ladd, of the Far North Land Search and Rescue group after a stressful overnight search for a seven-year-old boy and his Dad in Puketi Forest. It was the positive outcome they were all hoping for.

The ultimate reward of saving a life – in this case two – and delivering that news to relieved whānau is often met with tears of joy all round. It is an incredible privilege afforded to a courageous group of people involved in search and rescue or emergency services.

This search and rescue operation was one of hundreds that returned the missing or injured safely to their families over the past year. We Kiwis are well renowned for our can-do attitude; that number 8 fence wire mentality that gives us a certain edge when it comes to mucking in. And the psyche of people involved in New Zealand's search and rescue sector is no exception – their passion, dedication and skills led to 128 lives saved, with a further 506 lives rescued and 783 lives assisted. Many of these people are volunteers who willingly down tools to give their time generously to help others.

The value we place on SAR volunteers saw the development in September of a set of guiding principles for the sector to foster volunteerism. This followed a recommendation by Volunteering NZ to ensure current volunteers are well supported and there is an ongoing willingness among New Zealanders to engage with

search and rescue and volunteer in the future. SAR agencies throughout the country are now using these guiding principles to refine their own volunteer strategies.

The widespread impact of COVID-19 has affected every one of us – and the search and rescue sector is not immune to the challenges it continues to present. There have been subtle shifts in the way the sector operates; a focus on aligning resources, sharing expertise and working together for the best results. When the country went into lockdown for example, joint and decisive communications from the sector saw a dramatic decline in search and rescue incidents; helping to keep SAR volunteers safe in their 'bubbles'.

We enter the next financial year with a substantial investment from government – approximately \$58 million over the next four years, and a separate Budget allocation for Surf Life Saving and Coastguard. This is wonderful news for SAR in New Zealand and we look forward to reporting on the many new initiatives this funding will make possible in future.

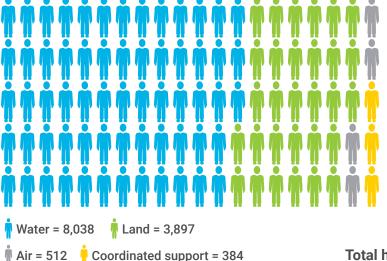
I am honoured to serve as Chair for a sector that does its absolute utmost to ensure people are returned to their loved ones. I hope you will enjoy reading more about it.

Peter Mersi Chair, NZSAR Council

WHO WE ARE

People in the NZ SAR sector

12,831 people are involved in the New Zealand search and rescue sector.



Total hours committed to search and rescue operations by agency

from shore.

operations are coordinated at the local level – covering land, subterranean, river, lake and inland waterway

environments. They can also include close-to-shore marine operations,

typically less than 12 nautical miles

the New Zealand Search and Rescue Region. These can also include land-based operations following the activation of a distress beacon.

Category II search and rescue operations are coordinated at the national level – including missing

The two coordinating authorities responsible for search and rescue operations throughout New Zealand are the New Zealand Police (for Category I operations) and the Rescue Coordination Centre (for Category II operations). Occasionally there is some overlap.

Rescue Coordination Centre

17 Search and Rescue Officers coordinate assets and agencies around the country to respond to SAR incidents. They work in shifts, so there are always at least two officers on the duty desk at any time.

NZ Police

In New Zealand we have 10 Police Districts, each with their own Search and Rescue Coordinators. They coordinate SAR assets and agencies within their respective districts.

Search and rescue agencies

Search and rescue operations rely heavily on the hard work of people from several supporting agencies, many of whom are volunteers.

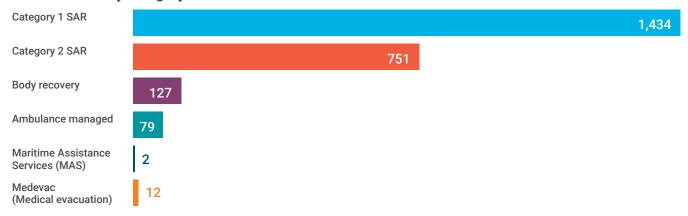
NZ Police 16,009 hrs LandSAR 11,450 hrs Surf Life Saving NZ 2,299 hrs Coastguard NZ 2,147 hrs Spontaneous volunteers 675 hrs Fire and Emergency NZ 653 hrs Department of Conservation 440 hrs Specialist land teams 322 hrs AREC 289 hrs Other marine rescue groups 249 hrs **NZ Defence Force** 186 hrs Other land rescue groups 181 hrs Civil Defence 110 hrs NZ response teams 6 hrs

WHAT WE DO

SAR incidents in 2019-20

In the year ending June 2020, the New Zealand Search and Rescue sector was involved in 2,405 incidents.

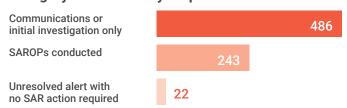
SAR incidents by category



Category I incidents by response



Category II incidents by response



SAR incidents by environment

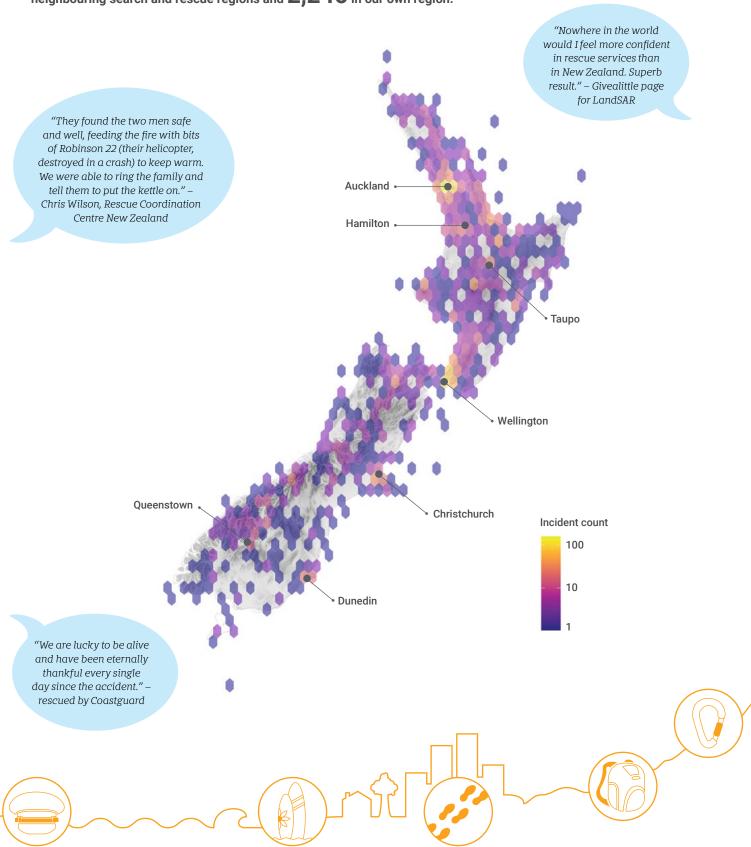




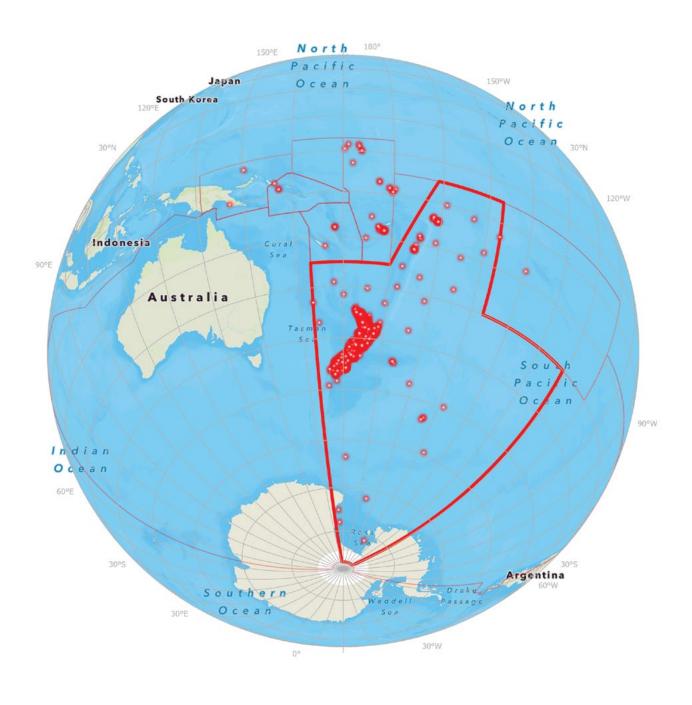
WHERE WE DO IT

The New Zealand Search and Rescue Region is one of the largest in the world, covering over 30 million square kilometres. We also assist our neighbouring Pacific Islands nations, which stretches our reach to an area of almost 70 million square kilometres.

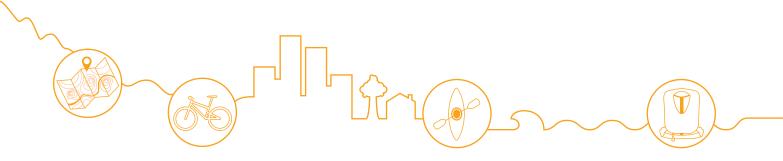
In the year ending June 2020, New Zealand assisted with 40 incidents in our neighbouring search and rescue regions and 2,246 in our own region.



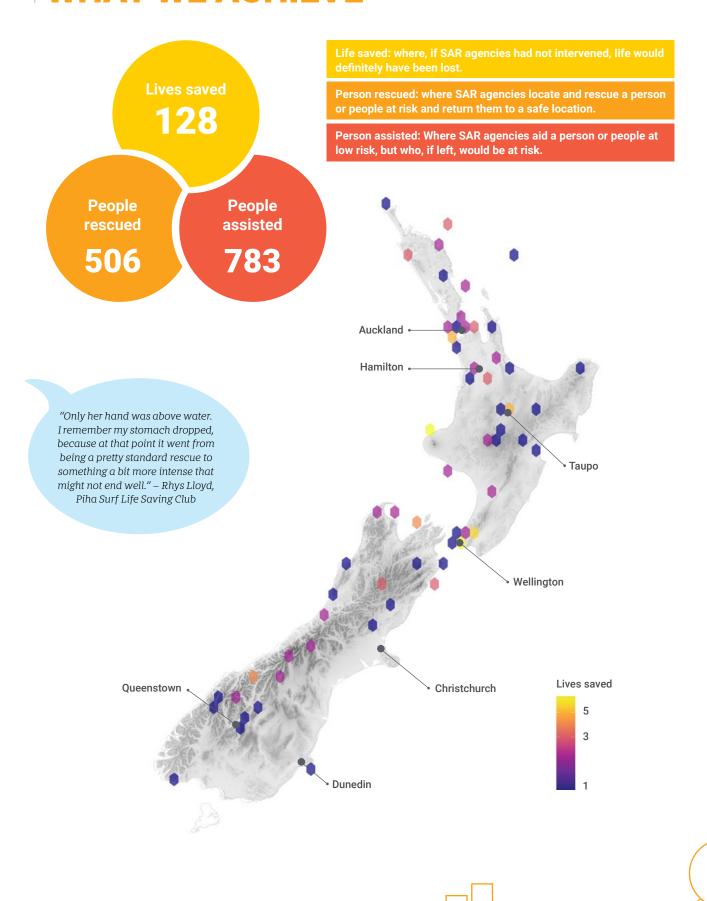
NEW ZEALAND'S SEARCH AND RESCUE REGION



Incidents: 2019 – 2020New Zealand's Search and Rescue Region



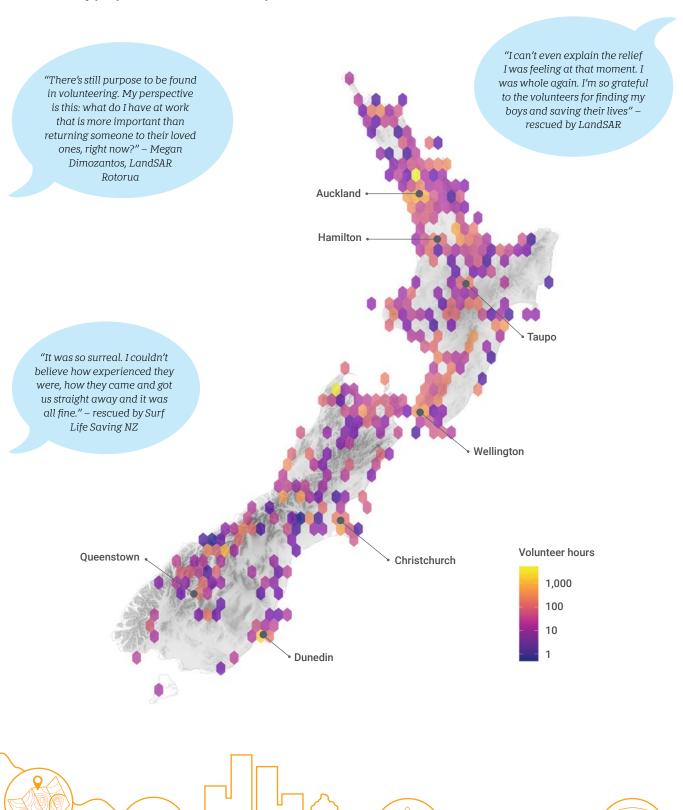
WHAT WE ACHIEVE



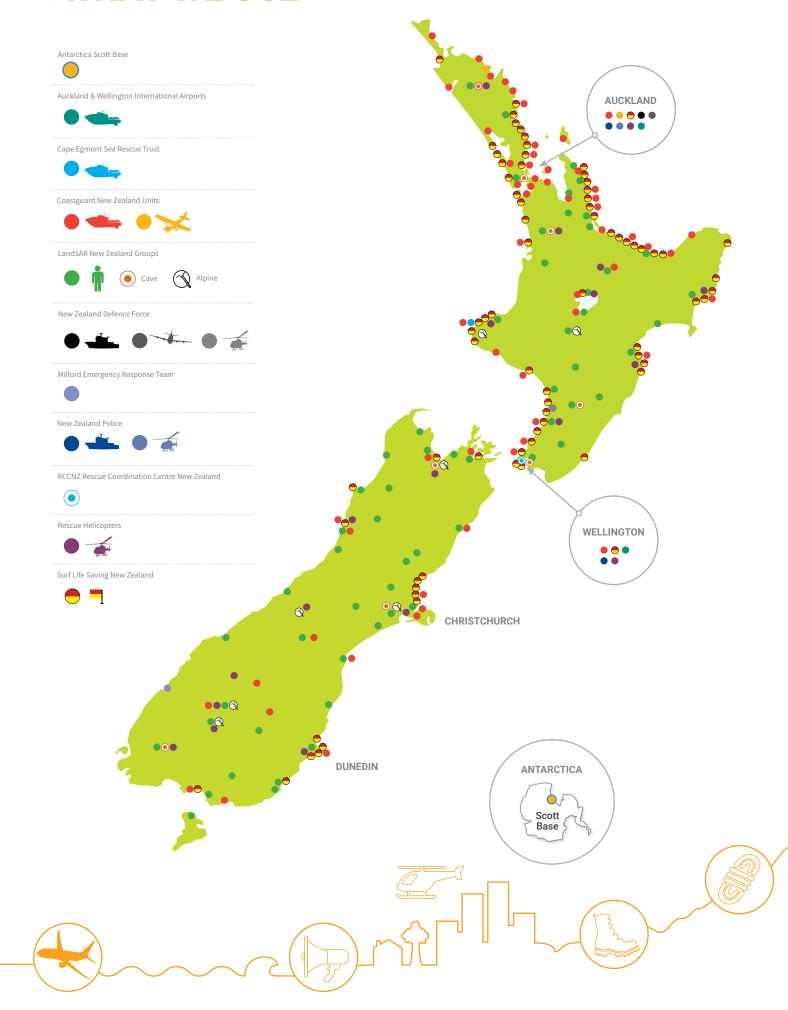
SAR OPERATIONAL HOURS

People are at the heart of search and rescue in New Zealand. Every year, SAR people collectively spend thousands of hours away from their own families to assist with search and rescue operations.

In the year ending June 2020, a total of 35,023 hours were invested by people in search and rescue operations.



WHAT WE USE



WHAT IT COSTS

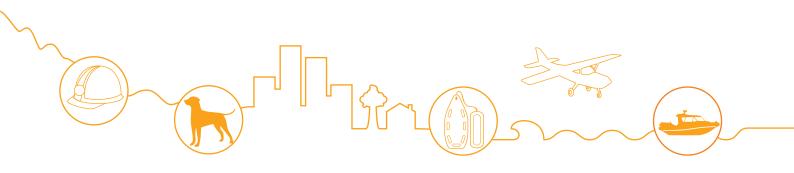


\$499 million in social costs was averted by saving 128 lives.

The social cost of a premature fatality is measured using the Ministry of Transport's Value of Statistical Life formula. It includes intangible costs such as emotional costs to family and friends. We estimate the intangible benefit to cost ratio to be approximately 14:1, which can in part be attributed to the financial efficiency and operational effectiveness of the search and rescue sector. Fuel Excise Duties paid by recreational boat users funded the New Zealand Search and Rescue Secretariat, the five Service Level Agreements and some elements of the Rescue Coordination Centre New Zealand's activities.

The total cost of search and rescue to the Government varies year on year, as operational costs change according to the number, length and type of SAR operations. Significant overhead and capital costs are not fully represented, as it is difficult for some organisations to capture this information.

The SAR system responded to a total of 73 fatalities during the year.



OUR STRATEGY

OUTCOME

NZSAR will ensure New Zealand has effective search and rescue services for people in distress throughout New Zealand's search and rescue region in order to save lives.

VISION

A cohesive community of capable people in sustainable organisations, finding and rescuing people in distress, operating collaboratively within a robust SAR system.

have a strong community service ethic

communicate and engage openly and effectively



collaborate and cooperate

between individuals, teams and organisations

respect individuals, teams and organisations



A robust and integrated SAR system

We seek a collective, cross sector culture of being "one SAR body" within an integrated SAR sector. Our policies, processes, procedures and documentation will be coherent, aligned and support effective, efficient and safe SAR practice. We will undertake SAR activity cooperatively and learn from our experiences. We will continue to improve our understanding of the SAR Sector, our performance, our people, our operations and external influences so that we can improve our services, strengthen our resilience and mitigate our risks. We will also promote and support SAR innovations and showcase good practice.



Efficient and sustainable SAR organisations

We seek high performing, efficient and sustainable SAR organisations with adequate, secure funding. Our capabilities will be fit-for-purpose, appropriately located and adequate to address known SAR needs. We will make affordable, evidence based investment decisions supported by good quality information. We will adapt our organisations and arrangements in response to changes in our environment and ensure we continue to deliver effective SAR services throughout the NZSRR.



Capable SAR people

We seek to maximise the potential of our SAR people. We will work to ensure our people have access to appropriate training and ensure we conduct SAR activities safely. We will collectively coordinate our standards, training, exercises and documentation. Knowledge will be shared without restriction and we will learn from each other. We will also recognise and celebrate the dedication, courage and commitment of our people.



SAR Prevention

We seek an informed, responsible, adequately equipped and appropriately skilled public who are able to either avoid distress situations or survive them should they occur. A large number of organisations have a role to play with SAR prevention. Collectively, we will enhance personal responsibility through information, education, regulation, investigation and enforcement. We will collaborate with, inform, and contribute to partner organisations and when required, enable, coordinate or lead public focussed SAR preventative strategies and actions in order to reduce the number and/or the severity of SAR incidents within the NZSRR.



A \$58 million investment in search and rescue and water safety services over the next four years is the largest ever vote of confidence from the New Zealand Government in the work that we do.

Announced by the Minister of Transport Phil Twyford in July 2020, this news was very warmly welcomed by SAR agencies nationwide. It represents a huge 108 percent increase in government support; helping to secure the future of the search and rescue sector and fuelling new initiatives to save more lives.

On top of this investment, Budget 2020 also delivered a combined total of \$60.5 million for Coastguard NZ and Surf Life Saving NZ, and a further \$2 million for Water Safety NZ.

This momentous level of government support will drive a step change in the way the sector is led and works together. The NZSAR Council has strong expectations for increased collaboration of search and rescue partners, which will not only improve inter-SAR agency readiness and operational effectiveness, but also planning, communication and general liaison.

How it will be spent

A wide range of projects and initiatives are planned, which will not only help to futureproof SAR organisations, but significantly enhance their ability to locate and save people in distress. Some common threads are volunteer support and training, health and safety, wellbeing,

interagency collaboration, technology improvements, communications and innovation, SAR training and SAR readiness. Some of the key initiatives include:

- NZ Police SAR response has been strengthened, with funding for 11 new Civilian Assistant District SAR coordinator positions to improve their readiness for search and rescue operations.
- Significant investment in Amateur Radio Emergency
 Communications (AREC) will see them employ a
 small number of paid staff for the first time. AREC will
 invest in their governance and organisational systems
 and revamp their training capability to offer core
 modules for common communication training needs
 sector wide.
- Land Search and Rescue will increase their investment in WanderSearch to support the delivery of the sector's Safer Walking Partnership Framework. This framework brings agencies together to coordinate services for people with cognitive impairment who go missing or are at risk of doing so. LandSAR are also investing in additional group support officers and their overall governance.
- Coastguard New Zealand achieved a significant milestone during the year by amalgamating their

- regional structure into one national body. They will invest in a sustainable fundraising foundation and an information management system, and redesign their qualification framework.
- Surf Life Saving New Zealand will appoint a
 Volunteer Manager, complete their digital radio
 network and investigate a joint communications unit
 in collaboration with Coastguard. Underpinning the
 financial sustainability of 74 surf lifesaving clubs
 throughout the country will also be a priority, as well
 as appointing several new roles.
- The investment received by NZSAR will provide further strategic leadership for the search and rescue sector, with a Principal and two Senior Advisors joining the

- Secretariat. A system-wide review of existing SAR training will take place, making it easier for SAR personnel to revalidate their skills.
- The Mountain Safety Council will update and extend its Avalanche Advisory service, keeping more people safe during New Zealand's snow season.
- The Department of Conservation will establish a
 Land Safety Forum to help reduce the number of
 preventable search and rescue incidents. This forum
 will include representatives from SAR agencies, the
 owners of land where SAR operations take place, the
 outdoor recreation sector and other organisations
 involved in promoting safety on New Zealand's Great
 Walks, mountain ranges and backcountry.

Funding principles

The NZSAR Council adopted a set of funding principles to help ensure that all SAR agencies gain from the investment, and robust and transparent processes are in place to deliver the initiatives. We will work with each agency to guide and implement the application of this funding, deliver measurable impacts, mitigate risks, and ensure value is demonstrated for the investment made.

Funding principle	Summary
Stewardship of public funds	Maintaining public trust by accounting fully and openly for operations and decisions in the use of public resources.
A collaborative approach	Mutual respect and goodwill to ensure funding efficiency, improved inter-organisational engagement and a sector-wide approach.
Shared services	Seeking opportunities to fund one agency to provide services that can also be used by another agency.
Transparency	Value for money and being clear about our structure, functions, intentions and accounts.
Justifiable business purpose and value of investment	Measuring quality – the monetary cost of the product/ service vs the benefit it will provide.
Managing risk	Mitigating risks in our evolving and complex environment.
Values	Demonstrating the alignment of all funded initiatives with our organisational values. (pg 10)
Wellbeing and resilience	Making sure of staff and volunteer wellbeing and building resilience at both the agency and individual levels.

Data capture and analysis

SARdony x is the primary data capture tool for operational search and rescue incidents in New Zealand. Operational since May 2019, it is improving the quality of data we record and generating a rich source of information for sophisticated analysis.

As the amount of data captured by SARdonyx increases over time, so too does the opportunity for fresh insights into the capability, robustness and risks within our search and rescue sector.

A bedding-down phase

The new system represented a significant change to how the sector records and shares operational information and how it works together. SARdonyx replaced the two separate post-incident data capture systems used for many years by NZ Police and the Rescue Coordination Centre NZ. Teething issues during its first few months of operation helped us to identify and implement a range of updates and improvements to the system throughout the year.

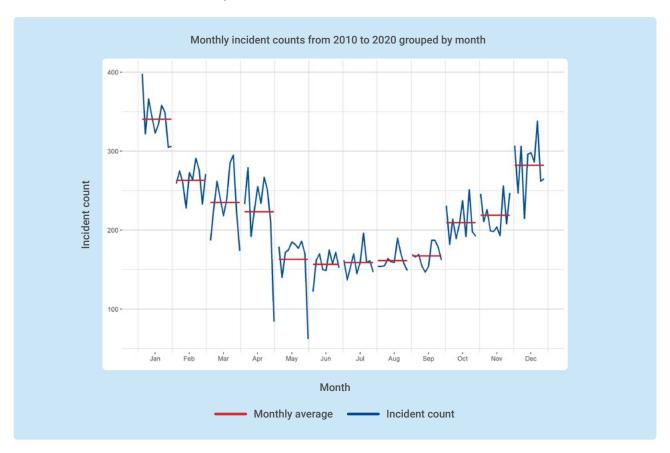
How we use the data

SARdonyx supported several pieces of work during the year, including:

- An analysis of 'wander' incidents, giving us a better understanding of the value of search techniques for people with cognitive impairment who get lost or go missing.
- · Benchmarking and SAR prevention.
- · A monthly dashboard for NZ Police SAR reporting.
- · Statistical reporting for the NZSAR Secretariat, its committees and working groups.

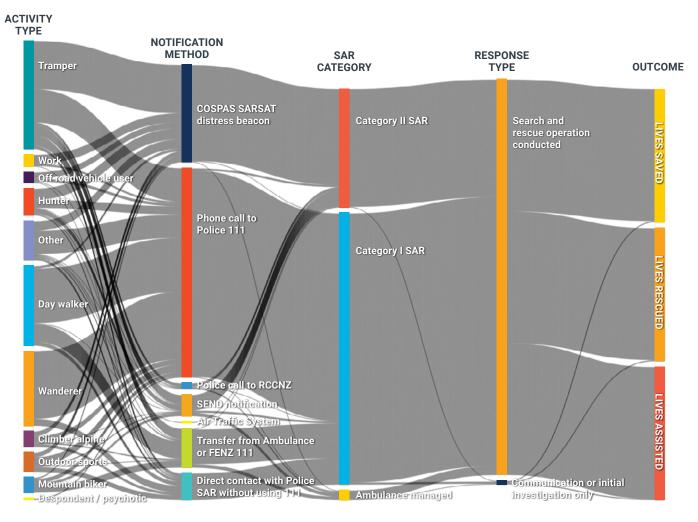
Having up-to-date information about the number of incidents by geographic region and environment can help to identify trends and inform prevention work in specific places, for example New Zealand's Great Walks.

We can also see the overall seasonal pattern of incidents and the variation within each month.



The consistency of SARdonyx data categories makes it easy to search for specific incident types, causes or outcomes. The chart below, for example, shows all land incidents that led to a life saved, rescued, or assisted during the year.

SAR journey for land incidents 2019-2020



COSPAS SARSAT – the international satellite system for SAR in New Zealand

SEND – Satellite Emergency Notification Device, a portable emergency notification and locating device which uses commercial satellite systems

FENZ - Fire Emergency New Zealand

Future projects

We will continue to listen to feedback from the SAR sector and translate this into further improvements to SARdonyx, ensuring it meets our diverse needs and making it as easy as possible to use. Some work on the horizon includes:

- · Updates to inter-agency cooperation.
- Development of additional interfaces to improve access to SARdonyx for other data systems.
- Evolving the built-in data reports to better serve the primary users.
- · Ongoing community-driven improvements.

Total incident count: 477	Lives saved: 18	Lives 70 rescued:	Lives assisted: 146	Operational 9,791 hours:	Auckland Police District

Supporting Volunteerism

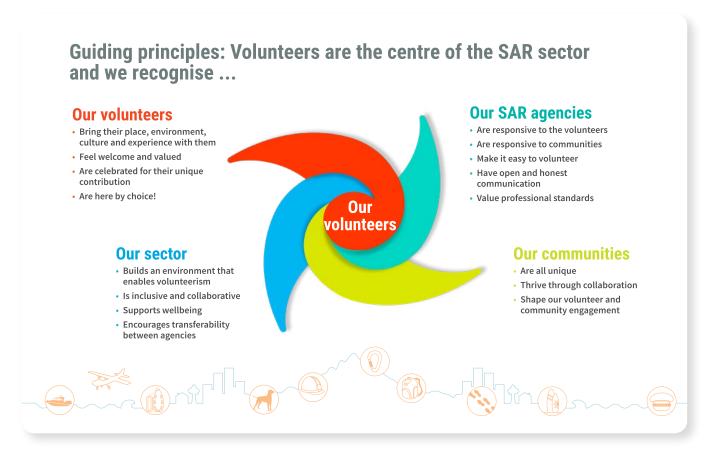
New Zealand's search and rescue sector has one of the highest rates of volunteer involvement in the world. There are volunteers working as part of first response or callout teams, training new personnel, providing advice on local terrain, managing calls from concerned family members and even balancing the accounts. Put simply, volunteers are the heart of search and rescue.

That's why we endeavoured to learn more about them. Volunteering New Zealand's Volunteer Study for NZSAR 2019 did exactly that – making a number of recommendations as to how we might better support this essential workforce. Over the past financial year, NZSAR has addressed several of these recommendations. Here's a summary of the progress we've made.

1. Guiding principles for volunteer involvement

The study clearly showed that organisational values are critical to engaging and retaining volunteers. In September 2019, NZSAR adopted a set of Guiding Principles for Volunteer Involvement. These principles are deliberately designed with the volunteer at the centre. They support and guide how we undertake activities that relate to our volunteers. Search and rescue agencies throughout the country are encouraged to build their own organisational values based on these guiding principles.





2. A volunteer strategy template

Search and rescue agencies are also addressing the recommendations made by Volunteering New Zealand in their agency-specific reports. One of the most consistent recommendations across the board was to develop a volunteer strategy that identifies opportunities to better support and resource their volunteers. These strategies would also consider how each agency will attract and retain volunteers.

NZSAR has provided a practical template to support the SAR agencies with this process. The template is built around 10 sub-strategies that set out:

- what challenges the organisation and its volunteers are facing
- how they tackle those challenges
- what actions they intend to take to turn those challenges into opportunities
- · the priority (urgency level) of those actions
- · what success will look like over a specified period
- · how to monitor success to ensure it is ongoing.

3. A common volunteer data standard

We know that our volunteers play a significant role in search and rescue, but we do not have a sector-wide view of our volunteers that is based on a common set of data. To address this, New Zealand's search and rescue agencies are working together to define the demographic information and capability indicators for data collection – such as date of birth, ethnicity, gender, joining date and employment status. We will not collect any personal identifying information – this is retained by the SAR organisation.

A consistent data standard will allow us to better understand the volunteer workforce and discrete search and rescue capabilities located around New Zealand. Once collated, the data will fuel informed decisions, enable us to provide details of our sector to stakeholders and facilitate more accurate reporting on our greatest asset, our people.



Volunteer snapshots

Linda Poulsen

Spencer Park Surf Life Saving Club

You might be forgiven for thinking that surf lifesaving is in the genes when you meet the Poulsen family of Christchurch. Linda, her husband Daryl and two grown daughters have all taken an active part in the Spencer Park Surf Life Saving Club over the past 10 years.

As Club Captain and Lifeguard Manager, Linda is the face of the club. She looks after about 90 lifeguards ensuring they receive their refresher training, organising rosters and equipment, coaching new lifeguards and even training IRB (inflatable rescue boat) drivers. She is a qualified lifeguard and manages the emergency callout squad. Linda also oversees Club functions like prizegiving, works behind the bar, and sits on the Club Committee. All out of the goodness of her heart.

On the flipside, Linda works as a Patent Manager at the Intellectual Property Office. She and Daryl own a business and she also does the accounts for a plaster board installer. But giving back to the community is important to her.

"I'm passionate about water safety at our beautiful beaches, lakes and rivers," she says. "Lots of people lose their lives every year around water and I just think it's a total waste of life. The Surf to School programme offered by Surf Life Saving NZ is there to help all New Zealand children become more waterwise, but unfortunately not all schools take up the opportunity."

In the summer season, Linda spends at least 10 hours per week at the club. She says the most challenging aspect of her role is trying to spread jobs across people.

"Everyone is really busy and recruiting volunteers can be hard," she says. "So many of our young lifeguards reach 18 and go off to university or start out on a different path."

Seeing her own children stay on as lifeguards after they completed their junior surf training was immensely satisfying.



Linda Poulsen

"You can still be a slow swimmer and be an awesome lifeguard. Or, you may not be the best swimmer, but still be a real asset to patrols. Do something you love, something you feel passionate about. Get amongst it, you'll find friends."

"One of the things that drives me is seeing people achieve. The other day I saw one of the first boys I trained as an IRB driver out coaching other drivers. It's rewarding to encourage people who may lack confidence and get them to the next level."

And its easy to see how motivating Linda can be. When asked what she would say to someone who was considering joining a lifesaving club, she said this:

"You can still be a slow swimmer and be an awesome lifeguard. Or, you may not be the best swimmer, but still be a real asset to patrols. Do something you love, something you feel passionate about. Get amongst it, you'll find friends."

Linda is quick to lend her support during search and rescue operations too. She was involved in a recent search for a boy at Sumner Beach. Linda co-ordinated the team, organised lunches, arranged transport and spent the whole day in the boat.

"Sadly, we knew we were probably looking for a body. The boy's family were camped out on the shore, watching and waiting for news," says Linda. "Seeing their grief made me thankful that we were doing something to potentially help bring back their son."

Bay of Plenty Total incident Lives Lives Lives **Operational** Police District 2.116 assisted: rescued:

Richard Bramley CanyonSAR, Nelson

Family man Richard is one of those extraordinary people who is prepared to drop what he is doing and pitch in when someone needs help. His kids (aged 4 and 7) love it when they get to see helicopters. But that's not why the energy economist became involved in search and rescue. Richard's interest in caving and canyoning has morphed over the past eight years into voluntary service of a specialised kind.

"There are very few recreational cavers in New Zealand and even fewer rescuers," says Richard. "We have to look after our own. If you're a half competent caver, you effectively end up in search and rescue."

Being both a caver and canyoner, he realised that the skills required to help injured or missing parties are quite different and that there was an urgent need to get CanyonSAR established.

"This became particularly apparent at the first New Zealand Canyoning Festival in 2016, during a search and rescue exercise," says Richard. "Some of the most experienced canyoners in the country tried to get a stretcher down the canyon. We did it, but it was quite chaotic."

So began Richard's involvement in CanyonSAR and his mission - as part of the NZ Canyoning Association - to train select SAR personnel throughout the country in the correct techniques, using the correct equipment.

"We have no aspirations to create large teams of CanyonSAR experts," says Richard. "There's simply not enough callouts. Our focus is on establishing canyoning expertise within existing rescue teams."

CanyonSAR skills can be put to good use during search and rescue operations where there is vertical water, or if rivers and creeks are hard to access. Richard was involved in several searches during our reporting period where CanyonSAR skills were needed, including the May 2020 search for Dion Reynolds and Jessica O'Connor in Kahurangi National Park.

"I was in one of two CanyonSAR teams winched in by NH90 helicopters to the steep headwaters of rivers. Navigating that terrain was pretty straightforward for us but would have been



"Being able to drop your work and family commitments to respond is tough."

difficult and dangerous for LandSAR teams without ropes, floatable packs, wetsuits etc. The first day we cleared two rivers – one team spent the night on the riverbank after finding footprints, while the other team was redeployed the next day in more steep terrain."

It is obvious that Richard is passionate about his volunteer work, although he says it does present challenges.

"Being able to drop your work and family commitments to respond is tough," he says. "It's also challenging to stay current with your skills and be realistic about your capabilities. In a risky environment, we have to be careful that our enthusiasm for doing a service to society doesn't result in exposing ourselves to risks that we're not equipped for."

Having said that, Richard doesn't hesitate in recommending SAR to others.

"It's very rewarding. SAR can become a hobby in itself - but be careful to prioritise keeping your personal skills current. Be comfortable looking after yourself and then you're in the best position to help others."



Training our people

The NZSAR Secretariat funds the delivery of more than 100 training courses annually, accessed by over 1000 learners nationwide.

Keeping search and rescue training courses fees-free and ensuring they are easy for our volunteer base to access is a responsibility we don't take lightly.

We listen to what the sector needs via a national forum of representatives and work with the governance groups of our training providers to ensure each SAR course is fit for purpose.

A flexible approach

A new funding model, introduced in 2019, makes it easier for us to add courses or change their location and adjust the delivery to meet demand. In the past financial year, for example, we arranged for a CIMS2 (Coordinated Incident Management System 2) course to be delivered in person instead of online to a group of Coastguard volunteers, at their request.

Training in numbers

More than 1,500 people received search and rescue training over the 2019 calendar (training) year. Tai Poutini Polytechnic delivered 31 multi-agency management and coordination courses, while Land Search and Rescue ran 83 courses focusing on the skills and competencies relevant to land operational roles.

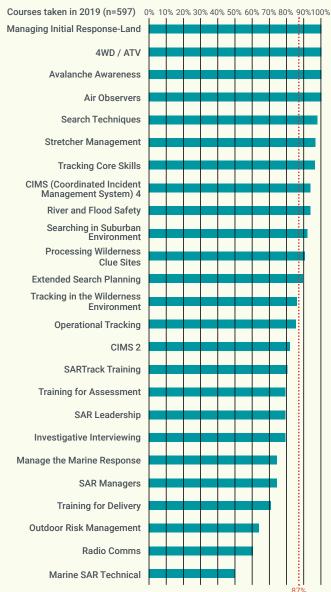
An independent survey of participants in the 2019 programme saw consistently high ratings for course content, the degree to which it was applicable to SAR activity and the quality of tuition.

- 95% agreed the course taught them skills very relevant to the tasks they do for SAR.
- 89% agreed they feel confident they can now use those skills in an operation.

87% of the ratings across all courses were positive (rated Good or Excellent). Twelve of the 26 courses rated at, or above the national average (87% positive).

Overall course rating

(rated 'Excellent' or Good')



Total incident count:

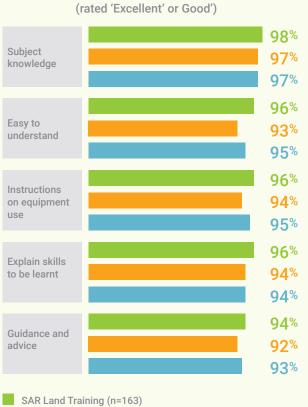
186 Lives saved: 6 Lives rescued: 50 Lives assisted: 58 Operational hours: 3,091

Canterbury Police District



Feedback on course tutors was exceptional

Tutors





The best thing about SAR training

When asked what the best thing is about training in search and rescue, participants selected:

- Learning new skills 86%
- Being ready to assist in operations 81%
- Learning from experienced tutors 80%
- Working in a team 71%
- Gaining confidence 64%
- Learning from other agencies 45%

Multiagency Training (n=97)

Total face to face (n=260)



Exercising our skills

Every year, search and rescue organisations come together within each Police District to participate in SAR exercises, where they can apply their skills without the pressures of an operational response. Known to the sector as SAREXs, these multi-agency exercises provide a valuable opportunity for people from different SAR specialties to meet, work alongside each other and learn from the experience. Participation in SAREXs is considered an important and practical way to put training into practice, especially when there may not otherwise be a need to use those skills for long periods.

While they are conducted as practice sessions, SAREXs still require teams to plan, carry out and review the search and rescue operation as though there were an immediate need at hand.

NZSAR provides financial support for each Police District SAREX. In 2019/20 this amounted to \$44,500. Unfortunately, some planned SAREXs were cancelled due to the impact of the Whakaari/White Island eruption and the COVID-19 lockdown.

The plans and format of each SAREX vary across the Districts, but typically fall into one of three types – scenario-based, cold case, or rogaine – with a land, marine or combined focus.

Each SAREX is planned against a set of objectives relevant to the operational and/or training needs of the District and is evaluated by a trained NZSAR Evaluator. Evaluation reports are published on the NZSAR website, www.nzsar.govt.nz.

A combined (land and marine) SAREX was held on and around Auckland's Manukau Harbour in September 2019 for the first time in 30 years. The scenario involved a search on land and water for ten survivors from a stricken fishing vessel. This successful exercise brought multiple agencies together – NZ Police, LandSAR, Royal New Zealand Air Force, Coastguard, Ports of Onehunga staff, the Auckland Harbour Master, Surf Life Saving NZ, and the Auckland Airport Crash Fire Squad.

"Every agency walked away from that exercise with new learnings. We learned how other agencies reacted and what up-to-date equipment they use. Without that inter-agency experience, you wouldn't know what resources there are available to you and what pathways can be of use." – Dan Pehi, Auckland LandSAR.

"Pulling experience from the team not just one person. Makes you think outside your own views." – LandSAR Trainee

Total incident 197 Lives saved: 13 Lives rescued: 52 Lives assisted: 65 Operational hours: 2,710 Central Police District

Total incident count:

Lives saved:

Lives rescued:

13

Lives assisted:

8

Operational hours:

Eastern Police District



Photograph courtesy of the New Zealand Defence Force

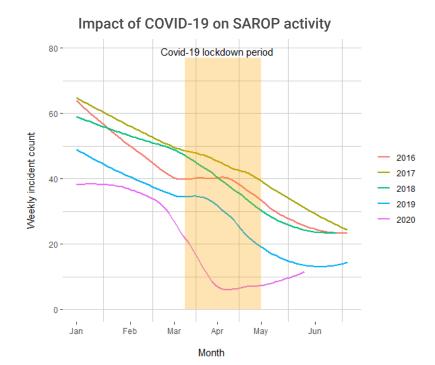
The search and rescue sector's collective response to the coronavirus pandemic epitomised the Government's call to "unite against COVID-19."

Beyond the provision of new personal protection equipment for response teams and the postponement of training activities, NZSAR played a small part in a much broader group effort to reduce the demand for search and rescue in New Zealand.

A joint communications campaign over the heightened alert level period delivered clear messages to the New Zealand public: stick to the rules and avoid any activities where you may unintentionally end up needing emergency services.

Ten agencies from the search and rescue sector and the outdoor recreation sector came on board quickly. Consistent messages across both sectors gave the public a better understanding of the COVID-19 restrictions as they applied to activities on the water and outdoor recreation.

While there were some exceptions, the overall result was a dramatic decline in search and rescue incidents during the last week of March and for most of April. This helped immensely to keep SAR volunteers safe at home in their own bubbles.



All-of-government input

NZSAR assisted the Ministry of Transport with its role in the all-of-government response to COVID-19.

Our Senior Advisor Carl van der Meulen was seconded to a team handling emails from members of the public. Carl contributed to over 4,200 responses to emails over six weeks regarding how the Alert Level 4 and 3 restrictions applied to individual circumstances.

Forecasting the impact on SAR

An NZSAR Environmental Scan during the COVID-19 lockdown period explored the potential impact of the pandemic on the search and rescue sector. The contents of the scan are used by SAR agencies to feed into strategic planning and risk management processes. Two factors were considered to have significant long-term impacts:

1. Economic impacts

Various economic impacts may reduce or limit the funding available to the volunteer agencies from many of their primary sources; and impact directly on the financial viability of commercial enterprises that provide direct support to search and rescue, such as helicopter operators.

2. Loss of international tourism

While international tourists account for only a small proportion of SAR operations, the loss of their financial contribution is likely to affect some recreational tourism operators and some helicopter operators. The absence of international tourists is also likely to see a change in domestic tourism and recreational behaviour, as people explore areas previously targeted by international tourists.

SAR in the wake of disaster

This year's Annual Report would not be complete without acknowledging the outstanding efforts of Police SAR and Coastguard in the response to the Whakaari White Island eruption on 9 December 2019.

One of the first calls made by White Island Tours boat Phoenix was to Coastguard Whakatāne. Coordinating with the Police and St John, the Whakatāne volunteer crew transported two paramedics out to the island, which was shrouded in a huge mushroom cloud of ash and steam. One volunteer jumped on board a White Island Tours boat to help a severely burned victim fighting for his life.

Coastguard Opōtōki volunteers also assisted first responders, helping where they were needed. In the week following the eruption, they spent many hours combing the water for the two people missing, while Coastguard Northland Air Patrol searched from the air.

At NZSAR we continue to be proud of the work our colleagues are doing in response to devastating events like these. Our thoughts go out to all those affected by the Whakaari White Island eruption, particularly whānau who have lost loved ones.

Celebrating success

The New Zealand Search and Rescue Awards are presented annually in recognition of outstanding achievements in search and rescue nationwide. Usually held at Parliament in May, COVID-19 restrictions meant the cancellation of the 2020 ceremony. This year's recipients received their awards at special presentations around the country in lieu of the national event.



Auckland Police Maritime Unit
Kariaotahi Surf Life Saving Club
Coastguard Waiuku
Auckland Rescue Helicopter Trust
NZ Police Air Support Unit
Coastguard Papakura
Coastguard Northern Region Communications
For the rescue of three people from their flipped vessel, Port Waikato on 25 May 2019.

The extraordinary teamwork, communication and quick thinking demonstrated in this night-time rescue was crucial to the successful outcome.

As lifeguards from Kariaotahi Surf Life Saving Club conducted a shoreline search, the trio were spotted by the Police Eagle, huddling together about 600 metres offshore. Attempts by the Westpac Rescue helicopter to winch them to safety and lower a paramedic were not successful due to adverse conditions.

While Coastguard Communications kept family members informed, a risk assessment determined that it was not safe for the Coastguard vessels to cross the Port Waikato bar. Kariaotahi lifeguards Nick Hornblow and Bradley Walters set out from shore in an IRB, guided by the rescue helicopter's landing light and headlights from Police and surf club vehicles.

Despite intense buffeting from the helicopter, the three people were rescued and back on land after enduring three hours in the water. The St John ambulance team administered immediate treatment for hypothermia and shock. Although one patient went into cardiac arrest and required CPR several times during the helicopter flight to hospital, all three lives were saved that night.



Seth McPhee
Otago Surf Life Saving Club

For his service and commitment to Surf Life Saving and search and rescue.

Seth has made a huge contribution to Surf Life
Saving – on the water and as a respected mentor
and instructor. He is one of the highest qualified
lifeguards in New Zealand and is passionate about
passing this knowledge on to others.

A lifeguard since 1999, Seth is currently a member of the Otago SLS Callout Squad – a team that he has coordinated for eight years. He is a successful rescue swimmer, playing a key part in multiple sea and air rescues. He has been a SLS Instructor for over 15 years and coached many people through the Advanced Lifeguard Award course.

He has instructed the Advanced IRB Skills,
Helicopter Swimmer, CIMS and Search and Rescue
units, working as Head Instructor at the National
Lifeguard School for the past three years. Seth
teaches his own innovative approach to Event
Lifeguarding and is developing a framework for Surf
Life Saving NZ to deliver flood water rescue services.

On top of all this, Seth is also a Coastguard-trained facilitator, training over 50 lifeguards each year in Marine VHF radio.



Maritime Operations Centre
Rescue Coordination Centre New Zealand
5 Squadron – Royal New Zealand Air Force
Auckland Rescue Helicopter Trust (ARHT)
Coastguard Bay of Islands

For the rescue of four people from a sinking vessel, near the Bay of Islands on 14 October 2019.

Given the stormy conditions, the Rescue Coordination Centre called on several assets, as it was likely that a prolonged search would be needed. Coastguard Bay of Islands and other responders negotiated 50 knot winds and 6-metre swells enroute, however the initial plan was successful: the Orion Kiwi Rescue located the distressed party, deployed a life-raft, and an Auckland Rescue Helicopter Trust crew extracted all four people from the water. Tragically, the 58-year-old skipper was not rescued alive.



Shane Cleary, Dean Rozendaal and Grant Brown Northland LandSAR - Cliff Rescue Team

For the rescue of a trapped climber at Piwhane/Spirits Bay, Northland on 19 December 2019.

Northland LandSAR Cliff Rescue negotiated the dangers of darkness and howling wind to reach a man perched precariously on a seaside cliff when it became clear that a helicopter winch was not possible. Using a counterweight belay system, with two people inland to counterweight one on the cliff face, Shane Cleary climbed down about

15 metres from the top of the cliff, gave the man some warm clothes and secured him in a harness. The pair self-belayed back up the crumbly slope before hover-loading into a Westpac Rescue helicopter.



Taylors Mistake Surf Life Saving Club Sumner Beach Surf Life Saving Club

For the rescue of a critical patient at Te Onepoto / Taylors Mistake Beach, Christchurch on 3 January 2019.

The skills and coordination of lifeguards provided Police and first responders with valuable assistance when attending to a youth who was in a critical condition after falling 20 metres on to rocks. Lifeguards stabilised the patient's head and neck while he was examined by paramedics and treated for severe trauma. They also cleared a safe landing area for the Westpac Rescue Helicopter and managed onlookers.



Constable Rochelle Andrews NZ Police, Wellington SAR Squad

For the rescue of six people trapped in the Hutt Gorge, 29-30 December 2019.

Constable Rochelle Andrews swam a nine-metre wide river 12 times at night to rescue a group of five children and one adult stranded on a ledge and surrounded by bluffs. Initially, she crossed the river to ferry survival blankets and warm clothing for the children, who were dressed in only their togs. But she later volunteered to swim the distressed party across the river one at a time, as the bluffs presented challenges for helicopter winching.



David Dittmer

Mackenzie Land Search and Rescue

For his service and commitment to search and rescue.

With 50 years of combined service, David Dittmer is described by colleagues as the 'go to' person for all things search and rescue. Beginning in the 1970s, he voluntarily assisted Horowhenua Police for over 30 years with his intimate knowledge of the local terrain and the search techniques required to bring missing people home safely. Since 2009, David has worked at Aoraki Mount Cook with the Department of Conservation as a highly respected SAR expert. He is now Senior Ranger of the Alpine Rescue Team and has served on many national working groups.

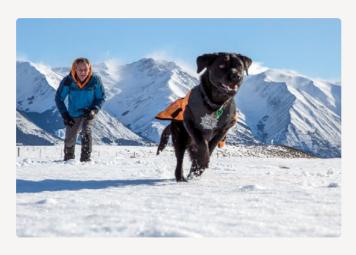


Allan Turia Coastguard Turangi

For his service and commitment to Coastguard Turangi and Iwi relationships.

Allan Turia has been a respected member of Coastguard Turangi for over 17 years. On top of saving stricken boaties, he works hard to create opportunities for people to get involved with the organisation. Allan's strong working relationship with the Tūwharetoa Māori Trust Board has led to a \$5k per annum commitment from the lwi group towards a cadet programme that encourages people of Tūwharetoa descent to volunteer

for Coastguard. From mentoring to training, to fundraising or general maintenance on the rescue vessel, Allan's commitment to Coastguard knows no bounds.



Brent MacDonald New Zealand LandSAR Search Dogs For his service and commitment to LandSAR Search Dogs.

Brent is the only LandSAR dog handler to have achieved operational status in all three disciplines of avalanche, tracking and area search. As well as achieving some incredible results with the dogs on search and rescue operations, he served as Lead Assessor for the avalanche group for about 15 years – working closely with the NZ Police Dog Section. Brent's peers say he was an inspirational leader, consistently aiming to improve the standard of searches. Brent was also Lead Assessor for the whole LandSAR Search Dogs group from 2012-2013, creating an outstanding training pathway.

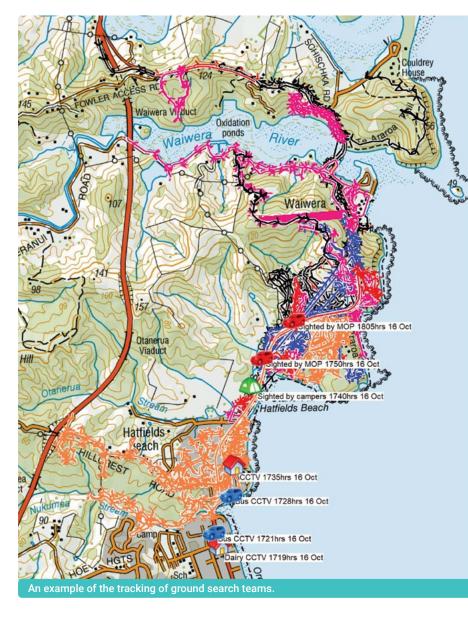
Learning from our experiences

Three to five search and rescue operations (SAROPs) are independently reviewed every year by the NZSAR Secretariat, with the endorsement of NZ Police and the Rescue Coordination Centre New Zealand. SAROPs are selected for their potential to provide feedback on search and rescue systems, reinforce good practice or identify areas for improvement.

The NZSAR Council may also direct a review of a search and rescue matter in response to an identified need or concern.

New Zealand's search and rescue system comprises an array of governmental, charitable, and commercial organisations who typically come together only for specific SAROPs or training. Reviews help us to better understand the operational response in time of need and improve its efficiency. The reports and their recommendations are used to improve SAR processes, standard operating procedures, documentation, and teaching materials.

All reports arising from reviews are available on the NZSAR website: www.nzsar.govt.nz



2019/20 Reviews

Myers SAR Operation – Search for Darren Myers, an overdue solo tramper in the Tararua Ranges, June 2019; found deceased on 12 June 2019.

Essence SAR Operation – The rescue of four people from the yacht Essence, 20 nautical miles off Cape Brett on 14 Oct 2019, following a mayday call.

McLennan SAR Operation – The search for Mike McLennan who went missing from his Orewa rest home on 16 October 2019; found deceased on 22 October 2019.

Some common recommendations arising from these reviews were:

Incident Management Team (IMT)

All people appointed to the IMT to be fully trained as appropriate

- · Use support agency personnel at the appropriate level
- Draw on specialist support, such as the Police Investigation team, and from out of District as required.

Communications / Technology

- Ensure information technology systems function correctly and have proficient operators
- Maintain currency of understanding of technologies for search operations
- · Explore the use of new technologies.

Guidelines

 Make use of Police Chapter / New Zealand's SAR Guidelines / Land SAR Guidelines.

Environmental Scans

Population growth, increased wandering, more extreme weather due to climate change and tourism - these were all factors identified in an Environmental Scan that are likely to increase the need for search and rescue in future.

We produced our first NZSAR Environment Scan in 2017 as a resource and stimulus for strategic planning and risk management. The scan was updated this year (before the COVID-19 pandemic), with a focus on features of the environment that have continued to change over the last three years, and the influence they may have on the search and rescue sector.

For example, the scan identified several demographic trends that are likely to have a significant impact on the sector's ability to recruit and retain volunteers:

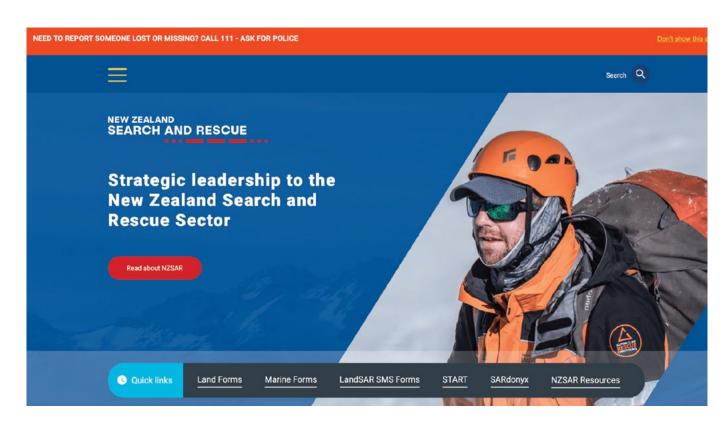
- population growth, driven by ongoing immigration
- population ageing and increased disability rates
- ongoing urbanisation, leading to 'hollowing out' of some rural areas (potentially putting strain on a locally led model of volunteering) and
- people feeling increasingly time poor and choosing to spend less time outdoors (which could make it harder to attract volunteers).

The complete 2020 update to the NZSAR Environmental Scan is available on our website: www.nzsar.govt.nz



Operational Police District **Total incident** Lives Lives Lives 8,454 73 78 assisted: rescued: count: saved: hours Waikato Total incident Police District Lives Lives Lives **Operational** 161 1.913 rescued: assisted: count: saved:

Tasman



Smartening up our online presence

The NZSAR website was given a facelift this year to improve its accessibility via mobile phone and tablet.

Applied in June 2020, the fresh look and feel provides a more structured layout and an interface that is easier to navigate. A bespoke search function allows visitors to the website to search by category or year, allowing them to find what they're looking for faster. And there are still clear links to our SAR partners and operational agencies.

NZSAR's Project Coordinator Alannah Taylor says the redesign brings the website into line with Web Content Accessibility Guidelines.

"All of the content we've developed since 2004 remains, we've just streamlined it and made room for some new features," she says.

These new features will include three dashboards that pull search and rescue data from the sector's joint operational information system, SARdonyx:

- The SAR Overview allows you to filter a summary of all search and rescue incidents by month, environment, response type and incident type. It is a quick way of determining how many lives were saved, rescued, assisted and lost for any given period.
- The Beacons Overview provides a searchable database of all the beacon activations in New Zealand's search and rescue region. It shows beacon type and the reason for activation.
- The Water Incident Summary allows harbourmasters around New Zealand to examine water incidents in their respective regions.

Visit us at www.nzsar.govt.nz and tell us what you think.



Stranded in the middle of the Southern Ocean, a lone sailor onboard a damaged 11-metre sloop was so far from land and other vessels that the people closest to him were at the International Space Station.

Fortunately for the sailor, his remote location was still well within New Zealand's Search and Rescue Region and help was on its way.

It was 5.53pm on 25 February 2020 when the Rescue Coordination Centre New Zealand (RCCNZ) received multiple satellite alerts for an unregistered EPIRB (Emergency Position-Indicating Radio Beacon), approximately 1400 kilometres southeast of the Chatham Islands.

Search and Rescue Officer Julian Tovey was rostered on the duty desk at RCCNZ and recalls the incident well.

"We contacted our counterparts in France to determine the details of the EPIRB," he says. "A vessel belonging to a French national was in distress – it was taking on water and communication with the sailor had been lost."

Using satellite imagery, RCCNZ scoured the waters for "vessels of opportunity". A cargo ship by the name of Lindanger was closest to the vessel, albeit 587 kilometres away, and was asked to divert its course to assist. The Royal New Zealand Air Force was the next port of call.

Flight Lieutenant Kate Galbraith received a text to her pager at 2.30am the following morning. As Tactical Coordinator of the No 5 Squadron P-3K2 Orion, Kate and her fellow crew members must report for work within 30 minutes of callout and endeavour to be airborne within two hours.

The Orion departed Whenuapai at 4.48am and reached the vessel four hours later. Flight Lieutenant Galbraith says they found the boat easily using the radar, but the flight time presented a challenge.

"As we were so far away from base, we only had 2 or 3 hours to help on scene before needing to return for fuel," she says. "At first glance, we could see that the vessel's mast had snapped and was dragging in the water. While we flew overhead, the sailor cut the mast away to stop his boat from listing."

Using VHF radio, communications with the sailor was established quickly. He was wet and cold, but otherwise well. Despite the language barrier, the crew determined his immediate needs and prepared a MADD (Minimum Assistance Delivery Device) pack with essential items.

"We included a personal locator beacon as he said that his own was running low on battery. And because he'd been in the water, a survival blanket, as well as thermal tops and leggings volunteered by some of the crew," says Flight Lieutenant Galbraith. "We drop life rafts separately, but in this case the sailor was comfortable using his own."

Two MADD packs were deployed in 20 knot winds, but unfortunately they missed the vessel and the sailor was unable to retrieve them due to a 5.5 metre sea swell. After providing the sailor with a weather update and confirming that the cargo ship was enroute, the Orion exhausted its time and departed the scene.

A RNZAF C130 Hercules, with a French translator onboard, resumed the search and rescue operation. On arrival, the crew discovered that the sailor had abandoned his vessel in favour of a life raft. Further MADD packs were dropped and this time one was retrieved.

Back at RCCNZ, Julian and his colleagues called on the No 5 Squadron P-3K2 Orion once more to relieve the Hercules and help the cargo ship to find the sailor.

"We arrived mid-morning on 27 February for the rendezvous in heavy sea fog, with visibility of less than one kilometre," says Flight Lieutenant Galbraith. "The tanker was 186 metres long, so did an amazing job pulling up alongside the life raft."

The sailor was extracted from the water 60 hours after the first alert was received at RCCNZ. He was treated for mild hypothermia and accompanied the cargo ship to its next port in Chile.



SECRETARIAT'S REPORT

I'm not sure many of us will reflect fondly on the first half of 2020, and to be fair, the last half of 2019 had issues all of its own. Despite this, there is a lot to be proud of in the way people involved in the search and rescue sector went quietly but diligently about their roles. The impact of the worldwide COVID-19 pandemic has dominated our thinking in the past several months but there was a lot more to the 2019/2020 year than that.

The SARdonyx search and rescue operational reporting system went live in May 2019, so we now have a full year of operational SAR information available to analyse and explore. This system is already proving its value as it is the source of almost all the statistical information in this report. As time goes on, we will become more proficient at understanding what it has to offer.

The NZSAR Council invests in a wide range of training for the SAR sector – not only courses for individual SAR skills, but also collective training exercises (SAREXs) that provide a safe, simulated environment for those skills to be practiced. While both the Whakaari White Island eruption and the COVID-19 pandemic impacted on training, it has been pleasing to see how much we have been able to complete.

For the past two years, we have conducted operational reviews on selected SAR operations and situations. These reviews have identified a host of things to consider, change and improve across our SAR system (see article page 27). It is a useful process and we are addressing the challenge of how best to share these 'lessons' effectively with everyone who could benefit from them.

Sustaining and supporting our SAR volunteers has also been a significant piece of work for us during the year. The SAR Volunteer Study 2019 (see our website for a copy) prepared by Volunteering New Zealand provides some very useful and pragmatic recommendations about how we can enhance and improve the state of volunteerism within the sector. We hosted a workshop with key volunteer SAR agencies to discuss how we would tackle the recommendations; what resources would be needed to take them forward and where the responsibilities would lie.

We completed a 9-month project to upgrade the NZSAR website platform and content during the year. The new site (at the same web address www.nzsar. govt.nz) works equally well on mobile devices and has a simple, more logical menu structure. We plan to increase its functionality in the coming year to make it even more useful for SAR people.

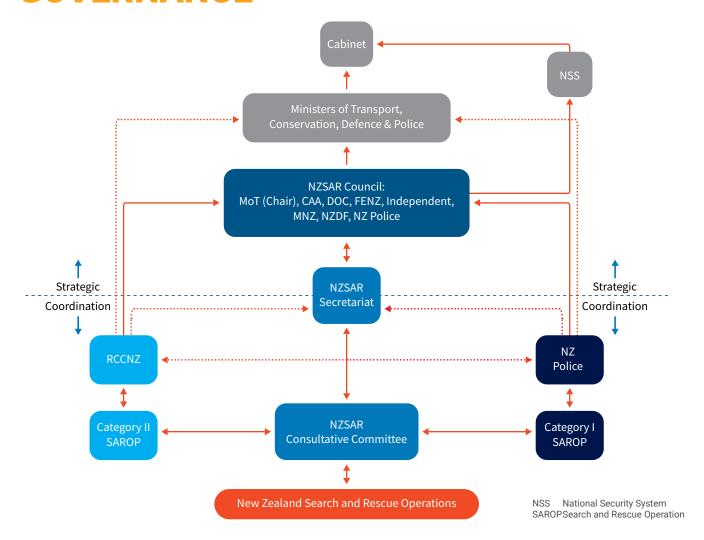
They say that money talks and that's certainly true of the SAR sector this year. The Government has chosen to invest significantly in search and rescue, commencing in July 2020. NZSAR and a wide range of SAR agencies put in a lot of work during the year in the lead up to this decision. It has been great to get it across the line, but the reality is it is only the start line. We are looking forward to the positive impacts this new investment will make across the SAR sector and we are very motivated to maximise its benefits.

Looking forward to the coming year, there is a lot to be done to bed in the new opportunities, redevelop the sector strategy and workplans and become more effective at reducing the demand for search and rescue services. I look forward to reporting on how we have travelled in next year's annual report.

I want to end this piece by thanking the great many people who have assisted us over the year. We (Alita, Carl, Jeff, Rhett, Alannah, myself and our ever loyal band of contractors) are a small team and we are hugely reliant on the advice and counsel of others as we do our best to help New Zealand's SAR sector to thrive. In particular – the members of the NZSAR Council and the NZSAR Consultative Committee have all given us huge amounts of time, thought and effort. We appreciate your guidance, trust and confidence in the work we do.

Stay safe Ngā manaakitanga Duncan Ferner Manager NZSAR Secretariat

GOVERNANCE



NZSAR Council

The Council's role is to provide national strategic governance and leadership to New Zealand's search and rescue sector.

In keeping with the Council's high level strategic function, its membership is drawn from the chief executives (or delegated to a person from the senior executive level) of the Ministry of Transport, New Zealand Police, New Zealand Defence Force, Department of Conservation, Maritime New Zealand, Civil Aviation Authority, Fire and Emergency New Zealand, and an Independent Member.

NZSAR Secretariat

The Council is supported by the NZSAR Secretariat. Its purpose is to provide a national forum for all New Zealand SAR stakeholders including voluntary groups. It provides the Council with support services, policy advice and implements agreed measures to effectively coordinate strategic SAR in New Zealand.

NZSAR Consultative Committee

The Consultative Committee provides advice to the Council and informs the strategic decision making process. Consultative Committee members include:

- Amateur Radio Emergency Communications
- Ambulance New Zealand
- · Antarctica New Zealand
- Aviation New Zealand
- (CAA) Civil Aviation Authority
- · Coastguard New Zealand
- (DOC) Department of Conservation
- (FENZ) Fire and Emergency New Zealand
- LandSAR New Zealand
- · (MNZ) Maritime New Zealand

- Maritime Operations Centre
- · (MoT) Ministry of Transport
- · National Ambulance Sector Office
- (NZDF) New Zealand Defence Force
- New Zealand Mountain Safety Council
- · New Zealand Police
- NZSAR Secretariat (Chair)
- (RCCNZ) Rescue Coordination Centre New Zealand
- · Surf Life Saving New Zealand
- Water Safety New Zealand

The Council, Secretariat and Consultative Committee operate cohesively to ensure their objectives are successfully delivered.

ew Zealand Pol Other Search and Re **New Zealand** NZ Defence Force/JFHQ **OUR SECTOR** ew Zealand Police Coordinating Operational Leadership Partners Agencies NZSAR Rescue Coordination Centre Joint Joint Antarctic Search and Rescue Team DOC Aoraki/Mt Cook ACR Team Fire and Emergency New Zealand 74 SLSNZ Clubs **ledical Service** 59 Marine Units 2 Air Patrols 2 Communication Units Helicopters **New Zealand** Coastguard Hawkes Bay Rescue Helicopter Trust Palmerston North Rescue Helicopter Nelson Marlborough Rescue Trust Waikato Westpac Rescue Helicopter Canterbury West Coastal Air Rescue Trust

