BUSH FIRE bulletin





- REFRESHED APPROACH TO INDIGENOUS MITIGATION RECRUITMENT
- NSW RFS HELICOPTERS TO FIGHT FIRES AT NIGHT
- **JENOLAN CAVES RISES FROM THE ASHES**

LIFTOUT



BUSH FIRE bulletin

Acknowledgement of Country

The NSW Rural Fire Service (NSW RFS) acknowledges the Traditional Custodians of this country and their continued connection to land, sea and culture. We pay our respects to the resilience and strength of Elders past, present and emerging and extend that respect to all Aboriginal peoples.

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Thank you to the NSW RFS members who have put their lives on hold multiple times in 2022 to assist flood-affected communities. Over the course of the year, our members have helped people recover from the record-breaking floods in the Northern Rivers down to the Illawarra and many areas in between.

Again and again, our volunteers demonstrated the values of the Service through their acts of selflessness and bravery. Sadly, the widespread flooding personally affected almost 200 NSW RFS members with the majority sustaining damage to their properties and business. Despite the losses, many of the members continued to support emergency response and clean-up efforts in their local communities. We particularly thank those NSW RFS members who set aside the stress of the damage to their homes and livelihoods, and provided aid to vulnerable members of the community.

During the flooding emergency, more than 6,200 NSW RFS firefighters and 595 Incident Management Personnel were deployed across the state to support NSW SES and Resilience NSW operations. A more detailed snapshot of NSW RFS involvement in the flooding emergency is provided on page 2.

Two years have passed since the launch of the first set of Commissioner's priority projects, and we have launched a new set of nine priorities since then. Many of these important projects have now been completed, though some are still underway and will continue well into the future.

Notably, the proposed new framework that will govern Workplace Conduct in the NSW RFS has been launched and members have been able to provide their feedback. This significant new framework was only possible thanks to the invaluable contribution of members who shared their input and lived experiences of grievance and discipline management in the Service. Once member feedback has been taken on board, the framework is due to be rolled out by the start of 2023.

I am also pleased to share that the rollout of Respiratory Protective Equipment was completed in July 2022, delivering the Dräger X-Plore 3500 half-face respirator and Dräger X-Plore 5500 full-face respirator, both with ABEK P3 canisters, to every firefighting appliance in the state.

After Australian Community Engagement and Fire Awareness (ACEFA) conferences were unfortunately cancelled in 2020 and 2021 due to COVID-19 restrictions, I greatly value the efforts that led to an incredibly successful ACEFA conference going ahead in May 2022. It was an important opportunity for our members to come together, with delegates travelling from across NSW to discuss best practice in community engagement. We are grateful to those who gave their time to speak, perform and share their experiences.

Sharing experiences is important to help our communities ensure they are prepared for the challenges of the season ahead. While the Bureau of Meteorology continues to forecast wetter than average conditions across the state in spring 2022, we continue to monitor grass growth across the state and recognise that when this weather does change, it will pose an increased risk for much of western NSW.

Fire Danger Ratings across the state have changed. The new ratings are simpler and easier to understand, and are supported by the latest science and technology. You can read more about the new system from page 24 of this magazine.

I urge all members to complete the introductory e-learning course on the new fire danger ratings and the changes to the old system. To complete the course, you can log in to Fuel via your One NSW RFS account, or speak to your District Office if you need assistance.

Thank you all for your continued service, in all your varied and important roles within the NSW RFS. Regards,







FLOODING EMERGENCY IN NSW

Record-breaking flooding across eastern NSW from February to April 2022 had a devastating effect on communities from Lismore down to the Illawarra region.

NSW RFS DEPLOYMENT



6,200+
NSW RFS FIREFIGHTERS



595
NSW RFS INCIDENT
MANAGEMENT PERSONNEL

RECOVERY OPERATIONS



300 LOCAL NSW RFS BRIGADES



150
OUT-OF-AREA
NSW RFS STRIKE TEAMS

Teams assisted with taskings in the lead-up to, during, and as part of recovery operations during the flooding emergency.

NSW RFS AIR OPERATIONS



202 missions

NSW RFS AIRCRAFT INCLUDING
SEARCH AND RESCUE
OPERATIONS



PEOPLE SUCCESSFULLY
RESCUED FROM FLOODWATERS



As Sunshine Coast towns flooded and the floodwaters steadily rose in Brisbane in late February 2022, predictions were that northern NSW would be next.

Cudgen Brigade and NSW SES Tweed Heads unit spent several days filling sandbags for local residents as the weather system arrived. The demand for sandbags from the public was insatiable – as soon as they were filled, they were gone.

Backed up drains and storm water were causing mayhem as the rainfall was heavy and unrelenting. Soon local roads in the Tweed were flooded, so Cudgen Brigade started delivering sandbags in our fire trucks as they were high enough to get through where ordinary cars couldn't.

Luckily an influx of members of the public who weren't being impacted by storm or floodwater arrived and took over the filling of sandbags. This freed up Cudgen Brigade to start assisting in the evacuation of more than 180 Chinderah residents and unfortunate travellers trapped on high ground on the M1 Pacific Motorway.

This was something Cudgen Brigade had seen and done before. During the unprecedented flooding of 2017 due to Ex-tropical Cyclone Debbie, Cudgen Brigade (with just two trucks) successfully rescued more than 64 men, women and children trapped by floodwaters on the motorway.

For 12 hours Cudgen members ferried people to safety in the pitch black of night through those floodwaters.

2022 felt a little like déjà vu, except this time the floodwater just kept on rising. The safe areas in the 2017 floods were now flooding.





FOR THE CUDGEN BRIGADE

Through the night and into the early hours of the morning of 1 March 2022, Cudgen Brigade trucks evacuated the elderly and infirm, their pets and what few belongings they could carry through the floodwaters from Chinderah to a waiting coach on the Barneys Point Bridge.

Multiple times through the night, Cudgen Brigade met members of NSW Ambulance at a high point on the highway, where we carried medical emergency patients from Kingscliff up an embankment and loaded them along with an ambulance officer into our trucks. From there, we safely traversed them through floodwaters to awaiting ambulances and then hospital.

Cudgen Brigade and the NSW Police worked until approximately 0330hrs when one of our trucks just could not make it through the floodwater any longer. The water just refused to stop rising and was at a height no one in living memory had witnessed.

With only 20 people left to rescue, Cudgen Brigade could do no more. We recovered our drowned truck through ingenuity and a bit of luck, and safely parked both vehicles on the overpass.

We instructed the 20 remaining people to evacuate to the overpass if required, where they would be safe, and promised we would return for them in the daylight.

The next morning after a couple of hours' sleep, some in cars and others on a park bench, Cudgen Brigade waded back to our lone surviving truck and were delighted to discover that the floodwaters had started to abate. So much so, that we were able to lead the remaining people who had been trapped for close to 24 hours to safety through the floodwaters.

As the floodwaters receded, Cudgen Brigade members alongside the other Far North Coast brigades pivoted to recovery and immediately started assisting the residents from the Tweed, Byron, Ballina and Lismore Shires with the massive clean-up efforts. This work varied from removing furniture from flood-affected houses to washing out the mud from homes, schools and businesses.

If not for the members of the public, the ADF and out-of-area strike teams, this work would still be ongoing, as the height and extent of destruction has never been seen before in the Far North of NSW. Nine Cudgen brigade members' homes suffered flood damage and, as a result, they lost possessions, cars, furniture and clothing.

Despite the loss, those members put their troubles to one side and volunteered their time helping others during the recovery.

Several weeks later, most of the mud had been washed away. The mud-covered rubbish piled as high as houses that were once prized and priceless possessions is now mostly gone - loaded onto trucks and taken to landfill. I witnessed the courage of Cudgen Brigade members and their willingness to work tirelessly to assist those that needed help.

I am proud to call these people my people.

From this experience, Cudgen Brigade have adopted a motto: If not us, then who?

Photos: Cudgen Brigade assisting affected community members in the Northern Rivers. Photos courtesy of Troy Middlebrook and the Cudgen Brigade.



With roads inaccessible during flooding events on the Far North Coast in March 2022, NSW RFS officers got off to a flying start on a multi-agency response to fix electrical faults.

TRIAL BY FLOOD

During major incidents, Far North Coast District Manager Superintendent David Cook would typically work from the Fire Control Centre in Murwillumbah.

On 27 February however, the FCC was inaccessible, the satellite office in Mullumbimby was inundated and inoperational, and Superintendent Cook's home was surrounded by floodwater. He was left with no choice but to work remotely.

On the morning of 28 February, communities of the Northern Rivers were reeling from the flooding event the night before. Meanwhile, Superintendent Cook was struggling to get an SMS out.

"Internet, NBN and phone services just collapsed over the whole of the northeast part of the state, including the Northern Rivers and Clarence Valley," Superintendent Cook recalls. "We've been through it before, but we didn't expect to lose communication.

"We were relying on the NSW RFS Private Mobile Radio (PMR) network to give us connectivity to all our brigades and the SES. However there were also significant complications with the PMR network."

From NSW RFS HQ, ICT Engineering Field Supervisor Graeme Smart had a full picture of the disturbances being caused by the unfolding flood crisis.

"On the top of Mount Nardi are all the major telephone carriers, the ABC, local FM radios stations and other TV stations," says Graeme. "It's a critical site for the NSW RFS Far North Coast and Northern Rivers radio networks, NSW Police, NSW Ambulance and others. For Essential Energy, it is the site which connects their control room to the electrical grid on the North Coast.

"The loss of that site would have provided significant operational impact to several agencies, and resolving this was one of the major bodies of work we undertook during the floods."

RFS ICT Field Operations Officer, Bryan Davison, had been mainly working in the Incident Management Team at Casino when he received a call at his home on Thursday night. Main image: View of Mt Nardi. Photo source Creative Commons.

Below right: Generator is lifted to be taken to Mount Nardi. Photo by Bryan Davison

- "It was after-hours, my boss rang me and said we've just had a significant alarm to Mount Nardi," says Bryan.
- "Already, the grid power had failed at the height of the storm activity. As a result, multiple emergency services were being powered through a generator backed up with batteries. However, the generator had run out of fuel and when the batteries went flat. the PMR network was broken into two."

Landslides and broken power lines in the valleys surrounding Mount Nardi made the site physically inaccesible for crews to get to by road, with blockages at numerous points on the main access track.

"Flooding makes my job more difficult - if something breaks, how do we get there? It has to be by helicopter," says Bryan.

A SHARED MISSION

From the State Operations Centre, NSW RFS ICT staff Fil Mincev, Matthew White, Ben Beath and Graeme Smart co-managed a multi-agency response to get the site back online alongside the NSW TELCO Authority (NSWTA).

"An initial helicopter flight was coordinated to Mount Nardi with a dual purpose: to attempt to land, drop off the RFS ICT Field Operations Officer and the NSWTA technician, and check over all of the agencies' radio equipment - but it was impossible for the helicopter to land," says Bryan.

"So we had to get a helicopter back to site to winch in the NSWTA technician to prepare the site, then a generator was long-lined in. Once the multi-agency radio equipment was connected to the generator, the technician was winched back out."

At the same time, Bryan was working with David from Far North Coast to start migrating the district operations across to the newly completed Public Safety Network (PSN), formerly known as the GRN, to ensure that operations could continue if it wasn't possible to get the generator up to Mount Nardi.

A SHINING EXAMPLE OF MULTI-AGENCY COOPERATION

The switch from the PMR network to the PSN was a success, allowing the District to communicate normally.

"There was a short education process which the District managed very well under David's control," savs Brvan.

"To move from one radio network to another may seem simple (like changing the channel on a TV), but it's not so straightforward - the brigades did a fantastic iob."

For Graeme Smart, the multi-layered undertaking demonstrated how effectively the NSW RFS is able to work under time pressure alongside other agencies.

"The operation to deliver the generator to the site was a shining example of multi-agency cooperation. Together we made sure that the NSW RFS and other key services could continue communicating."

Far North Coast District Manager Superintendent David Cook views the collaboration as a credit to those working behind the scenes in the Service.

"Once we switched to the PSN, it worked fantastically," says David. "It allowed us to communicate and showed we have the capability to switch when the systems fail."





NSW RFS BOATS A WELCOME SIGHT AS HAWKESBURY OVERFLOWS

BRIGADES PITCH IN AT WISEMANS FERRY IN SUPPORT OF NSW SES

In March 2022, two significant rain events in the Hawkesbury were followed by the largest flooding in the area since 1978. Brigades played a crucial role in keeping lines of communication open, providing common and medical supplies to affected community members and aiding in recovery efforts.

Floodwaters reached 1.02m higher than the 2021 peak of 3.9m in Wisemans Ferry, inundating riverbank properties and businesses, and isolating residents of the Macdonald River as far as Spencer to the east and lower Portland to the west.

Twenty-two NSW RFS volunteers from the Wisemans Ferry Brigade undertook 447 boat tasks out of approximately 503 tasks overall, with the majority of assistance requested directly by community members.

"People would contact Woolworths in Glenorie, for example, and place food or other supply orders online, and these would be organised to be dropped off at the [brigade] station, for us to deliver," says Wisemans Ferry Brigade Captain Stan Montgomery.

Ferry services were halted on Australia's oldest river crossing at Wisemans Ferry, with waters too high and flowing too rapidly for them to run. Two boats were manned by the Wisemans Ferry Brigade for 19 days for supply runs and other

assistance. Help was received from the Mooney Mooney Brigade, and a boat was also sent down from the Berowra Waters Brigade.

"Compared to the floods last year, people went a long time without power and phone coverage, so this necessitated a larger number of supply runs, including delivering generators and things like that," says Stan. "It's one of the bigger floods we've had in the Wisemans Ferry area.

"People were surprised, because after the first couple of days of flooding, we got some reprieve. The next big cycle was a lot heavier – we got drenched on the second round."

Strike teams from around the state were called in for two weeks to assist with the recovery effort, with NSW RFS posi-tracks helping to clear mud from driveways and roads, while supply runs continued until the main ferry returned to service on 15 March 2022.

Phone and internet coverage was mostly restored on the evening of 10 March in Wisemans Ferry, although some businesses still did not have power reconnected until April due to landslips and lack of access. NSW RFS crews provided key assistance in providing and maintaining generators to help restore telecommunications in and around Wisemans Ferry.



Main previous page: A NSW RFS boat pulls up to a flood-damaged property at Wisemans Ferry. Above: Submerged house and yard on the Hawkesbury River at Wisemans Ferry. Photos by Dawnmarie

Brennan. Below: Caravan remnants on a warehouse by the Hawkesbury River in flood aftermath. Photo courtesy of Matt Reeves.

"Using the fire boats, The Wisemans Ferry Brigade worked incredibly well looking after people in areas like the Lower MacDonald Valley, who were isolated and wouldn't have had access to supplies otherwise," says The Hills District Manager Glen McCartney.

ANOTHER BLOW TO FLOOD VETERANS

Matt Reeves, Senior Deputy Captain of Hawkesbury HQ Brigade, assisted with the flood clean-up in the Richmond Lowlands and Windsor.

"The ferocity of the waters left utter devestation," says Matt. "We needed to clean out houses, sheds, bed materials, lounges, flooring and move all those things out of the premises."

In March 2022, flood levels reached 13.7m at Windsor after heights of 12.9m last year. At North Richmond, 2022 levels were even more severe. reaching 13.9m.

The consequence of this flooding is considerable given many locals were still rebuilding from the flood damage of 2021.

"We now have people who lost everything in last year's floods, and now again in this year's. These ones were higher, and they can't take that devastation again," says Matt. "A lot of people did move their farm machinery to higher ground, but I feel for those who were just away or didn't get a chance to remove theirs.

"On a positive note, people were really glad to see us. They were really grateful to have the assistance from the NSW RFS, the Hawkesbury District and other agencies at such a difficult time."





AVIATION CREWS WINCH DOZENS TO SAFETY DURING FLOODS IN NORTHERN RIVERS

NSW RFS Aviation Rescue Crews were deployed across the state in February and March 2022 to join rescue operations in Lismore, Ballina, Casino, the Hawkesbury and Taree, and to stand-by in Nowra, Coffs Harbour, Cessnock and Moruya, as regions suffered from life-threatening flash and riverine flooding.

Flood levels reached 14.4m in Lismore on 28 February 2022 to deliver the most devastating flooding in the area's recorded history. Extraordinary river rises were recorded in the Coopers, Terrania and Leycester catchments culminating in the Lismore Levee overtopping.

Between February and April 2022, 163 missions were flown on deployments of two to seven days at a time, with 77 people rescued from flooding in affected regions.

Nigel Korff was deployed from Singleton to Casino on 27 March as Rescue Aviation Crewman on one of the NSW RFS Bell 412 helicopters.

"I was on a four-day deployment. In just two days, we did 30 roof winches," says Nigel. "We were winching everyone from three-year-old children to the elderly, plus dogs and cats.

"The most challenging was rescuing two teenagers out of a tree in the floodwaters - the winch operator couldn't really see me because I was between the branches of the tree.

"I had one teenager jump out at me when I'd barely got the harness on him because he was so panicked. "The chest strap was only half done up, fortunately just enough to stop him falling out."

Due to the unprecedented speed at which floodwaters rose, members of affected communities were caught off guard, becoming trapped on the roofs of homes. Without a way to charge mobile phones or other devices, many individuals were reliant on emergency aviation crews to spot them from the air.

"Out of the corner of my eye, I saw one couple standing on a roof with about 30cm to go until they would have ended up in the floodwater," says Nigel.

"We ended up radioing a helicopter, tasking them with the coordinates, and they were able to get them off in time. There would have been nothing to cling to - it was incredibly fortuitous that we happened to see them."

Rick Ott volunteers in many contexts for the NSW RFS, but was deployed to Lismore in his capacity as Aviation Rescue Crew Officer on 27 February 2022 on the eve of his wife's birthday. For Rick, this would be the first of three five-day deployments during the floods.

Main photo: NSW RFS helicopter operating in Lismore. Right: Matt Allen and Rick Ott flying over Northern Rivers. Photos courtesy of Rick Ott.

"At the end of the second day we were ready to go home, but then we saw a man and a woman on a roof," says Rick. "When I landed, the man said he had been watching the flood waters come up all day and he had watched everything he and his wife owned go completely underwater. It was just them, his prescription glasses, and their dogs.

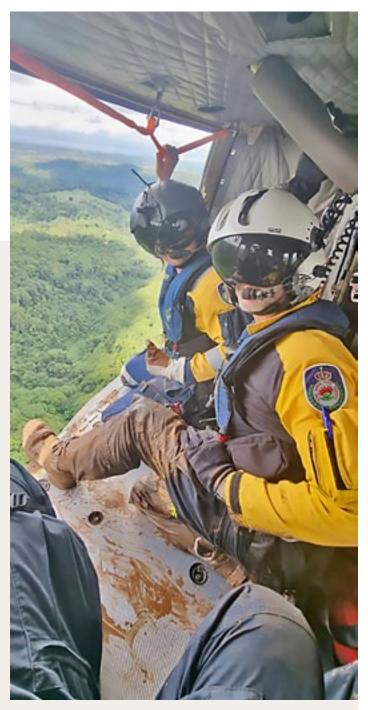
"I found later that I had his glasses in my pocket, and realised that I had something like 25 percent of this guy's worldly possessions with me. However, the upside was that I was able to both rescue him, and eventually, get his glasses back to him."

Rick returned from his third deployment on 4 March 2022, during which time the NSW RFS Aviation Rescue Crew Officers were among volunteers from across the state dropping tons of hay from helicopters to rural properties without road access for their livestock.

"It takes time to build up again and build momentum, and to have the resources and supplies to do so," says Rick. "These floods were different to previous ones in the area - the sheer number of homes inundated by deep, flowing waters and roads cut off so quickly. Because the rain came so hard at night, I think people were stunned when they woke in the morning.

"We have been training for eight years with the NSW RFS backing us 100 percent, and I'm just glad the Service put that trust in us and gave us that training so that we could get in there and do the job."

NSW RFS Aviation Rescue Crew Officers undertake the 12-month internal program for the Certificate III in Aviation, and must already have existing aviation experience.



Twice per year, the officers are formally recertified, once in land and once in water winching.

"We are one of the few organisations nationally that can issue this qualification," says Simon Topp, NSW RFS Operational Field Support Coordinator. "Skills are kept current every six months, although activities are usually more frequently than that, including delivering helicopter insertion training for other NSW RFS members.

"Our Aviation Rescue Crew Officers have a pretty full plate".

INFOCUS

CSIRO'S NEW BUSH FIRE FACILITY IN CANBERRA

CSIRO has invested \$2.1 million in a new National Bushfire Behaviour Research Laboratory at their Black Mountain site in Canberra.

The facility will help the NSW RFS to prepare for future bush fires. The new purpose-built lab offers increased size and capability to enhance the potential of existing technologies.

The Pyrotron, the 29m-long centrepiece for the study of the combustion of bush fire fuel, is a fantastic learning tool for the NSW RFS.

Additionally, the laboratory will house a Vertical Wind Tunnel for studying the combustion and aerodynamic characteristics of embers formed by burning bark and other materials.

These tools are valuable for bush fire research and modelling because they allow for aspects of real-life bush fires to be replicated without the risks, safety concerns or access issues that a live bush fire presents.





> NEW DIRECTOR AREA OPERATIONS (NORTHERN) ANNOUNCED

Congratulations to Chief Superintendent Jayson McKellar who has been appointed as Director Area Operations (Northern) and to the rank of Assistant Commissioner.

.....

Jayson brings a wealth of experience to the position, having first joined the service as a volunteer in the Blue Mountains in 1988, before taking up a salaried role in 1994 at State Operations. He played a pivotal role in the amalgamation of the Cessnock and Maitland Districts to form the Hunter Zone. and the combination of the Cessnock, Dungog, Maitland and Port Stephens Districts to form the Lower Hunter Zone.

During his career Jayson has filled a number of roles in Districts throughout the Hunter Valley prior to becoming Acting Manager, Region East in 2017 and transitioning to an Area Commander in 2020.

> PRINCESS ANNE MEETS NSW RFS VOLUNTEERS

Her Royal Highness the Princess Royal was the guest of honour at the NSW RFS State Operations Centre in April 2022 during a three-day trip to Australia.

Princess Anne met with the families of volunteer firefighters Geoff Keaton and Andrew O'Dwyer, who were both killed while battling the Green Wattle Creek fire in 2019. She also took time to speak with their colleagues from the Buxton and Horsley Park brigades.

Due to heavy rainfall in early April, Princess Anne was unable to visit the memorial site in Buxton and the fire truck-themed playground, built to honour the ultimate sacrifice of Geoff and Andrew.



NEW APPOINTMENT: MAT SMITH

Commissioner Rob Rogers confirmed the appointment of Mathew (Mat) Smith to the rank of Assistant Commissioner in March 2022. Deputy Commissioner Kyle Stewart and Former Deputy Commissioner Bruce McDonald presented Mat with his insignia at a small ceremony at NSW RFS Headquarters.

"Mat Smith is a well-deserving candidate to hold the rank of Assistant Commissioner," said Deputy Commissioner Stewart. "He has an extensive operational background, which spans several decades and it is fantastic to see someone of his capabilities progress through the NSW RFS and to become one of the agency's Assistant Commissioners."

Mat joined the NSW RFS as a volunteer member of Beacon Hill Brigade in February 1991, where he remains a life member. His first salaried role with the service was as Deputy Fire Control Officer at Moree Plains District in November 1999 before working across District, Region and State Operations teams. In 2021 he was appointed to the role of Director, Built and Natural Environment.

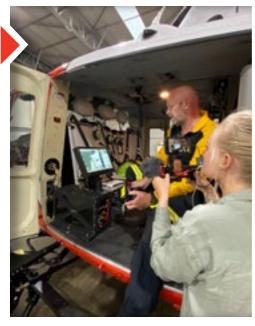
> WATCH NSW RFS CONNECT EACH MONTH TO **KEEP UP WITH THE LATEST NEWS**

Thanks to the NSW RFS Connect monthly video broadcast, members are staying abreast of key developments within the Service and enjoying candid, informative discussions between Commissioner Rob Rogers and other NSW

These sessions are designed for all members to learn about the things that interest them, from the Service's involvement in the Sydney Mardi Gras to production of new and refurbished trucks.

Thousands have tuned in from across the state over the course of these broadcasts, particularly enjoying the Q&A sessions, where members get the most current and accurate responses to their queries.

For up-to-date information including updates on priority projects from the comfort of your own home, head to www.rfs.nsw.gov.au/connect to watch the live and previous episodes. You can also watch the episodes live on the NSW RFS Members Group on Facebook. Connect with us on the fourth Wednesday of each month at 7pm.





When the Jenolan Caves Brigade station burnt down during the Green Wattle fire on New Year's Day 2020, Chifley/Lithgow Group Captain Barry Richards was devastated.

"I lost all the physical logs, all the records and memorabilia, everything," says Barry. "It was such a blow for me because I built the Brigade up from an empty small shed in 1979, and so many things that we worked so hard for over many years were gone.

"At the time it burnt down I was about a kilometre away at Jenolan Caves House - that was our main target to preserve and keep. The shed (brigade station) just couldn't be saved, despite the efforts of our crew."

However, a silver lining of the incident is the fact that the new station, rebuilt on the previous site, is larger and better equipped than its predecessor and will see the Brigade better resourced in the future.

"Everything about the new station is brilliant, I am over the moon," says Barry. "There's been a lot of thought put into the design and infrastructure, and now the station is so much bigger.

"It's nice to be able to move around the tankers without turning sideways. The kitchen is fitted out, and we have a toilet now - in fact three toilets and two showers.

"It's very different to when we started with really just a shed, a lot smaller than a normal shed. Each time we got a new truck we had to raise the door a bit more to get the bigger one in," says Barry.

"But with this new shed we've got huge doors. I'm sure it'll take anything in future without alteration to the structure."

Additionally, thanks to Barry's industriousness and the timely efforts of founding member of the Cudgegong NSW RFS Heritage Committee, Alan Selman, several of the station's items of historical value were saved.

"I credit Alan Selman with his visit to the station before the fire, it was so fortunate," says Barry.

"We went through what I had and he took some items I'd collected over the years, including the steel knapsack that dated back to when we kicked off the Brigade."

The new station makes room for three truck bays, a multipurpose room, kitchen and many other significiantly improved facilities for volunteers.

On 21 May, NSW Deputy Premier Paul Toole MP and NSW RFS Deputy Commissioner Peter McKechnie were joined by NSW RFS members and guests to officially open the new Brigade station.

"The Jenolan Caves Brigade was instrumental in protecting the historic Jenolan Caves House as flames bore down on its doorstep," Deputy Premier Toole said, in reference to the day the former station was burnt down.

"It is so pleasing to see the Brigade's resilience and its commitment to rebuild. The Jenolan Caves is a must-see destination for many tourists and can see hundreds of people pour into the area, so it's vital the NSW RFS has the facilities to be prepared for any incidents."





Deputy Commissioner McKechnie touched on the history of the Brigade, including how the Jenolan Caves Brigade members worked out of a single bay shed after its establishment in 1979.

"Today, the Brigade has 32 active members who are kept busy responding to fires, motor vehicle crashes, and supporting other agencies as well as conducting vital hazard reduction burns and educating people on bush fire safety," he said.

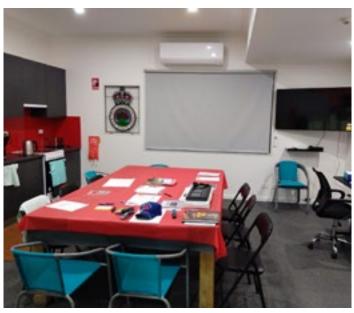
"The Brigade has not only helped protect their own community but have been called on to assist their Chifley/Lithgow District colleagues to fight large fires in Bathurst, Oberon and the Gospers Mountain fire in 2019."

Displayed at the event was an impressive new collection of matchbox fire trucks, which were donated to the Jenolan Caves Brigade after Phil Pedley, Deputy Captain of North West Brigade in the Canobolas Zone, posted a call-out to help replace some of what Barry lost.

"Phil Pedley put out a bit of a story on his Facebook page, and I received over 100 fire models from all around the state," says Barry.

"It's roughly what I had before in terms of numbers. I had a few rare ones before, but now I've got lots of these matchbox fire engines."





Phil and Barry were overwhelmed with the generosity of members and people from as far away as Western Australia in response to the Jenolan Caves Brigade's loss.

A new cabinet to house Barry's donated collection is due for completion soon.

SCAN the QR code to watch a video about the Jenolan Caves station being rebuilt and Barry's experiences.





Ritchey Sealy has fought bush fires for 28 years as a member of the Bodalla Brigade and a Deputy Group Captain with Eurobadalla Shire, however none have left an impact on him like the Black Summer fires of 2019/20.

"When we got hit with the Badja Forest Rd fire and the Potato Point fire, it was quite emotional being under so much stress and pressure," says Ritchey.

"But when all the strike teams came into our area to help, to get that assistance was just fantastic, and that's when you see the camaraderie. We got hit hard at that time - it was our area, it was personal."

Ritchev is a well-established visual artist on the Far South Coast, where he has lived since 1988. He is mostly known for his depictions of South Coast sea and landscapes.

He began to paint the 2019/20 fires about a month after Black Summer, giving particular focus to depictions of dangers like gas cylinders, falling trees and ember explosions.

"They're not just pictures, it's about capturing a mood. After the 2019/20 fires, I could really see the subject matter," says Ritchey. "It was basically three months of solid firefighting on very little sleep, trying to manage firegrounds and everyone else.

"It was a surreal, hostile environment with trees coming down everywhere and nature just exploding around us.

"After the fires, I settled into the painting - drawing on my subconscious, but also looking at reference material on social media or in Bush Fire Bulletins.

"Of course, when you're out on the fireground, you don't have time to stop and photograph things to look at later, you're just doing the job."

In April 2022, Ritchey shared the latest works in his 'Fire' series on Facebook with the NSW RFS community.

The posts teemed with comments and amassed hundreds of 'likes', as members from all over the state showed their appreciation.

"Thank you for honouring us in this way", said one member, while another wrote, "takes you straight back, doesn't it".

Ritchey can be found selling his art - influenced by impressionism and the work of Australian war artists like Ivor Hele and John Longstaff - at his Moruya market stall every Saturday, weather permitting.

He also updates his Facebook page, 'Ritchey Sealy Art Studio', with regular news.



Main left and below: Works from Ritchey Sealey's 'Fire' series. Photos courtesy of Ritchey Sealey.

Above: "The one with the two firefighters and gas cylinders references a bit of a joke with firefighers: what did you save? We saved the mailbox!" says Ritchey.





For John Sullivan, volunteering and joining the NSW RFS had always been a lifelong dream. However the nature of his day job was not compatible with this ambition.

John was regularly posted to Southeast Asia, the United States and Europe in a senior management role, and couldn't properly commit to a brigade.

That all changed when he took on a new role based in Australia, and signed up with the Taralga Brigade in 2009.

"The reason I joined, and the reason I was wanting to join for so long, was because I like doing things for the community," says John.

Once he became a volunteer firefighter, he knew he wanted to do more for the Service outside of fighting fires.

John saw the duties and responsibilities of the State Ceremonial Unit as a way to further serve the community and inquired about joining.

"When I joined the NSW RFS, I felt that I was doing something really good for the community in the fire season but then there's the other half of the year where I could also help," says John.

"I started to look for something else I could do to contribute when I saw an advertisement in the Bush Fire Bulletin for what was then called the State Protocol Squad."

Now, nine years later and while balancing duties as the Captain of the Taralga Brigade, John heads up

the 20 member-strong State Ceremonial Unit. This includes four NSW RFS volunteers who have been with the Unit since its inception in 1994.

"I love what I do - I feel that a lot of the Service doesn't know that we exist and are available to assist with all manner of events," says John.

"We can assist brigades with events and ceremonies, such as medal presentations, station openings, tanker handovers and funerals. Anything ceremonial that the brigades would like us to assist with, we can help them."

John estimates that over the years, he has been involved in at least 500 ceremonies for brigades across the state.

John's contributions were recognised in the 2022 St Florian's Day awards, where he received the Commissioner's Commendation for Service (Individual).

The State Ceremonial Unit was also honoured on the day, receiving the Commissioner's Unit Citation for Service.

"I was really very humbled to receive one personally, and for the Unit to also be recognised was a very pleasant surprise - I'm really honoured," savs John.



Main left: Brett Martin, John Sullivan and James Garland at the opening of a memorial and avenue of honour for fallen firefighter Samuel McPaul in Jingellic. Photo by Jess Oxford. **Above**: The State

Ceremonial Unit is awarded the Commissioner's Citation for Service (Unit) on St Florian's Day 2022: **Below:** State Ceremonial Unit members at the State Championships in Pambula 2014. Photo by Sharon Quandt.

In particular, the State Ceremonial Unit and John were recognised for their service in assisting with and attending an increase of medal ceremonies and, tragically, funerals following the devastating 2019/20 fire season and widespread flooding across the state.



John recalled fighting the Green Wattle Creek fire with his Brigade during the season after the blaze had claimed the lives of NSW RFS firefighters Geoffrey Keaton and Andrew O'Dwyer.

He recounted how the Brigade kept the deaths at the forefront of their minds but focused on their efforts to contain the blaze.

"Everyone was aware of what had happened and you've got to be very respectful of the fact that it has happened," says John.

"There is a grieving process that takes place with firefighters but you still have a job to do and we had to take care of the people we could.

"That fire season was definitely the worst one I've ever seen - I've got members in my Brigade who have been there for 50 years and have said they've never seen anything like it."

As well as organising and travelling to events, the Unit's members also perform duties of a Catafalque party, flag attendants, ushers and other roles as requested.

John encourages NSW RFS members who are interested in finding out more about the State Ceremonial Unit or who are interested in joining, to email State.Ceremonial.Unit@rfs.nsw.gov.au.



BUDGET BOOST IN RESPONSE TO THE BUSHFIRE INQUIRY

The NSW Government has committed \$315.2 million across the next four years to fulfil the recommendations of the NSW Bushfire Inquiry in the 2022-23 NSW Budget.

This includes \$191 million allocated to the NSW RFS for crucial hazard reduction works, maintenance of strategic fire trails, and the procurement of new fleet.

"The devastating Black Summer of 2019/20 had a lasting impact on communities right across our state, which is why the NSW Government is committed to finalising the Government's response to the Bushfire Inquiry," said NSW Premier Dominic Perrottet.

"The investment will go a long way to ensuring that more than 1.3 million properties on bush fire prone land in our state are better prepared for future fire seasons.

"We are committed to investing in frontline services to strengthen communities across NSW."

The funding will include \$105.6 million towards new trucks or retrofitting of older vehicles, \$75 million for ongoing mitigation crews and \$10 million for strategic fire trail enhancement.

Commissioner Rob Rogers said that the funding would not only provide NSW RFS members with preparedness where necessary, but with the best firefighting resources.

"Being prepared and having the right resources is so important and this investment from the NSW Government will strengthen our crews," said Commissioner Rogers.

"Previous funding to address the NSW Bushfire Inquiry has enabled the NSW RFS to purchase and refurbish hundreds of trucks, with the 400th truck due to roll off the production line within weeks."

Part of the additional funding was to enable 42 ongoing mitigation crew roles.

This will bring ongoing mitigation crew roles to a total of 318, 46 of which will be Aboriginal Torres Strait Islander roles.

In January 2020 the NSW Government commissioned an independent expert inquiry into the 2019/20 bush fire season to provide input to NSW ahead of the next bush fire season.

The Inquiry reviewed the causes of, preparation for and response to the 2019/20 bush fires and made 76 recommendations, which were all accepted by the NSW Government and are now either complete or in progress.



REFRESHED APPROACH TO INDIGENOUS MITIGATION RECRUITMENT

The North Western and Western Area Commands have been taking a local approach to the recruitment of Indigenous crews, with six new members inducted to the Service in 2022.

The new approach aims to build on the established links between the NSW RFS and Indigenous communities. The program is a collaboration between the Area Operations, Member Services and Operational Training units within the NSW RFS, who have worked in conjunction with local elders and Aboriginal employment agencies.

The program commenced in December 2021 with information sessions in remote communities conducted by North Western and Western Area Commands. Multiple sessions were held in these remote communities, supported by local Aboriginal Employment Agencies, existing Mitigation crews and other service providers.

"We really focused on the experience of the applicants in this process, to develop a recruitment action which would bring out the best in locals applying for our roles," explains Shellie Smyth, Manager of Community Risk at North Western Area Command.



Photos: Trainees Kieran Bony and Brendon Coffey taking part in the Indigenous Mitigation Crew Recruitment Program. Photos by Noah Lamrock.

"We conducted face-to-face interviews and assessments, provided assistance with job application writing and Operational Training delivered an 'On Country' induction."

The trial has included a collaboration with the Driver Licensing Access Program provider Birrang to progress applicants' driver licences to improve their employment prospects. The recruitment team also worked with applicants to resolve their COVID-19 vaccination status.

"We are continually working to improve how we engage and work with Indigenous communities. particularly in remote locations across NSW," says Chief Superintendent Jayson McKellar, Director of Area Operations Northern.

"Our Indigenous Mitigation crews do great work on country and across NSW. They represent their local communities with pride. The crews are very knowledgeable, hard-working and proud of their communities and their heritage.

"We can learn a lot from them as they start their journeys in the NSW RFS. I'd encourage everyone to have a chat with our new and existing Indigenous crews, get to know them, and if you get the opportunity, head out and visit some of our more remote parts of the Service.

"We have seen so many examples of the benefits of having Indigenous NSW RFS members in these communities - they really do provide a valuable addition to our growing Mitigation cohort in the NSW RFS."



In July 2020, Commissioner Rob Rogers announced a set of priorities for the Service following the devestation of the Black Summer fires of 2019/20. Building on the successful rollout of those first priorities, new priorities have now been identified for the NSW RFS.

The new priorities continue to align to our strategic direction, and place focus on projects that will make a tangible difference to members, allowing them to operate safely and effectively, and connect and work together to best serve the community.

MAPPING SOFTWARE

Quality in-field mapping helps us make better operational decisions and is critical for situational awareness, fire spread predictions and warnings.

We have explored what is needed to allow our members in the field to undertake mapping and easily transmit this to each other, incident management teams and the community.

Member consultation for this project is now complete. Many thanks to all who contributed during the consultation phase. Your engagement has provided the project team with valuable insights which will help them compile and deliver their recommendations and final report to the NSW RFS.

The recommendations and report have been drafted and are undergoing review, amendment and approval prior to the final report being submitted in the very near future.

○○ WORKPLACE CONDUCT

We are committed to ensuring every NSW RFS member feels safe and respected at work. Commissioner Rogers recently announced the creation of a new Workplace Complaints Resolution Framework that acknowledges our members' fundamental right to a physically and psychologically safe workplace and will overhaul how complaints are handled and resolved in the Service.

The proposed framework was developed in consultation with almost 2,500 members, whose contribution was invaluable in arriving at a proposed framework that considers the unique nature of the NSW RFS.

We appreciate members' time and effort invested in this important work, including those who contributed their lived experience of raising, responding to, or managing complaints.

The process also involved engaging an independent specialist, who guided us to examine good practice and conceptual models.

The proposed framework will be finalised by the end of 2022, with implementation starting in early 2023. It is very different from current practices, featuring simplified processes, additional support and guidance, clarified roles and responsibilities, and consistent and equitable outcomes. You can find more information about the framework on One NSW RFS.

MENTAL HEALTH

We are committed to providing the highest standard of support for members to best cope with the impact of stressful and potentially traumatic experiences associated with their role.

To achieve this, the Mental Health Strategy will be ready for release in late 2022 and will be accompanied by materials to inform members of the .full range of support available should they need help in the future.

This project recognises the importance of looking after our own mental health and wellbeing, as well as the health and wellbeing of others, and builds upon the existing and highly valued mental health offerings that already exist across the Service, such as CISS and the Area Psychologists.

DESIGN OF FIRE APPLIANCES

The NSW RFS is working with the Monash University Accident Research Centre to improve the protection of firefighters through the better design of fire appliances.



Right: The Drager X-Plore 5500 full-face respirator

Given the unprecedented circumstances of the 2019/20 season, in particular the tragic loss of our members and the number of vehicles badly damaged, we need to ensure the design of our fire appliances is fit-for-purpose for the future.

The research undertaken through the member survey, which received more than 3,300 responses, was critical in informing how we design and use our vehicles to be as safe as possible.

Monash University is compiling and interpreting the survey results alongside the other information it has collected, including organisational data relating to appliance incidents over the past five years.

This information will be collated in a final report for the NSW RFS, due to be delivered in August 2022.

PPE RESPIRATORY PROTECTION

One of the Commissioner's priorities is to equip our members with better respiratory PPE for use during firefighting that is evidence-based and fit-for-purpose.

Following testing and evaluation by NSW RFS members and an open market tender process, the NSW RFS rolled out new respiratory options to all firefighting appliances across the state.

The rollout was completed by July 2022, delivering the Dräger X-Plore 3500 half-face respirator and Dräger X-Plore 5500 full-face respirator (pictured below), both with ABEK P3 canisters, to every firefighting appliance in the state.



Members will get regular updates on these projects via One NSW RFS, the eBulletin and NSW RFS Connect.



Caring for animals both great and small has always been a passion for Bogee Brigade Captain Thomas (John) Marshall.

"I have a great love of the Australian bush and I do believe that we've got to do our best to look after our wildlife and environment," says John.

During his firefighting career, which stretches back to 1965, John has regularly been involved with wildlife rescues and continues to be a licenced wildlife rescue and rehabilitator.

Over the years, he has been involved in the rescue and rehabilitation of thousands of native animals from red-bellied black snakes to tawny frogmouths to wallabies.

"Unfortunately, there is a lot of wildlife becoming critically endangered, and I think that if I can rescue an animal and get it back to its natural environment then that's a good thing," says John.

"We need to make sure that we help protect our native wildlife so that our grandchildren and greatgrandchildren can actually see what they look like and know what they are.

"Look at what happened to the Tasmanian tiger for example - I don't want that to be the same for koalas."

At his rural property where he has nursed back to health and rehabilitated many young orphaned animals and those who have suffered injuries, John is regularly greeted by kangaroos he helped care for and released back into the wild.

However, when pushed to name a favourite, he settles on the humble wombat.

"They're a very smart animal - they're really cute and funny and I'd call them the bulldozer of the bush," iokes John.

John has even helped rescue animals while on duty as a firefighter. He vividly recalls responding to the Gospers Mountain fire in 2019, where several turtles came crawling out of the bush to escape the blaze.

Photos: Bogee Brigade Captain Thomas (John) Marshall cares for young native animals. Photos by Nicole Brimelow.

"I saw one and thought 'what are you doing all the way out here?' before one of the guys called out and said there was another turtle," says John.

"Then there were three and I think we had six to ten turtles ultimately running out of the fire. I put them all in the fire truck and we later stopped by some water to let them go."

After an invitation from the National Parks and Wildlife Service, John's expertise proved valuable in establishing a free online course designed to train firefighters and civilians to safely assess and rescue native animals on firegrounds.

"They saw benefit in me being there from both a firefighter's perspective and also with my experience in native animal care," says John.

The self-paced training course comprises three modules to help firefighters assess and report potentially injured wildlife, as well as assisting wildlife where possible under the direction of an Incident Management Team.

Following completion of the course, firefighters are provided with an interactive handbook to take with them on the fireground.

The move to offer training for firefighters arose following the 2019/20 fire season that saw many wildlife injured and killed in the destructive blazes.

It's estimated more than 1 billion native animals were killed during that season, including more than 800 million in NSW alone.

The National Parks and Wildlife Service, in partnership with Taronga Conservation Society Australia, spearheaded the creation of the course to address the NSW Bushfire Inquiry recommendation that the NSW Government develop and implement a policy for injured wildlife response, including guidance for firefighters on handling injured wildlife.

John stresses how important it is for NSW RFS firefighters to undergo training to help preserve the remaining wildlife.

"This course is the culmination of 16 months of work and it would be a great benefit to NSW RFS firefighters," says John.

"Not only is it for their safety when coming across a wild animal - and they are a wild animal that we need to be mindful of - this course also empowers them to assess the situation and assist these animals until they can be passed on to a licenced wildlife carer."





The training is now available through the FUEL portal on One NSW RFS.

Training is not mandatory but encouraged to ensure that we can provide a capability to assess and report injured wildlife into the future.



OUR ICONIC FIRE DANGER RATING SIGNS HAVE CHANGED

As of September 1 2022, Australian Fire Danger Ratings have been made consistent across the country. The iconic fire danger signs that mark the roadside entrance to many country towns across NSW will now match the ones everywhere else in Australia.

The way we determine and communicate the science behind the signs, the Forest Fire Danger Index (now called the Fire Behaviour Index), has also been updated.

The NSW RFS led the national Australian Fire Danger Rating System project with the Australasian Fire and Emergency Service Authorities Council (AFAC) and the Bureau of Meteorology. The NSW RFS also managed the implementation of the new system across the state and provided resources and guidance to NSW RFS members and partner agencies about the changes.

The rollout of the system was supported by an extensive community engagement and education campaign.

You can see what the new sign now looks like, read about the changes and updated information for the community on actions to take, in the liftout on the following pages.

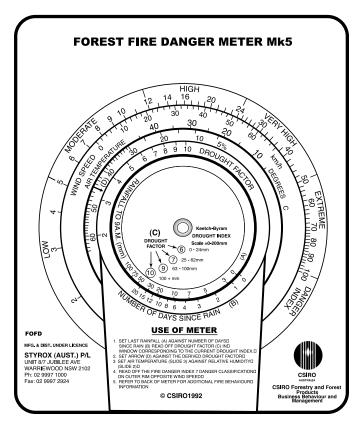
Did you know the science behind the fire danger ratings has remained largely unchanged for more than 50 years?

The Forest Fire Danger Index (FFDI) was originally created by the grandfather of Australian fire science, Alan G. McArthur.

McArthur developed the Forest Fire Danger Index and Grassland Fire Danger Index while working as the Commonwealth's first bush fire behaviour researcher at the Forestry and Timber Bureau in Canberra in the 1950s and 60s.

McArthur and his team carried out field experiments on the rate of spread of fires behaved. By studying the spread of wildfires, he devised fire danger tables for both forest and grass fire situations throughout Australia.

His research, which began in 1953, led to what we now know as the roadside fire danger rating systems.



Main at left: Virtual illustration of the new Fire Danger Rating sign. **inset:** Pioneering Australian fire scientist. Alan G. McArthur.

The Australian Fire Danger Rating System is derived from the Fire Danger Index scores that began many years ago with the work of McArthur and his team.

McArthur's system has been used operationally since 1967 and has undoubtedly saved many lives.

Why the change?

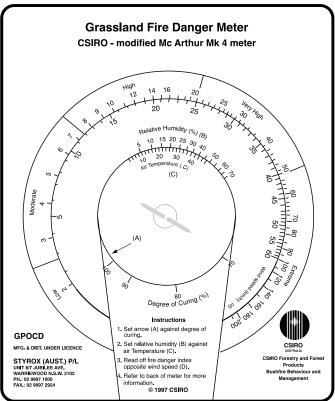
The McArthur system uses only two vegetation types, forest and grass, and does not allow for science and technology updates.

Fire danger ratings are now more accurate and relevant. The new Australian Fire Danger Rating System has incorporated advances in our understanding of fire danger. Through a modular platform, the Fire Behaviour Index has allowed continuous improvement by incorporating scientific advances and developments in technology.

It also uses the eight vegetation types mapped broadly across Australia instead of two.

These vegetation types now include: pine, forest, grassland, buttongrass, spinifex, mallee heath, savanna and shrubland.

Buttongrass and grassy woodland are the only two vegetation types not found in NSW.



Above left: Forest and Grassland McArthur Fire Danger Meters, 1966-1974. Images courtesy of CSIRO.

The Fire Behaviour Index is a tool to support decision makers such as Meteorologists and Fire Behaviour Analysts, and provides a scale of potential fire behaviour based on:

- Fire intensity
- > Flame height
- Rate of spread
- Spotting potential

It can be used to support decisions such as:

- > When it is safe to conduct a prescribed burn
- Which bush fire suppression strategies are safe and effective
- When it is not safe to use equipment that may start a fire
- When Total Fire Bans may be required

Together, the Fire Behaviour Index and the Fire Danger Ratings are the two elements of fire danger that inform the Australian Fire Danger Rating System.

We can thank McArthur for providing us with a system that has stood the test of time and provided the foundation to progress and improve our understanding of fire behaviour and fire danger in Australia.

The next page outlines the changes to our Fire Danger Ratings and how to understand them.

Australian Fire Danger Ratings have changed

The new Fire Danger Rating System has commenced across Australia as of 1 September 2022.

Fire danger ratings will now be simpler and easier to understand.

By using the latest science and technology, they will provide a more clear and accurate rating to save properties and lives.

The new system is based on eight different vegetation types, which have been mapped across Australia (instead of the current two). These vegetation types include Buttongrass, Forest, Grassland, Mallee heath, Pine, Savanna, Shrubland and Spinifex.

RATINGS AND MESSAGING

MODERATE

PLAN AND PREPARE

Fire Behaviour: Most fires can be controlled.

HIGH

BE READY TO ACT

Fire Behaviour: Fires can be dangerous.

EXTREME

TAKE ACTION NOW

TO PROTECT LIFE AND PROPERTY

Fire Behaviour: Fires will spread quickly and be extremely dangerous.

CATASTROPHIC

FOR YOUR SURVIVAL

LEAVE BUSH FIRE RISK AREAS

Fire Behaviour: If a fire starts and takes hold, lives are likely to be lost.



FIND OUT MORE

You can monitor the Fire Danger Ratings at www.rfs.nsw.gov.au/fdr For more information, visit www.rfs.nsw.gov.au/newfdr



NEW MEMORIAL HONOURS SAMUEL McPAUL

A memorial and Avenue of Honour in Jingellic were recently unveiled to commemorate NSW RFS firefighter Samuel (Sam) McPaul.

On 30 December 2019, Sam was part of the firefighting contingent battling the Green Valley Talmalmo blaze in Jingellic, near the NSW-Victoria border, when fierce winds from the fire overturned the the truck in which he was travelling with two other NSW RFS members.

Sam was tragically killed that day.

The McPaul family, Minister, Commissioner and Council gathered in early March 2022 to unveil the memorial and dedicate a two-kilometre section of River Road that follows the Murray River as an Avenue of Honour to Sam.

Lined with 100 pin oak trees, the Avenue of Honour passes the site where Sam was fighting the Green Valley Talmalmo fire.

A wayside stop and shelter offers the community and visitors to the area the opportunity to read about Sam's life, and learn about the impact of the fires.

Commissioner Rogers said it was a fitting tribute for Sam, who was not just a dedicated firefighter, but also a generous, loyal and creative person, and a talented basketball player.

"The 2019/20 fire season was like nothing we had seen before. It was firefighters like Sam who kept their communities safe," said Commissioner Rogers.

"As Commissioner of the Service, it is always devastating to lose one of our members in the line of duty. Sam's loss has had a profound impact on his brigade and on the greater NSW RFS community.

"This memorial will be a testament to Sam's bravery, and the community's gratitude to our dedicated volunteers."

Sam spent considerable time volunteering as an administrator, referee, state league player and coach at Basketball Wagga Wagga, and had a passion for helping others.

"This Jingellic memorial is incredibly important to everyone who knew Sam here at Basketball Wagga Wagga," said Carol Pevere, Director

Photos by Jess Oxford



of Finance for Basketball Wagga Wagga. "It will be just a small reciprocation of the lasting difference he made."

Sam, a member of the Morven Brigade, was on a tanker working in an open paddock, moving livestock to a safer area and putting out active fire, when extreme winds associated with a pyrocumulonimbus fire thunderstorm hit the tanker. The winds were strong enough to lift the tanker off the ground and flip it over, so that it landed on its roof.

Sam was working in the refuge area of the tanker and died as a result of the extraordinary incident. The two other occupants of the tanker were injured and taken to hospital, while a second NSW RFS vehicle working in the area was also blown over and the firefighter on board transported to hospital.

Greater Hume Council Mayor Tony Quinn said the Council and community at large wanted to establish this memorial to commemorate Sam and his ultimate sacrifice.

"This memorial is the culmination of a significant project and the result of a community-led response, following the devastating Green Valley fire that sadly took the life of Sam McPaul," said Cr Quinn.

"The idea to create a memorial and the rest stop came during the early months after the fire was extinguished. First proposed by a NSW RFS volunteer, Jingellic Rural Fire Brigade members immediately embraced the idea, and together brought it to Council. "On behalf of the Greater Hume Council, we sincerely hope that this memorial to Sam will provide comfort to his family and loved ones."

Sam is survived by his wife Megan and son Angus.

On 17 January 2021, a funeral service held at Holbrook Sporting Complex celebrated Sam's life. Megan received the Commissioner's Commendations for Service and Bravery on Sam's behalf.

A long line of NSW RFS members and basketball players formed an honour guard to farewell their fallen colleague.





"At the moment, there's so much to learn in my new position – that's what excites me most," says Liz. "I was definitely comfortable in my home district, knowing everyone by name, so to have all-new stakeholders is certainly a challenge.

"I have taken the opportunity to get out and meet my brigades as much as possible and meet my volunteers, it excites me to learn about them and what they bring - what enthuses them? What do they have in common with my senior leadership team?"

In her new role, Liz has identified the need for extra planning and preparation to meet the challenges faced by the Lower North Coast community. These changes include motor vehicle and truck incidents on the Pacific Highway, and protection of, as well as access in and out of, isolated coastal villages during the bush fire danger period, particularly in the busy tourist season.

"I want to introduce CABA here for structure fires, it's a need I've identified and a capability we don't have," says Liz. "Setting goals, team-building and instilling a culture of respect is another thing that is really important to me."

Liz began volunteering with the NSW RFS in 1990 and has had a long and varied volunteering career that included being involved in the NSW RFS International Training Program in Botswana in 2011 and 2016.

"I am a believer in lifelong learning and taking opportunities as they arise," says Liz.

"While I believe in 'the best person for the job', I am also a strong advocate for women to take on field operational roles and hope to inspire more women to make the move to staff."

In her spare time Liz enjoys riding motorcycles and travelling around Australia, and previously ran a cattle-grazing business with her husband, while being a Manager in Computer Systems at the University of New England.

"Having great family support from my husband and children, as well as support from colleagues and the NSW RFS family further afield, makes me really excited for what's ahead."



"FANTASTIC" GROUP OF VOLUNTEERS IN NEW ENGLAND

PAUL METCALFE

After serving a successful four-and-a-half years as Coonamble District Manager with the NSW RFS, Paul Metcalfe began in a new role as New England District Manager in October 2021.

As a District Manager, Paul works closely with the senior leadership team to support brigades in delivering front-line fire response and mitigation services to the local community. Paul credits the training and development he has received from the NSW RFS for the skillset he draws upon day-today to rise to these challenges.

"The Service has spent considerable time training me and developing me," says Paul. "My purpose is to take the Service and the people in it to the next level, and build up for the next 10 or 20 years."

Paul has felt privileged to find a "fantastic" group of volunteers in New England, who are highly engaged with and passionate about their community. He brings the same passion for the community, having been a volunteer with the NSW RFS since 2009.

"My job is all about connection and I've always enjoyed working like that, developing those professional relationships," says Paul. "The NSW RFS is really people-focused - I've worked with volunteers in all the jobs I've been involved with.

"I enjoy communicating. Once you get the 'people stuff' right, I believe you can get just about anything right."

Prior to his leadership roles in the NSW RFS, Paul worked for the Newcastle City Council, before joining Taronga Western Plains Zoo as Manager of Life Sciences. Getting to witness the births of giraffes and elephants, the strong bonds keepers formed with animals and people's passion for conservation were among the highlights for Paul.

The outdoorsman looks forward to having his 'own patch' with his sheep and chickens in Armidale. Farming, gardening and generally being outside in nature constitutes a 'happy place' for him. Paul looks forward to making a positive impact in the New England area with his leadership and passion for people.

"I've got a fantastic group of volunteers here, there are lots of things going on all the time," says Paul. "The people are very engaged and they want to feel empowered and connected, to keep moving into the future, to go on to serve and to feel valued."



AREA COMMANDS EXPLORE IMPROVEMENTS TO DIVISIONAL COMMANDER ROLE

Determining what makes a Divisional Commander in modern firefighting depends on who you ask.

The NSW RFS is exploring changes to the Divisional Commander role in response to recommendation 44 of the NSW Bushfire Inquiry.

Recommendation 44 states "that, in order to ensure suitably skilled and experienced personnel operate as Divisional Commander during major fire incidents, Bush Fire Risk Management Committees identify appropriate personnel as part of their plan of operations".

In a program instigated by Area Command South Eastern and supported by Area Command South Western, the experience and views of NSW RFS members on the Divisional Commander role have been sought.

Other Area Commands across the state were also given the opportunity to contribute to the program.

Just what constitutes a suitably skilled person for this role was first formally discussed during a workshop in Area Command South Eastern in November 2021 by current Incident Controllers and 21 of the most senior and experienced Divisional Commanders throughout the South East.

Captain of the Wallaroo Brigade on the Southern Tablelands, Neil Shepherd, took part in discussions. He noted that a Divisional Commander could make or break how a fire is controlled.

"The Divisional Commander acts as the vital link between the Incident Management Team (IMT) and the troops on the ground," said Neil. "It's about being able to have a plan, assess a situation, apply a strategy, and have the vision, training and skills to execute that strategy on the fireground."

This was followed by a second workshop at Griffith FCC in Area Command South Western in February 2022. The two-day workshop at Griffith was facilitated by senior staff from both the South Eastern and South Western Area Commands, and involved 19 senior NSW RFS members with a combined 679 years of experience gathering to discuss the role of Divisional Commander.

This involved undertaking research and surveying members prior to the workshop to understand their perspective on the strengths and weaknesses of the position. Discussions built on and fleshed out the current and possible future requirements and skills required for this role.

One key insight from those in attendance was the possibility of a qualification for the role of Divisional Commander, and how this would interact with current Group Leader training delivery in the NSW RFS.



Main previous page: Workshop participants hear from Superintendent Chris Allen, Manager Capability, Area Command South Eastern.

Above: Craig Burley (second from the left), Divisional Commander during the Gospers Mountain Fire, gives a briefing on the fireground in 2019. Photo by Ned Dawson.

Those in attendance acknowledged the great work performed by Divisional Commanders during the 2019/20 fire season. At the same time they identified strengths that could be built upon and capabilities that could be improved.

These included identifying the leadership qualities required for a Divisional Commander, a commitment to inform and consult with the community during fires and improving effective communication and information flow going down to the fireground and up to the IMT.

There was also discussion around the future function of the Divisional Commander, and to undertake succession planning to gain gender and cultural diversity.

"The goal was to understand how to improve the role from a NSW RFS member's perspective," says former Superintendent Chris Allen, Manager Capability at Area Command South Eastern.

"We want to set people up to succeed and we want to empower members to be a part of the change."

The senior members involved in the workshops acknowledged that, while the basics of the role were the same, there needed to be flexibility to recognise different conditions experienced across NSW.

"One example is we want to ensure that we clearly understand the alignment between a Divisional Commander from South Western covering the Lower Western Zone with Mallee scrub, grasslands and cropping across the Riverina, and forests and pine plantations leading up to the escarpment on the east side of the Area," says Chris.

Neil, who has held several volunteer roles in operations and leadership within the Southern Tablelands, is undergoing specific additional training internally with NSW RFS as well as undertaking separate training in his own time.

"Training is part of my own personal development, and is actually in relation to the Divisional Commander role," says Neil. "I'm gaining additional skills and knowledge in relation to a role I feel I can better fulfil in the future."





TREE FELLING: A DANGEROUS BUT NECESSARY SKILL

Recently, Area Command South Eastern held a Tree Felling Fireline (TFF) course, with members travelling to Monaro from all over NSW.

Teaching advanced skills that prepare firefighters for falling problem trees, the NSW RFS course ultimately leads to a Tree Falling Fireline (TFF) qualification if members are deemed competent.

It comprises a week of high-risk training that provides chainsaw operators with the knowledge and skills to not only bring down dangerous trees safely and efficiently, but also to identify them on the fire line.

The training is one the toughest and most mentally and physically taxing courses in the NSW RFS, with members required to implement the safest and most efficient techniques in order to progress.

"We see what the participants are like with a chainsaw. If they are competent there, they progress," explains Monaro District Officer, Adrian Butters.

"You're looking at trees that can be six or 60 inches in diameter, to cut down with a 22-inch chainsaw, so you really need to have proper technique.

"It's a specialisation, and not everyone will become competent." TFF operators are often engaged across the state when ground crews identify a dangerous tree.

If the TFF deems the tree too dangerous to fall manually, heavy plant can be considered as an option.

The heavy plant fall back is, however, not a silver bullet, as heavy plant often cannot get close enough to the tree, or is sometimes not available.

There has been a conscious effort from many District TFF instructors across the state over a number of years to deliver this course to the consistently high standard required of an activity that carries considerable risk to NSW RFS members.

The course held at Area Command South Eastern required the 11 participants to undertake theory on the first day to understand the 'why' of many techniques used to deal with falling problem trees with complex and varying defects, including fire.

The theoretical component is followed by four days in the field putting concepts into practice.



Main previous page: Alex Pickering participates in the TFF course. **Above:** TFF participants led by Steve McKinnon.

To qualify for the TFF course, the participants needed to have already obtained Tree Felling Intermediate (TFI, the stepping stone course for TFF) and gained some experience previously by working with TFF operators falling trees.

This previous falling experience is important as the step from TFI to TFF is a significant increase in skillset and difficulty.

To facilitate quality learning and to mitigate the hazard of picking up new skills while felling problem trees, the participant to trainer ratio is 1:1.

The Monaro District supported this important learning opportunity, facilitating the course and providing three separate falling sites all with different species, size and varying terrain.

Congratulations to our newest TFF operators, and encouragement to our TFI operators who are working towards the TFF level.

The courses would not be able to be held without the skills and knowledge of volunteer instructors, who provide a professional and valued contribution.

Below: Alex Pickering and Nathan Banks participating in the TFF course. All images by Scott Southwell.





Night-time aerial firefighting in emergency operations is a relatively new concept in Australia. As such, it is exciting for the NSW RFS to currently be developing a night-time aerial firefighting capability in conjunction with Coulson Aviation, using the NSW RFS owned Bell 412 helicopter and one Chinook.

The trials are taking place in response to recommendation 52 of the NSW Bushfire Inquiry into the 2019/20 bush fire season which stated that, in order to enhance NSW's firefighting capacity, Government should trial aerial firefighting at night with a view to full implementation if successful.

"We utilise two helicopters working together at night," explains Chief Superintendent Chris Ryder, Operational Field Support Manager.

"One of our Bell 412 Helicopters with a FLIR camera acts as a supervision and safety platform, identifying hazards, water sources and target areas for the drop, while ensuring the Incident Controller's intent is followed.

"The second aircraft, a CH47 Chinook with an internal tanking system, conducts the actual water bombing missions."

The Chinook helicopters, the second of which was provided to Victoria, are now the largest volume firefighting helicopters in Australia.

Both have the capacity to carry up to 11,000 litres of water or retardant.

While an exciting project, aerial firefighting at night is not without challenges.

"A challenge encountered in development and trials has been the significant rainfall events that occurred during the summer period and limited fire activity," says Chris.

"We are working on expanding the trials into the upcoming fire season and the ongoing development of this program.

"The outcome of these trials will see the NSW RFS able to undertake initial attack on fires at night, a time when historically we see lower fire activity but have been unable to utilise aircraft in suppression activities."

Weather conditions for firefighting are typically more favourable at night, which has become further evident during trials, according to NSW RFS Assistant Commissioner Ben Millington.



- "Night-time aerial firefighting is a relatively new but exciting concept in Australia," says Ben.
- "Operating helicopters at night will allow us to directly attack fires at times when weather conditions are more favourable.
- "We will continue to build on this capability to provide our firefighters and emergency service personnel with aviation support at times when traditionally they wouldn't have any."

The outcome for the NSW RFS will be a sustainable night-time firebombing capability, deployable to any area within NSW.







NSW RFS UPS THE ANTE IN FUEL MODELLING

The NSW RFS is participating in a cutting-edge fuel modelling project designed to produce the data needed for next generation fire spread models and simulators.

The project is being funded by the Minderoo Foundation, which is working in partnership with American conservation tech company, SALO Sciences.

"SALO Sciences is producing vegetation and fuel information by using a wide range of input data, including LiDAR data and machine learning processes, to model vegetation attributes and fuel loads across the landscape, and that is exciting," said David Field, Supervisor Bush Fire Analyst.

Light detection and ranging (LiDAR) technology can provide precise measurements of vegetation by measuring the height of finely-detailed objects with a tightly-focused laser beam from the air.

David said the involvement in this project was part of the Service's ongoing mission to improve the information available about fuel and vegetation.

This new science and technology is doing just this, as well as providing the opportunity for the testing of our existing information against a cutting-edge process.

Photos: NSW RFS Predictive Services team collecting fuel samples in the field. Photos courtesy of Laurence McCoy and NSW RFS Predictive

"The results of the work done so far by SALO Sciences is promising, particularly what they tell us about the structure of vegetation," says David.

"But part of what is being revealed is that the work which has been done in NSW over the last 20 years also appears to have been of very high quality, with much of our existing information being very accurate."

NSW RFS Manager Predictive Services, Laurence McCoy, said his team was happy to help with this important work, with fuel load being a significant determinant of bush fire spread in Australia.

"We've been out in the field with more than a dozen crews to get fuel samples, and now we're examining the accuracy of the data and models against those samples," said Laurence.

"This work is valuable and is building our understanding of how the fuels respond in a structural sense, so that we're able to ultimately get better predictions of what fires might do."

The process is being facilitated by the Minderoo Foundation, a not-for-profit organisation that founded a \$70m Fire and Flood Resilience initiative in the aftermath of the Black Summer bush fires.

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In July 2021, the Urban Interface Program was developed with the intent of mitigating the risk faced by urban interface communities across NSW and focusing on the areas where the bush met assets.

The focus of the program is the review and establishment of Asset Protection Zones (APZs), fuel-reduced areas surrounding built assets or structures, and to do so with a tenure-blind approach, giving equal focus to all assets and their surrounding areas, irrespective of the type of tenure.

During the planning phase of this new program, District staff and Brigades within Hunter Area Command were invited to participate in the program's development. They were asked to provide feedback on existing APZs and suggestions of areas for new APZs within their District.

The next phase was to task the Area Command mitigation workforce to inspect pre-identified areas of concern, using sophisticated mapping. The Hunter Community Risk team then collated the bulk data, which included both information regarding existing APZs and suggested locations for the construction of new APZs.

Mitigation crews identified that a number of the APZs required further inspection. Qualified Certificate Issuing Officers from Area Command and District teams were then tasked to inspect and deal with these APZs.

One significant body of work completed as part of this project within Hunter was the APZ around John Hunter Hospital. The Hospital initially approached NSW RFS and Fire and Rescue NSW to discuss the risks of surrounding bushland, and subsequently a joint-agency inspection was conducted on site and a number of high-priority APZ options were identified for construction.

Over the course of the ensuing seven weeks, mitigation crews from across the Area Command attended the hospital site and undertook works to establish an APZ spanning the 1.5km perimeter.

This project provides wider benefits for the entire health precinct and surrounding assets, which are now protected from known fire paths.



Photos: David Allen, Operational Officer, Hunter Area Command



The Australian Community Engagement and Fire Awareness (ACEFA) Conference, hosted by the NSW RFS every two years, brings together Community Engagement practitioners from emergency services, government and private sectors. The aim of the conference is to share knowledge, experiences and best practice in engaging with our communities to improve the safety of everyone.

In 2022, the 21st ACEFA conference was held in Newcastle from 26-28 May, where for the first time in four years, 400 delegates were able to gather in person.

Minister for Emergency Services and Resilience and Minister for Flood Recovery, Steph Cooke MP, described the conference as an opportunity to inspire, encourage and interrogate the best practice in fire awareness and bush fire preparedness, and thanked the volunteers of the NSW RFS.

"It's my absolute privilege to join you all here. You have been through so much and you should be incredibly proud of your tireless efforts in protecting others," said Ms Cooke. "Thank you for the work you do."

Delegates travelled the length and breadth of NSW in order to attend the conference, as well as from Victoria, Tasmania and Queensland, to share personal stories and engage with topics like innovation and research utilisation.

Visual storytelling was a feature of the conference, with art works, short films and various multimedia supporting this year's theme: 'Compassion. Grit. Innovation. Engaging with our communities when times are tough.'

"The past three years have been tough for people and communities across NSW – and for our people," said Commissioner Rob Rogers.

"In the NSW RFS, we all engage with our community, but do so in different ways depending on whether we are in a Brigade, a District office, an Area Command or Headquarters. But the reason we engage is the same: to minimise the impact of bush fire and other emergencies on communities.

"Preparing our communities for bush fire is a key goal of NSW RFS community engagement. And in many ways, a prepared community is our greatest asset."

An impressive line-up of keynote speakers included:

- documentary-maker and co-creator of the Earth Hour initiative, Todd Sampson
- leading social and business commentator Bernard Salt
- producer Jackie Maxted, one of creators behind the feature film 'A Fire Inside'
- David Webber, who is a highly experienced member of the NSW SES in community engagement
- David Rankine, who has rich experience engaging with rural and regional communities
- Group Captain Kenneth (Mark) Eglington from the Far North Coast



- > Janet Pettit, who has a wealth of experience, knowledge, and skills with volunteers and communities dealing with the impacts of floods
- > film and documentary-maker, Michael Hilliard, who focuses on themes of social justice, music and inclusive culture in his work

One highlight of the Gala Dinner was the performance by The Big OI Bus Band, which featured special guest NSW RFS Nymboida Brigade Captain Paul Johnston.

"Playing in front of hundreds of people at ACEFA was such a diversion from the ugliness and stress of what happened and what we experienced at Nymboida," said Paul.

Nymboida was among the areas worst-affected by the Black Summer bush fires. One of the ways the community recovered was through creating and recording original music with the help of professional musicians Hugh Scott Murray and Grace Hickey.

The music and performance at ACEFA was a celebration of the creativity and resilience of the Nymboida community.

"I was very nervous, because it was a little bit daunting," said Paul. "But it ended up being more difficult to speak about the fires than to play.

"Once I started playing, everything else fell away it was such a lift for me."

The NSW RFS community engaged with ACEFA 2022 enthusiastically, meeting colleagues and community engagement practitioners from all over Australia.

"At a brigade level, we have very limited opportunity (I would say hardly ever) to get to know and interact with HQ and with brigades outside our district," said Andrew Macdougal, a member of Scotts Flat Brigade in the Hunter Valley. "The platform provided to share experiences at every level of the organisation bridged that divide.

"As a result, we are better people and the NSW RFS becomes a more united and vibrant organisation. So many people benefited and learnt from this wonderful event".



All photos by Jacqueline Murphy



TRUST FUNDING GALVANISES COMMUNITIES

NSW RFS brigades from every corner of the state continue to benefit from the goodwill of people across Australia and around the world in the wake of the 2019/20 bush fire season.

Thanks to the NSW Rural Fire Service and Brigades Donations Fund, every brigade in NSW has been able to access up to \$10,000 in funding to put towards improvements to their equipment or brigade facilities.

The NSW RFS and Brigade Donations Fund (the Trust) was established in 2012 to support volunteer brigades with the management of publicly donated funds. In 2022, the Trust is providing more funds for a range of projects including \$6m to allow for the distribution of respiratory protection equipment to all firefighting appliances across the state, \$10m to establish a benevolent fund for NSW RFS firefighters and \$36m to rollout mobile data terminals into all front-line vehicles.

A grant scheme was established in 2020 by the Trust, whereby all NSW RFS brigades could apply for funding of up to \$10,000 each. Brigades had the flexibility, subject to Trust and NSW RFS requirements, to spend these funds to best suit their particular needs, with a focus on spending in their local community where possible.

The MIA District purchased a Toyota HiAce Commuter Van during the grants process, pooling the money of 15 brigades.

The bus was deemed a requirement for the District following the 2019/20 bush fires as MIA volunteers, as well as volunteers from surrounding districts, were constantly being transported over hundreds of kilometres to and from nearby districts, airports and fire control centres (FCCs).

The bus, purchased through a combined grant, cost approximately \$65,000. It has already been put to use for local training and events, as well as for Area-wide higher-end training.

The MIA Airbase communications office was also purchased through the same grant, costing approximately \$50,000.

Previously, airbase communications operators worked from the MIA District FCC and had no situational awareness or understanding of the airbase operations.

The new comms room was built within the current Griffith Airbase, and is an elevated office with a window allowing a full viewing platform of the Griffith Airport and all its operations. The comms room has already been utilised for neighbouring district incident operations, and been proven to work well.



Main previous page, left to right: Former Deputy Commissioner Bruce McDonald AFSM, NSW RFS member Paul Muir, and Andrew Macdonald, Chair of the NSW Rural Fire Service and Brigade

Donations Fund (The Trust). Above: The new Coleambally Brigade station upgrade. Images courtesy of the Deductible Gift Recipient (DGR) Committee.

Not only did the Coleambally and Fivebough-Stony Point brigades build with their \$10,000 contribution from the Trust, they also built on it, with the support of the community.

Like many other small towns, the Coleambally Brigade station is a central community point for local emergency services and residents, used by the local Volunteer Rescue Association and NSW Ambulance as well.

Upgrades to the station included improvements to the structure itself, a new training room, new air conditioners, replacement of the old kitchen, new flooring, furniture and equipment and new plumbing. Brigade members are commended for their own time and effort spent on the upgrades.

The Fivebough-Stony Point Brigade benefited from the Brobnah and Murrmi brigades pooling their entitlement, as well as considerable donations from the Leeton community and an additional RFSA grant, to help complete the upgrade of their station.

The combined effort from the community has resulted in the Brigade being able to now enjoy a new training room and kitchen, where members have a place to train in wet or dangerous weather, and a nice spot to spend time together in at night. "About 15 businesses in the area volunteered their time and labour, or donated items," says Fivebough Stony-Point brigade Brigade Captain, Scott Griggs.

"We went to local businesses and most of them straight away said, 'yes, we'll help'.

"Also the Brobenah and Murrumi brigades were so selfless to do what they did. They thought we could all benefit from upgrades and put their grant towards our station - now they've made an investment in our Brigade and it's a mutual space that members from all three brigades can enjoy and spend time together in at night."

Additionally, brigade members gave their time and expertise to completing the extension, sacrificing nights and weekends to work on the kitchen fit-out, painting walls or planning further upgrades. Former Treasurer of the Brigade, Peter Wynan, has now moved away from the area but was instrumental in the success of this enormous project.

"It would've cost nearly double if we'd paid the true labour cost," Scott said. "We're so happy to have a space now where we can keep encouraging the 'volunteering bug' that the community here has.

"It's all about the camaraderie and getting to know each other, so that we can work in the best way possible."



AUSTRALIAN FIRE

The Australian Fire Service Medal (AFSM) is awarded to a member of an Australian fire service for distinguished service. Congratulations to the eight NSW RFS members who received an AFSM as part of the 2022 Australia Day Honours, recognising their commitment to the community.

FIREFIGHTER DAVID IAN BOSWORTH

Minore Brigade, Orana

Firefighter David Bosworth has been a member of the NSW RFS for more than 55 years, and was one of the first members of the Cobar Central Brigade, spending most of his Saturdays back in 1965 at the council depot.

He was instrumental in the establishment of the high frequency two-way communication system for the Cobar Shire and was appointed the communications officer for the Cobar Shire bush fire area in 1966. He was appointed Captain of the Cobar Brigade in 1983 and also served as the Brigade training officer and Deputy Fire Control Officer (Honorary) for the Cobar Shire.

He has assisted at many fires including the Roto fires in 1969/70, and large-scale fires in 1974/75 and 1984/85, the latter of which burnt out 1,500,000 hectares of the Cobar Shire.

He has also been involved with other brigades including Glenhaven and Winmalee, is a current member of the Minore Brigade and was voted life member of the Megalong Valley Brigade in 2015.

He has held multiple leadership positions in these brigades, and continues to provide invaluable assistance to the Orana Team and the NSW RFS broadly. Firefighter Bosworth's lifelong service to the NSW RFS and his commitment to ensuring the safety of the community is most noteworthy.

GROUP CAPTAIN DONALD (STUART) FARLEIGH

Mandalong Brigade, Central Coast

Group Captain Donald (Stuart)
Farleigh joined the Bonnells Bay
Brigade in 1966 at the age of
15, and became Deputy Captain
in 1972. After a brief stint with
NSW Fire Brigade (NSWFB)
in Dubbo, he joined Morisset
Brigade and held the position
of Captain until 1985 when it
transferred over to NSWFB.
Stuart was the inaugural Captain
until his retirement in 2000.

Group Captain Farleigh rejoined the NSW RFS in 2003 as Captain of Mandalong Brigade, a position he held between 2003 and 2006, and 2009 to 2011 until he was again elected Group Captain – a position he still holds.

Group Captain Farleigh has a passion for training and educating members and external agencies on bush fire awareness. He has attended many major incidents during his career including the 1989 Newcastle earthquake, the Western Sydney hail storm, the 1994 and 2003 bush fires and the 2015 East Coast low storms.

He played a significant role in the 2019/20 fire season, and is also a certified wildfire and structural fire investigator, having been crucial in bringing many alleged arsonists to justice.

Group Captain Farleigh is a dedicated member of the NSW RFS who should be recognised for his service to community safety, education of his peers and his extensive operational experience.

DEPUTY CAPTAIN JANE HOLLIER

Field Operations and Oakville Brigade, Hawkesbury

Ms Jane Hollier has provided exemplary service to the NSW RFS for 32 years as a salaried officer and volunteer. She held various roles in the Service including in community engagement, hazard management, professional standards and operational business before her current position of Manager Events and Awards.

SERVICE MEDALS 2022

She has a strong understanding of emergency management and has provided support throughout many operations, including the recent 2019/20 Black Summer bush fires.

Ms Hollier is well known for her professionalism and knowledge of the Service. This was called upon during the 2019/20 fire season when she organised for senior state and federal officials to visit fire-affected communities. Similarly, she played an integral part in arranging the state funerals for three firefighters who were tragically killed in the line of duty.

Ms Hollier has built strong partnerships with key stakeholders and has represented the NSW RFS and at times other land management agencies at state and federal working groups and inquiries.

For more than 20 years. Ms Hollier has been an active volunteer member and is currently a member of the Oakville Rural Fire Brigade, where she is the Deputy Captain and President. She is also a strong advocate for women in operational roles and is a qualified crew leader.

GROUP CAPTAIN JENNIFER JOY LAWTHER

Callala Beach Brigade, Shoalhaven

Group Captain Jennifer Lawther joined the Callala Beach Brigade in May 1989, where she held the roles of Deputy Captain and

Senior Deputy Captain before her appointment as Captain in 1996. In 2013, she was elected as a Deputy Group Captain and in 2016 to her current position as Group Captain.

Group Captain Lawther is a very active member of the NSW RFS, and over the years has contributed in leadership positions to a number of emergencies throughout NSW and interstate, including the Sydney hailstorm (1999), Canberra bush fires (2003), Black Saturday (2009), Tathra bush fire (2018) and the devastating 2019/20 Black Summer bush fires.

Group Captain Lawther has contributed also as a trainer and mentor to NSW RFS members through Brigade, Group and District training since 1991.

In the early 2000s, when the membership of the Callala Beach Brigade seriously declined, Group Captain Lawther personally door knocked throughout the village recruiting new members.

Her actions and her leadership ensured the survival of the Brigade.

In 2005, she was awarded the National Medal and was awarded life membership by her Brigade. She is an active member of the Rural Fire Service Association and is a champion for gender equality.

CAPTAIN BRIAN EDWIN MCKENZIE

Lower North Coast Support Brigade, Lower North Coast

Captain Brian McKenzie commenced with the NSW RFS at Gosford in 1977, where he served as a Group Captain until his departure from the District in 2000.

An experienced leader, he was appointed to Group Officer upon his arrival at the Kempsey Fire Control Centre (FCC) in 2000, remaining in this role until 2006. He has since held the positions of Deputy Captain at both Frederickton and Aldavilla Brigades and was instrumental in the establishment of the Lower North Coast Aviation Brigade. He is the current Captain of the recently formed Lower North Coast Support Brigade.

He has participated extensively at a local level, and in many outof-area deployments including to NSW, South Australia, Victoria and Canberra. He has participated in numerous strike teams in addition to a range of highly demanding aviation roles during several major fire events.

Captain McKenzie's easy-going nature has greatly assisted his capacity to mentor and train others. His role as an accredited trainer has seen him specialise in the area of pumps and pumping. His capacity in this regard has also seen him help design and develop some of the earlier NSW RFS appliances, including catering units at the Gosford FCC. Captain McKenzie's leadership, operational experience and commitment to his community is second to none.

GROUP OFFICER JONATHON STUART MCKENZIE

Tallimba Brigade, Bland Temora

Group Officer Jonathon McKenzie joined Weethalle Brigade in 1999 and held the positions of Brigade Secretary and Treasurer. In 2003, he transferred to Bland Headquarters and was an active volunteer with the Brigade, attending complex incidents across NSW.

In 2004, Bland Headquarters amalgamated with West Wyalong Brigade, where Group Officer McKenzie served as Captain of the Brigade from 2006 to 2008 and from 2014 to 2016.

From his commencement with the Service, he has been a dedicated and active volunteer, and participated resolutely in aviation roles and fire investigation.

In 2018, he was elected to the role of Group Captain for the Bland Temora Zone. A well-respected firefighter and mentor, he leads by example and frequently takes on roles and responsibilities over and above what is expected of him.

During the Black Summer bush fires of 2019/20, Group Officer McKenzie ably led his crews out-of-area as a strike team leader to the Dunns Road fire near Tumbarumba. His commitment in representing volunteers is second to none, and his advice and guidance is sought widely throughout the Service.

He is also well regarded for his representation of the NSW RFS with key stakeholders and land managers, particularly during difficult times.

Group Officer McKenzie is a strong advocate for NSW RFS volunteers and his community.

GROUP CAPTAIN CHRISTOPHER RONALD NOLAN

Oak Flats Brigade, Illawarra

Group Captain Christopher Nolan joined the Oak Flats Brigade in 1986, in the same year taking on the role of Equipment Officer, which he held until 2003. After stepping down as Equipment Officer, he continued to take an active role in the Brigade, fulfilling various leadership roles including Deputy Captain, Senior Deputy Captain and Captain.

Group Captain Nolan is committed to the development of younger members, exemplified well by the cadet program which he initiated in 2009. Running two Sundays out of the month, the training provides firefighting skills to members as young as 14, and features a social and cultural focus to encourage participants to become wellrounded, contributing members of society. To ensure the ongoing success of the cadet program, Group Captain Nolan has taken on the roles of Brigade Management Member, Brigade President, Cadet Coordinator and Brigade Training Officer. The results achieved through the program are inspiring and their results in both state and national competitions are everimproving.

In 2017, Mr Nolan was elected by his peers to the rank of Group Captain, and in 2018 was awarded life membership of the Oak Flats Brigade for his years of exemplary service to the NSW RFS in the Illawarra.

GROUP CAPTAIN CHRISTOPHER HELMUT PETRIKAS

Tennyson Brigade, Hawkesbury

Group Captain Christopher
Petrikas joined the NSW RFS
Tennyson Brigade in 1976, assisting
in firefighting operations at just 14
years of age alongside his father.
For the following 43 years, he
served his Brigade and District
in various leadership capacities,
including as Captain of the
Tennyson Brigade, and currently
holds the rank of Group Captain.

Group Captain Petrikas has attended numerous fires locally and on various deployments over his many years of service. He is an integral member of the Hawkesbury District Incident Management Team and has assisted in controlling some of the most challenging campaign fires, including the recent Gospers Mountain fire where he undertook the roles of Operations Officer and Divisional Commander.

He is a dedicated trainer and assessor, renowned for his chainsaw training in the NSW RFS. He is a well-respected volunteer firefighter who has provided outstanding leadership and encouragement to brigade members, and developed strong working relationships throughout the Hawkesbury community, as well as with other emergency services organisations and across all levels of management.

Group Captain Petrikas' committed service to the NSW RFS and to the Hawkesbury community throughout his years of volunteer service is highly commendable.



ST FLORIAN'S DAY Bravery & Service Awards 2022

The fourth of May is the Feast Day of St Florian, patron saint of firefighters, and International Firefighters' Day. On this day each year, the NSW RFS holds an internal awards ceremony to recognise the bravery and outstanding service of volunteers and members.

In 2022, 19 NSW RFS staff, volunteers and teams were honoured for their bravery and exceptional service.

In all cases, the recipients are nominated by their peers, which makes receiving an award on St Florian's Day even more significant and special.

Commissioner Rob Rogers praised the recipients for their ongoing hard work and professionalism.

"These past few years have seen the state face fires, floods and a global pandemic, and our NSW RFS members have selflessly stepped up to help communities through these challenges," said Commissioner Rogers.

Minister for Emergency Services and Resilience and Minister for Flood Recovery, Steph Cooke MP, thanked each award recipient for their dedication and commitment to serving and protecting communities across NSW.

"I am incredibly proud of our NSW RFS volunteers and staff who remain on call, day after day, responding to all manner of emergencies and incidents," said Ms Cooke.

COMMISSIONER'S COMMENDATION FOR BRAVERY (INDIVIDUAL)

FIREFIGHTER LEE BYRNE

Baan Baa Brigade, Namoi/Gwydir, Area North Western

COMMISSIONER'S COMMENDATION FOR SERVICE (INDIVIDUAL)

STATE PROTOCOL OFFICER JOHN SULLIVAN

State Ceremonial Unit, NSW RFS Headquarters

COMMISSIONER'S CERTIFICATE OF COMMENDATION (INDIVIDUAL)

DEPUTY CAPTAIN PERCE DENTON

Llandilo Brigade, Cumberland, Area Greater Sydney

FIREFIGHTER JOHN DOWNES

Jamberoo Brigade, Illawarra, Area Greater Sydney

MR PAUL FOWLER

Events and Awards, NSW RFS Headquarters

FIREFIGHTER MARTIN KALINA

Glenellen Brigade, Southern Border, Area South Western

FIREFIGHTER DEREK KOLSTER

Wilton Brigade, Southern Highlands, Area Greater Sydney

COMMISSIONER'S UNIT CITATION FOR SERVICE

HORNSBY/KU-RING-GAI STRIKE TEAM

Hornsby/Ku-ring-gai, Area Greater Sydney

LOFTUS 1 BRAVO

Sutherland, Area Greater Sydney

MT RAMORNIE 9

Clarence Valley, Area North Eastern



Above: Recipients of the Commissioner's Commendation for Bravery with Commissioner Rob Rogers and Steph Cooke MP. Photo by Adam Hollingworth.

MUNGINDI BRIGADE

Namoi/Gwydir, Area North Western

STATE CEREMONIAL UNIT

NSW RFS Headquarters

SUTHERLAND STRIKE TEAMS ALPHA AND BRAVO

Sutherland, Area Greater Sydney

COMMISSIONER'S CERTIFICATE OF COMMENDATION (UNIT)

BAAN BAA BRIGADE

Naomi/Gwydir, Area North Western

BOURKE HEADQUARTERS

Far West, Area Western

GOSFORD CATERING UNIT

Central Coast, Area Hunter

MOREE BRIGADE

Namoi/Gwydir, Area North Western

NORTHERN BEACHES HEADQUARTERS 1 AND BELROSE 1A, STRIKE TEAM E18-201

Northern Beaches, Area Greater Sydney

WAMPRALEA BRIGADE

Far West, Area Western



VALE

IAN COOK

1940 - 2022

BY PETA COOPER, MANAGER, PEOPLE AND BUSINESS, AREA COMMAND NORTH EASTERN

A valued member of the NSW RFS for more than three decades, Ian Cook passed suddenly at his home on 24 February 2022, despite the best efforts of NSW Ambulance paramedics. His most recent role was Acting Manager, Community Risk for the Area Command North Eastern.

lan's relationship with the NSW RFS began in 1985 when he joined the Repton Brigade. During the following 37 years, lan served with Cainbil-Bungaba Brigade, Urunga Brigade, Nambucca FCC and Kempsey FCC, remaining an active member of Talarm Brigade until his recent passing.

Highly respected among his peers, lan ascended from Brigade Training Officer to Group Captain over his career. He was a valued staff member also, becoming a permanent employee within the Coffs Harbour Planning and Environmental Customer Service team, after starting part-time with the Service in 2009.

lan's skills and experience were extensive – with more than 130 NSW RFS and external L&D units of competency to draw from, it is no wonder that he was so successful in carrying out his duties over the years. His genuine appreciation for what this organisation represents is what I believe fed his passion for learning.

lan enjoyed learning about people, and fire investigation became a great passion for him. He used his operational experience and fire science knowledge to guide policy development, which led to improved outcomes on the ground for communities and firefighters.



Indeed, his noteworthy skills in fire investigation saw him give testimony as an expert witness in the Black Summer coronial inquests. He was due to give further evidence in April 2022.

At the time of his passing, he was due to commence in the Operational Officer Level 3 position as the Fire Investigation Coordinator for the Area Command North Eastern. While this was lan's substantive role within Area Command, he tragically never commenced in it.

In recognition of outstanding service, he received the NSW RFS Long Service Good Conduct Medal Clasp (20 years) in 2010, and in 2020 a Premier's Bush Fire Emergency Citation.

Ian will be remembered as a patient, considerate man with a warm heart, loads of generosity and a fantastic sense of humour. He loved his family dearly, and many would aspire to the career he achieved.

lan is survived by his wife Danette, daughter Katrina and sons Joel and Alex.

Photo by Daniel Gibson.



ONLINE RESOURCE KIT TO SUPPORT VOLUNTEER LEADERS BY BETHANY PATCH, NATURAL HAZARDS RESEARCH AUSTRALIA

A thriving and diverse volunteer workforce is essential to building the resilience of Australian communities to natural hazards. To help volunteer leaders build effective skills that support volunteers across the country, researchers at Curtin University have created a new toolkit full of helpful and engaging resources, all available online.

"Supporting Your Volunteers: A Resource Kit for Emergency Service Volunteer Leaders" is a new online package of resources aimed at current or aspiring volunteer leaders.

It's designed to help leaders learn more about how to better recruit volunteers, support new volunteers and retain current and future volunteers through effective leadership.

The resource kit comprises three modules full of interactive and engaging evidence-based resources – including training videos, volunteer interviews, tip sheets, checklists, case studies, thinking exercises and templates – all developed in partnership with emergency service volunteers and their leaders:

- Module 1: Recruiting to support the effective planning, promotion and selection of new volunteers.
- Module 2: Onboarding to support volunteer registration, induction, support, training and engagement.
- Module 3: Leading to guide volunteer management and improve leadership skills, such as sharing responsibility, providing feedback, recognising achievements and dealing with conflict.

The modules can be used together as a full support package, or users can choose the topic from within each module that is most helpful for their brigade, group or unit. The resources are not intended to replace the existing information provided by emergency service agencies, but rather to support the existing strategies where there might be gaps or topics that can be improved with research-backed resources.

All of the resources can be adapted or amended by volunteer leaders within emergency services to fit existing internal portfolios or training units.

The modules are the result of five years of research conducted in collaboration with emergency services, primarily the Department of Fire and Emergency Services in Western Australia, with resources drawn from interviews with and surveys of volunteers.

They were developed through the Bushfire and Natural Hazards CRC's enabling sustainable emergency volunteering project, with research by A/Prof Patrick Dunlop, Hawa Muhammad Farid and Prof Marylène Gagné at Curtin University's Future of Work Institute, as well as Dr Darja Kragt from the University of Western Australia.

For more information about how to use or integrate the modules, contact A/Prof Patrick Dunlop at patrick.dunlop@curtin.edu.au.

To access the full resource kit, visit

www.bnhcrc.com.au/resources/ volunteer-leader-resource-kit or scan this QR code:





The Avoca Beach Brigade's official formation was in October of 1950 during a meeting of the 'Avoca Progress Association', in light of different types of fires posing serious threats to the settlement.

In 1936, the landmark and beloved guesthouse 'Avoca House' was engulfed in flames and the post office had a narrow escape.

Over the years, the Avoca Beach crew have fought side-by-side against fires across the Central Coast. In 2019, the 'Three Mile Fire' near Wisemans Ferry spread quickly to Mangrove Mountain, Spencer, Peats Ridge and surrounding areas. It was just one of many out-of-control bush fires burning in NSW at the time.

"At night time, it was the same fire conditions as during the day time – there was no way of stopping it," says Brigade Captain Kurt Pressley. "The Brigade deployed to that fire eight times, probably eight days and nights. There was a lot of property protection."

Ten percent of the bushland in the combined Central Coast/Lake Macquarie area was lost in these fires, however, firefighters collectively saved 401 houses, 30 facilities and 51 outbuildings.

Now, the Avoca Beach Brigade is 22 members strong. In a creative endeavour to reaffirm meaningful ties with their community, the Brigade will be posing for a 2023 calendar called 'The Real Faces behind the Helmets'.

"The calendar is for meeting the people under the helmet – your neighbours, your colleagues that you didn't always see, incorporating their stories and their photographs," says Deputy Captain Peter Kelly.

"One of our volunteers is a retired professor of speciality cancer treatments, for instance.

Top: The Avoca Beach Brigade in 2022. **Right:** Brigade member Philip Yuilie poses for the camera. Photos by Cliff Kent.

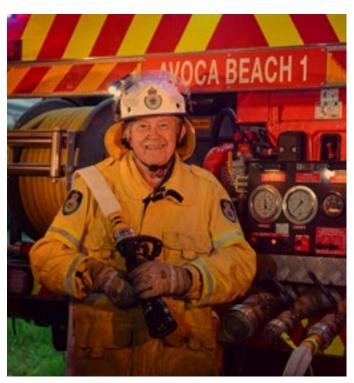
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"We have a real variety of people in our Brigade, male and female, different ages and nationalities, some working, some retired."

The calendar will feature photographs of volunteers by Avoca-based photographer Cliff Kent. Beyond raising local awareness of who their local firefighting volunteers are, the calendar will raise money for local charity, Central Coast Children in Need.

Calendars will be sold from the Avoca Beach Brigade station for \$20 from September 2022.

To request a posted copy please email Peter.Kelly@ccrfs.org.au.



OUR BUSH FIRE bulletin **HISTORY**



Volume 9, No. 6, Winter 1974.

BUSH FIRE DANGER Bush Fire Bulletin Con Control of the State of the

The NSW RFS has joined forces with the National Library of Australia to digitise the entire collection of the Bush Fire Bulletin dating back to September 1952.

All editions of the Bush Fire Bulletin are available online and are fully searchable, making this huge historic archive easily accessible.

This collection brings to life the important work our members have undertaken over the years and makes the history of the NSW RFS available for all of Australia and the world to see.

You can search place names, brigade names, dates and fire-related topics such as "fire trails" or "large air tanker".

TROVE

HOW TO SEARCH BUSH FIRE BULLETIN ON TROVE

On the Library page of the NSW RFS website, you will find links to browse the various collections of the Bush Fire Bulletin.

You can also search for articles on a particular topic (such as the town of Merriwa) by using the link provided and following the instructions.



O eBulletin (email required)

BUSH FIRE bulletin

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NSW RFS Member

BUSH FIRE bulletin

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Cover photo: Trainees Keiran Bony and Brendon Coffey attending the Brewarrina BF Course held as part of the Indigenous Mitigation Crew Recruitment and Induction program in June 2022. Photo by Noah Lamrock.



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