

Connecting the search and rescue sector

Link is a quarterly publication of New Zealand Search and Rescue

Found! Search and rescue in the midst of a global pandemic

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Coordinated communication

The search and rescue sector's collective response to the coronavirus pandemic epitomised the Government's call to "unite against Covid-19", leading to a dive in Category I and Category II SAR incidents.

NZSAR Secretariat Manager Duncan Ferner says NZSAR played a small part in a much broader group effort to reduce the demand for search and rescue over the heightened alert level period.

"After an initial flurry of independent media activity from SAR agencies, we worked out very quickly that a shared set of key messages would have more traction, not only with the New Zealand public, but also government policy makers," he says.

Enter Water Safety New Zealand Chief Executive Jonty Mills, who offered to co-ordinate a joint communications campaign.

"There were mixed messages out there, particularly around boating and interpretations of what you could and couldn't do," he says. "We needed to urgently boil these down into practicalities for people and provide consistent messages across the sector to prevent further confusion." Jonty consulted with 10 agencies involved in SAR and outdoor recreation and says everyone came on board quickly.

"By working together, we gave the public a better understanding of the Covid-19 restrictions as they applied to activities on the water and outdoor recreation, encouraged them to stick to the rules and ultimately helped to keep SAR volunteers safe in their bubbles."

Duncan says the outcome – a dramatic decline in search and rescue incidents during the last week of March and most of April – was heartening to see.

"The new linkages formed in a pressure cooker situation produced a really good result," he says. "One SAR body came together for the good of all SAR people. Thanks to everyone for participating so effectively."

Cover pic

A Royal New Zealand Air Force NH90 helicopter transports LandSAR teams across rugged terrain in the search for Jessica O'Connor and Dion Reynolds in Kahurangi National Park. The collaboration of the NZ Police, the New Zealand Defence Force and LandSAR led to the best possible outcome on 27 May when the missing trampers were rescued.

Photo provided courtesy of NZDF

All-of-government input

Senior Advisor Carl van der Meulen assisted the Ministry of Transport with its role in the all-ofgovernment response to Covid-19.

Carl joined a small team that was tasked with responding to emails from members of the public on how the Alert Level 4 and 3 restrictions applied to their special circumstances.

"After six weeks, the team had replied to over 4,200 enquiries," says Carl. "It was clear that this was completely different to a traditional emergency management response, which mostly happens at

Forecasting the impact on SAR

An Environmental Scan conducted by NZSAR on 12 May explores the potential impact of the Covid-19 pandemic on the search and rescue sector.

NSSP Coordinator at the NZSAR Secretariat Rhett Emery says the scan is a useful resource for SAR agencies to feed into strategic planning and risk management processes.

"It may help with positioning and finding a new normal in the post-Covid environment," he says.

Some of the issues covered by the report include the demand for, and supply of SAR services; sector capacity and capability; funding; training; and changes to the way we operate – all in relation to Covid-19 restrictions and beyond. A few excerpts follow.

The months of June and July fall into the 0-3 months post-lockdown period, during which the scan projects a normal or "above seasonal" demand for search and rescue.

"The end of lockdown is likely to coincide with the onset of winter conditions in many areas. It is likely that we will see a spike in post-lockdown activity as people make up for lost opportunities, as well as taking advantage of quiet tourist hotspots. A reduction in search and rescue associated with the absence of tourists may be offset by an increase in domestic recreational activity."

The Environmental Scan suggests that the predicted recession from Covid-19 is likely to impact on the search and rescue sector, particularly affecting the availability of funding. In many areas business operators will be affected, which may result in lost support for SAR agencies. the local level. This was a health emergency that required fast acting decisions and responses on a national scale."

RCCNZ's Mike Hill was seconded to be the Response Manager for Maritime NZ. Mike worked with several other agencies to advise the Ministry of Transport on maritime border issues such as international shipping, arriving crew and super yachts.

"This involved daily meetings between the Ministry of Transport, the NZ Transport Authority, Kiwi Rail, Civil Aviation and Aviation Security to jointly work on and discuss transport issues," he says.



"Loss of tourism demand and commercial work for helicopter use will put financial demands on non-NASO operators who are heavily reliant on tourism."

One widely felt impact of the Covid-19 restrictions was a reliance on web-based fundraising in place of large-scale fundraising events. There was also "greater competition for available funding from NGO social service agencies."

The limitations on international travel will affect our interaction with international counterparts and the Rescue Co-ordination Centre of New Zealand's support and activities in the Pacific.

On a positive note, the scan suggests the SAR sector will stabilise in the medium to long term – potentially allowing time to strengthen partnerships, establish new protocols and align resources with other SAR agencies.

To read the full Covid-19 Environmental Scan, please visit our website: www.nzsar.govt.nz/governance/governance-documents/environmental-scan/



A substantial increase in Government search and rescue investment over the next three years, and further financial support for two major water safety organisations in the Government's Budget, will help to secure the future of New Zealand's search and rescue sector.

From 1 July 2020, there will be an overall investment boost of approximately \$31.5 million per year for search and rescue (SAR) in New Zealand. This comprises \$16.5 million in Fuel Excise Duty (FED) funding for eight SAR agencies and \$15 million in a separate Budget allocation for Surf Life Saving and Coastguard combined.

Additional FED funding will go to Maritime New Zealand to support recreational boating safety and marine radio services.

NZSAR Secretariat Manager Duncan Ferner says the increased investment from Government recognises the important work of the search and rescue sector and its value to New Zealanders and visitors to our country.

"We're excited about the new opportunities this gives us for a step change in how the sector collaborates and operates together," he says.

The FED funding for the SAR non-governmental agencies will be delivered via joint Service Level Agreements together with NZSAR, NZ Police and Maritime NZ. These agreements are being substantially re-written to reflect the NZSAR Council's newly established Funding Principles.

"Applying the Funding Principles will help us all to gain the most from this increased investment and ensure we have robust, transparent processes in place to manage, monitor and deliver on a range of new projects," says Duncan. "We're excited about the new opportunities this gives us for a step change in how the sector collaborates and operates together."

Plans for the new investment are well developed and vary across SAR agencies. Some of the common threads include volunteer support, health and safety, wellbeing, interagency collaboration, SAR training and SAR readiness.

Land Search and Rescue (LandSAR) will – among other initiatives – increase their investment in Wander SAR to support the delivery of the sector's Safer Walking Framework.

"We certainly appreciate the opportunity to invest further in our volunteer workforce," says LandSAR Chief Executive Carl McOnie. "This will also allow us to make some significant progress towards delivering the Safer Walking Framework, an area that has increasing need within our wider communities."

Amateur Radio Emergency Communications (AREC) will work through a volunteer strategy and action plan with Volunteering NZ to determine how to better attract and retain their volunteers. They will also experience a major shift from being entirely volunteer run to employing a small number of paid staff. "It's really exciting from our point of view," says National Director of AREC Don Robertson. "For the first time, we can have some paid part-time staff for key roles. We're looking forward to building the nucleus of an organisation that can grow, train and measure the competencies of our members to deliver SAR communication services."

Don says AREC will also have more capacity to collaborate with other SAR agencies and projects.

"We plan to revamp our training capability to offer core modules for common communication training needs sectorwide. We'll also offer individual training modules for more specialised requirements."

Having long-term certainty as an organisation is a sentiment shared by **Surf Life Saving New Zealand** Chief Executive Paul Dalton.

"This is a game changer for the 74 surf life saving clubs around the country and should underpin their sustainability for the foreseeable future. It could not have come at a better time, with our traditional sources of short term, high risk revenues taking a big hit with the impact of Covid-19."

Paul says he was delighted with the extra funding from both the Budget and FED sources, allowing the organisation to progress important projects that otherwise would not have happened.

"We are extremely thankful to all the people at NZSAR/ Ministry of Transport, Water Safety New Zealand, the wider water safety sector, Sport NZ, a number of other Government agencies and of course the final decision makers in Cabinet for what is a culmination of many years work."

The Government's nod to water safety was met with equal enthusiasm by **Coastguard NZ** Chief Executive Callum Gillespie.

"It's a great outcome for the organisation - providing Coastguard with additional core operational funding to better support our volunteers," he says. "It will also support an ambitious programme of work that will modernise our service delivery."

The NZ Police, the Department of Conservation and the Mountain Safety Council will also benefit from increased FED investment in their search and rescue services.



Training update

Search and rescue training calendars are starting to populate again after being cleared over the Covid-19 lockdown period.

Training Co-ordinator at NZSAR Alita Bigwood says there were 30 training courses that were affected by the pandemic restrictions. The approval and rollout of new SAR courses was also put on hold.

"We're excited to be back in fees-free training mode and encourage you to enrol in the courses that spark your interest or those you need for certification and competency standards," she says. "It's a great way to reconnect with SAR colleagues in person, in a safe environment."

LandSAR is offering two courses – Outdoor Risk Management and Field Team Leader 1 – in an online format. General Manager Training at LandSAR Tony Wells says there has been a "super high" level of interest, with sufficient numbers to hold four online courses already.

"The first one booked out overnight," he says. "It attracted trainees from Golden Bay to Central Otago, so they really seem to be helping people who are part of smaller groups in outlying areas who may not otherwise have courses offered near them."

Check the Tai Poutini Polytechnic and LandSAR websites for the updated training calendars, as changes will continue to be made throughout the year to accommodate postponed courses.

- Tai Poutini Polytechnic: www.tpp.ac.nz/study-options/ search-and-rescue/search-and-rescue/
- LandSAR: www.landsar.org.nz/course_calendar.php (members' log-in needed).

Queen's birthday honours

Among the list of people receiving Queen's Birthday Honours this year were two Kiwis acknowledged for their services to search and rescue.

Congratulations to **Stuart Thorne** of Wanaka, who received the Queen's Service Medal for services to conservation and search and rescue. Stuart was a SAR Police Advisor for 30 years and was involved in more than 150 search and rescue operations.

Ian Robinson of Waihi also received the Queen's Service Medal for services to surf life saving and the community. Congratulations to Ian on his 67-years of service at the Waihi Beach Surf Life Saving Club, running fundraising events for the Club for over 30 years and volunteering for NZ Police coordinated search and rescue operations in Waihi for 45 years.

Celebrating SAR at its best

Dozens of valuable Kiwis, many of whom are volunteers, are recognised by the NZSAR Awards for their significant services to search and rescue. This year's recipients will receive their Awards in presentations to be made throughout the country, as circumstances allow. This follows the unfortunate cancellation of our annual New Zealand Search and Rescue Awards ceremony at Parliament due to the Covid-19 pandemic restrictions.

Congratulations to the following award winners, as judged by the NZSAR Council. Remember, nominations are always open – forms and guidelines are available on our website: www.nzsar.govt.nz/nzsar-awards/about-the-awards/.

Gold Award – Operational



Kariaotahi Surf Life Saving Club, Coastguard Waiuku, Auckland Rescue Helicopter Trust, NZ Police Air Support Unit, Coastguard Papakura

For the rescue of three people from their flipped vessel, Port Waikato on 25 May 2019.

Police received a distress call at dusk from a boat near the Waikato River mouth, battling 1.5 metre waves. The boat stalled and overturned shortly afterwards, tossing a sevenyear-old boy, a woman and a man overboard.

In complete darkness, eleven responding lifeguards from Kariaotahi Surf Life Saving Club began a shoreline search, while two helicopters (Auckland Westpac Rescue and the NZ Police Air Support Unit Eagle) scoured the water by air. Using infrared heat-detection equipment, the Police Eagle spotted the trio huddling together, wearing lifejackets, about 600 metres offshore.

The Westpac Rescue crew tried to winch the trio to safety, but the darkness and sea spray made it extremely difficult. An attempt was made to lower an intensive care paramedic, but adverse conditions forced him back.

A risk assessment determined that it was not safe for the Coastguard vessels to cross the bar, so Kariaotahi lifeguards Nick Hornblow and Bradley Walters set out from shore to attempt an IRB rescue. The rescue helicopter's landing light, together with headlights from Police and surf club vehicles parked on the beach, guided their way.

Just four minutes later, despite intense buffeting from the helicopter, the three people in the water were rescued and back on land after nearly three hours in the water. The woman and child both needed immediate treatment by the St John ambulance team for hypothermia and shock. Once out of their wet clothing, the pair were warmed with blankets and heat pads, but were still not emanating any heat. The woman went into cardiac arrest as she was being loaded into the helicopter and CPR was performed several times during the flight to hospital.

All three lives were saved that night, thanks to the quick thinking, meticulous planning and coordination of all rescue services involved.

Gold Award – Support



AND

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 – not only on the water, but also 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. His credentials are such that we do not have enough space to cover them all.

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.

Seth sits on the SLSNZ National Lifesaving Advisory Committee and champions search and rescue training for the SLS membership wherever possible. He has been a SLS Instructor for over 15 years, helping surf lifeguards to achieve their Surf Lifeguard Award, IRB Operators and Rock Training qualifications. Seth has coached many people through the Advanced Lifeguard Award course – the highest qualification in the SLS framework. For more than 12 years, 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 trained as a CIMS Course Facilitator at Tai Poutini Polytechnic (TPP), delivered CIMS to surf lifeguards and went on to work as a CIMS Tutor at TPP for three years. He teaches his own innovative approach to Event Lifeguarding and is developing a framework for SLS to deliver Flood Water Rescue Services.

As a Coastguard-trained facilitator, Seth trains over 50 lifeguards each year in Marine VHF radio. His skills also extend to Workplace First Aid – in which he trains lifeguards, SAR volunteers and members of the public.

Certificates of Achievement – Operational



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 SV Essence, near the Bay of Islands on 14 October 2019.

It was midday when Maritime radio received a distress call from the sailing vessel *Essence*, with four people on board, 20 nautical miles NNE of Cape Brett. The vessel was sinking, the life-raft had blown away and the group expected to be in the water shortly.

ANDRE

Given the stormy conditions, the Rescue Coordination Centre called on several assets to assist. Two ARHT helicopters, a P3K2 Orion from the Royal New Zealand Air Force, two Navy Sea Sprite helicopters, Coastguard Bay of Islands, a cargo vessel nearby, a Navy vessel and Police launch were all tasked to the location.

Kiwi Rescue departed Whenuapai within 50 minutes of tasking and found the four people huddled together in the water just 30 minutes later. The crew skilfully deployed a life raft, which two members of the stranded group managed to get into. Despite their best efforts, the remaining pair could only cling to the life-raft lines. Meanwhile, Coastguard Bay of Islands Rescue II and other responders negotiated 50 knot winds and 6-metre swells as they headed to the location.

An ARHT helicopter arrived 55 minutes after the Orion and successfully extracted all four people within 25 minutes. Tragically, the 58-year-old skipper was not rescued alive.

Kiwi Rescue remained on site until all four people were plucked from the water, sending updates to RCCNZ and providing oversight and top cover for the helicopter crews.

The Coastguard crew were stood down approximately 9 nautical miles from the stricken vessel.

The combined teamwork, cooperation, support and communication between RCCNZ, 5 Squadron, the crew of the ARHT and Coastguard was crucial to the successful outcome.



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.

Whangarei Police were notified at 9pm of a 21-year-old man trapped on the sheer face of a seaside cliff. The Westpac helicopter was tasked to the scene, with Northland LandSAR Cliff Rescue onboard as back-up if the helicopter was unable to winch.

On arrival, the helicopter crew were concerned that buffeting from the rotor blades could cause the man to lose his footing and fall 50 metres to the ground. So instead the pilot skilfully set the machine down on a narrow slope to unload the Cliff Rescue team.

Team leader Shane discovered that the rock was too crumbly to rig a rope system. Due to safety concerns, the helicopter crew decided to wait until first light to attempt a winch. Meanwhile, Shane and his team would try to lower supplies to the trapped climber. Using a counterweight belay system, with two people inland to counterweight one on the cliff face, Shane climbed down about 15 metres in howling wind. When he saw the man perched on a two-foot wide ledge, Shane knew that waiting for daybreak for the helicopter was not an option. Any wayward movement could cause him to fall.

Shane gave the man some warm clothes and secured him in a harness. They agreed on a plan to climb up while on selfbelay. Attached together, they took their time finding hand and foot holds, making it to the top with just one minor slip.

The rescued man was hover-loaded into the helicopter and reunited with his family at the local campsite.

The training, professionalism and bravery of the Cliff Rescue Team in difficult circumstances was key to this operation's success.



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.

A medical emergency saw Police reach out to Taylors Mistake SLSC on a Friday night for urgent assistance. A youth had fallen 20 metres from a seaside cliff and was in a critical condition.

Senior Lifeguard Mike Smith dispatched an IRB to determine the patient's exact location. He also contacted key members of the Taylors Mistake SLSC emergency call out squad.

When the IRB arrived at the scene, the lifeguards identified that the patient was accessible via the rocks, but an incoming tide could present difficulties for the rescue. They stayed on the water, ready to assist if required.

Lifeguards Craig and Tisha arrived quickly on foot with first aid rapid response packs. They were joined soon after by colleagues Patrice and Mike. An off-duty paramedic, an orthopaedic theatre nurse and a rapid response team also arrived to assist. A second emergency call out squad was dispatched from the nearby Sumner SLSC.

The patient had multiple injuries to his head, face and limbs, and was struggling to breathe. Lifeguards stabilised the patient's head and neck while he was examined by the paramedics and treated for severe trauma. They also helped with a suspected fractured femur.

Back on the beach, lifeguards cleared a safe landing area for the Westpac Rescue Helicopter and managed onlookers.

Once stabilised, the patient was winched away from the rocks and on to the beach, before being airlifted to hospital. He went on to make a full recovery.

Police had high praise for the skills of the lifeguards who assisted with the patient and ensured the safety of the public during helicopter movements.



At 6.30pm on 29 December, Police were alerted to a missing group of five children and one adult in Kaitoke Regional Park. The group were staying at the local campsite and had failed to meet family members at a nearby swimming hole.

Constable Rochelle Andrews was dispatched to the campsite to ensure the group had not simply made other plans without telling anyone. But their clothes, shoes and mobile phones were still in their tents.

LifeFlight Westpac Trust Helicopter found the missing group just before dark, trapped on a ledge above the river and surrounded by bluffs, which made winching difficult. The pilot tried to reach them but pushed the machine too far and needed to return to base.

Rochelle and a Dog Handler set off on foot. On arrival, Rochelle saw that the river was too deep for the group to navigate. The children were showing signs of hypothermia, dressed in only their togs with the air temperature dropping.

Constable Rochelle Andrews NZ Police, Wellington SAR Squad For the rescue of six people trapped in the Hutt Gorge, 29-30 December 2019.

Rochelle decided to swim the 9 metres across the river with a dry-bag containing survival blankets and warm clothing. She made this swim twice to ferry all the gear, reassuring the group that more help was on the way.

Defence Joint Forces diverted its only operating NH90 helicopter crew, with long winch capacity, from Mahia to assist.

Rochelle volunteered to swim the stranded group across the river, one at a time, assisted by a colleague attached to a safety line. Altogether, she crossed the river 18 times, emerging cold and exhausted after a final crossing to recover the gear.

Shortly after 3am the NH90 arrived. All six members of the rescued party were winched into the helicopter and returned to elated family members.

Certificates of Achievement – Support





David Dittmer Mackenzie Land Search and Rescue

For his service and commitment to search and rescue.

David Dittmer is described by colleagues and friends as the 'go to' person for all things search and rescue.

His involvement in SAR began in the 1970s. He assisted Horowhenua Police with their SAR responsibilities for over 30 years – not only with his intimate knowledge of the local terrain, but also with his ability to get to the crux of lost person behaviour and the search techniques required to bring missing people home safely.

David held several voluntary roles for what was then known as Horowhenua Search and Rescue, including Incident Controller, Field Team Leader, Incident Management Team member and Chairman of the committee. He was involved in training the Police SAR Squad and his fellow volunteers in alpine skills.

In 2009 David moved to Aoraki/Mt Cook to work with the Department of Conservation, where he became a

highly respected member of the local SAR management team. Moving on to Senior Ranger of the Alpine Rescue Team, David was praised for rebuilding systems and team culture after the tragic death of a colleague during a training exercise.

David's service to search and rescue in Horowhenua was acknowledged with a national LandSAR award in 2009. He has served on many national working groups, including the Safety Management Systems committee and the Constitution Review Committee.

Colleagues describe David as quiet and unassuming, with a depth of SAR knowledge and a quick, analytical mind. To quote one of Dave's former colleagues: "When Dave walks into a room, it is likely that you won't notice him as he is diminutive in stature and quietly spoken but [among] his peers he is a giant."



Allan Turia Coastguard Turangi

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

Allan Turia has been a well-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 focus on inclusion has seen Coastguard Turangi's role stretch far beyond maritime assistance and search and rescue. He has built strong working relationships with the Department of Conservation and the Tūwharetoa Māori Trust Board, to ensure that protected areas such as Lake Taupō and nearby Motutaiko Island are looked after by the three groups.

Allan's work 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. This programme is beneficial for both parties as Tūwharetoa have the Kaitiaki (guardianship) of the lake. Coastguard Turangi supports Tūwharetoa by providing transport across the lake to access the marae and acts as a support boat during the lwi groups' community events, such as waka ama races.

Allan and Coastguard Turangi also assist DoC with the upkeep of the protected Motutaiko Island, a place of spiritual significance to Māori. Every three months Allan transports DoC staff to and from the island to check on endangered species and to look after the land.

Allan ensures all volunteers have equal opportunities to build on their skills through training and mentoring. From getting more youth involved in Coastguard, to general maintenance on the rescue vessel or fundraising, 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.

His first dog Winnie (operational from 1995-2002) was known by Brent's colleagues as the "nose"; super methodical in her search and thorough.

Brent and his second dog, Ella, were called to around 30 searches over 10 years, including a remarkable rescue in September 2011. A missing tramper was believed to be overdue by four days but had actually been buried by an avalanche. What started as an area search became a complicated find, due to the time delay from burial to search. But within just 10 minutes of being deployed, Ella located the point where the lost subject was found, saving many hours of probing into unstable snow.

Brent worked alongside his third dog Honi for four years from 2011-2015.

Between 2001 and 2007, the avalanche search dogs group went through a period of change. The leader of the group left and there was a disconnect between geographic teams, training and assessment. Brent was instrumental in bringing the group back together.

He served as Lead Assessor for the avalanche group for about 15 years, working closely with the NZ Police Dog Section. Brent consistently aimed to improve the standard of searches.

Brent was Lead Assessor for the whole LandSAR Search Dogs group from 2012-2013, creating an outstanding training pathway for his peers. He strived to improve both his own learning and the learning of countless volunteers who benefitted from his guidance to become seasoned operational handlers.

SARdonyx

One year on from its launch, SARdonyx is capturing an improved quality of data for analysis than previous search and rescue information systems.

Data Analyst and Assurance Coordinator at NZSAR Jeff Lean says SARdonyx data categories have greater consistency and it is easier to search for specific incident types, causes or outcomes.

"Our hope at NZSAR is that SARdonyx will eventually lead to a range of products from something as simple as routine reports of key incident types or summary statistics, through to complex inferential analyses," he says.

Dashboards

In our last issue of Link, we mentioned the release of three simple interactive dashboards using groups of records from SARdonyx. The general SAR Overview, a Beacons Overview, and a Water Incident Summary are all available on our website: www.nzsar.govt.nz/Resources/SAR-Dashboard. Here's a little more information about how they can be used.

The **SAR Overview** is a summary of all incidents and allows you to filter 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 time period.

The **Beacons Overview** is a collection of all the beacon activations in SARdonyx. You can filter by region, month, environment, incident category, beacon type (PLB, EPIRB etc) and reason for activation.

The **Water Incident Summary** was designed primarily to provide harbourmasters around NZ with a tool to examine water incidents in their respective regions. It allows you to filter by root cause, incident cause, activity type and vessel type, along with region and date.

Seasonal data

"Not surprisingly, search and rescue operations in New Zealand show a distinctly seasonal pattern," says Jeff. "If we analyse the data using a timeseries approach we can generate some interesting charts."



Figure 1 is a subseries chart. It takes all the data, groups it by month of the year and then plots a line for each individual month across the duration of the series. This allows for easy comparison of annual variations within each month and seasonal variations across the year.

"This is a handy chart because it gives us a lot of information in a relatively compact space," says Jeff. "We can see the overall seasonal pattern of incidents and the variation within each month across time."

"The dramatic tails in March and April clearly show the impact of Covid-19 on the number of search and rescue incidents. Some incidents from that period may still need to be recorded, but there will still be a significant reduction when compared to incident counts in March and April of previous years."

"Seasonal analysis is especially useful for predictive work. If we know how much variation we can expect to see, we get a more reliable estimate of the possible range of values at any given time."



Duncan's desk

I hope we never see another three months like that again. The Covid-19 pandemic and all its associated effects seems to have turned the world on its head. But it was great to see almost all Kiwis (and the remaining guests we had in the country) respect the various Alert Level rules and, by and large, keep themselves home and safe.

Throughout the lockdown SAR agencies were able to confirm that, should the need arise, they were available for SAR operations. Many people also helped the Government formulate its policy settings for recreational activities and talk to media to explain them. On behalf of the NZSAR Council – thank you for your dedication throughout this difficult time.

During the last parts of March and pretty much all of April the number of domestic SAR callouts declined to almost zero. But as the alert levels dropped, the number of SAR operations increased including a long but ultimately successful search in the Kahurangi National Park. The Secretariat has been focusing more on the medium and long term effects of Covid-19 and seeing where we can assist SAR agencies navigate this crisis.

Another consequence of the Covid-19 restrictions was the cancellation of the Council's NZSAR Awards. The annual awards function is normally our way of thanking both the deserving award recipients and also the broader SAR sector for their service and dedication over the past year. The stories on pages 6-14 feature everyone being recognised for 2019. In lieu of the central awards ceremony, we'll be working with the recipients and agencies to run several smaller NZSAR Awards functions closer to home.

It certainly has helped to be able to deliver good news in terms of additional funding for the sector (see article pages 4-5). This new funding is a very significant increase and gives us the opportunity for a step change in how the sector collaborates and operates. In anticipation of this decision, the Council adopted a set of funding principles (available on the NZSAR website) to assist us in the development of the new three-year service level agreements.

Some high-risk funding streams will be replaced and a Land Safety Forum will be established along similar lines to the very successful Safer Boating Forum. A review of the search and rescue and recreational safety sectors will be conducted over the next 18 months.

As I write this, we are still working through the various agreements necessary to pass funding to various SAR agencies. We are certainly very motivated to maximise the benefit of the new investment into the sector and we look forward to working with you all to implement the wide range of projects that SAR agencies have planned.

Stay safe Duncan

Calendar

SAREXs and SAR training: nzsar.govt.nz/Calendar/Events

Websites

www.nzsar.govt.nz

Search and Rescue sector resources and information, including a PDF of this newsletter

www.adventuresmart.nz

Safety information and tips for people planning outdoor activities

www.beacons.org.nz

Information about 406 beacons, including where to purchase, rent and register a distress beacon

www.tpp.ac.nz/study-options/searchand-rescue/search-and-rescue/ SAR Multiagency training

www.landsar.org.nz/trainingcalendar/ (members' log-in needed) LandSAR Training

www.nzsar.govt.nz/sardonyx/ 'SAR Overview', 'Beacons Summary', 'Water Incident Summary'

www.nzsar.govt.nz/trainingresources/start/start-overview/ Search and Rescue Knowledge Library

