



NSW RURAL FIRE SERVICE



ANNUAL REPORT 2012/13

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FRONT PAGE: Todd Gibson (Heathcote Brigade) and Steve Franks (Heathcote) in the background) at a Hazard Reduction burn in Engadine, May 2013. Photo by Sharon Quandt

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SUMMARY REVIEW OF OPERATIONS

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Fire season overview

The 2012/13 bush fire season will be remembered as one of the most challenging and destructive in recent times.

As early as July and August 2012 crews in northern NSW were tackling a number of significant fires which impacted on communities around the Clarence Valley, Tenterfield, Armidale and Richmond Valley areas. In Region North alone firefighters dealt with 1,000 fires between July and November 2012. In the State's west, there was extensive lightning activity. In one storm alone in October, around 40 new ignitions were reported in the Barwon Darling area. In the same period crews on the Central Coast were also kept busy with Section 44 declarations at Wyee and at Pretty Beach in the Gosford area. It was the busiest start to the fire season in many years.

By the time summer came along the fire season had escalated into one of the most challenging in recent times. The level of risk leading up to the season, the weather conditions, the scale of loss, and the public demand for timely information all contributed to the challenge.

The peak of the season was in January 2013 when there was a number of large and destructive fires in areas such as Coonabarabran, Shoalhaven, Yass, Cooma and Bega Valley. During this time temperature records were broken, the first Catastrophic fire danger ratings for forested areas with large population centres were issued and there was an unprecedented demand for information about fire activity.

In fact January 2013 was the hottest month on record for NSW.

Tuesday 8 January was the worst fire weather day ever recorded.

Hot, dry and gusty winds led to Catastrophic fire danger ratings being declared for the Illawarra/ Shoalhaven and the Southern Ranges. This was

PREVIOUS PAGE: 18 January 2013: A frightening situation at the Aberdare fire near Cessnock for Greta Brigade members. Photo courtesy of Peter Stoop, The Newcastle Herald.

the first time since December 2009 that a Catastrophic fire danger rating had been issued in NSW and it was the first time ever the rating has been used across a large urban centre. That day, a number of significant fires developed including in the Shoalhaven, Cooma and Yass areas.

The hot and dry conditions persisted for the following week. On Sunday 13 January, a large and destructive fire spread through the Warrumbungle National Park, west of Coonabarabran. This fire destroyed 53 homes, burnt through in excess of 50,000 hectares and caused damage to some facilities at the Siding Spring Observatory.

The following Friday, 18 January, the State experienced another terrible day in terms of weather conditions, with temperature records being broken in many areas. Fires in the Shoalhaven, Bega Valley and Cessnock areas, as well as those already burning, received significant focus.

Across this two-week period, NSW RFS crews and other agencies attended more than 300 bush and grass fires, with more than 650,000 hectares burnt. There were large losses of stock, as well as fencing and farming equipment. Between 7-21 January 2013, 10,500 firefighters from NSW RFS, FRNSW, National Parks and Wildlife Service (NPWS) and Forests NSW were deployed. Of the 14 days, four were Statewide Total Fire Bans and eight days had Total Fire Bans in some districts. There were 41 Section 44 declarations in that period. There were, however, 57 homes lost and 149 other structures such as outbuildings, and sheds were lost – mostly in Coonabarabran. Agricultural losses were severe in some areas with thousands of head of stock lost, 1,700km of rural fencing destroyed and 33,000ha of pasture burned.

The State Air Desk coordinated more than 650 aviation taskings during this time. A massive transport and logistical operation saw more than 450 pallets of foam, drinking water and energy packs delivered. A NSW RFS semi-trailer and tilt tray travelled more than 16,500 kilometres delivering these.

Fortunately, and to the credit of the entire Service and supporting agencies, there was no loss of human life.

Thirst for information

The public demand for information reached a level never before seen.

In the two-week period of 7-21 January there were 99 activations of the Emergency Alert telephone warning system, including 43 uses of the new location-based warning system for mobiles.

The NSW RFS public website received 8.5 million views, while there was more than 27 million views on the NSW RFS Facebook page, 15 million on Twitter, and 12,000 downloads of the Fires Near Me smart phone application. In addition, the Bush Fire Information Line received over 26,000 calls.

Many of the changes instituted after the 2009 Black Saturday fires in Victoria, were put to the test in this busy period. Communications and public information innovations were very successful in preparing the public for the very hot weather. The NSW RFS website became a trusted source of up-to-the-minute information.

While the January fires quite rightly attracted much of the attention the whole fire season from July 2012 to March 2013 was busy for the NSW RFS.

Fire season at a glance

July 2012 - March 2013

Total bush and grass fires	5,885
Area burnt	1.4 million hectares
Total fire ban declarations	26
Section 44 declarations	80
Personnel deployments	20,544
Aircraft taskings	2,066
Firefighter injuries	259
Human lives lost	0

Highlights and lessons of the 2012/13 fire season

Recent investments in public information and warnings, technology, aircraft and frontline support paid off across the 2012/13 fire season. The high availability and early activation of aircraft proved to be extremely successful in protecting homes along with strategic use of Rapid Aerial Response Teams and base camps.

Despite best efforts 62 houses were destroyed throughout the fire season. Understanding the damage and the fire behaviour that led to the losses is paramount to the NSW RFS. The Service's Bush Fire Impact Analysis teams were busy from September 2012 through to the end of January 2013, gathering information about each of the losses.

The response of residents in the stress of an approaching fire is another rich source of knowledge for the Service. In February 2013 the NSW RFS requested the Bushfire CRC to conduct research into the bush fire preparedness and behaviour of residents for three of the major fires, at Coonabarabran, Shoalhaven and Yass.

Preparing for the fire season

While response bush fire is a significant focus for the NSW RFS, prevention of fire remains the other major concern and in the reporting period there was a keen interest in the reduction of hazard and preparation of resources for the coming fire season. August 2012 saw several significant steps toward preparing for the coming fire season.

On 28 August 2012 a State Operations Exercise was held at the NSW RFS Headquarters in Lidcombe. Involving around 120 participants at Headquarters and 12 districts across the State, the Exercise consisted of a dozen scenarios. Each 'incident' is simulated by an NSW RFS District office, working to pre-arranged storyline scripts, and communicating its progress to State Operations. The Exercise provides an opportunity to update, practice and hone skills prior to the fire season, in order to be ready for major or State-wide bush fire events.

With very significant grass growth across much of western NSW, concern about grass fires was heightened in the reporting period. In order to prepare volunteers for such an event two Region West Familiarisation Tours were conducted in August 2012. The tour enabled volunteers from Region East to become familiar with the heavy grass fuel loads in the mid-north western parts of NSW, learn more about grass fire behavior and meet the local volunteers.

Hazard reduction

Substantial work has been completed in 2012/13 around the State to manage and reduce bush fire hazards. Of the 9,680 proposed Hazard Reduction works, 82.9 percent have been completed.

During 2012/13, a total of 281,492 hectares were treated by hazard reduction activities. This provided bush fire protection to 146,292 properties. Annual bush fire hazard reduction targets for land management agencies responsible for bush fire prone lands were established and the number and area of hazard reduction activities were increased on national parks and reserves. A total of 209,593 hectares of National Parks and reserves were treated.

A full report on hazard reduction activities can be found on Appendix A.

Community Resilience

Public information

The NSW RFS Prepare. Act. Survive. public awareness campaign has been running since 2009 and in 2012/13 the campaign focussed on encouraging people to complete a Bush Fire Survival Plan. The range of the 2012/13 campaign was extensive, running from September 2012 to February 2013 it included coordinated television, radio, online, print and outdoor advertising.

The campaign was recognised by the advertising industry for its creative approach in encouraging people to make a Bush Fire Survival Plan. The campaign, which was produced by the Corporate Communications team, has picked up four 'bronze pencils' at the AWARD Awards, run by the Communications Council. Each of the three 30

second TV commercials won an award, while the overall campaign also picked up an award.

Post campaign research also revealed that the campaign had a positive impact on public awareness of fire safety.

Research showed that the level of preparedness and confidence within the general community had risen to its highest level, with 50 percent of people stating they are confident or very confident, while 46 percent state they are prepared or very prepared. Twenty four percent of people state they have an official Bush Fire Survival Plan. Seventy one percent of people who have a Bush Fire Survival Plan have completed it. This is an increase from 50 percent at the end of the 2011/12 season.

The second year of the three-year Prepare. Act. Survive. campaign began at the end of the 2012/13 reporting period with a focus on mobile and digital media. A mobile and tablet version of the Plan is under development, which will provide people with tips for preparing, as well as information during fires. This will complement the Fires Near Me smart phone application.

Our members

Employer recognition program

The Supportive Employer Program was officially launched on 6 March 2013 by the Minister for Police and Emergency Services, the Hon. Michael Gallacher and Commissioner Shane Fitzsimmons. The primary intention of the program is to acknowledge and recognise the contribution that employers and self employed volunteers make to the NSW RFS, particularly by releasing volunteers to attend incidents/activities during work hours.

Following the call for nominations by the Minister and Commissioner at the program's launch, 12 businesses were honoured with the 2013 Special Commendation during National Volunteers Week in May. The businesses ranged from self-employed volunteers, through small and medium enterprises, to large corporations.

Flexible Membership Model

In March 2013 the Flexible Membership Model (FMM) was officially launched. The FMM is essentially an approach, or way of doing things, which will encourage more people to join or stay with the NSW RFS and be part of an organisation that protects their own local communities.

Flexible membership will help the NSW RFS to retain its current vibrancy, while developing new ways for more people to participate and ultimately serve the community. It is about promoting a Service that is welcoming for people of different ages, genders, cultures and situations and has a range of roles for them. It is also about removing barriers which may deter people from participating, including allowing them to change their role and level of involvement as their availability, capabilities and interests change.

A new set of recruitment resources was also developed which more accurately reflect the variety of roles that are currently being undertaken within the NSW RFS.

Organisational capability

Financial services

The NSW Budget allocation for the total expenses of the NSW RFS for 2012/13 was \$303.1 million; an increase of \$17.7 million or 6.2 percent.

The funding provided enabled the Service to:

- > Continue its commitment to bush fire prone communities through a combination of fire mitigation work crews, fire mitigation grants, hazard reduction allocations to Local Government and investment in Neighbourhood Safer Places
- > Progress the program to upgrade the private mobile radio network and paging infrastructure to ensure volunteers have modern and reliable communication tools
- > Enhance equipment and facilities for volunteer firefighters through the provision of tankers and other firefighting vehicles, new and upgraded Brigade stations and Fire Control Centres and upgraded firefighting equipment including personal protective equipment

- > Improve community awareness through the Prepare. Act. Survive. public awareness campaign

New corporate governance framework

An enhanced Corporate Governance Framework for the Service based on the 'Lighthouse' model of the Audit Office of NSW, was developed. This Corporate Governance Framework position paper was approved by the Commissioner on 18 April 2013.

While the NSW RFS is well placed in relation to its governance arrangements work is continuing to improve them. The following is being undertaken as part of the Governance Framework Project:

- > developing a governance policy
- > clearly documenting the NSW RFS Corporate Governance Framework
- > actively communicating and promoting the NSW RFS Governance model across the Service (i.e. the Fire Tower model)
- > establishing a regular reporting regime as part of the governance framework to the Executive, CEG and to the Audit and Risk Committee
- > developing a governance awareness / training program based on the Framework
- > assessing the opportunity for a self assessment strategy to be included in the Governance regime
- > reviewing of the Service's internal control system, including compliance and the associated broader Executive assurance process related to the internal control system
- > contributing to an annual governance statement on the internal controls.

Finally, in order to better contextualise the symbology of the governance framework and related concepts to the NSW RFS environment, the Audit Office 'Lighthouse' model visual representation has been revised into a NSW RFS Governance Fire Tower model.

Arson prevention

The NSW RFS is the lead agency in providing a new system to help combat arson which was implemented in the reporting period.

The Arson Trend Analysis System (ATAS) allows Fire Investigators to rapidly select, collate, assess and export information on fire incidents in NSW soon after they have occurred. The power of the system lies in its ability to very quickly generate reports which reveal patterns of behaviour – such as clusters of incidents taking place in a certain locality or connected incidents happening one after the other. The reports are easy to read – maps and graphs are automatically generated. This is the first time data about fire incidents is being shared between NSW RFS, FRNSW, NSW Police and NPWS which makes the system even more powerful for fire investigators.

The Bush Fire Arson Taskforce (BFAT) evolved as a result of issues arising from the 2009 Black Saturday Fires in Victoria and the subsequent Federal Attorney General's Workshop on the Prevention of Arson.

Membership comprises of NSW RFS, NSW Police Force, FRNSW, NPWS and Juvenile Justice personnel. The primary role of the BFAT is to reduce the incidence and impact of arson and deliberately lit bush fires throughout NSW. Assistant Commissioner Rob Rogers represents the NSW RFS on this committee.

Fire Behaviour Analysis

Predicting how fast a fire is travelling, where embers may land and how hot a fire might get are aspects of the Fire Behaviour Analysis (FBA) and Smoke Plume Modelling which was active in the reporting period.

FBA provides timely and informative advice about the predicted passage of a fire and the actions to be taken by people in areas potentially in its path is a key recommendation. A project to expand the use of FBA in the field and integrate it into Incident Management Teams across the State was implemented in the reporting period. Two Portable Automatic Weather Stations (PAWS) have also been purchased to support FBA and Bureau of Meteorology (BOM) forecasts. So far more than 56

members have been trained as Fire Behaviour Analysts across NSW.

Enterprise Risk Management Award

The NSW RFS has continued to enhance its level of risk maturity and has further integrated risk management with planning, project management, internal audit and other decision-making processes. A risk based Internal Audit Plan was developed and a significant number of risk workshops were regularly facilitated throughout the year.

In the reporting period the NSW RFS was recognised as a leader in risk management practice within the NSW public sector at the 2012 Treasury Managed Funds Awards for Excellence.

The NSW RFS won the 'Framework and Systems Risk Management Award' - which recognised excellence in the implementation of a risk management-related framework or system. In winning this award, the NSW RFS was able to demonstrate that managing risk has been embedded within its planning processes, decision-making structures and operational procedures.

The NSW RFS's organisational performance against specific measures has improved after risk treatment, and risk management is increasingly used to inform decision-making across the NSW RFS to improve outcomes and provide value. Among the many key factors in establishing the NSW RFS's successful risk management framework have been using a formal project methodology and governance and a staged implementation approach; identifying best practice; developing networks; resourcing; extensive stakeholder consultation and building capability.

New appliances rolled out

The 2012/13 fire season demonstrated the benefits of a modern fleet. In early 2013 the Service launched two new firefighting vehicles, the Cat 6 Firefighting Appliance and Cat 13 Bulk Water Support Unit. These appliances carry 9,000 and 11,000 litres respectively. Both are based on the same Single Cab, an Isuzu FVZ 1400, powered by a six-cylinder 24 valve SOHC engine with an Allison six speed automatic transmission configured with a hand lever operated

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transmission retarder. To improve the vehicles off road capability, the rear axles are fitted with both diff locks and cross locks. The Cat 6 and the Cat 13 bring a greater diversity and capacity to the NSW RFS operations and were designed with a view to the future. They both allow operations to be delivered effectively while using smaller crews, as well as providing improved access to possible water sources. The development of these two appliances has been the direct result of engaging with the volunteers who use these vehicles.

