BUSH FIRE bulletin

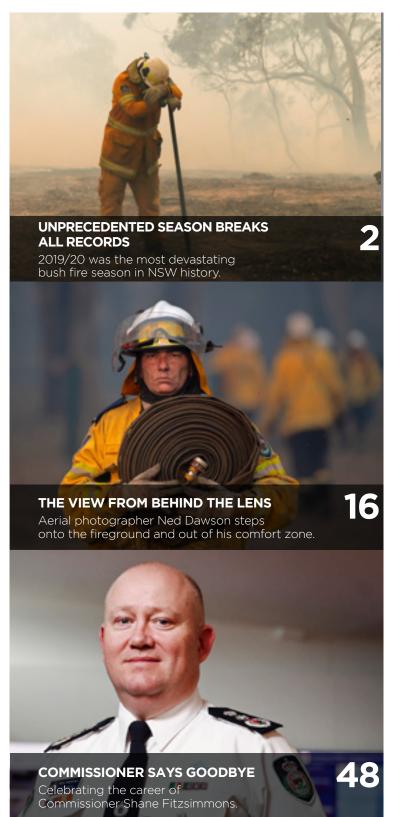






UNPRECEDENTED

THE 2019/20 FIRE SEASON



BUSH FIRE bulletin

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FOREWORD



The 2019/20 bush fire season was the most challenging and devastating we have ever faced in NSW. The season was truly unprecedented in terms of the weather conditions, fire activity, the impact on communities and, of course, the loss of life and property.

Across the season, bush and grass fires burnt more than 5.5 million hectares and destroyed nearly 2,500 homes. Most tragically, there were 26 deaths this season, including three NSW RFS volunteers and three US aerial firefighters. Our thoughts will forever be with the families and loved ones of all those who lost their lives.

We especially pay tribute to the families of Deputy Captain Geoffrey Keaton and Firefighter Andrew O'Dwyer from the Horsley Park Brigade and Firefighter Samuel McPaul from the Morven Brigade, along with US aerial firefighters Captain Ian McBeth, First Officer Paul Hudson and Flight Engineer Rick DeMorgan Jr. The Service has felt their loss deeply and we honour the sacrifice they made to selflessly protect communities across NSW.

All fire and emergency services personnel, especially NSW RFS members, have given so much this season, spending time away from their families, jobs and loved ones. We continue to thank our members' families, colleagues and employers for allowing our volunteers to provide such a great level of protection to the people of NSW.

Most significantly, I would like to thank every NSW RFS member, no matter their role, for their contribution this season. Time and time again as I travelled across fire-affected areas, the overwhelming message I received was one of gratitude, admiration and appreciation for the efforts of all the men and women working so hard to save and protect as many and as much as possible.

Thankfully, we did not face these fires alone. The NSW RFS is incredibly grateful for the support of agencies including Fire and Rescue NSW, National Parks and Wildlife Service, Forestry Corporation NSW, NSW State Emergency Service, NSW Police, NSW Ambulance, the Volunteer Rescue Association, Marine Rescue NSW, Surf Life Saving NSW, government emergency management organisations, the Australian Defence

Force and all of our interstate colleagues from every state and territory across Australia. We must also thank Canada, the United States and New Zealand for providing us with international assistance.

Analysis of past fire seasons indicates that a loss of 2,500 houses should have resulted in the equivalent loss of around 150 lives. While the loss of 26 lives is incredibly tragic, and without being insensitive or disrespectful in any way to those that have lost so much, I can say with confidence that the toll would have been considerably higher if it wasn't for the extraordinary and unwavering efforts of all fire and emergency services personnel, media services and affected communities.

We as a Service need to recognise the difficult and challenging time we have all gone through, and that this period has impacted people differently. We place a high importance on emotional and psychological wellbeing in the NSW RFS culture and as such, we've introduced a number of measures to increase our capability to support members and their families. I encourage all our members, and the wider NSW community as a whole, to look out for each other and recognise the unprecedented season we have just endured.

On a personal note, this will be my final foreword for the *Bulletin*, as I have taken up the new role of Commissioner of Resilience NSW and Deputy Secretary Emergency Management. I have very proudly served in the NSW RFS for more than 35 years, as both a volunteer and salaried member, including more than 12 years as Commissioner. The NSW RFS has been a significant and rewarding part of my life and I want to thank everyone, volunteer and salaried alike, for your support, professionalism and camaraderie during my time with the Service.

In light of my departure, Deputy Commissioner Rob Rogers has been appointed Commissioner of the NSW Rural Fire Service for a period of up to 12 months, to ensure stability of leadership during the ongoing COVID-19 pandemic and the upcoming bush fire season. I congratulate Rob and know that he and the Executive team have the experience, knowledge and passion to lead the Service through these challenges and into the future.

Regards,



Shane Fitzsimmons AFSM Commissioner



@RFSCommissioner

UNPRECEDENTED SEASON BREAKS ALL RECORDS

2019/20 was the most devastating bush fire season in NSW history, truly unparalleled in more ways than one. Over the course of the season, fires spread south from the Queensland border to the Victorian border, leaving huge numbers of people displaced.

With fire impacting on towns and communities up and down the coast, and large population centres such as Sydney and Newcastle swathed in smoke from the fires, the season was a visible and menacing presence for the majority of people in NSW.

Bush and grass fires burnt more than 5.5 million hectares in NSW - the equivalent of almost seven percent of the state and an area nearly twice the size of Belgium and only slightly smaller than Tasmania. While these fires destroyed 2,448 homes, the hard work of firefighters saw a further 14,519 homes in the line of fire saved.

Sadly, 26 lives were lost this season, including those of three NSW RFS volunteers and three US aerial firefighters. You will find tributes to each of the fallen in the pages of this issue.

Rain in early February finally brought an end to significant fire activity across the state, with all fires contained by 13 February. By this point, the fires had burned the largest area in recorded history in NSW, destroyed the most houses in a single season and resulted in the deaths of the most people in a single season.

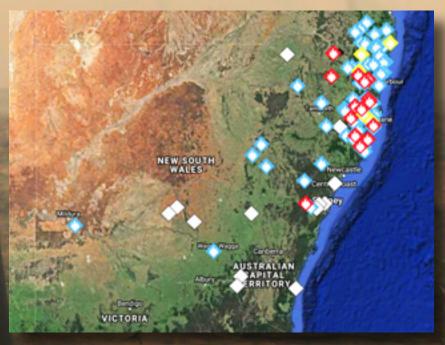


Main image: A firefighter rests after defending a property near Braidwood from the North Black Range fire. Photo by Alex Ellinghausen. Above: The area burnt during the 2019/20 fire season.

FIRE SEASON 2019/20

TOTAL BUSH, GRASS AND FOREST FIRES IN NSW	11,400
AREA BURNT	>5,500,000ha
HOMES DESTROYED	2,448
HOMES SAVED	14,519
FACILITIES DESTROYED	284
FACILITIES SAVED	1,486
OUTBUILDINGS DESTROYED	5,469
OUTBUILDINGS SAVED	14,016
LIVES LOST	26

DAYS OF CATASTROPHIC FIRE DANGER RATINGS	6
FIRST SECTION 44 DECLARED (IN KEMPSEY AND NAMBUCCA)	10 August 2019
STATE OF EMERGENCY DECLARATIONS	3
DAYS OF STATEWIDE TOTAL FIRE BAN	11
DAYS OF TOTAL FIRE BAN	59
NSW RFS FIREFIGHTER DEPLOYMENTS	>280,000



Above: A screenshot of Fires Near Me from 4pm on 8 November, with 15 fires at Emergency Warning.

BY THE NUMBERS



PEOPLE
RESCUED FROM
BUSH FIRES BY
SEARCH & RESCUE
HELICOPTERS



390
INTERNATIONAL
PERSONNEL
DEPLOYED TO NSW



SIMULTANEOUS EMERGENCY WARNINGS
ON 8 NOVEMBER 2019,
THE MOST EVER RECORDED



PAGE VIEWS FOR THE NSW RFS WEBSITE BETWEEN JULY 2019
AND FEBRUARY 2020



OF FIRE RETARDANT DROPPED BY LARGE AIR TANKERS



2.7M+

DOWNLOADS OF

FIRES NEAR ME APP



PER DAY

AVERAGE NUMBER

OF AIRCRAFT

DEPLOYED DAILY



35K+
NEW VOLUNTEER
ENQUIRIES BETWEEN
JULY AND FEBRUARY



512K+

HECTARES BURNT

BY THE GOSPERS MOUNTAIN

FIRE, AUSTRALIA'S LARGEST

EVER FOREST FIRE



\$100M+
DONATED TO NSW RFS
BRIGADES AND
DONATION TRUST



An unprecedented fire season required an unprecedented level of interstate, international and interagency support, both in the field and IMTs as well as in the State Operations Centre.

The NSW RFS is indebted to all those who supported the firefighting effort this season, from countless emergency services and agencies, to firefighters from every state and territory in the country as well as New Zealand, Canada and the United States.

The deployment of more than 6,500 interstate and international personnel over the fire season was a huge logistical challenge, ably coordinated and facilitated by the AFAC National Resource Sharing Centre (NRSC).



Additionally, the State Operations Centre and IMTs around the state hosted personnel from a range of agencies including NSW Police, NSW Ambulance, Fire and Rescue NSW (FRNSW), NSW National Parks and Wildlife Service (NPWS), Forestry Corporation, the Bureau of Meteorology, Australian Defence Force, functional areas of government and non-government organisations and many more.

"The whole-of-government approach through the State Operations Centre has been something like I've never seen before," says Assistant Commissioner Peter McKechnie. "On some of those really bad days of fire activity, the resources available to State Operations were just incredible – at one point we had over 30 agencies represented in the State Operations Centre.

"Our ability to find information, intelligence and support and have the people who control the resources sitting in the room with us was an amazing benefit to have."

Main image: A contingent of US firefighters are met by Assistant Commissioner Kelly Browne on their arrival at Sydney Airport in December.

Left: Personnel from NSW RFS, Fire and Rescue NSW and the National Interagency Fire Center working together in the IMT for the Gospers Mountain fire. Photo by Ned Dawson.



The long and arduous campaign that was the 2019/20 fire season started in winter 2019 with more than 1,000 fires per month in June, July and August and losses in the very north of the state. The region was still fighting fires right through to the middle of summer, with repeated flare ups when weather conditions deteriorated. All in all, northern NSW saw 703 homes destroyed over the season and a further 4,716 saved from fire.

EARLY START TO THE SEASON

Warm and windy conditions in August saw large and damaging fires in Armidale, Tenterfield and Yamba, however it was fire activity in September and October that would prove to be particularly damaging for the New England, Northern Tablelands and Clarence Valley districts.

The Bees Nest fire was started on the last day of winter by lightning in the Guy Fawkes River National Park near Ebor. Over the following weeks and months it burnt in remote bushland and would eventually become the first fire of the season to grow beyond 100,000ha in size, topping out at 113,706ha when it was extinguished in November.

As the Bees Nest fire grew in early September, an Incident Management Team (IMT) was established on 4 September at Glen Innes Fire Control Centre (FCC).

That same day, lightning ignited the Long Gully Road fire near Drake. Extreme fire danger the following day

caused both fires to grow significantly and destroy numerous properties. The Glen Innes IMT continued operating until 15 January, a gruelling 133 days of continuous activity.

Fire activity continued throughout October in the north of the state, with the Long Gully Road fire claiming two lives near Coongbar on 8 October and the Busbys Flat Road fire devastating the town of Rappville. More than 40 homes and the local timber mill were destroyed and the North Coast rail line was damaged by fire and closed for nearly a week.

NOVEMBER FIRES HIT MID COAST

There was no respite for northern NSW in November, after lightning storms in late October started a number of new fires in remote national parks and bushland.

When the extremely hot and dry conditions reached a peak and combined with strong winds on 8 November, 17 fires were at Emergency





Main (at left): Destruction left behind by the Bills Crossing Crowdy fire at Harrington. Photo by Martin Von Stoll.

Top: The 'Marie Bashir' Large Air Tanker drops retardant ahead of the Long Gully Road fire. Photo by Ned Dawson. **Above**: A backburn on the Mid Coast. Photo by Brittany Daly.

Warning at the same time. This was an extremely tough day for firefighters across the state, with resources stretched to breaking point as communities from the Queensland border to the Blue Mountains battled out of control blazes.

The Mid Coast was hit particularly hard over the season, with the district experiencing 122 days under Section 44 declaration from August to January. Fires in the district burnt a total of 420,000ha of bushland – more than 30 percent of the total area of the district.

During the peak of the fires in November, 151 homes and 317 outbuildings were destroyed with 73 homes and 151 outbuildings damaged. Despite this destruction, more than 1,500 homes and 1,200 outbuildings were saved from fire. The fiercest period was a week in early November when 26 Emergency Alerts were issued to communities across the Mid Coast in a seven-day period.

One of the fires that flared during this period was the Hillville Road, Hillville fire, which started burning in the Talawahl Nature Reserve south of Taree on 7 November.

It moved quickly in an easterly direction in the ferocious conditions experienced on 8 November, crossing the Pacific Highway and burning through the small community of Rainbow Flat as it headed towards the coast.

Sadly, while the members of Rainbow Flat Brigade were protecting homes in the community, their own brigade station burnt down.

A southerly change that afternoon pushed the fire north towards the coastal communities of Wallabi Point and Old Bar, as well as the area around South Taree. The fire continued to burn through the night and into the following day, with crews in property protection mode as 200-300 residents of Old Bar evacuated and gathered at Old Bar Surf Club.

"The firefighting efforts to save the towns of Wallabi Point and Old Bar were sensational given the difficult conditions and the fact that the wind speed and direction were changing constantly," says Mid Coast District Officer Stuart Robb. "Remarkably, we managed to save every house in Wallabi Point and only lost one home and a few sheds in Old Bar."



The fire remained active over the following days and flared up again on 12 November with Emergency Alerts issued for Nabiac and Failford on the southern edge of the fire and Tinonee, Purfleet and Old Bar in the north. Conditions remained dangerous throughout the night and into the next few days before calmer weather enabled containment in mid-November.

The Bills Crossing Crowdy fire was started by lightning in the Crowdy Bay National Park on 26 October, impacting on the town of Harrington several times in late October and early November.

By the time the worst of the fire weather hit on 7 November, the fire had already burnt east to the coast and was spreading south towards Harrington and north towards Diamond Head.

Despite the threat, firefighters saved every house in Harrington with existing asset protection areas around the town proving crucial.

Tragically, the Bills Crossing Crowdy fire claimed a life on 8 November when it impacted on the small town of Johns River on the northwestern edge of the fire.

LARGE FIRES CONTINUE IN REMOTE INLAND

The same period also saw several very large fires burning further north in remote territory inland between Armidale and Taree, representing an unbroken stretch of hundreds of kilometres of fire front.

The Rumba Complex was a combination of several fires started by lightning in the Tapin Tops National Park and Dingo State Forest areas on 18 October. The fire burned in remote country and impacted on isolated communities and properties, with firefighters hampered by the difficult terrain. After burning through 153,167ha, it was finally declared out on 24 January.

The Carrai Creek and Carrai East fires started from lightning strikes on 17 October on the Carrai Plateau between Kempsey and Armidale, spreading quickly in dangerous conditions. Access to both fires proved tricky for NSW RFS crews given the remote and rugged terrain, with containment options difficult to implement.



Previous page and above: Fires burning near Forster. Photos by Ned Dawson.

Below: Protecting properties in Lake Cathie from the Crestwood Drive fire. Photo by Brittany Daly.

Small communities in the area were threatened several times throughout October, November and into December, with one man in Willawarrin dying as a result of the Carrai East fire on 8 November.

Both fires were finally extinguished in mid-January, with the Carrai Creek fire burning through 238,602ha and the Carrai East fire another 150.278ha.

Further to the north, the Kangawalla fire burned intensely in the area east of Glen Innes in early November, claiming two lives and destroying more than 60 homes. Driven by 80km/hr westerly winds on 8 November, the fire devastated the small community of Wytaliba. The town lost its school, more than half of its buildings and two of its residents.

To the west of Macksville, the Kian Road fire was started by lightning in mid-October and also flared up in the dangerous fire conditions of 8 November. The fire destroyed 62 homes in the small town of South Arm and surrounding areas.



LONGEST FIRE OF THE SEASON FINALLY OUT

The longest-running fire of the season was the Lindfield Park Road fire in Port Macquarie, which started on 18 July and was not set to out until 12 February. Burning in peat underground, the challenge was to extinguish the fire without damaging the delicate ecology of the wetland environment and surrounding koala habitat.

After consulting with soil scientists and the Victorian Country Fire Authority (CFA), who had previous experience with peat fires in Victoria, the NSW RFS decided to use reclaimed water to rehydrate the wetlands and extinguish the fire.

From September to February, more than 65 megalitres of reclaimed water was pumped through a 3km pipeline from the nearby Port MacquarieHastings Council water treatment facility to the fireground.

Over this time the water level of the wetlands was raised by 1.2m, but rainfall was needed to accelerate the process. This finally arrived in early February, with the fireground receiving 260mm of rain in a week.

On 12 February, after 210 days of activity, the Lindfield Park Road fire was finally set to out. The significant operation would not have been possible without the collaboration and support of Department of Planning, Industry and Environment, the CFA, Port Macquarie-Hastings Council, NSW Health and Fire and Rescue NSW.

Below: A NSW RFS member scans the Lindfield Park Road fire for hotspots. Photo by Steve Farrell.





The season's fires not only affected people and property, but also had a devastating impact on the state's wildlife. Many estimates put the number of animals killed at over one billion.

Well over 30 percent of identified koala habitat in NSW was wiped out in the fires, and it is likely more than 2,000 koalas perished. One spot hit particularly hard was the Port Macquarie-Hastings area, where a significant population of genetically diverse koalas was almost wiped out by the Crestwood Drive fire in late October.

"For what we knew was in the Crestwood area, a very small number of koalas came out alive," says Cheyne Flanagan, Clinical Director of the Port Macquarie Koala Hospital. "It must have been so intense that they have just been burnt to ash, literally nothing left of them."



With the help of the NSW RFS, rescue crews from the Koala Hospital were able to access firegrounds as soon as it was safe to look for survivors. During the season, 50 koalas were found in fire-affected areas in the Port Macquarie, Taree and Blue Mountains regions and transported to the hospital for treatment.

But among the devastation, there is hope for the future. The fires proved to be the catalyst for an amazing outpouring of support for the koalas and the Koala Hospital in particular.

Following the Crestwood Drive fire, the Koala Hospital established a GoFundMe page to raise \$25,000 to install drinking stations for wildlife in fire-affected areas. The page attracted immediate support from all over the world, and at the time of writing had raised \$7.8 million.

Initially, Cheyne and the Koala Hospital had hoped to install 30 drinking stations in the Port Macquarie area. With the extra funds, they have already installed nearly 100 stations and continue to deploy them all across Australia. The money raised will also go towards ensuring the long-term survival of the koala by funding the creation of three breeding facilities and the purchase of land for conservation.

"It's been a dream of ours for a very long time to breed koalas for reintroduction into the wild, and we've never had the funds to do it," says Cheyne. "But now it's a reality. Not on our watch will we allow koalas to become basically extinct in local populations."

Main image: A rescued koala recovers at the Port Macquarie Koala Hospital. Left: One of the wildlife drinking stations made possible by the GoFundMe page. Photos courtesy of Cheyne Flanagan.



The Gospers Mountain fire started as a result of lightning strikes in very remote bushland in the Wollemi National Park on 26 October 2019.

During November and December the fire grew and threatened homes in the Hawkesbury and Blue Mountains, posing particular problems across the statewide Total Fire Ban from 18-21 December, when the region experienced Extreme and Catastrophic fire danger conditions.

In total the fire burnt 512,626ha across the Lithgow, Hawkesbury, Hunter Valley, Lower Hunter, Cudgegong, Blue Mountains and Central Coast districts – an area more than twice the size of the ACT. It also joined the Kerry Ridge, Little L Complex, Grose Valley and Three Mile fires resulting in a combined burnt area of nearly 1,000,000ha.

The fire was finally contained on 12 January 2020 and set to out after significant rainfall in early February. This massive campaign involved thousands of NSW RFS members both on the ground and in IMTs, as well as crews from FRNSW, NPWS and interstate and international agencies. Two Hawkesbury Group Captains, Ken Pullen and Craig Burley, share their experiences of fighting this massive blaze.







Main image: The Gospers Mountain fire impacting on Bells Line of Road. Left: Group Captains Ken Pullen (left) and Craig Burley discuss tactics. Right: Battling the blaze at Colo Heights. All photos by Ned Dawson.

THE VIEW FROM THE IMT BY GROUP CAPTAIN KEN PULLEN

CC During the Gospers Mountain and Three Mile fires, I spent a number of days as a Divisional Commander and the majority of the time in the Planning cell in the IMT.

I've been with the NSW RFS for 35 years and have had roles in Planning for a number of big campaign fires. Gospers Mountain exceeded all the others I've worked on by so much in terms of size - I think the largest I'd experienced previously was around 120,000ha. We thought they were big - and they were huge fires - but this one eclipsed them all, it was as though nothing could stop it.

Our experience in the IMT was that when you had kind weather on one front, that same weather was unkind on the other end of the fire. For the first time in my experience, we were facing at least three different weather patterns across the fireground. That made planning very complex.



I'll be honest and say that trying to get the overall perspective on the fire was very overwhelming. In the past, even with the big fires, you felt you had a chance of getting around it and wrapping it up. This thing was so big that, in essence, we were looking at five or six significant fires. And that's how we had to treat it. We had to take into account so many different things at different points, such as the length of travel for crews or the time it would take to get aerial support if suddenly required.

In the early days after the fire started at Gospers Mountain, there was a meeting at the Hawkesbury FCC to determine if the fire would get into the Hawkesbury. It seemed that any fire this season that got over 50ha was unstoppable unless it hit the ocean or a very significant fire break, and we had nothing like that between where the fire was and the Hawkesbury district. Nothing like that between where the fire was and Putty Road.

We decided we would try to hold the fire on the Putty Road, and try to cut it off to the north and south on fire trails we knew had worked in the past. Even when the fire skipped over the Putty Road, we were still trying to utilise those control lines to the north and south. It was a big win when we finally brought the fire down to the Colo River off Putty



Road. It wasn't on the track we had originally hoped to do so, but two or three fall-back lines from there.

In reality the only reason these control lines were successful was planning over many years with previous hazard reductions in the area. These burns meant that although the Gospers Mountain fire didn't stop, it gave us control lines and ensured the fire burned through those areas with less intensity than it does otherwise.

While almost everybody in the IMT would prefer to be in a crew or on a truck, actually out there trying to stop things happening, we recognise that the Planning cell and the Operations cell and the Logistics cell are all vital to the whole process.

I encourage as many people on the fireground as possible to start thinking about putting their hand up for those kind of roles, because we do need local knowledge.

You can't fight fires without trucks and crews on the ground, and ultimately you can't fight campaign fires without IMTs that are doing their absolute best to support firefighters on the ground. I'm sure that if we didn't have these experienced local people in IMTs, the losses would ultimately be much worse.

FIGHTING GOSPERS MOUNTAIN ON THE GROUND, BY GROUP CAPTAIN CRAIG BURLEY

Gonce the Gospers Mountain fire started getting into the Hawkesbury, I was in the field as a Divisional Commander at locations such as Colo Heights, Webbs Creek, St Albans, Mt Wilson and Bilpin.

The fire was clearly the biggest any of us had worked on. I've seen fire behaviour as vigorous as that before, but not on the same scale. I've seen fires go on hard runs reasonably often through my time, but not to have it day after day where you're getting belted over and over again. Colo Heights village was impacted in significant fashion four times – that's not normal.

What stood out to me was how dry it was. It didn't matter what time of day or night it was, the fuels were available. At one stage in Blackheath we were still losing houses at 0330hrs - there was no respite. And to have fire over such a sustained length of landscape, hopefully we don't ever see it again. I jokingly suggested a few times that we might need to set up drip torches at the Newport Arms - that might be the best place to fall back to.

Our original strategy was if the fire crossed the Colo River, we would hold it to the east at Putty Road. Historically, that's always where we've ended up holding fire in the area. Clearly, those plans went out the window when the fire ran across Putty Road and started heading towards the McDonald Valley. We never envisaged at that point that the scale of it would get to where it did.

We had plenty of bad days, and one that stands out is the day the fire ran into Bilpin. We had the fire running parallel with the southern side of Bells Line of Road, on a west-to-east trajectory, and then the wind swung to the southwest and 3-4km of fire flank opened up into a head fire. That was an enormous afternoon.

But we had some big wins as well. One in particular was on Christmas Day, when we had planned an enormous backburn to hold the fire to the north of Bells Line of Road near Kurrajong Heights.

On Christmas morning it was actually drizzling, and we decided we could go with a direct attack on this edge of the fire between Bells Line of Road and Wheeny Gap Trail to hold it instead of backburning.



It was really miserable terrain, steep as blazes. We had only four remote area firefighters and a heap of truck crews. So we went direct, walked in for several kilometres and held the fire in that location – it saved us a bunch of work and reduced the potential for the fire moving down into the areas of Blaxlands Ridge, Kurrajong and East Kurrajong.

This was a group of volunteers who would normally work off the back of a truck, doing what traditionally would've been remote area work. It's not generally something we ask truck crews to do on a day-to-day basis, and they did a wonderful job, really outstanding work.

We came away that night and I was really confident that we could hold the fire where it was, because of the hard work crews did on that first day in that area.

After such a long campaign, I'm amazed at the resilience of our firefighters. They just keep stepping up to the plate and getting on with the job, day after day. We're a volunteer organisation, we're not there for any reason other than helping people, and I think that's what kept everyone going. But we couldn't have managed to get people on the ground without the help and support of our families at home.



For more than twenty years, Ned Dawson has been photographing NSW RFS operations across the state from the air. Indeed, many of the photos you see in this magazine were captured by Ned. This fire season, Ned ventured onto the fireground for the first time with NSW RFS crews. He shares his experiences here.

Going onto firegrounds with crews was way outside my comfort zone, but I was keen to see what it was like and the NSW RFS media team were kind enough to make it happen. Over the space of a few weeks during summer I had the privilege of riding shotgun with fire crews three times, and shooting the men and women of the NSW RFS up close and personal. Needless to say, it was a real eye-opener for me.

Looking up at 30m flames towering above you, fires leapfrogging across paddocks faster than you can drive, crews doing everything they can to save the house of someone they don't even know - it allowed me to give people a look behind the scenes at what these crews do. The general public will never see where I get to go and what I get to do, but hopefully the images I capture can give them an insight into the brave men and women who put on the NSW RFS uniform.

My first ride-along was with Divisional Commander Craig Burley in the MacDonald Valley area near St Albans, a truly gorgeous place hidden away across the Hawkesbury River from Wisemans Ferry. That day I got to shoot

local crews putting in hand-tool lines around houses in the path of the Gospers Mountain fire. This type of work is out of the public eye and something the media doesn't generally focus on.

On my second trip to the fireground I was with Craig again on a particularly bad day when the southerly winds kicked in and started pushing the front of the Gospers Mountain fire towards properties along the Bells Line of Road. The sky went dark at 1400hrs and when the fire impacted it was like something you see in the movies. Flames burned along each side of the road high up into the trees, the glow of burning trees spread as far back from the road as could be seen and in many cases the fire was crowning through the tops.

Standing side by side with these firefighters as they watched a wall of fire descending on them I understood what makes them tick - protecting the property and lives of people they don't even know. I know the media always focus on the losses but what I saw that afternoon was a hell of a lot of successful saves, and that needs acknowledging. I think it is totally unfair and not at all representative of the reality of firefighting to always focus on the buildings that are lost.











Left: The Gospers Mountain fire near Bilpin.

Right: The Currowan fire near Nowra. All photos by Ned Dawson.



My next experience on the fireground was probably the most intense of all. I was down at the Currowan fire on a day with temperatures in the 40s and strong winds, riding with Reconnaissance Officer Matt Apps. We were tasked to check on specific areas around the fireground and covered some distance, from Sussex Inlet down to Lake Tabourie. As the temperature picked up and the winds did likewise, the radios also lit up with Triple Zero calls. Matt grabbed whichever call was closest and we would head to that.

One of our calls took us to Morton, just west of Lake Tabourie where fire was moving through the gully and threatening a house. Matt drove down to the rear of the property and I started shooting the residents tackling the spot fires that were coming up through the property around the dam that was the only source of water. After what was probably ten minutes of shooting photos, I looked across to see that Matt had grabbed one of the spare hoses, but that there was still another spare hose and the spots were getting more numerous.

I made an instant decision to chuck the cameras in our Toyota and grab the other hose - it seemed insane to see all that fire and a hose not being used.

It was certainly a challenge - my first ever experience of being on the end of a hose in the middle of a firestorm, being hammered by 80km/hr winds was a unique experience. I actually thought I would have been terrified, but I wasn't. In fact, as Matt and I discussed afterwards, you are actually so focused on winning the battles and keeping the beast at bay that you are quite cool, calm and collected. The worst was yet to come, however.

The predicted southerly change kicked in and the fire started to climb through the top of the trees towards us. With hose in hand, the goal was to protect the house and sheds no matter what. As the embers were landing on the ground all around us, I took a moment to reflect and tried to recall all the comments and knowledge the various Air Attack Supervisors I had flown with had given me over the years about fire behaviour - what to do and what not to do, where to position yourself, how the fire



will behave. It was invaluable information - especially right now. I thought of all the firefighters I have shot from the air for the last twenty or so years, as I wondered what it must be like in their shoes down on the frontline - well, now I was finding out first-hand.

It was a constant battle for the next hour, from one spot fire to the next. The fire started to take hold around the back of the shed, just as we were running out of water. With the electricity off, there was no way to fill the tanks. We continued to do what we could with the little amount of water left, but that wasn't enough to keep the fire out of the shed and it soon took hold. The shed was ablaze and I was so annoyed to have to watch it burn when we had spent the last hour or more trying to protect it. There was nothing we could do without water though. As Matt and I reluctantly left, we hoped like hell that the house would still be there in the morning (and as luck would have it, it was!).

As we carried on back to Nowra I had time to reflect on what it was like being on the ground and shooting firefighting from this perspective. I was completely

outside my comfort zone at first but as the time went by and I spent more and more time with the ground crews it became like second nature. I trusted those around me. Why? Because they wore that yellow uniform, because they knew what they were doing and because even though they were right on the fireline, they also were looking out for me - I can't thank each and every one of them enough for that.

The images I captured in these three instances were completely different from anything I have shot before. Firefighters doing battle with the beast, exhausted, yet focused and determined - the range of emotions and expressions was extensive and incredibly intense.

I can't thank Craig and Matt enough for letting me ride with them on those days - you allowed me to see a side of the NSW RFS that I hadn't seen before and now that this door has been opened,

I am so proud and privileged to be able to capture some unique images of the men and women of the NSW RFS at work.



In the midst of the large and devastating fires burning northwest of Sydney late last year, the NSW RFS worked with NSW National Parks and Wildlife Service (NPWS) in a secret mission to save some of the oldest and rarest trees in the world.

SECRET MISSION TO SAVE ANCIENT PINES



The Wollemi Pine was only discovered by chance in 1994, but the species has survived virtually unchanged for roughly 200 million years. There are less than 200 individual Wollemi Pines growing in the wild in the world, all found in one remote valley in the Wollemi National Park.

With fire threatening the National Park early in the season, multi-agency plans to save the pines were put in place once the fire got closer to the pines around Christmas. After the fire crossed containment lines some distance from the pines, NSW RFS aircraft were brought in to slow the rate of spread. Yet still the fire continued to burn, so a last-resort irrigation system was set up by NPWS crews to protect the pines.

"When the fire was still some distance away, our crews were able to walk in and set up an irrigation system to pump water from a nearby creek and keep the fuels around the pines moist," says Lisa Menke, NPWS Area Manager. "But as the fire got closer, crews need to be winched in via helicopter to turn on the system and let it run until the pumps ran out of fuel."

Despite this, the fire still crept nearer to the pines and even managed to burn the irrigation system itself. In a last-ditch effort, a NPWS crew was winched in to repair the irrigation system, put out the active fire and cool down smouldering areas around the pines.

In the end, all the hard work was not in vain. Although a couple of pines were lost to fire and several charred, the bulk of the population was saved. Thanks to the joint efforts of the NSW RFS and NPWS, the remarkable Wollemi Pine lives to fight another day in the wild.

"These trees are incredibly ancient, relics from when Australia was part of Gondwanaland," says Lisa.

"The work of the NSW RFS to provide the aerial support we needed at critical times was crucial to saving these pines."

Above: Fire got close enough to the pines to damage the upper canopy. Photo courtesy of NPWS.



The Catastrophic fire danger ratings in early November 2019 prompted enormous interest from the community around bush fire planning and preparation. Many brigades held community meetings with hundreds of people attending on short notice.

Based on a forecast of deteriorating conditions. the Service supported an impromptu Get Ready Day on Saturday 16 November to meet the community demand for information. Despite only announcing the plan 48 hours earlier, more than 150 brigades opened their doors to a massive response from local communities with some brigades reporting approximately 1,000 people attending.

Having witnessed the impact of fires in the north of the state, and with several large fires burning near major population centres, the community was spurred into action and eager to learn the latest information on the forecast conditions, current fires and tips to get ready.

"Community engagement plays a critical role in the public information and warnings process, and community meetings prior to fire weather deteriorating were common throughout NSW this season," said Anthony Bradstreet, Manager of Community Engagement.

"The opportunity to scale and coordinate these meetings to such a large number through our community engagement facilitators is a testament to their commitment and was really appreciated by their communities.

Photos: A big turnout to the impromptu Get Ready Day at Cooranbong Brigade. Photos by Michelle Astleford and Nick Barrett.

"Once again, the rate of people across NSW who now have a bush fire survival plan has increased this season to a new high of 80 percent, or four in every five people. There's a whole range of tactics we use to achieve these results including our advertising campaigns and community engagement initiatives such as Get Ready Day."

With less than 48 hours' notice, and with many brigades still committed to firefighting in the field, the day going ahead was a huge achievement. Given the fire weather the state experienced over the next few months, the advice provided to the community proved to be critical.





> SEEING THE BIG PICTURE

The State Operations Centre at NSW RFS Headquarters is responsible for overseeing and co-ordinating support to incidents across the state. Capable of accommodating over 200 personnel, during the 2019/20 fire season this world-class facility was home to a never-ending rotation of staff from the NSW RFS as well as interstate and international firefighting organisations, government agencies and other emergency services.

day from early July to March, far exceeding our previous longest period of continuous activity. In my memory, the State Operations Centre has never worked at as high a tempo as it has this time around. There's been very few quiet days this season, as we constantly had new incidents coming through. It was a constant cycle of preparing for bad days or worsening weather in the weather cycle.

And it wasn't just about preparing for that bad day, it was also about the days afterwards – where we tried to confirm what the level of loss was and what agencies we needed to activate to assist in recovery. The couple of days after the big day are just as high tempo in the State Operations Centre, because you go from a reactive phase on the bad day to a period of analysis.

THINKING WEEKS AHEAD

We are just a bit more removed from the immediate matters the IMTs and firefighters are dealing with – we look at everything strategically across the entire state and balance where to put resources such as strike teams, interstate and international resources and aviation assets. IMTs

and the districts are always working some days ahead, but in the State Operations Centre we had to work some weeks ahead to forecast what resources we were going to need.

An example is the day of Catastrophic Fire Danger for Greater Sydney, Greater Hunter and Illawarra/ Shoalhaven on 12 November. We had done significant work with the regions and all of the agencies about preparing for that first bad day - we saw an amazing level of resourcing stood up and moved around the state, all in preparation for what might occur. Yet even still, we didn't have a chance to deal with everything from that day before we were into the planning for the next bad day.

MOVING INFORMATION

As a SOC on those extremely busy days of elevated fire danger, such as the day in early November when we had 17 incidents at Emergency Warning level at the same time, we have to be very clear about the way we move information around in the State Operations Centre. It is a constant cycle of moving information, checking and validating that information as the fire situation changes and making decisions.



Photos: The State Operations Centre hard at work on 12 November. Photos by Anthony Clark.

The State Operations Controller (SOC) is the senior officer at the centre of the room who maintains overall awareness of the statewide firefighting effort and makes key decisions. Assistant Commissioner Peter McKechnie was one of several officers to serve as SOC between August and February. He describes what life was like in the State Operations Centre during this record fire season.

The room itself is designed so that information flows to the centre of the room for decisions to be made. It allows us to easily reach out to our regions, to the State Air Desk and to the other agencies. As the SOC, you have instant access to senior representatives of NSW Police Force, NSW Ambulance, Fire and Rescue NSW, NSW National Parks and Wildlife Service, Forestry Corporation, the Bureau of Meteorology and others, as well as the Public Liaison Unit, Major Incident Controllers (MICs), Logistics and the Air Desk - all with a leader and all well connected back to the SOC.

We work really closely with our MICs, who are in constant contact with the districts and the IMTs, so everyone has a detailed understanding they are ultimately bringing to the table. You can't arbitrarily stand in the middle of the room and direct what has to happen, you have to do it in collaboration. There is a time to be direct, but there's a time to work closely with people as well. And the majority of the time it is a collaborative approach in partnership with the MICs and the other agencies.

A BALANCING ACT

We're constantly trying to balance not only the fire danger in an area and where we can take resources from, but also balancing availability of resources and workloads. It's not just about the fire itself, it's about the impact on people and balancing their fatigue, their desire to help and their own needs as humans. That balancing game never stops.

Those who fill the SOC role have been in a constant rotation since September. Most of us have tried to balance doing periods on duty with getting out to the regions to see people and better understand what's happening out there.

It ensures that the information we're getting can be contextualised. It's always good to have an idea of what our people are confronting - not so much about the immediate fire, but the issues they're dealing with and the challenges they have.

From our perspective, the State Operations Centre can't do what it does without all of our people in the field, and all the people in our IMTs and in our brigades doing what they do. Our work is about supporting them and coordinating the effort on the ground and in the air, because without their support, State Operations doesn't work.

We are deeply indebted to them for their support and their ability to provide us with the critical information that makes the room work.

GREEN WATTLE CREEK FIRE RAVAGES SOUTHERN HIGHLANDS

The Green Wattle Creek fire was started on 27 November by lightning in the Blue Mountains National Park, southwest of the Warragamba Dam. As the fire spread over the following weeks it encompassed five separate LGAs and threatened communities as far apart as Jenolan, Colo Vale, Megalong Valley and the western outskirts of Sydney.

Before it was extinguished by rainfall in February, the fire burnt through 278,200ha and destroyed 37 homes, with more than 1,000 homes saved.

Fire activity peaked just before Christmas when the blaze ripped through the communities of Buxton, Balmoral and Bargo to the southwest of Sydney.

Tragically, this period also saw the fire claim the lives of two NSW RFS firefighters, Deputy Captain Geoffrey Keaton and Firefighter Andrew O'Dwyer of the Horsley Park Brigade, when their tanker was hit by a falling tree and rolled over near Buxton.

Inspector David Stimson served as the Public Liaison Officer (PLO) for the full run of the Green Wattle Creek fire. He also served as PLO for the Morton fire, which branched off the Currowan fire at the southern end of the Southern Highlands.

He shares his experiences below of dealing with the unprecedented community thirst for knowledge this fire season.

Below and top left: The Green Wattle Creek fire rages near Buxton. Both photos by Ned Dawson. **Top right**: Smoke from the Green Wattle Creek fire. Photo by Anthony Turner.





My experience of the Green Wattle Creek fire was pretty horrendous, to be quite honest. While everyone is probably sick of words like 'unprecedented' and 'unrelenting' by now, that is exactly what it was. Firefighters always say the big one is coming next year, we joke about it, but it came this season. I've been deployed as a PLO right across the state over the last 20 years, and absolutely nothing compares. The proximity of this fire to communities made it a very different experience - the busiest and most draining deployment I've done.

The nature of the fire behaviour and its effect on communities took a toll on everyone, and it affected me just as much as anyone because we had so many different communities coming under threat. We had roughly 40 community meetings spread right across the length and breadth of the two fires, and the concern of the community was illustrated by the fact that attendance at those meetings was just massive.

We used large halls for the meetings and they were overflowing, to the point where we had to run a second session on a few occasions to make sure we got the word out to everyone. I was fortunate to have a very dedicated group of volunteers with me working as community field liaisons - they were exceptional in supporting everything we did.

Because the community in our area had seen the extent of the fires up north, they were more alert than I'd ever seen before. We've always said in community engagement leading up to bush fire season that the lack of concern from the community can sometimes be very frustrating, but that just wasn't the case this season.

The media coverage of the losses and deaths in the northern part of the state made people start to realise that it was serious, and that's why we had a level of community interest that I've never seen before. And not only attendances at meetings, but a thirst for knowledge about what to do and how to prepare. It was unrelenting for us in the Public Liaison Unit, but we did the best we could and I think our efforts were wellreceived by our communities.

People really listened to our advice especially the Emergency Alert messages. We saw that when the fire took a run around the Oakdale and Nattai areas and plenty of people relocated in accordance with our recommendations and messaging. The moments of greatest stress were making sure you got that Emergency Alert message out in an appropriate timeframe and making sure the message itself gave the right advice and got people to do what we wanted them to do.

The hardest part of the job is the losses. It doesn't matter which functional area you're in, we all share the losses. If we've lost a home or there's an issue with the firefighters, which we had several incidents of including fatal accidents, you just look around the IMT and you can see from the faces that everyone shares the pain and the grief.

While this fire season was incredibly full-on and definitely no comparison to anything I've done in the past, in many ways I found the PLO work quite satisfying because the results were there to see. Admittedly we lost homes and there was criticism, but it's been a very emotive period and we did the very best we could. It takes a toll, but you have to dust yourself off and get on with the job at hand.



PLANING FOR TUFWORST

By Dr Simon Heemstra, Laurence McCoy and David Field

Within State Operations, the Predictive Services team supports the NSW RFS firefighting effort by analysing and predicting the behaviour of fire. During periods of fire activity, Fire Behaviour Analysts (FBAns) are embedded in the State Operations Centre and can also be deployed to IMTs to assist at a local level.

The 2019/20 fire season for Predictive Services spanned 158 days of continuous operations. During this time, 2,378 shifts were filled by a mixture of volunteers and staff in either Headquarters or at IMTs. On average, 15 FBAns were rostered per day and on our biggest day, 34 FBAns were deployed throughout the state. Over the season we also deployed FBAns into 28 IMTs.

The FBAn response was multi-agency from the outset with FBAns from all states, the ACT, NPWS and Fire and Rescue NSW deployed into Headquarters and IMTs regularly. The arrival of six international FBAns from the US and Canada a few days before Christmas bolstered our capability at a critical time.

After an induction with A/Professor Kevin Tolhurst (the Grandfather of Fire Behaviour Analysis in Australia), our international counterparts had their first shift at Headquarters on Christmas Day before being rotated out into the IMTs.

Overall the international crews completed 327 shifts in IMTs, a critical resource for fatigued local FBAns mid-season. We greatly appreciated their dedication and commitment over the Christmas period, forgoing holiday time with their families and swapping the chilly North American winter for an Aussie heatwave and drought!

The Bureau of Meteorology (BoM) also provided us with outstanding support, with meteorologists embedded into State Operations throughout the season and forecasters in the Regional Forecast Centre completing more than 3,000 Incident Weather Forecast requests.

We also benefited from the latest research at key periods during the season, with many predictions incorporating technology such as the use of pyrocumulonimbus risk maps (risk of fire induced thunderstorms), satellite-derived live fuel moisture or fuel load information.

Overall, 4,529 predictions were prepared, of which there were 2,933 manual predictions and 1,596 simulator-derived predictions. This is more than ten times the normal number of predictions that would be produced in a busy fire season.

Above: Bush Fire Analysts working at NSW RFS HQ. Photo by Kelly White. Right: The Fire Spread Prediction Map for New Year's Eve.

PUBLIC RELEASE OF PREDICTIONS

One notable achievement during the 2019/20 fire season was the creation and public release of Fire Spread Prediction Maps for the very first time in NSW. These maps were prepared on days when dry conditions and dangerous fire weather could lead to significant and dangerous fire behaviour, and they displayed predictions of how far or fast we thought a fire could travel.

The published maps included a combination of different fire spread prediction types including: best estimate, extended outlook, modelled worst case scenarios, breakout scenarios and computer generated simulations.

The Fire Spread Prediction Maps were constructed from a series of individual operational fire spread predictions prepared by the FBAns,

Fire Spread Prediction for New Year's Eve 2019

and compared to computer simulations to gain greater confidence. Creating these maps involves combining the science (fire behaviour models), situational awareness (intelligence) and the FBAn's experience to prepare a prediction. Each map is a considerable effort to produce and requires careful consideration as the maps are often used to inform Incident Controllers, planning, operations, public information and now the general public.

These maps became known as 'red maps' and were shared on Facebook, Twitter and the NSW RFS website in an effort to pre-emptively and visually communicate the risk posed by the predicted fire runs. Judging by the positive responses on social media, the general public were receptive to the opportunity to understand a fire's potential via our maps.

KEY FIRE BEHAVIOUR FEATURES FOR THE SEASON

This season saw a critical escalation in the number of recorded fire-induced thunderstorms or pyrocumulonimbus activity.

Researchers found that more than double the amount of pyrocumulonimbus events were recorded compared to any other season in the last 40 years.

Smoke (and dust) and its impact on air quality was a constant reminder of fire activity for most regions in NSW. But on occasions, smoke was our friend. It was attributed to moderating fire weather on a number of bad fire weather days, with the theory that the smoke was so thick it acted like cloud and prevented surface heating and subsequent mixing of stronger winds from higher in the atmosphere.



After an unprecedented season, it is important that NSW RFS members recognise the impact on their mental health. In this liftout we outline the ways you can reach out for assistance and give some simple tips for maintaining your mental wellbeing.

Chaplaincy/Family Support

NSW RFS Chaplaincy and Family Support Service is offered to all members and their immediate families. Our aim is to provide assistance that would help in a wide range of settings. This can include being an independent confidential listening ear, providing crisis intervention and support during a crisis, caring for those who are sick, undertaking hospital visitation, offering onscene support and providing spiritual support that acknowledges an individual's beliefs.

Contact: 1800 049 933 www.myrfs.nsw.gov.au

MAP Counselling

The Member Assistance Program (MAP) is a confidential counselling, coaching and wellbeing service free for all NSW RFS staff AND volunteers, as well as their immediate family members. The service can help you achieve lifestyle, work, personal and family goals and assist you with managing work and life experiences, issues or concerns that arise from time to time.

Contact: 1300 360 364 benestar.com

Workers Compensation

If you have sustained an injury as a member of the NSW RFS in the course of your duties, then you are covered for Workers Compensation and can get in touch with the team to assist with the claims process.

Contact:(02) 8741 5511 www.myrfs.nsw.gov.au

GP/Medicare

You can seek advice and possible referral to a mental health practitioner from your medical provider. If your Doctor determines that a mental health care plan is appropriate for you, then a referral to a mental health practitioner can be achieved under Medicare.

Contact: Your local Medical Practitioner

Beyond Blue

Beyond Blue provides information and support to help Australians achieve their best possible mental health, whatever their age and wherever they live. The experiences and needs of people with anxiety and depression and their families and friends underpin all Bevond Blue's work.

Contact: 1300 22 4636 beyondblue.org.au

CISS/Peer Support

Critical Incident Support Services (CISS) and Peer Support Services are available to all members of the NSW RFS who may be experiencing traumatic or every day stressful reactions. The team provides a positive way to cope with the effects of dealing with traumatic events and lessen the impact of critical incident stress on members and their families.

Contact: 1800 049 933 www.myrfs.nsw.gov.au

Lifeline

Contact: 13 11 14 www.lifeline.org.au

SIMPLE THINGS CAN MAKE A HUGE DIFFERENCE







REST AND RELAXATION

Ensure you take breaks regularly, both throughout your day as well as longer holidays. Include mind-soothing activities in your day such as music, podcasts or reading a book.



SOCIAL CONNECTION

Social connection minimises isolation. Connect by giving someone a call, having technology-free time with your family, bringing out old board games or using FaceTime with friends.



₩ATER

Water is essential to your health, aim to consume 2L per day of fluids which can include milk, water and herbal teas. Think of water as a nutrient your body needs.



SLEEP

Aim for 7-9 hours of sleep daily, ideally between 10pm and 6am for enhanced rejuvenation and mental and physical benefits.



DIET

Increase wholefoods in your day such as fruits, vegetables, wholegrains and lean proteins and limit processed foods such as fast food, biscuits, lollies and chips. Consuming a good quality diet improves your energy and enhances mental clarity.



EXERCISE

Exercise has huge benefits to mind and body. Find something you enjoy and include family and friends to keep moving consistently, at least 30 minutes per day.



BY SCOTT HART, CAPTAIN OF THE BRAIDWOOD RURAL FIRE BRIGADE

The day of 26 November 2019 dawned pretty well the same as much of the previous months. I was enjoying my last week of leave from work with plans on fishing, four-wheel driving and relaxing after joining two strike teams earlier in the month to Grafton and Port Macquarie. We'd learnt a few lessons with these strike teams – fires weren't behaving 'normally' up there due to a combination of heat, drought and massive fuel loads. Little did we know that what we had seen up north was going to continue down into our patch and beyond.

A storm went through the area on the night of 25 November, dropping a bolt or two of lightning into North Black Range and Currowan. At about 1100hrs the next day, we got the call for a smoke sighting near North Black Range Fire Trail, a track on the western side of the Tallaganda National Park. As we headed out, I noted it was a significant smoke column and we were going to need help. We didn't have sufficient resources to make a meaningful early attack on the fire, as there was huge amounts of fuel on the ground and thick lomandra grass everywhere.

Two days later on the afternoon of 28 November, we were called to assist with a backburn NPWS had planned ahead of predicted bad fire weather the next day. As Braidwood 1 pulled up in Ralpine Valley, we noticed that there was a definite 'swirl' happening in the smoke – the easterly and westerly winds were meeting right above us and caused what I can only describe as a fire tornado.

Suddenly, the entire front of the mountain was on fire – spots were igniting in all the dry tussock around us and behind us towards Gourock fire trail. One spot ignited on the eastern side of Mount Palerang and was also rapidly expanding. We withdrew from this position and were retasked to the Forbes Creek area, as homes were in danger.

After a long night, we got back to the station. Things weren't looking good. While the fire was still sitting in the National Park, the forecast 70-80km/hr westerly winds were going to put properties in the areas of Bombay, Manar and Farringdon in danger. The town of Braidwood was also looking right down the barrel, some 15km in front of the fire. Majors Creek and Araluen were also potentially in trouble, not for the last time this season as it turned out.

The day of 29 November is really a bit of blur. We were assessing for property protection, working out where grader lines could be cut and checking how



Photos: NSW RFS ground and air crews working on the North Black Range fire. All photos by Ned Dawson.

prepared the landowners were. Then the first spot fire hit, dropping into a stand of kunzea. Kunzea has two states: won't burn with napalm, or more explosive than napalm. Guess which we copped.

Spot fires were popping up everywhere. We were doing our best to stop them from getting away but it ended up futile. We were doing well with the fires in the grass, but then it would drop into the kunzea and was off. One home was lost off Tea Tree Road (the alternative name for kunzea) purely due to the amount of the stuff in proximity to it.

Many more homes were saved, due to good work by landowners and FRNSW and NSW RFS crews. Basically, the fire was caught where the kunzea ran out and we could get at it in the grass.

The fire burnt almost into the back of Mt Gillamatong, approximately two kilometres west of Braidwood where it was caught just out of a pine forest. On the north side of Bombay Road, homes on Glenmore Road were in danger. The crew flew in, defended and saved the home as fire came at it from three directions. As a result, we caught the fire about 4km west of Braidwood at that point.

A few days later, a breakout occurred while we were working at the southern end of the fire on Lake George Support 1 - we had more members turning out than we had trucks, so we appropriated anything left lying around. We were advised the fire had crossed the river at Bendoura, and was heading toward the Cooma Road. This was a vital point, and recognised by the locals as such. If it crossed the road, there was nothing but kunzea and forest to Majors Creek, Araluen and ultimately Moruya.

We flew over to Bendoura and were hitting spots as fast as we could. We had just run out of water when the first of the 'mozzies' arrived and was able to keep it from getting across. The 'mozzies', local landowners with 1,000L containers and a pump on their utes, were invaluable to us. If not for all our efforts, losses would have been much greater. The mozzies showed their value again and again, especially when the Currowan fire came at us from the east in the following months.

The record will show we eventually beat the bugger, after 30,000-odd hectares burnt. And then there was the Currowan/Clyde Mountain/Charleys Forest/Badja/Jinden/Good Good fire...



The Currowan fire started on 26 November as a result of lightning in the Currowan State Forest northwest of Batemans Bay, and spread over December and January to eventually encompass 314,599ha. The Clyde Mountain, Morton and Charleys Forest fires all broke out from the Currowan fire, and combined with Currowan totalled nearly 500,000ha.

The fire complex originally burnt east from Currowan towards the coast, before spreading north as far as Bundanoon and south as far as Moruya. It impacted on towns and holiday destinations all along the coast such as Ulladulla, Milton, Tabourie, Falls Creek, St Georges Basin, Bomaderry, Nerriga and Lake Conjola.

The Currowan fire destroyed 312 homes and damaged 173 more. The hard work of firefighters and residents saw a further 1,889 homes in the path of the fire saved. At its peak on New Year's Eve, almost 500 personnel were deployed to the fire and an Emergency Alert was issued covering 90 percent of the Shoalhaven LGA.

Casey Addison, Senior Deputy Captain of the Tomerong Brigade in the Shoalhaven, spent many days as Divisional Commander working on the Currowan fire. He gives us a glimpse into what it was like when the fire conditions were at their worst in late December and early January.

f For us in the Shoalhaven, Currowan was a very different fire compared to what we usually experience. Over the last few years, typical bad fires in our area have run in a southeast direction under northwest winds. What we were finding with Currowan was that it was still doing that run, but the southerly winds would punch through in the afternoon or evening and catch everyone off guard. Combine that with the dry conditions and we were experiencing rates of spread we had never seen before.

New Year's Eve was the big one for us - that was the day that really hurt. By that point the Currowan fire had run across the entire Shoalhaven, from the south all the way up to the north. The rate of spread that day was just unbelievable, the fire was moving up to seven or eight kilometres per hour. We had a strong northwesterly wind in the morning and the fire was already very active by 0930hrs and daytime soon turned to dark.





Top: A kangaroo jumps through the fire at Lake Conjola on New Year's Eve. Photo by Matthew Abbott. Bottom: Firefighters tackle the Currowan blaze near Nowra. Photo by Ned Dawson.

I had been deployed to Nymboida to fight the Liberation Trail fire on the day we lost more than 100 homes, and that was a scary experience from my standpoint. When it happens in your backyard and you're driving around with your high beams on in the middle of the day and the radio is going ballistic, you just don't know where to start.

A southerly change came through at about 1400hrs, and it nearly knocked us over. Usually of an evening in summer you get a southerly storm that drops some rain on you, but this was just wind with no moisture in it. We had pyrocumulonimbus events, downbursts; it was just crazy - mother nature at its worst. Definitely unlike anything else I'd ever faced.

That day I was looking after a division around HMAS Albatross and we got lucky. We prepared fairly well and I had just enough time to task crews to property protection. We lost a couple of houses early in the morning, but when fire does what it did that day there's just not enough trucks. You're relying on communications and your crew looking after themselves - making sure they're in safe spots, making an assessment and moving on.

After the fire ripped through areas such as Wandandian, Bewong, Tomerong and Basin View on New Year's Eve, we got out early in the morning on New Year's Day. Our job was to tackle the active fire in the largely-unburnt Corramy Regional Park, an area of a few hundred hectares that backs onto the town of Basin View.

This was the closest active fire to properties and we needed to take out that unburnt block with a backburn. There was a lot of concern around doing it, given the weather we had at the time, the size of the block and the possibility of it spotting. We managed to successfully backburn the area and protect many homes in the Bay and Basin area. If we didn't do that, we would've lost a lot more homes in the highly-populated Bay and Basin area over the next few days.

Saturday 4 January was the next big day. For me personally, that was when it hit closest to my home - the fire actually burnt through most of Tomerong. When it started to come really close to homes and you're being relied on to look after your own doorstep, that's when it gets to you.

Luckily, the local brigades and the community really pulled together and looked after each other -I've never seen anything like it. The whole community came together and listened to our advice, they prepared well and helped to protect their property and their neighbour's property. Despite the threat of fire, it was a great thing to see and no doubt helped to save even more homes.





CATASTROPHIC NEW YEAR FOR SOUTHERN NSW

After fires ravaged the northern half of NSW in spring and the first half of summer, the south of the state received its fair share of fire activity as 2020 dawned. The destruction experienced in the north was repeated in the south, with more than 1,500 homes and 3,400 outbuildings in the south of the state destroyed – the bulk of these in December and January.

The effect on communities was significant, with Tourist Leave Zone maps (such as the one on the following page) released by the NSW RFS in early January ahead of dangerous fire conditions. This advice saw extraordinary large-scale evacuations along the South Coast and down into Victoria, as residents and holidaymakers fled from the threat of out of control fires.

FIRES ENGULF FAR SOUTH COAST

The Far South Coast lost nearly 1,000 homes, more than 1,900 outbuildings and saw approximately 635,000ha burnt – almost two thirds of the whole district. Despite this, firefighters managed to save more than 3,000 homes and 2,700 outbuildings in the line of fire.

Large fires impacted almost every community in the Far South Coast as the district burned in late December and early January. One of the most destructive of these was the Clyde Mountain fire. When the southern tip of the Currowan fire crossed the Kings Highway from the Shoalhaven into Eurobodalla on 29 December, it became the Clyde Mountain fire.

The fire continued to spread south as it grew to 98,816ha and destroyed 490 homes in coastal and inland communities such as Mogo, Malua Bay, Batemans Bay, Nelligen and Broulee. The fire was at its worst on New Year's Eve, cutting off power as more than 1,000 people sheltered on the beach at Malua Bay. It was finally extinguished on 16 February after 49 days of activity.

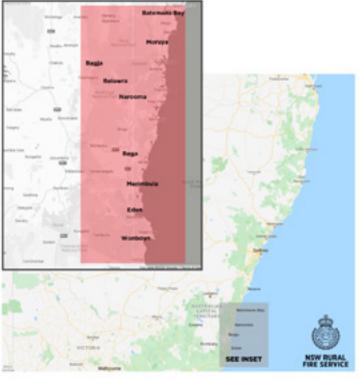
Further south, the Badja Forest Road, Countegany fire was started by lightning on 27 December in the Badja State Forest, just east of Cooma. It grew quickly in dangerous fire conditions, impacting the towns of Cobargo and Quaama on New Year's Eve when the historic main street of Cobargo was razed and three people in the area died.



Tourist Leave Zone - South Coast Bush Fires

Dangerous conditions for holiday makers on the South Coast of NSW this Saturday 4 January 2020

- Widespread Extreme Fire Danger is forecast for the South Coast this Saturday 4 January 2020
- These will be dangerous conditions, the same or worse than New Year's Eve
- If you are holidaying on the South Coast, particularly in the general area from Batemans Bay to the Victorian border as shown on the map, you need to leave before this Saturday
- If you are planning to visit the South Coast this weekend, it is not safe. Do not be in this area on Saturday.
- For more infor go to www.rfs.nsw.gov.au



The Badja Forest Road, Countegany fire would eventually grow to 315,512ha, combining with the Clyde Mountain fire in the north and burning almost as far south as Bega, a distance of approximately 100km from northern tip to southern tip. The fire destroyed 399 homes in total.

New Year's Eve also saw fire activity in the very southern end of the state, as the Border fire crossed north from Victoria into NSW. It was the same fire that burnt through the Victorian seaside town of Mallacoota, forcing thousands of trapped people to be evacuated by sea with the assistance of the Navy - the images of which were seen across the world.

The fire crossed the border in the Nungatta area and impacted communities to the south of Eden such as Wonboyn, Kiah and Narrabarba over the following days. The fire proved particularly damaging on 4 January, when it was spreading at up to six kilometres per hour. The town of Wonboyn came under direct attack that day, with at least 20 residents taking shelter in the Wonboyn Brigade fire shed.

LARGE FIRES BURN THROUGH **RIVERINA HIGHLANDS**

The Riverina Highlands district was another area faced with several large fires around the New Year period, with fire stretching from the southwest tip of the ACT all the way to the Victorian border.

One of these large fires was the Dunns Road fire, which was started on 28 December by lightning in a pine plantation 10km west of Adelong.

The fire spread quickly throughout the district, impacting the towns of Batlow and Tumbarumba and burning through 333,940ha of farmland, forestry plantation and national park. It destroyed 182 homes in the Snowy Valleys LGA and eventually merged with the Green Valley, Talmalmo and East Ournie Creek fires to combine for over 600,000ha of active fire.

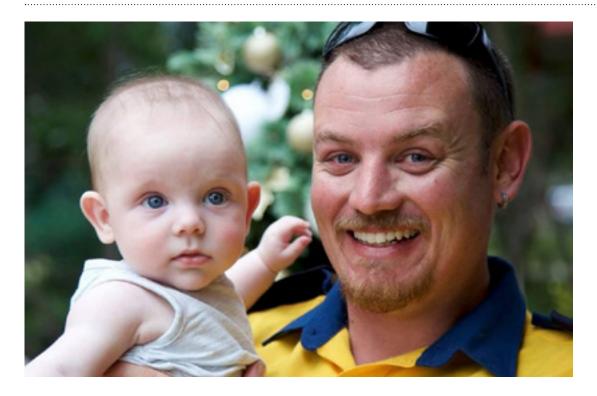
The Green Valley, Talmalmo fire started on 29 December by lightning in bushland to the north of Talmalmo, near the Victorian border. It quickly crossed into Victoria and continued to burn through remote areas in both states with intense activity, growing to 208,275ha. In just one night in early January, the fire moved 80km after jumping containment lines.

The Green Valley, Talmalmo fire also sadly caused the death of firefighter Samuel McPaul of Morven Brigade, when the tanker he was working in was flipped by extreme winds associated with a pyrocumolonimbus event.

Previous page: The Green Valley, Talmalmo fire. Photo by Seth Wilmot. Above left: The destruction of the Dunns Road fire. Photo by Peter Jones. Above right: The Tourist Leave Zone map for the South Coast on 4 January.

GEOFFREY KEATON

1987 - 2019



Deputy Captain Geoffrey (Geoff) Keaton and Firefighter Andrew O'Dwyer of the Horsley Park Brigade died on 19 December 2019, when their tanker was struck by a tree and rolled near Buxton in southwest Sydney during firefighting operations on the Green Wattle Creek fire.

Just before midnight, the Horsley Park 1A tanker was driving in Buxton with a crew of five as part of a convoy of Cumberland Zone Strike Team tankers. A large tree fell across the road and collided with the tanker, forcing the tanker to leave the road and roll over.

Sadly, the two members in the front of the cabin, Geoff Keaton and Andrew O'Dwyer, died as a result of the accident. The other three occupants in the back of the cab, also members of the Horsley Park Brigade, were injured and treated in hospital.

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Geoff and Andrew were great friends with young children born just days apart from each other. They were part of a tight-knit brigade, for whom their loss was understandably devastating. Despite this, members of the brigade were back in the field battling the Green Wattle Creek fire less than 36 hours later to honour the memory and service of their colleagues Geoff and Andrew.

Geoff joined the Horsley Park Brigade in 2006, rising to the rank of Deputy Captain.

ANDREW O'DWYER

1983 - 2019



His father Wesley 'Wombat' Keaton is also a long-serving NSW RFS volunteer, and was out working on the Gospers Mountain fire at the time when his son was at the Green Wattle Creek fire.

Geoff was farewelled at a funeral service at Pinegrove Memorial and Crematorium, Minchinbury on 2 January, where he was posthumously awarded Commissioner's Commendations for Bravery and Service.

He is survived by his partner Jess and young son Harvey, who was 19 months old at the time of the accident.

Andrew joined the Horsley Park Brigade in 2003 and rose to the rank of Deputy Captain in 2009 before stepping down to spend more time with his family.

He is remembered for his passionate and tireless devotion to his brigade, and was also a talented photographer who used his skills to give the world an insight into the life of a NSW RFS volunteer.

Andrew's funeral was held at Our Lady of Victories Catholic Church, Horsley Park on 7 January, where he was posthumously awarded Commissioner's Commendations for Bravery and Service. He is survived by his wife Melissa and daughter Charlotte, who was also 19 months old at the time of the accident.

The NSW RFS has created a dedicated bank account to collect donations for the families of both volunteers.

All funds received will be equally distributed between the spouses of Geoffrey and Andrew.

SAMUEL MCPAUL

1991 - 2019



Firefighter Samuel (Sam) McPaul, of the Morven Brigade near Holbrook, was killed on 30 December 2019 while working on the Green Valley, Talmalmo fire at Jingellic, about 70km east of Albury.

Shortly before 1800 hours, Sam was on a tanker working in an open paddock, moving livestock to a safer area and putting out active fire. The tanker was hit by extreme winds associated with a pyrocumulonimbus fire thunderstorm, causing the tanker to lift off the ground, flip over and land 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 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.

Sam will be remembered as a positive and generous person, who loved giving to others through his community work

with the NSW RFS and the basketball clinics he ran for local children. He was heavily involved in the local basketball community, as a representative player in Wagga Wagga and a coach in Holbrook.

Sam is survived by his wife Megan, who is expecting the couple's first child in May 2020.

Sam's life was celebrated at a funeral service at Holbrook Sporting Complex on 17 January, where Megan received 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.

As a result of the tragedy, the NSW RFS created a dedicated bank account to collect donations to the McPaul family. All funds received will be distributed to Sam's wife, Megan, to provide for her and their baby's future.

Above: Samuel McPaul. Following page, left to right: Captain Ian McBeth, First Officer Paul Clyde Hudson, Flight Engineer Rick DeMorgan Jr.

PLANE CRASH CLAIMS LIVES OF THREE US AVIATORS







Captain Ian McBeth, First Officer Paul Clyde Hudson and Flight Engineer Rick DeMorgan Jr died in a plane crash on 23 January 2020 during firefighting operations at the Good Good fire near Cooma.

The three experienced aviators, all from the United States, were working on the Coulson Aviation-owned Lockheed C-130 Hercules (call sign Bomber 134), contracted to the NSW RFS through the National Aerial Firefighting Centre. The aircraft and crew had been working in NSW since 6 December 2019.

On the afternoon of 23 January 2020, contact was lost with Bomber 134 after it dropped a load of retardant on the Good Good fire in the Snowy Monaro area. Radio reports indicated that the aircraft had crashed, though it took several hours to locate the wreckage given the active fire and visibility challenges in the area.

Tragically, the three men on board died in the crash. The circumstances leading up to and including the crash are being investigated by the Australian Transport Safety Bureau.

The investigation may take more than 18 months to complete given the complex nature of the crash.

The three aviators were very experienced in aerial firefighting, and described by Wayne

Coulson of Coulson Aviation as "valued members of our firefighters' family".

lan McBeth was a father of three from Montana, a highly qualified and respected C-130 pilot with many years' experience firefighting, both in the military and with Coulson Aviation. He spent his entire career flying C-130s and is survived by his wife Bowdie and three children Abigail, Calvin and Ella.

Paul Clyde Hudson was from Arizona and completed 20 years' service in the US Marine Corp in a number of positions, including as a C-130 pilot. He retired as a Lt. Colonel and received many decorations during his career. He is survived by his wife Noreen.

Rick DeMorgan Jr was a father of two from Florida. He served in the US Air Force, with 18 years as a Flight Engineer on the C-130 and nearly 2,000 hours in combat environments. He is survived by his two children Lucas and Logan.

A memorial service was held for family and friends of the three men at RAAF base Richmond on 30 January, before their bodies were repatriated back to the US.

The NSW RFS honours the sacrifice they have made in the act of protecting NSW communities from fire, and their professionalism and dedication will not be forgotten.



The 2019/20 fire season saw an extremely high demand on NSW RFS aviation assets to help fight fires from the Queensland border to the Victorian border.

From an aviation perspective, the season started in August when the NSW RFS-owned 'Marie Bashir' Large Air Tanker (LAT) was deployed to the Lindfield Park Road fire in Port Macquarie the very day the aircraft was commissioned in Australia.

On an average day this season, 90-100 aircraft were deployed to fight fires in NSW. On the busiest days, this rose to 120 aircraft. At the peak of the season in December, there were approximately 19,500 missions flown. Remarkably, the LATs on their own used 24 million litres of retardant across the season.

Throughout this fire season, the Service's aerial capacity was supported by aviation units within IMTs of up to 20 people (not including pilots and fuel crews). In these IMTs, aviation specialists from the NSW RFS, NPWS, NSW SES, the Volunteer Rescue Association and the ACT Emergency Services Agency, as well as from interstate and international firefighting agencies, filled vital roles in aircraft management, aircraft loading, intelligence gathering and the coordination of tactical aircraft.

The massive demand for aircraft over the season also brought with it many challenges. Many of the fires were so large and spread out so far geographically that the Service's aviation assets were all tied up quickly. This led to challenges around prioritisation of aircraft, particularly the LATs.

On many days smoke from the fires was an issue and visibility was so poor that aircraft remained grounded, sometimes for days at a time.



Main photo and right: Aerial firefighting at the Hillville Road fire on the Mid Coast. Photos by Ned Dawson

Previous page, bottom: Leigh Nolan, NPWS Team Leader Fire, at the Green Wattle Creek fire. Photo by Ned Dawson.

Bottom: A NSW RFS Rescue Crew Officer being winched over the Gospers Mountain fire near Bilpin. Photo courtesy of the ADF.

Among the challenges, the 2019/20 fire season also necessitated an increase of the Service's Search and Rescue (SAR) capability. The NSW RFS has operated SAR helicopters since 2014, manned by NSW RFS Rescue Crew Officers - volunteers with significant experience in helicopter winching through Remote Area Fire Teams.

There are currently 26 active Rescue Crew Officers in the NSW RFS, who undergo rigorous training and assessment (including fitness and swimming tests) to qualify for the position. In each SAR helicopter, a contract pilot and winch operator are joined by the Rescue Crew Officer, who can be winched to the ground to rescue people or provide assistance such as cutting fences or door knocking in remote areas.

Traditionally, the SAR team has been most active during floods, rescuing trapped civilians from rising waters. The SAR team assisted the NSW SES at the Western NSW floods in 2016 and more recently during the 2017 floods on the North Coast, where more than 30 rescues were performed.

However, the 2019/20 fire season brought a new challenge as 51 people across the state were winched to safety from the threat of fire. The 2019/20 fire season saw 244 shifts for SAR teams. The previous SAR shifts from 2014 to 2019 combined only totalled 240.

In addition to the two NSW RFS helicopters used for SAR, this season saw several Australian





Defence Force (ADF) helicopters crewed by NSW RFS members used for the same function. The generous assistance provided by the ADF was greatly appreciated, with approximately 60 SAR shifts completed on ADF helicopters throughout the season. On one day, two ADF helicopters with NSW RFS crew on board winched 16 people, including a group of eight bushwalkers, out of the Kosciuszko National Park when fire threatened.

Another notable rescue occurred in January in the area of Cadgee, just west of Bodalla, during the Badja Forest Road fire. After fire had gone through the area, three people reported to the local NSW RFS brigade station with severe burns. The local captain radioed for an ambulance, however active fire, smoke, fallen trees and burnt bridges made access a serious issue. After several unsuccessful attempts to reach the area and with much concern for the wellbeing of the injured people, NSW Ambulance requested assistance from the NSW RFS.

The next day, a Navy helicopter with NSW RFS crew on board was able to fly low and slow through the smoke, find the three injured people and winch them to safety. They were flown to Moruya and handed over to NSW Ambulance for further treatment. Given the concerns for the wellbeing of the injured and the dangerous flying conditions, it was a daring and vital rescue by the SAR team - just one of many performed during this devastating fire season.



NSW HONOURS THE FALLEN

After NSW finally received significant rainfall in early February and the majority of fires were contained, a State Memorial for those impacted by the fires was held on Sunday 23 February. The Memorial, held at Qudos Bank Arena at Sydney Olympic Park, gave emergency service workers and members of the public from across the state the opportunity to come together and pay tribute to the lives lost during the horrific fire season.

With Prime Minister Scott Morrison and NSW Premier Gladys Berejiklian in attendance, six pairs of boots were placed on a shrine to commemorate the three NSW RFS volunteers and three American aviators who tragically died during the fire season. The families of the 19 community members killed in the fires lit candles in their memory.

"Twenty-six lives have been taken by fire this bush fire season," said NSW RFS Commissioner Shane Fitzsimmons. "Each one of those is a story of grief, profound loss and great sadness – of lives cut short and of families being changed forever.

"Nans and pops, mums and dads, sisters, brothers, sons and daughters, loved ones, colleagues and mates - all much loved and valued members of our community. Each one will remain a reminder of the terrible events of this bush fire season."





One positive out of the fire season was the amazing and generous community response to the efforts of the NSW RFS and other firefighting agencies. NSW RFS HQ and FCCs and brigade stations across the state were inundated with messages, letters of thanks and donations of food and drink, to the point that many had to turn away offers of donated items.

NSW RFS crews out fighting fires also stumbled across many wonderful roadside messages of thanks from grateful communities all across the state. One of the more quirky and welcome displays of gratitude came in the form of a fridge on the side of the road at Bungendore near Canberra.

The fridge was placed on the side of the road by a local family in December, offering cold drinks and snacks to fire crews on their way to fight fires at Braidwood and the South Coast.

The fridge became something of a local icon, as community members kept the fridge well stocked and visiting firefighters left badges and helmets as tokens of thanks.

After the fire season, the fridge was donated to the National Museum of Australia in Canberra





Previous page top: Just a few of the thousands of letters of support received at NSW RFS HQ.

Previous page bottom: Members of the Bungendore Brigade with the famous fridge as it travelled to the National Museum. Photo by Tahlia Burgoyne.

Above: Children from the local preschool deliver a message to Assistant Commissioner Rebel Talbert and the team at the Narrabri **FCC**

Below: A sign on the roadside at Wallabi Point. Photo by Tony Longa.

as an example of the community spirit that developed in response to the devastating fires.

The fridge was even given an emergency services convoy in late February as it was transported from Bungendore to the Museum.

The community gratitude extended to an extraordinary outpouring of support in the form of donations, coming from all corners of the earth.

Over the course of the season, the **NSW RFS and Brigades Donations** Trust received more than \$100 million, while donations directly to individual brigades and to funds set up to support the families of fallen volunteers also totalled several million dollars.

Donations came from every walk of life - from individuals, families, community groups, sports teams, religious groups, small and large companies and from a wide range of celebrities. Russell Crowe auctioned the Rabbitohs cap he wore while fighting the Liberation Trail fire at his Nana Glen property, raising more than \$400,000 for NSW RFS brigades in November.





Sizable donations from celebrities such as Chris Hemsworth, Elton John, Nicole Kidman and Kylie Minogue followed.

But one of the most notable efforts came from comedian Celeste Barber. She launched a fundraising campaign on Facebook in January with the aim of raising \$30,000.

It soon became the largest fundraiser in Facebook's history and was attracting \$10,000 in donations every minute at its peak. When it finally ended, Barber's campaign had raised a staggering \$52 million for the NSW RFS.

The NSW RFS is indebted to the incredible generosity and spirit of all those who dug deep and donated, no matter the size of their contribution.

The NSW RFS and Brigades Donations Trust has identified that the funds will be directed towards rebuilding, supporting our members, equipping our brigades and improving service delivery. To that end, a \$20 million fund for brigades has been established to provide grants of up to \$10,000 per brigade and members are being consulted on future spending. At the time of writing, more than \$700,000 has been paid to eligible brigades.

Brigades interested in applying for a grant can find more information and submit an application on MyRFS. Applications close on 30 October 2020.

Above: A house in Tahmoor leaves a message for aviators after the Green Wattle Creek fire threatened. Photo by Ned Dawson.









PREPARE. ACT. SURVIVE.

NSW RURAL FIRE SERVICE



Over several weeks in January, 55 members from the 20 brigades of the Far North Coast were deployed to the Cobargo area to assist after fires devastated the community. On returning home, members were emotionally affected by their experiences and several voiced the idea that perhaps brigades could work together to assist this community further.

A committee comprising four NSW RFS members from the area was formed, called the Far North Coast Relief Fund, to raise funds to assist the Cobargo and Quaama communities.

Far exceeding all expectations, \$40,000 in cash and a further \$10,000 in equipment was donated by the brigades, individual brigade members, local businesses and community members in the Tweed, Ballina and Byron Shires.

The Relief Fund provided funding for equipment such as fencing and plumbing supplies and fittings - enough to fill a semitrailer.

The committee members travelled to Cobargo to deliver the supplies and donate money to local primary schools at Cobargo and Quaama.

Nineteen children from one school of 70 students had lost their homes in the fires. As the children in these bush fire affected areas had missed out on fun during their school holidays, plans were made for them to experience a day at Mogo Zoo, courtesy of the Relief Fund.

Cobargo Preschool also received a visit and Gentle Bears were distributed and well received by the children, gaining many cuddles. The 1st Cobargo Scout Group also received funds as they were in the process of replacing their bus which had been destroyed by fire. The assistance from the Relief Fund made their dream of a new bus a reality sooner than expected, and saved the Scouts from many sausage sizzles.

The members of the Far North Coast brigades exceeded their duties not only on the fireground, but they also went above and beyond to help communities far from their homes. By working together they have achieved an exceptional result and should be congratulated for their efforts.

To the members of the Cobargo and Quaama Rural Fire Brigades, we salute you for what you endured and experienced during and after the horrific bush fires devastated your communities. We thank you for the lifelong friendships now formed.

Above: Members of the committee visit Quaama Public School.



1985

Joined the Service at age 15 with Duffys Forest Brigade

1989

Elected Captain of Duffys Forest at age 19

1993-1994

1993 promoted to Group Officer and in 1994 takes up salaried position as Regional Planning Officer

1996

Promoted to State Operations Section as Bush Fire Service became NSW RFS

1998

Appointed Assistant Commissioner Operations In early April, NSW RFS Commissioner Shane Fitzsimmons announced he would be resigning to take up the role of Commissioner of Resilience NSW, a new government agency focused on disaster preparedness and recovery for NSW communities. Shane's resignation comes after a 35-year career with the NSW RFS as a volunteer and staff member that includes more than 12 years as Commissioner. Before Shane left the Service, he sat down for a final conversation about his time with the NSW RFS, the challenges of the 2019/20 fire season and why it was time to move on.

"The decision to leave the Service has been one of the most difficult decisions of my career, to be honest," says Shane. "The NSW RFS is genuinely like a very large family, and I've always talked about how much I love the people that make up our organisation.

"There's something very special about what our volunteers do and why they do it, and to be making a decision to move on from that was extremely difficult."

Shane joined the NSW RFS in 1985 at Duffys Forest Brigade in Sydney's north when he was 15 years old, following in the footsteps of his father George who was also a volunteer at Duffys Forest. Shane took quickly to brigade life and made an immediate impression on his fellow volunteers, elected Captain at just 19 years of age. It was also through the brigade that Shane met his wife Lisa, the daughter of the local Fire Control Officer at Warringah Council.

In 1993 he rose to the level of Group Officer and in September 1994 he took up a full time position with the NSW RFS, as Regional Planning Officer for the then Central East. In 1996 with the establishment of the new NSW RFS from the old Bush Fire Service, Shane was promoted to one of the first State Operations Officer positions in the State Operations Section, responsible for statewide communications.

In 1998, Shane was appointed Assistant Commissioner and Director of Operations, with responsibility for coordinating firefighting arrangements during the damaging 2001/02 and 2002/03 fire seasons. He was working in this role when tragedy struck in June 2000. A routine NPWS hazard reduction burn went horribly wrong in Ku-ring-gai Chase National Park and claimed the lives of Shane's father George and three of his NPWS colleagues. The tragic loss only strengthened Shane's resolve to ensure firefighter safety is prioritised in all operations.

Photo courtesy of News Corp.

2001 Awarded the Australian Fire Service Medal

(AFSM)

2001-2003 Responsible for

Responsible for coordinating firefighting arrangements during the damaging 2001/02 and 2002/03 fire seasons

2007
Appointed
Commissioner of
the NSW RFS

Resigns as
Commissioner
of NSW RFS
and is appointed
Commissioner of
Resilience NSW



FROM THE BACK OF A TRUCK TO THE COMMISSIONER'S OFFICE

After Commissioner Phil Koperberg's retirement in 2007, Shane became the second Commissioner of the NSW RFS. In his time as Commissioner – and with the NSW RFS as a whole – Shane has overseen great change in the way the Service operates.

"There's no doubt we've seen huge upgrades in technology, infrastructure, equipment and our buildings," says Shane. "So many of our Fire Control Centres in the early days were just a backroom in council chambers, whereas today we've got dedicated spaces fitted out with leading technology.

"But the core to this change has been our people we've never seen more highly credentialed, highly trained and skilled people across our very broad workforce, it's fantastic."

This focus on the people of the NSW RFS has been central to Shane's time as Commissioner, and he has championed a number of initiatives that have seen the Service's membership grow and diversify. One of these is the Secondary School Cadet Program, which when launched in 2004 encompassed 60 students in five schools. Now, the program sees more than 800 graduates each year across 60 schools.

Shane has also played an active role in encouraging more women to take up both volunteer and salaried roles in the NSW RFS. Appointed the NSW RFS Male Champion of Change in 2017, Shane has been vocal in improving gender representation within the Service and eliminating workplace sexism.

Despite all these changes, Shane is in no doubt when asked to name the biggest transformation of the Service in his time as Commissioner – the watershed event of the 2009 Black Saturday bush fires in Victoria, which led to the overhaul of Fire Danger Ratings and a new focus on public information and warnings.

"As I've said publicly, despite the firefighting arsenal we now have at our disposal, the thing that has saved the most lives is the way we now get information to people in danger and get them to act when the risk escalates," says Shane. "The research shows that, as tragic as 26 lives lost this season has been, the numbers should've been in the hundreds if it wasn't for the communication of information and warnings."

A CHALLENGING SEASON

Shane's final fire season as Commissioner proved to be the most challenging of his career, as the statewide drought combined with hot and dry weather to lay the foundation for a long and difficult season that ran from July until significant rainfall in February. In all, nearly 2,500 homes were destroyed and 26 lives lost.

"This last season has been truly awful, in so many ways," says Shane. "I don't know how you can go through this season and not be personally affected. Behind every one of those statistics there's a name, a family, an individual, a community.

Below left: Shane (centre front) as a member of the Duffys Forest Brigade in 1985. **Middle**: Shane washing his Group Officer vehicle after the 1994 fires. **Right**: Shane as Commissioner in 2007.





"For me personally, this season took a massive toll. But I'm not alone – it's affected everybody and together we will get through it.

"The good thing today compared to when I first started in this organisation is that there's a very open, honest dialogue around not feeling okay, which we didn't have in the past. That dialogue is going to be absolutely fundamental in helping everybody to get through this."

NEW HORIZONS

The destruction of the 2019/20 fire season will be felt for some time, and even though he has left the NSW RFS, Shane will still have a crucial role to play as NSW recovers. As Commissioner of Resilience NSW and Deputy Secretary, Emergency Management, he will oversee the recovery effort for NSW communities hit by natural disaster and also drive emergency management policy and disaster preparedness across the state.

Given the extensive damage that has been done to communities all over NSW in the past year, not only from bush fires but from drought, storms, flooding and now COVID-19, the recovery effort will be an extraordinary undertaking. For Shane, the time was right to move on and take the lead on this task.

"I've said for a while that I never wanted to outstay my relevance or welcome in the Service, I think all of us have got to pick a time to leave," says Shane. "In my mind, no matter how difficult it was, this was the right time to leave. "After an unprecedented set of natural disasters in such a short space of time, I found it very appealing that the NSW government wanted to seriously invest in a new and enhanced way of dealing with what is now an unparalleled statewide recovery effort.

"As challenging and demanding as this new role is going to be, I think it's an area where I can make a difference and be part of the government's commitment to the people of NSW that have been so terribly devastated by this season.

"I'm really looking forward to leading the state's recovery and also focusing on how we better prepare for, respond to and bounce back from major disasters and emergencies."



MESSAGE TO MEMBERS

As he departs the NSW RFS after 35 years of service, Shane has some final words for the 70,000-plus members that make up the organisation.

"Thank you for what you do and why you do it - without volunteers there is no NSW RFS," says Shane. "Our volunteer culture is absolutely the heart of the organisation, from the highest levels of leadership, right out to the far reaches of the state.

"Your commitment and dedication this season has been seen by people all around the world, and I don't think you could be held in any higher regard for what you do and for the difference you make in daily lives."

While he is resigning as Commissioner, this is not the end for Shane Fitzsimmons in the NSW RFS. You might even see him in the not-too-distant future on the back of a truck in his yellows.

"Being out on the truck is something I've always missed, and maybe if I get a bit of time I'll be able to do something about that and get back out there in the yellows as well," says Shane. "I spoke to my local Captain at Berowra recently and he said I'll be able to join, but they're telling me I might have to re-sit all my basic firefighter training again!"





NSW RFS FACES FRESH CHALLENGES DUE TO COVID-19

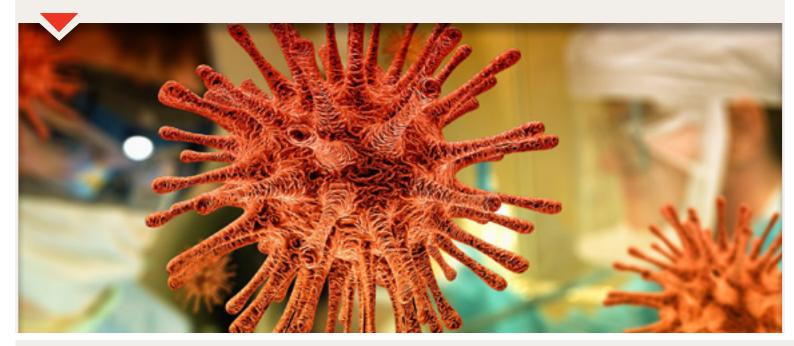
The COVID-19 pandemic has changed the way people and organisations across the world work and live, and the NSW RFS is no different.

As a community-based emergency service, it is vitally important that the NSW RFS continues to function in an operational capacity. To this end, the Service introduced a number of measures to protect the health of members while maintaining the organisation's critical capability and ability to respond to incidents.

These measures include alternative working arrangements for staff, restrictions on group sizes during training and

other essential activities, increased cleaning of facilities and the cancellation or postponement of non-essential activities. As the situation is changing rapidly, members are encouraged to visit www.rfs.nsw.gov.au/coronavirus for more information and regular updates.

The NSW RFS will continue to provide advice to members and develop new initiatives to help keep people connected to the Service and connected with each other. Members are encouraged to stay safe and support one another over the coming months as we face this challenge together.



> 2019 VOLUNTEER MEMORIAL SERVICE

The Emergency Service Volunteer Memorial service was held in October 2019 to honour NSW Emergency Services volunteers that have died for the safety of their communities. The annual event was held at the Volunteers Memorial at the Domain in Sydney.

The names of 94 volunteers are enshrined on the memorial, recognising personnel from the NSW RFS, NSW State Emergency Service, Marine Rescue NSW and NSW Volunteer Rescue Association.

Photo: Adam Hollingworth



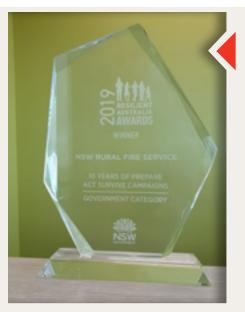
> NSW RFS CAPTAIN NAMED **REGIONAL WOMAN OF THE YEAR**

Krystaal Hinds, Captain of the Gunning-Fish River Brigade and Deputy Group Captain in the Southern Tablelands, was named the 2020 Regional Woman of the Year at the NSW Women of the Year Awards in March.

The award recognises Krystaal's significant contribution to the community following the state's devastating fire season, and her passion for fostering gender diversity in the NSW RFS. The honour is her second for the year, as she was also named Upper Lachlan Shire's 2020 Citizen of the Year on Australia Day.

Captain of her brigade for the last six years, Krystaal joined the NSW RFS in 1998 and has been a passionate and inspiring mentor for members of her brigade. Under her leadership, the Gunning-Fish River Brigade has increased its female membership by 30 percent.

Congratulations to Krystaal on both her well-deserved awards and her outstanding contribution to her community and the NSW RFS.



NSW RFS WINS RESILIENT AUSTRALIA AWARDS

Late in 2019, the Service's 'Prepare Act Survive' campaign was acknowledged as the winner of the Government category at the NSW Resilient Australia Awards. The awards, managed by the Australian Institute for Disaster Resilience, recognise initiatives that build whole-of-community resilience to disasters and emergencies around Australia.

The 'Prepare Act Survive' campaign aims to increase public awareness about the need to plan and prepare for fire. The successful nomination for the award outlined how the campaign has evolved through learning from research and tracking since its commencement in 2009 and incorporated key community engagement events such as Get Ready Weekend.

After picking up the NSW award, the NSW RFS campaign was also highly commended at the national Resilient Australia Awards held in Canberra in November.



AUSTRALIAN FIRE SERVICE MEDALS 2020

The Australian Fire Service Medal (AFSM) is awarded for distinguished service by a member of an Australian fire service. Congratulations to the six NSW RFS members named as recipients of the AFSM as part of the 2020 Australia Day Honours.

ROBERT JAMES GRAHAM

Group Captain Northern Rivers, Region North

Group Captain Robert Graham joined Goolmangar Brigade in the Lismore District at the age of 21 in 1969. He became Captain of the brigade in 1983 and remained in the position until the amalgamation with the Coffee Camp Brigade.

Over the years, Group Captain Graham has held a number of positions including Captain, Deputy Captain, Brigade Training Officer, President, Deputy Group Captain and Group Captain. Graham still holds the positions of Permit Officer and Group Captain today. He is also a member of the District Training Team and was awarded Life Membership of Goolmangar Brigade in 2009.

Graham has attended over 200 local incidents and been deployed to numerous out-of-area incidents as a Group Captain. He has also assisted with the Lismore City hailstorm, Lismore floods and Queensland floods.

Group Captain Graham is a very well respected leader and his knowledge and experience on the fireground instils confidence and determination in the members who work with him. His local knowledge and in-depth understanding of community issues and concerns holds him in high regard.

RAYMOND RANDOLF HILL

Group Captain Lower Western, Region South

Group Captain Raymond Hill has been a volunteer with the NSW RFS since joining Curlwaa Brigade in December 1989, and has held the position of Group Captain since 2003.

He has led a number of strike teams locally, out-of-area and interstate, and is well respected by brigade members within the Lower Western Zone and across the state borders to Victoria and South Australia.

Group Captain Hill's commitment to the NSW RFS is demonstrated by his tireless service to the Wentworth area. He continues to offer guidance and support to all brigades within and outside of the area and provides invaluable service both on and off the fireground. He is always there to help during truck servicing time and is often seen driving a truck back to its station in remote areas.

As River Group Captain,
Raymond is always front and
centre of the NSW RFS, both
at brigade level and more
widely within the community.
His support and coordination is
instrumental to the success of a
number of community events and
organisations in the area. He is an
inspiration to all who meet him
and is held in high regard by the
staff in Lower Western.

JOHN WAYNE STUCKINGS

Group Captain MIA, Region South

Group Captain John Stuckings joined the Gidgell Brigade in 1980, taking on the role of Captain in 2005. He is very active within the brigade, not only as a firefighter, but also having held the positions of Permit Officer, OH&S Officer, President, Training Officer and Vice President over the past 38 years.

In 2003 John became a Deputy Group Captain, a position he held until 2007 when he stepped up into the Group Captain role. Group Captain Stuckings has led several strike teams to outof-area incidents including the Black Saturday fires in Victoria in 2009, the Canberra fires in 2002 and Tumbarumba in 2014. He also played a key role in supporting the NSW SES in the floods of March 2012 in the MIA area, taking on the position of forward command and liaising with the community, the NSW SES and the local council.

Group Captain Stuckings is very active in mentoring younger volunteers within the MIA district particularly in the Coleambally area, often helping neighbouring brigades with local training. He also participates in community engagement, assisting with cadets in schools and as part of the Firewise Kids programs.

MICHELLE JANINE THORNLEY

Captain Shoalhaven, Region South

Captain Michelle Thornley joined St Georges Basin Brigade as a Junior Member in 1984.

Since that time, she has filled many roles within the brigade and has held the position of Captain for many years.

Captain Thornley was awarded the National Medal in 2003 and 1st Clasp in 2011 for her diligence and exemplary service and

dedication to the Service. In addition, she has been awarded a 30-year Long Service Medal and Clasp.

Captain Thornley has always demonstrated strong leadership qualities and fostered strong ties within the local community. She was awarded Life Membership of her brigade and has held the positions of President, Permit Officer, Call Out Officer and Training Officer. She is also a Fire Investigator, in addition to a fully trained Structural Firefighter.

Over the years, Captain Thornley has always been there for major fire events and incidents and has been on countless out-of-area deployments. Her firefighting skills are exemplary and she has put in hundreds of hours training her members and juniors over her 35 years of service.

OWEN TYDD

Group Captain Liverpool Range, Region North

Group Captain Owen Tydd has been a member of the NSW RFS for 58 years since joining in 1961. He has successfully held the positions of Captain through to Group Captain and continues to prove himself an effective member of the Liverpool Range District Senior Management Team and the District Training Team.

In that time, Group Captain Tydd has proven to be a capable leader, both on and off the fireground and is an example to both new and seasoned field

officers for what it means to be a leader within the Service.

For almost 60 years, Group Captain Tydd has devoted himself to sustained and selfless voluntary service to the community. He has earned the respect of his peers and has become a role model in his field. Group Captain Tydd is recognised for his commitment, professionalism, generosity of his time he devotes to others and his ongoing positive contribution to the NSW RFS.

GRAHAM WILLIAMS

Deputy Captain Shoalhaven, Region South

Deputy Captain Graham Williams has been an active member of the NSW RFS for 55 years since joining the Sussex Inlet Brigade in 1964. He was elected Deputy Captain from 1970 to 1977, served as Captain from 1977 to 1983 and was elected Group Captain from 1989 to 1995 and again in 2008.

Deputy Captain Williams has been a mentor to a succession of brigade officers for many years. He has worked in many Incident Management Teams where he takes on the role of safety advisor and Divisional Commander.

On the administrative side. Deputy Captain Williams has been involved in many committees during his time with the NSW RFS and was heavily involved in the planning and construction of Sussex Inlet brigade station.

OUR BUSH FIRE bulletin HISTORY

Bush Fire Bulletin,

TRAGIC FIRE SEASON

(By Graham Davis)

THREE DEAD, 100 HURT, 40 HOMES DESTROYED. To add to this more than 1,215,000 hectares of bush and grazing land blackened . . . and a damage bill exceeding \$15 million.

It was indeed a grim 1974-5 fire season.

The worst fires since 1968 broke out in widespread areas of the State from late November.

Heavy fuel build-ups from previous seasons, and a dry spring set the stage.

Sydney firefighters were kept busy in the first weeks of December with up to 200 fires a day being reported.

Permanent fireman, Constantine Sheveless, 41, of Lurnea, a member of the Busby Fire Brigade, collapsed and died while fighting a bush and scrub blaze at Mount Pritchard, an outer Sydney suburb, on 12th December.

It was the far western areas of the State which were next in line for serious blazes.

Total fire bans were declared day after day as huge fires burnt at Balranald, Cobar, Ivanhoe, Wentworth and along the Queensland border.

Grazier Neil Hudson, 35, of the Boukra station was badly burnt fighting a blaze near Cobar on 19th December, and died in a Sydney hospital in January.

A home in Barden Road, Menai, burns during bushfire emergency, 9th February.



BUSH FIRE BULLETIN



Their faces blackened by smoke and ash, firefighters from the Baulkham Hills Bushfire Organization with the Kellyville tanker take a break beside the Stuart Highway at Dareton, near Wentworth, during the big fires in late December. Many Sydney firefighters and tankers went to the assistance of local teams.

Squads of Sydney firefighters and tankers headed west to work beside local teams, troops and airmen.

Homes, shearing sheds and scores of out-buildings, along with valuable plant, stock and kilometres of fencing were lost in the fires.

A rural fire at Cudal near Orange on 4th January, saw the death of firefighter and local State Emergency Services controller Roy Brown, 55.

Councillor Brown, who was also President of the Boree Shire, died when his car collided with a tanker in blinding smoke.

Seven firefighters were hurt in the crash, the fire that followed and in other operations against the blaze. Two fire tankers and several hectares of wheatgrowing country were destroyed.

Mid-January saw more fires in the Riverina and Southern Tablelands. Several centres were menaced by a blaze of more than 7 100 hectares near Gundagai, which at one stage closed the Hume Highway.

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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 historical archive easily accessible.

Commissioner Shane
Fitzsimmons has praised the chance to make the Bush
Fire Bulletin so accessible.

"The skill and dedication of our volunteer service has been recorded in the pages of the Bush Fire Bulletin, informing and bringing to life the important work our members undertake," Commissioner Fitzsimmons said. "I am very proud that this history of the NSW RFS will be available for all of Australia and the world to see."

Search place names, brigade names, dates and firerelated topics such as "fire trails".

HOW TO SEARCH BUSH FIRE BULLETIN ON TROVE

- On the Library page of the NSW RFS website, use the search box for Trove
- 2. Type in your search term
- 3. Click "Go". You will be taken to the Bush Fire Bulletin's archive on the National Library of Australia's Trove website
- 4. A range of articles will be offered for selection
- 5. Click on the green View Online box on right to view the article.

O eBulletin (email required)

- 6. You can print, download or simply read online.
- To initiate another search return to the search box on the Library page on the NSW RFS website.
- 8. Or leave the search terms ("nla.obj-284283986" OR "nla. obj-284265362") in the search box to stay within the Bush Fire Bulletin archive.

BUSH FIRE bulletin

EMAIL YOUR DETAILS TO Bush.Fire.Bulletin@rfs.nsw.gov.au TO RECEIVE THE BUSH FIRE BULLETIN DIRECT TO YOUR HOME OR TO UPDATE YOUR DETAILS.



Or cut out and mail to: Bush Fire Bulletin NSW RURAL FIRE SERVICE

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NSW RFS Member

BUSH FIRE bulletin

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Cover photo: Two boys watch the Failford Road, Darawank fire from the beach at Black Head, near Forster. Photo by Martin Von Stoll.



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