Forestry Corporation

Fire Management Plan

forestrycorporation.com.au

Contents

Document title: FCNSW Fire Management Plan		Version No.: 1	Page **2** of **41**
Document ID: D00271354	Owner: State Fire Manager	Issue date: August 2019	Review date: August 2024

WARNING: a printed copy of this document is uncontrolled. Please verify this is the latest version prior to use.

Document title: FCNSW Fire Management Plan		Version No.: 1	Page **3** of **41**
Document ID: D00271354	Owner: State Fire Manager	Issue date: August 2019	Review date: August 2024

WARNING: a printed copy of this document is uncontrolled. Please verify this is the latest version prior to use.

1. Introduction

Forestry Corporation of NSW (FCNSW) manages 2.19 million ha of native forest and plantations in NSW, with most of the softwood plantation and some of the eucalypt plantation being highly susceptible to severe damage by low to moderate intensity fires for their entire crop life and mortality from high intensity fires. The forest industry is valued at more than $2.4 billion within the State.

The main risk to these assets is fire. FCNSW statutory obligations for fire management arise from the *Forestry Act 2012* and the *Rural Fires Act 1997*. These Acts place a responsibility on FCNSW to

» protect life and property from wildfire;
» minimise the spread of wildfire from State forests and other lands managed by FCNSW, and
» protect State forests from the damaging effects of wildfire.

In addition to these responsibilities, the Rural Fires Act establishes FCNSW as one of four Fire Authorities and a member of the NSW Bush Fire Coordinating Committee which enables a statewide Coordinated Fire management approach.

This Fire Management Plan describes the systems developed to implement FCNSW fire management policies and strategies on State forests and other lands managed by FCNSW to meet its obligations and business imperatives.

2. Scope of the plan

This Plan provides the framework for how Forestry Corporation intends to manage fire on State forests and other land owned or managed by Forestry Corporation of NSW. It is not intended to repeat existing plans, policies or procedures, but to provide overarching guidance to our fire management arrangements. Included are policies, strategies, and approaches we take to minimise the fire risks to our commercial assets, to our industry, and to neighbours and communities.

The broad range of forest types, fire history, climate, weather, unpredictability between years and seasons and forest values across the state mean that the risk posed by fire varies significantly making a risk-based approach prudent.

The term "fire management" includes both fire prevention and fire suppression activities.

3. Context

FCNSW is the largest manager of commercial native and plantation forests in NSW, managing recreation, environmental sustainability and renewable timber production on more than two million hectares of NSW State forests and other land.

FCNSW is Australia's largest grower of plantation pine, producing enough timber to construct a quarter of the houses built in Australia each year. FCNSW also produces certified sustainable native hardwood timber. A State Owned Corporation with an independent Board of Directors, FCNSW' sustainability framework sets out our principles for managing both the forests and our business. Financial statements are available in the Annual Reports.

FCNSW' forest estate is geographically disperse. We manage native forests with a wide diversity in ecosystems, landscape features and land use patterns along the coast and tablelands of NSW from the QLD to the Victorian borders. This also includes large areas of native timber plantations. We have two extensive pine plantation areas around Tumut and Bathurst and three smaller areas near Walcha, Grafton and Bombala. We also manage large areas of native cypress forests in the west of the state, as well as smaller areas of red gum forest along the Murray River.

As such, we are a commercial organization with contractual obligations to supply timber to a range of customers. The sustainable supply of timber from both hardwood and plantation forests can be severely impacted by unmanaged fire and other natural events which have the potential to damage or destroy the resource.

NSW has rather unique cooperative fire and response arrangements established between its key fire authorities. These arrangements provide for the responsibility of land management agencies to manage fuel on their estate and to respond to and control wildfire. It also enables high levels of support and coordination between the agencies to ensure sufficient resources to respond to escalating fire situations which are beyond the capability of any one agency. It provides for a shared responsibility and ability to operate within an inter-agency coordinated system.

3.1   COMPLIANCE FRAMEWORK

This Plan meets legal and other best practice standards and requirements for fire management[1]. Refer to Table 1.

---

[1] For greater detail, please refer to Forestry Corporation's Compliance Register.

Document title: FCNSW Fire Management Plan		Version No.: 1	Page **5** of **41**
Document ID: D00271354	Owner: State Fire Manager	Issue date: August 2019	Review date: August 2024

WARNING: a printed copy of this document is uncontrolled. Please verify this is the latest version prior to use.

	Legislation	Plans/ Regulatory Instruments	Committees	Strategy/ policy
Commonwealth	Environmental Protection and Biodiversity Conservation Act 1999		Australasian Fire & Emergency Service Authorities Council (AFAC) Forest Fire Management Group (FFMG)	National Bushfire Management Policy Statement for Forests and Rangelands
State (NSW)	Forestry Act 2012 No 96	Integrated Forestry Operations Approvals (IFOAs)		
	Rural Fires Act 1997 No 65	Bushfire Environmental Assessment Code Bushfire risk management plans	Bush Fire Coordinating Committee (BFCC) Bushfire Management Committees (BFMCs)	Bush Fire Coordinating Committee Policies
	Plantations and Reafforestation Act 1999	P&R (Code) Regulation (fire roads)		
	Environmental Planning and Assessment Act 1979 No 203	EIA process		
	National Parks and Wildlife Act 1974 No 80	FCNSW Cultural Heritage Guidelines		
FCNSW		Fire Management Plan		Forest management policy Fire management policy

3.1.1 FCNSW – A Recognised Fire Authority

FCNSW is a recognised Fire Authority under the Rural Fires Act, giving FCNSW the authority to manage fires on its estate. In addition to this:

» The RFS Commissioner may delegate a function to FCNSW staff (Sect 33D)
» FCNSW staff should be advised when there is an unauthorized fire (Sect 64)
» FCNSW staff are authorised to light a fire for the purposes of back burning (Sect 86)
» FCNSW staff may enter adjoining property - up to 8 km from FCNSW estate – and undertake actions necessary to suppress fires (Sect 133).

Document title: FCNSW Fire Management Plan		Version No.: 1	Page **6** of **41**
Document ID: D00271354	Owner: State Fire Manager	Issue date: August 2019	Review date: August 2024

WARNING: a printed copy of this document is uncontrolled. Please verify this is the latest version prior to use.

» FCNSW can issue Hazard Reduction Certificates for hazard reduction burns in State forests (Sec 100G)

3.1.2 Bush Fire Coordinating Committee (BFCC)

The Bush Fire Coordinating Committee (BFCC) is established under the provisions of Section 46 of the *Rural Fires Act 1997*.

The Committee is chaired by the NSW RFS Commissioner and comprises nominees from the following:

» Fire and Rescue NSW
» Department of Industry – Resources and Energy and Crown Lands Divisions
» Office of Environment and Heritage
» Local Government and Shires Association of NSW
» NSW Police Force
» Minister for the Environment
» Nature Conservation Council of NSW
» NSW Farmers Association
» Ministry for Police and Emergency Services
» Forestry Corporation of NSW

The BFCC reports to the Minister for Emergency Services and is responsible for planning in relation to fire prevention and coordinated bush firefighting and advises the Commissioner on bush fire prevention, mitigation and coordinated bush fire suppression. The Committee has other functions imposed upon it by or under the *Rural Fires Act 1997* and other legislation.

The Chief Forester is FCNSW' representative on this Committee.

3.1.3 Bush Fire Management Committees

The BFCC constitutes Bush Fire Management Committees (BFMCs) for all rural fire districts, areas with a significant risk of bush fire and approves the draft plans of operations and bush fire risk management plans that are prepared by the BFMCs.

FCNSW sits on these committees where there is a forest resource within the Committee's area of responsibility (Section6.2, Table 4)

Under the Rural Fires Act, the Rural Fire Service have responsibility for coordinating the development of District Bushfire Risk Management Plans. This is done through each District Bush Fire Management Committee which comprises FCNSW, other Public Land Managers and other representative landholders or interest groups.

Bush Fire Risk Management Plans are strategic documents that identify community assets at risk and outline five-year multi-agency programs designed to reduce the risk of bush fire to those assets. Treatments may include hazard reduction burning, grazing, community education, fire trail maintenance and establishing community fireguard groups.

These plans specifically:

» Identify the level of bush fire risk across the BFMC area.

Document title: FCNSW Fire Management Plan		Version No.: 1	Page **7** of **41**
Document ID: D00271354	Owner: State Fire Manager	Issue date: August 2019	Review date: August 2024

WARNING: a printed copy of this document is uncontrolled. Please verify this is the latest version prior to use.

» Develop treatment strategies for risks identified by the BFMC, including the location of Bush Fire Management Zones.
» Identify the agencies responsible for implementing the treatment strategies.
» Define a process for prioritising treatments as well as monitoring implementation progress over the life of the Plan.

Document title: FCNSW Fire Management Plan		Version No.: 1	Page **8** of **41**
Document ID: D00271354	Owner: State Fire Manager	Issue date: August 2019	Review date: August 2024

WARNING: a printed copy of this document is uncontrolled. Please verify this is the latest version prior to use.

4. Fire management in FCNSW

4.1   OBJECTIVES

FCNSW is a commercial business and the protection of it's timber assets are crucial to it's sustainability, viability and profitability. Any substantial loss of timber resources has long term supply implications. In order to deliver fire protection to the greatest extent possible, FCNSW recognises that it needs to:

i.   work collaboratively with other NSW fire authorities to develop bushfire risk management and operations plans, and will implement programs for bushfire prevention, mitigation, preparedness, response and recovery.
ii.   work cooperatively with other NSW fire authorities to respond to bushfires to minimise the adverse impacts on human life, on social, economic and environmental values.
iii. use fire under appropriate conditions to promote ecosystem health, diversity and resilience in native forests, and as a risk reduction strategy.
iv.   maintain appropriate levels of fire management capability to effectively discharge its responsibilities as a sustainable forest manager and statutory fire authority (recognising that bushfire risk management is a shared responsibility (involving other NSW fire authorities, state and local government, communities and individuals).

4.2   POLICIES

FCNSW has a Fire management policy. Other relevant policies include:

» Health and Safety Policy and associated safety management system
» Alcohol and Other Drugs Policy
» Forest Management Policy
» Fire Training Currency and Competency

In addition, SPD and HFD are both certified to ISO 14001: Environmental Management System and the Australian Standard for Sustainable Forest Management (AS 4708).

Environmental care

The Forest Management Policy outlines FCNSW' intent for management of the environment. FCNSW adopt principles of environmental care when planning and conducting fire management activities in line with the following:

» Maintain the vigour and diversity in NSW's indigenous flora and fauna species populations and communities through use of appropriate fire regimes and fire management activities
» Protect water quality and quantity by implementing measures designed to minimise the impact of fire on swampy ground and bodies of standing water, and their physical, chemical, and biological qualities
» Protect soil to maintain its physical and chemical properties and promote stabilisation of bare or disturbed earth

Document title: FCNSW Fire Management Plan		Version No.: 1	Page **9** of **41**
Document ID: D00271354	Owner: State Fire Manager	Issue date: August 2019	Review date: August 2024

WARNING: a printed copy of this document is uncontrolled. Please verify this is the latest version prior to use.

» Consider landscape values, geomorphologic features, and cultural and historical sites when planning operations
» Protect indigenous flora and fauna following wildfire suppression by measures which promote the re-establishment of the ecological processes existing prior to the wildfire
» Avoid the possible introduction and spread of pest plants and animals, plant diseases, and insect pests
» Address air quality by measures which diminish the impacts of smoke generated by prescribed burning.

4.3 MEDIA

The Media Policy outlines how FCNSW interacts with the media. Media will be pro-actively managed according to the sensitivity of issues for all fire management activities. If staff are contacted by the media regarding information about a fire, they should transfer the call to senior staff in the Forest Protection Area. In the absence of those staff, refer the caller to the Communications & Media Manager or the State Fire Manager. FCNSW will also:

» Facilitate the provision of information to media outlets that informs the public of our fire management operations in accordance with internal media policy.
» Provide information to the publicly available RFS website on fire management operations
» Utilise electronic media outlets established by the RFS, including the internet, to provide public alerts concerning wildfire incidents and smoke accumulation events.

4.4 RISK MANAGEMENT

FCNSW adopts a risk management approach throughout its fire operations, consistent with its Risk Management Framework. The main risk categories for fire management are described below.

4.4.1 People

Fire presents risks to the health, safety and welfare of staff, contractors and forest visitors. Fire and associated smoke can also impact communities and our neighbours. FCNSW is also committed to forming partnerships with traditional aboriginal custodians to insure the maintenance and protection of their culture and values.

4.4.2 Resources

FCNSW maintains fire management resources according to that defined in Pre-Incident Plans and preparedness guidelines (which are formulated around daily Fire Danger Ratings (FDR). Forestry Corporation is committed to using resources cost effectively and ensuring financial accountability in its fire management activities.

Document title: FCNSW Fire Management Plan		Version No.: 1	Page **10** of **41**
Document ID: D00271354	Owner: State Fire Manager	Issue date: August 2019	Review date: August 2024

WARNING: a printed copy of this document is uncontrolled. Please verify this is the latest version prior to use.

4.4.3   Impact on the environment

The environmental impact of a fire depends, of course, on the size and intensity of the fire. Fire can have the following impacts on the environment we are trying to protect and maintain;

Air quality

Fire can have a significant impact on air quality causing detrimental impacts on major population centers, airports, major roads, neighbours and other sensitive areas.

Planning and risk analysis are undertaken for each prescribed burn to determine the comparative risk of smoke impacts from burns on communities and air quality with the risks to public safety and natural assets from potential wildfire. Information on weather, fire behaviour, smoke trajectory predictions, burn location, size and strategic importance in determining the most suitable burn prescription and ignition application to achieve an effective burn outcome with low smoke impacts.

Water quality

Our state forests provide for important and significant water catchments for communities across the state. Planning and operations are assessed by risk to minimise the impact on water quality, and reduce risks associated with increased chance of sedimentation.

Habitat modification

Habitat modification includes destruction of ground cover and subsequent accelerated erosion (land degradation), changes in ground cover species composition (perennial grasses to annual weeds), physical modification of stream profiles and water quality and physical destruction of individual plants.

Soil quality

Fire can lead to increased erosion through the removal of ground cover.

Prescribed burn planning considers the impacts of fire on soils and aims to deliver mosaic burn patterns that maintain soil cover while at the same time reducing fuel loads. Forestry operations and earthworks are undertaken in accordance with strict "best practice guidelines" to insure soil quality is not degraded. Post fire recovery operations are also undertaken to insure soil stability.

4.4.4   Commercial imperatives

Forestry Corporation is a commercially-focused business, returning a dividend to the State of New South Wales.

Timber needs to be supplied to customers to meet long term Wood Supply Agreements. One of the greatest risks to this is the impact of unplanned fire. The loss of significant areas of plantation or native forest regrowth ultimately impacts our ability to meet these wood supply commitments.

Plantation estate within Softwoods is susceptible to fire, although *P. elliotti* var. *elliotii* shows a tolerance to mild fire once established. When not killed outright, fire can damage plantation timber or greatly reduce growth rates. Whilst it may still be possible to harvest and recover plantation products, it will be at a much-reduced value.

The hardwood estate comprises a range of forest types and timbers and provides for a diverse range of other community values such as recreation, water, biodiversity and cultural assets. In terms of timber production, we manage large areas of high value timber resources, including hardwood plantations. These include fast growing regeneration forests along the NSW coast through to cypress and redgum

forests in the central western regions of the state. Cypress forests are susceptible to fire as are young regeneration forests on the coast. As with plantations there is a significant loss of resource and time to re-establish these forests if they are impacted by wildfire.

It is not only the loss or damage to the timber resource by fire that impacts the industry and the community. There is a flow on effect right across the industry. Our industry employs a significant number of people in communities across the state including contractors engaged in silviculture, harvesting and haulage to supply timber to large mills and paper manufacturers. Large fire events will ultimately have a significant impact on regional economies.

These potential impacts are well recognized by FCNSW and the other fire authorities in NSW, and the coordinated approach to interagency fire fighting and support recognizes and reflects the impacts that large uncontrolled fires will have on the forests, on the industry and on the communities. Commercial forests are defined and recognized in Bushfire Risk Management plans as high risk, high value assets and coordinated operational planning and mitigation activities are highly prioritized for their protection.

Document title: FCNSW Fire Management Plan		Version No.: 1	Page **12** of **41**
Document ID: D00271354	Owner: State Fire Manager	Issue date: August 2019	Review date: August 2024

WARNING: a printed copy of this document is uncontrolled. Please verify this is the latest version prior to use.

5. Safety

Safety is a key driver in FCNSW. We have defined a list of critical risks to our people and have implemented a range of actions and utilized technology to reduce these risks. Keeping our people safe and ensuring that they get home safely to their families at the end of each day is our "catchcry".

FCNSW

» Ensure the safety of all firefighting and support personnel is given the highest priority in the planning and application of all fire management operations.
» Review and apply standards for the medical and physical fitness requirements of all fire management personnel in accordance with best practice information and experience as set out in the Fire Fitness Guidelines for Managing the Fire Fitness Program.
» Make available critical incident stress debriefing to personnel subjected to traumatic events or circumstances
» Give firefighters sufficient time to rest to relieve fatigue and stress arising from their involvement in fire suppression operations as far as is reasonably practical.

Random drug and alcohol testing can be undertake at any time and at any part of the work place, including on the fire ground, as per the FCNSW Alcohol and Other Drugs Policy.

The following initiatives and procedures are maintained by FCNSW to further enhance and promote the safety of all firefighters working for the organization.

5.1 FITNESS FOR FIREFIGHTING

FCNSW firefighters undertake an annual fitness assessment to ensure they are fit for task. There are various levels of fitness prescribed for roles undertaken by staff. These are detailed in the Task Based Assessment Document (available on the Fire and Radio intranet).

FCNSW staff are required to undertake a medical test prior to employment, including a test for drugs and alcohol. Firefighting staff are required to undertake further medical checks annually or every three years, the regularity of which are determined by age, general fitness and doctor's assessment.

5.1.1 Personal protective equipment (PPE)/Personal Protective Clothing (PPC)

All FCNSW fire fighters are supplied with, and expected to wear or carry, standard firefighting PPE/ PPC. PPE/ PPC meets Australian Standards and it is the responsibility of the wearer to ensure it is maintained and worn or carried in accordance with SOP 19/08 PPC & PPE for fire operations.

5.2 STANDARD OPERATING PROCEDURES AND GUIDELINES

Fire related Standard Operating Procedures and Guidelines are developed and updated as required. They can be found on the Fire and Radio Intranet.

All firefighting staff are expected to be aware of and abide by these SOPs and Guidelines.

Document title: FCNSW Fire Management Plan		Version No.: 1	Page **13** of **41**
Document ID: D00271354	Owner: State Fire Manager	Issue date: August 2019	Review date: August 2024

WARNING: a printed copy of this document is uncontrolled. Please verify this is the latest version prior to use.

5.3 VERY HIGH TREE HAZARD AREAS

The safety of firefighters is always paramount in firefighting operations, and dangerous trees have been identified as one of the organisation's Critical Risks.

FCNSW has a policy and decision-making tool to determine the procedures to be adopted in Areas of Very High Tree Hazard (SOP 18-53 Very High Tree Hazard Areas and Firefighter Safety).

5.4 FATIGUE MANAGEMENT

Fatigue management guidelines apply within FCNSW and incident management teams schedule rosters and crew changeovers accordingly. FCNSW has a procedure for managing firefighter fatigue (Fire SOP 19-16 Managing fatigue - work hours).

It is the responsibility of every fire fighter as well as Duty Officers and Incident Management Teams to be aware of and abide by these procedures.

5.5 VEHICLES AND DRIVING

The extent of the forest estate and operations means that many staff are required to drive long distances as part of their workday. Driving is considered one of the organisation's highest critical risks. This is exacerbated in fire management because of the work environment, which can include night time operations and extended periods of work. FCNSW strive to limit this risk by enforcing fatigue management guidelines, monitoring vehicle movements and safe driving practice. Staff are constantly reminded of the risks and controls to minimize accidents and incidents associated with driving.

Document title: FCNSW Fire Management Plan		Version No.: 1	Page **14** of **41**
Document ID: D00271354	Owner: State Fire Manager	Issue date: August 2019	Review date: August 2024

WARNING: a printed copy of this document is uncontrolled. Please verify this is the latest version prior to use.

6. Organisation of fire management

6.1 FORESTRY CORPORATION

6.1.1 Fire Management Branch

State-wide coordination of fire management activities is facilitated by Fire Management Branch within Corporate Services Division. Fire Management Branch:

» provides for the delivery of fire training
» develop and maintain fire related standards and procedures
» collate state-wide fire reporting requirements
» negotiate, co-ordinate and manage out of area deployments to wildfires
» undertake the state liaison role with RFS and the other fire authorities and
» support Forest Protection Areas (FPAs) within HFD and SPD.

Two (2) operating divisions - Hardwood Forests and Softwood Plantations – are responsible for fire preparedness and response in defined Forest Protection Areas (refer Figure 1).

6.1.2 Hardwood Forests Division

For the purposes of fire management, HFD is organised into Forest Protection Areas which are geographically based (refer Table 2 Hardwood Forest Division's Forest Protection areas).

TABLE 2 HARDWOOD FOREST DIVISION'S FOREST PROTECTION AREAS

Location	Forest Protection Area
Coastal	Far North Coast
	North Coast
	Mid North Coast
	Hunter
	South Coast
Western	Northern Cypress
	Southern Cypress
	Riverina

Document title: FCNSW Fire Management Plan		Version No.: 1	Page **15** of **41**
Document ID: D00271354	Owner: State Fire Manager	Issue date: August 2019	Review date: August 2024

WARNING: a printed copy of this document is uncontrolled. Please verify this is the latest version prior to use.

6.1.3 Softwood Plantations Division

In Softwood Plantations Division, the Management Area boundaries are used for fire management. For the sake of consistency in this document, the term Forest Protection Areas is used. These are detailed in Table 3 Regions and associated Management Areas in SPD.

TABLE 3 REGIONS AND ASSOCIATED MANAGEMENT AREAS IN SPD

Region	Management Area/ Forest Protection Areas
Snowy	Bombala
	Tumut (includes Moss Vale and Tallaganda Plantations)
Northern Softwood	Bathurst
	Grafton
	Walcha

FIGURE 1 FCNSW FOREST PROTECTION AREAS

FIGURE 1 FCNSW FOREST PROTECTION AREAS
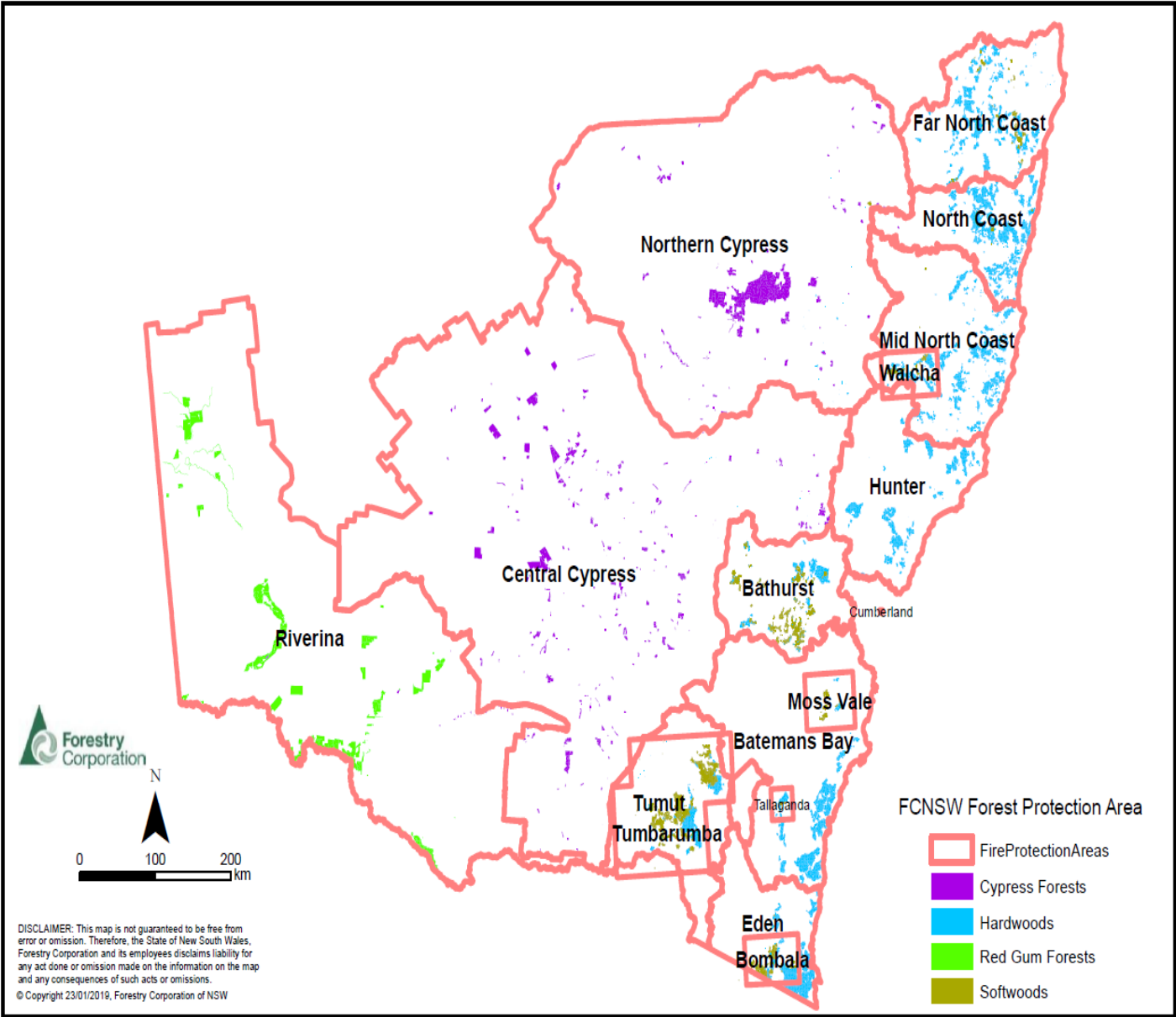
6.2   NSW coordinated fire management structure

FCNSW works closely with other government agencies, including NSW Rural Fire Service, National Parks and Wildlife Service and Fire and Rescue NSW. This is generally coordinated through local Bush Fire Management Committees.

A Statewide map and District Overview map of RFS Districts and LGAs can be found at: https://www.rfs.nsw.gov.au/resources/publications/statewide-map

Where both hardwood and softwood divisions have estate within the one Bush Fire Management Committee area, refer to the "Fire management responsibility for Forestry Corporation Assets and Fire management arrangements between SPD and HFD" document.

TABLE 4: FOREST PROTECTION AREA X BUSHFIRE MANAGEMENT COMMITTEE X LOCAL GOVERNMENT AREA

FCNSW office	FCNSW Forest Protection Area	Bush Fire Management Committee
Casino	Far North Coast	» Northern Tablelands
Grafton[2]		» Clarence Valley » Northern Rivers
Coffs Harbour	North Coast	» Mid North Coast » Lower North Coast » Clarence Valley
Wauchope	Mid North Coast	» Lower North Coast » Mid Coast » New England » Tamworth » Liverpool Range
Maitland	Hunter	» Mid Coast » Lower Hunter » Hunter Valley » Central Coast » Hawkesbury

[2] Grafton Management Area (SPD) is part of the Far North Coast Forest Protection Area

Document title: FCNSW Fire Management Plan		Version No.: 1	Page **18** of **41**
Document ID: D00271354	Owner: State Fire Manager	Issue date: August 2019	Review date: August 2024

WARNING: a printed copy of this document is uncontrolled. Please verify this is the latest version prior to use.

Eden/ Batemans Bay	South Coast	» Bega Valley
		» Snowy-Monaro
		» Shoalhaven
		» Lake George
		» Eurobodalla
Tumbarumba		» Riverina Highlands
Baradine/Inverell/ Narrabri	Northern Cypress	» North Tablelands
		» Gwydir Namoi Tamworth
		» Liverpool Range
		» Castlereagh
		» North West
Dubbo/ Forbes	Southern Cypress	» Orana
		» Cudgegong
		» Far West
		» Mid-Lachlan Valley
		» Bland-Temora Zone
		» Riveri
		» MIA Mid-West
Deniliquin/Barham/ Balranald	Riverina	» Mid Murray
		» Lower Western
Snowy	Bombala	» Snowy Monaro
		» Bega Valley
	Tumut	» Snowy Valleys
		» Greater Hume
		» Southern Border
		» Southern Highlands
		» South West Slopes
		» Lake George
Northern Softwoods	Bathurst	» Chifley
		» Canobolas
	Walcha	» New England
		» Tamworth

Grafton[3]

> » Clarence Valley
> » Northern Rivers

6.3 Capability

Each Forest Protection Area maintains:

» A defined "initial attack" capability for wildfire response which has been defined and established in accordance with a risk-based approach. This model incorporates a daily readiness and preparedness guideline which is informed by the fire danger rating and levels of fire activity on any given day.
» A Pre-Incident Plan, revised annually, which holds this guideline along with resources and procedures for daily activities and requirements for fire preparedness and response.
» A Fuel Management Plan, revised annually, with scheduled mitigation activities that reduce the risk of fire or support operational activities in terms of detection and response.

6.3.1 Staff

The "initial attack" capability requirements for each FPA defines the number of firefighters and support staff that are necessary to fill rosters and provide initial attack to multiple fires at different locations at any given time. Most FPA staff that are fit and able are expected to be fire trained and available to respond, if not to support the firefighting effort in other ways.

Seasonal staff are also employed in HFD and SPD to supplement firefighting capacity to meet the "initial attack" numbers.

Staff are trained and experienced in a range of competencies to enable FPAs to resource fires with roles ranging from on ground fire fighters and commanders through to specialist Incident Management roles. Once fires go beyond this initial attack capability, more staff can be deployed from other FPA's to support. At this stage we would also be relying on the cooperative firefighting arrangements with other agencies and for them to also supply people to assist with the firefighting effort.

6.3.2 Training

Fire training and accreditation is an essential component of safe, efficient and effective fire management operations.

FCNSW

» Apply national standards as the basis of competency definition, or where these do not exist, accepted industry standards.
» Define competency requirements for all Incident Management roles and firefighting personnel to meet the requirements of Forest Protection Area Pre-Incident Plans.

---

[3] Grafton Management Area (SPD) is part of the Far North Coast Forest Protection Area

» Review the competencies of our firefighting personnel according to established currency requirements.
» Provide and/or facilitate training programs and competency assessments for skills acquisition, maintenance and personal and professional development to ensure personnel have the required competencies.
» Maintain systems to record training and competency for all fire management activities.

Training requirements and review/expiry dates are tracked and monitored through PeopleStreme for all FCNSW firefighting staff.

FCNSW fire training is managed and delivered through Fire Management Branch. FMB is responsible for:

» Managing the fire training program including fire training camps and pre-season fire days.
» Leading and implementing fire training to ensure FCNSW staff are accredited with and have the necessary firefighting qualifications and experience to perform roles expected of them.
» Delivering operational fire management support to the FPA's as required during fire operations.

Figure 2 Pathways available to FCNSW Staff describes the fire roles that may be undertaken and levels of experience they need to acquire to progress to more senior leadership or specialist roles.

Document title: FCNSW Fire Management Plan		Version No.: 1	Page **21** of **41**
Document ID: D00271354	Owner: State Fire Manager	Issue date: August 2019	Review date: August 2024

WARNING: a printed copy of this document is uncontrolled. Please verify this is the latest version prior to use.

Figure 2 Pathways available to FCNSW Staff

Document title: FCNSW Fire Management Plan		Version No.: 1	Page **22** of **41**
Document ID: D00271354	Owner: State Fire Manager	Issue date: August 2019	Review date: August 2024

WARNING: a printed copy of this document is uncontrolled. Please verify this is the latest version prior to use.
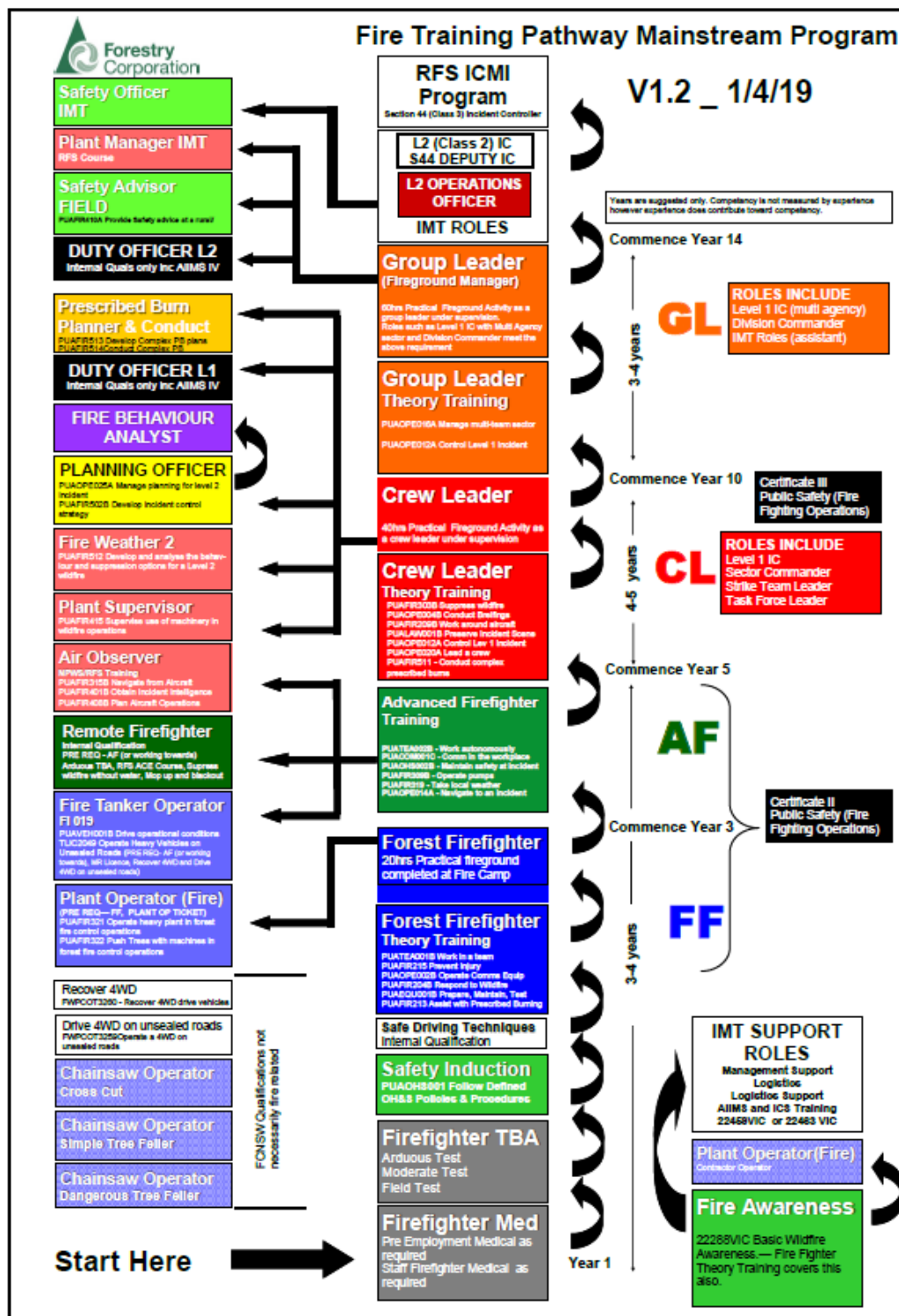
6.3.3 Facilities and equipment

Fire appliances

FCNSW maintains a fleet of around 50 heavy fire tankers (Cat 1), which are strategically located around the FPA's. Staff utilize dedicated light attack fire appliances (Cat 9), for daily duties and are usually very mobile in being able to leave normal duties to attend to fires. These resources can be deployed out of area to provide support when needed.

Heavy plant

Each FPA has access to, owns, or contracts heavy machinery that can be used in firefighting. Heavy plant may be specifically stood-up and ready for deployment, particularly during periods of high fire danger.

FCNSW uses heavy plant that is Roll Over Protection (ROP's), Falling Object Protection (FOP's) and (OPG) Operator Protection Guarding compliant (refer to Section 8.6 Using heavy plant).

FCNSW has many staff that are trained and highly experienced in operataing and supervising heavy plant. To the greatest extent possible, FCNSW should always provide a heavy Plant Supervisor to direct and work with heavy plant on the fire ground to ensure communications with the plant operator and to also provide fire protection for plant working on fire lines.

Fire towers and detection

FCNSW maintains a network of fire towers and vantage points across the state which can detect and locate fires on most State forests when they occur. Fire towers are manned according to daily readiness guidelines contained within Pre-incident Plans. We rely also on fire reports from the public or other agencies.

FCNSW have installed and have access to remote cameras on unmanned towers providing 360-degree views across both forest and parks tenure. These real time video feeds are fed back to fire rooms in the relevant FPA.

FCNSW has also developed a Remote Piloted Aircraft (RPA) capability to assist us in detecting fires and providing specific GPS coordinates.

Radio communications and technology

FCNSW maintains its own radio network which is used extensively in fire control and daily operational requirements. Radio Services specialists, located in Tumut and Coffs Harbour, service the south and north of FCNSW' radio network respectively. FCNSW has also developed a range of measures to ensure that we can communicate with other agencies to ensure inter-operability.

Refer to the Fire and Radio Services intranet page for procedures relating to radio instillation, upkeep and maintenance.

FCNSW has developed its own tablet-based mapping application which provides most staff with detailed and accurate mapping capability, and the ability to map fire details and share this near real time information with all other users.

Aircraft

FCNSW contracts at least 2 light helicopters, based at Bathurst and Tumut, during the fire season to enable reconnaissance, water bombing and air observation. Additional aircraft may be contracted or

Document title: FCNSW Fire Management Plan		Version No.: 1	Page **23** of **41**
Document ID: D00271354	Owner: State Fire Manager	Issue date: August 2019	Review date: August 2024

WARNING: a printed copy of this document is uncontrolled. Please verify this is the latest version prior to use.

sourced from the State Air desk as and when required. Refer to Section 8.7 for additional information on aircraft use.

Fire trails and access

FCNSW maintains an extensive network of roads and fire trails throughout the forests which provide both access and fire management options from which to fight and control fires. Road, track and access networks necessary for fire management purposes and other essential activities on our estate are identified. Within plantation areas, Fire Roads, suitable for Cat 1 fire tankers, may be identified and maintained in accoradnace with standards of the Plantations and Afforestation Code.

FCNSW maintains GIS database maps which indicates the standard classification of each road, track and access route. Management Areas use an annual Road Schedule to develop priorities for the construction and maintenance of fire trails, roads, and bridges and implement those plans as far as is practicable.

Water points

FCNSW adopts defined RFS criteria and standards for the establishment and maintenance of permanent or mobile water points for supply of water for ground and/ or aerial firefighting on land it manages. The location of permanent water points is signposted on the ground and recorded in FPA Pre-Incident Plans/ corporate GIS.

Fire coordination

Each FPA maintains a "Fire Duty Room" and a Duty Officer throughout the fire season. This enables us to provide "Area Control" and communications for both detection and response. The Duty Officer provides for initial coordination and resourcing of fires until or if an Incident Management team is established or required. When fires become too big for a single agency response, FCNSW moves to RFS Fire Control Centers and provides staff for Incident management roles to support the coordinated firefighting effort.

6.3.4 Weather forecasts and fire danger

FCNSW monitors seasonal and daily fire danger across the State and monitors indices indicative of seasonal and daily fire danger.

Each FPA monitors its own local weather and fire danger and sets its state of readiness against the established guidelines in their pre-incident plans. Where there is overlap between the divisions such as Bombala, Walcha and Grafton, details for preparedness are spelt out in "Fire management responsibility for Forestry Corporation Assets and Fire Management Arrangements between SPD and HFD". Where appropriate they will also liaise with the Bureau of Meteorology and the NSW Rural Fire Service regarding current and future trends in fire danger.

7. Fire management program delivery

Forestry Corporation use the "Prevention, Preparedness, Response, Recovery model" as an organising framework for delivery of its Fire management planning and programs.

7.1 FIRE PREVENTION

FCNSW undertakes, participates in, and supports programs aimed at improving the effectiveness of fire prevention activities through cooperation and collaboration with other NSW Fire and Emergency Services Authorities and other stakeholders. FCNSW works cooperatively with National Parks & Wildlife Service, Fire and Rescue NSW, Rural Fire Service, local government authorities and other stakeholders on programs to prevent the occurrence of unplanned fires.

Additional measures for fire prevention are determined and implemented at a Management Area/ Forest Protection Area level. Measures commonly applied are:

» Compliance with the Forestry Regulation 2012 to prevent ignition by machinery and enforce fire use restrictions/ forest closures in forests and camping areas to reduce accidental/careless/deliberate ignition by others.
» Systems for ceasing forest operations during severe fire weather to reduce accidental ignitions.
» Surveillance of selected camping/recreation areas during adverse conditions.
» Undertaking strategic prescribed burning programs.

7.2 PLANNING AND PREPAREDNESS

7.2.1 Fire planning

FCNSW aims to undertake fire prevention and preparedness activities in a planned and integrated manner, delivering the best possible level of fire protection, as required by legislation, while simultaneously maximising ecological and other land management outcomes.

Fire management planning is undertaken in conjunction with local government, communities and other stakeholders through local Bushfire Management Committees (BFMC). For further information on BFMCs refer to Section 13.1.3. FCNSW has input – along with others - into the BFMC coordinated risk management and Operational Planning process.

FCNSW also develops and implements

» Annual **Fire Pre-Incident plans** detailing fire suppression strategies and priorities, and
» Annual **Fuel Management plans** to mitigate the risk of bushfires on its managed estate.

This provides for a consistent and integrated approach for both suppression and fuel management activities. These must:

» Include an assessment of risk to life and property, economic risk to commercial assets, and risks to rare and threatened species and communities.
» Describe the priorities for fire protection works for a five-year period.

Document title: FCNSW Fire Management Plan		Version No.: 1	Page **25** of **41**
Document ID: D00271354	Owner: State Fire Manager	Issue date: August 2019	Review date: August 2024

WARNING: a printed copy of this document is uncontrolled. Please verify this is the latest version prior to use.

7.2.2 Pre-Incident plans

Prior to fire season commencement each year, pre-incident planning is undertaken, and a plan developed to ensure rapid and effective response to wildfires can occur.

Plans are developed for each FPA, and contain the following information:

- » Fire preparedness guidelines and fire readiness guide
- » First response arrangements
- » Local infrastructure for example, fire towers
- » Links to resourcing documents.

Levels of preparedness and defined numbers of personnel and equipment required for initial attack are determined in accordance to predicted fire danger. FCNSW ensure, as far as is practicable, that the total number and distribution of competent personnel meets the initial attack requirements as determined and approved by management for each FPA.

These arrangements are defined in each FPA Pre-incident Fire Plan.

FCNSW strategically locates personnel and resources to ensure rapid and effective response to wildfires, and to respond to changes in fire danger. Staff are available to deploy to other FCNSW areas to bolster resources or relieve fire fighters.

In line with established agreements, FCNSW may deploy personnel to assist with fires not only on other NSW estate, but also interstate and internationally.

Daily preparedness processes and systems are outlined in each Pre-Incident Plan.

7.2.3 Responsibilities

Development of Pre-incident Plans is the responsibility of:

TABLE 5 PRE-INCIDENT PLANS

Division	FPA	Prepared by	Approved by
HFD	Coastal	Forest Protection Supervisor	Senior Manager Forest Stewardship
	Western	District Managers	Senior Manager Western
SPD	All	Fire & Stewardship Manager (Snowy and Bathurst)/ District Manager (Grafton and Walcha)	Regional Manager

Note: HFD and SPD develop one Pre-incident Plan for Far North Coast comprising Grafton Plantation and Casino Harwood Management Areas. Walcha develops a Pre-Incident Plan for Plantations and Mid North Coast provides the planning for Hardwood forests in the area. There are defined and coordinated initial attack arrangements in place in these areas between divisions.

Review

Pre-incident Plans are reviewed annually, prior to the commencement of the fire season.

Document title: FCNSW Fire Management Plan		Version No.: 1	Page **26** of **41**
Document ID: D00271354	Owner: State Fire Manager	Issue date: August 2019	Review date: August 2024

WARNING: a printed copy of this document is uncontrolled. Please verify this is the latest version prior to use.

Amendments to approved Fire Management Plans follow FCNSW Document Control Procedures.

7.2.4 Fuel management plans

Both Softwood Plantation and Hardwood Forests Divisions have a Fuel Management Plan, incorporating details and schedules for each Management Area/ Forest Protection Area.

The Fuel Management Plan considers the range of fire protection strategies and practices available and adopts those which best meet both fire protection objectives and the principles of environmental management. These may include use of fire

- » at a landscape scale (including exclusion of fire)
- » as a tool to achieve ecological outcomes by altering habitat structure and composition of flora and fauna species;
- » as a silvicultural management tool for forest regeneration following timber harvesting operations (HFD);
- » to protect or enhance water catchment, archaeological, historical, Indigenous and other cultural values.

Developing the Divisional Fuel Management Plan requires

- » involvement of specialists in flora, fauna, reserve management, historic and Indigenous heritage, soil and water protection and fire management;
- » support by best available scientific research;
- » following the principles and procedures in NSW IFOAs or the Bushfire Environmental Assessment Code for ecological burning and management of native flora and fauna; and
- » accommodating fire protection objectives outlined in BFMC Risk Management Plans.

Each plan identifies 3-5 year rolling targets for prescribed burning on State forests/ areas managed by Forestry Corporation. Overall targets must meet or exceed targets for the organisation as defined by the RFS.

The Fuel Management Plan includes the following components:

GIS

GIS allows FCNSW to analyse spatial information such as the planning area, fire history, built, natural and cultural assets and values.

Layers are periodically reviewed and updated to incorporate new data and fire history as required. Map layers are stored in the Corporate GIS database.

Each Forest Protection Area has a series of **Risk Based Maps** which identify the following:

Assets at risk

This map identifies fire-vulnerable asset distribution.

- a. Settlements/townships adjoining State forest
- b. Plantations and high value young regrowth agglomerations

Document title: FCNSW Fire Management Plan		Version No.: 1	Page **27** of **41**
Document ID: D00271354	Owner: State Fire Manager	Issue date: August 2019	Review date: August 2024

WARNING: a printed copy of this document is uncontrolled. Please verify this is the latest version prior to use.

  c. Land tenure boundaries (State forest; land owned by Forestry Corporation, National Park (NP); Crown; Private)

  d. Credible high-intensity fire paths to fire-vulnerable assets via State forest

Hazard reduction constraints

This map identifies areas that are hazard reduction treatable and non-treatable land/ vegetation type map

Non-burnable area categories:

a. FCNSW land excluded from prescribed burning by environmental regulations.

b. Plantations and high value young regrowth agglomerations

c. Fire sensitive forest types in which grazing is preferred to burning as a fuel management treatment *(Note: Grazing and burning may also be a suitable option)*.

d. Forest health category 3 areas – being FCNSW land NOT currently feasible to treat with low intensity prescribed fire without Forest Health Restoration treatment first being applied.

e. FCNSW land NOT tenable for hazard reduction burning due to operational constraints (neighbour fencing/assets not feasible to protect, no reliable burn boundaries, access issues etc.).

Burnable area categories:

a. Forest Health Category 1 : forests currently in a healthy condition.

b. Forest Health Category 2 : forests in a late transition state which require burning as a matter of priority to prevent transition to Category 3.

c. Forest health Category 3. forests in significant to terminal decline, restoration treatments required to restore ecosystem process including the use of prescribed burning.

Hazard reduction fuel management zones

a. Asset Protection Zones (may be too small to depict on FPA scale maps).

b. Strategic Fire Advantage Zones

c. Forest Health Category 2 Zones requiring near-term treatment

d. Forest Health Category 1 Zones requiring treatment within nominal fire interval timeframes.

The above burn zones are additional to other fuel reduction treatments including Silvicultural burning, grazing and mechanical treatments.

7.2.5 Site specific burn plans

All prescribed burns will have an approved operational plan prior to burning. FCNSW uses standard Burn Plan templates for planning prescribed burns.

Safety and environmental considerations and potential impacts on other stakeholders are assessed as part of the planning process (due diligence). Operational plans include:

» burn objectives and prescriptions

» an operational map

» environmental approvals

» burn area details

» resources required

» standards to be met

» checks and notifications to be undertaken

Document title: FCNSW Fire Management Plan		Version No.: 1	Page **28** of **41**
Document ID: D00271354	Owner: State Fire Manager	Issue date: August 2019	Review date: August 2024

WARNING: a printed copy of this document is uncontrolled. Please verify this is the latest version prior to use.

- » authorisations to be obtained and
- » post burn appraisals to be conducted.

Operational Plans for prescribed burning remain current for 5 years where planned under the RFS Bushfire Environmental Assessment Code. Operational Plans under IFOA must be completed within 2 years of harvesting.

Authorising a site-specific burn plan under the appropriate environmental legislation

FCNSW conducts prescribed burning under one of four environmental approval pathways. These are:

i.   Burning for site preparation

FCNSW plantations are authorised under the [Plantation and Reafforestation Act 1999 No 97](#).

The specifications for windrow and debris heaps produced as part of plantation operations are described in the [Plantations and Reafforestation (Code) Regulation 2001](#).

The burning of these windrows and debris heaps is permitted under a Bushfire Hazard Reduction Certificate (BFHRC) issued pursuant to the Rural Fires Act.

ii.   Burning under the Bushfire Environmental Assessment Code (BFEAC)

Burning conducted in accordance with a Hazard Reduction Certificate (HRC) which FCNSW issue for land under which it manages. FCNSW may also issue HRCs for other lands with the consent of the owners/managers for multi-tenure burns. Changes to the regulatory environment enable bush fire hazard reduction burns to be carried out under the provisions of the Rural Fires Act in areas covered by an IFOA.

Fire Permits are not required for burns conducted under a HRC issued by FCNSW on land it manages, and it is envisaged under the Rural Fires Act, that FCNSW will remain the responsible entity, whether undertaking the burn or not.

HRCs can be issued for burning and other bush fire hazard reduction work which meet the relevant provisions of the Bush Fire Environmental Assessment Code (BFEAC). https://www.rfs.nsw.gov.au/resources/publications/hazard-reduction/bush-fire-environmental-assessment-code

HRCs can only be issued in areas covered by a Bushfire Risk Management Plan prepared by the relevant Bushfire Management Committee.

iii.   Burning under an IFOA

a.   Coastal IFOA

Coastal IFOA Conditions and Protocols are available on the EPA's website: https://www.epa.nsw.gov.au/your-environment/native-forestry/integrated-forestry-operations-approvals/coastal-ifoa

The Coastal IFOA (2018) allows burning to be conducted pre-harvest, within 1 year prior to commencement, and post-harvest, within 2 years after completion of harvesting.

The conditions of the Coastal IFOA specify limits to the timing of burns and maximum Forest Fire Danger Index (FFDI) for when burning can be conducted. IFOA burns aims to minimise burning in exclusion zones to enable them to act as refuge habitat around the time of harvesting operations. These exclusion zones may be burnt during regular prescribed burning operations conducted under the BFEAC.

Document title: FCNSW Fire Management Plan		Version No.: 1	Page **29** of **41**
Document ID: D00271354	Owner: State Fire Manager	Issue date: August 2019	Review date: August 2024

WARNING: a printed copy of this document is uncontrolled. Please verify this is the latest version prior to use.

HFD are not obligated to burn under the IFOA in these periods and can revert to burning under the BushFire Environmental Assessment Code (refer Section (ii) above). This may be appropriate where harvest areas interface with community protection requirements and it is not safe, practical or desirable to exclude fire from all exclusion zones.

b.   Western IFOAs

Under the three (3) Western FPA areas, burning activities can be conducted under the provisions of a Burning Operations Management Plan as defined in the IFOAs (Brigalow-Nandewar, South West Cypress and Riverina Red Gum).

Where burning operations are conducted under an IFOA, fire must not be lit within a drainage feature protection zone or environmentally significant area as defined in the IFOA. Fire lit outside the zone or area may subsequently enter that zone or area without being a breach of the IFOA conditions. For such operations, the operational plan must specify the relevant features and associated exclusion zones that fire must not be lit within.

For those forests not covered by an IFOA, burning operations are conducted under the BushFire Environmental Assessment Code.

iv.   Burning under an Environmental Impact Assessment

Burning conducted by FCNSW outside of the provisions of the three (3) previous categories must be assessed under Part 5 of the Environmental Planning and Assessment Act 1979 No 203 (EP&A Act). Burning in this category could include high intensity or frequent burning for specific habitat or forest health restoration purposes etc.

A key requirement of Part 5 of the EP&A Act is the preparation of an Environmental Impact Assessment (EIA) and assessment of the significance of the impact. If the impact is significant an Environmental Impact Statement / Species Impact Statement is required, and a Section 193 licence needs to be issued by the Office of Environment and Heritage (OEH).

It is envisaged that this category of burning will occur only in circumstances where the EIA identifies no significant impacts and that an EIS is not required. This may need to be considered for specific types of burning for silvicultural, forest health, or ecological reasons that are not considered to be hazard reduction specifically for fuel management.

Ecological burning or burning to maintain forest health or development needs to be planned according to existing templates and approved under the appropriated or necessary regulations or legislation.

7.2.6   Approving burn plans

All site specific burn plans must be approved by a designated officer, or their delegate, and all burns must be authorized prior to commencement of burning

Division	Area	Designated officer
HFD	Coastal	Senior Manager Forest Stewardship
	Western	Senior Manager Western
SPD	Snowy	Fire and Stewardship Manager
	Northern Softwoods - Bathurst	Fire and Stewardship Manager
	Northern Softwoods - Grafton	District Manager
	Northern Softwoods - Walcha	District Manager

TABLE 6 FCNSW OFFICERS AUTHORISED TO APPROVE A SITE-SPECIFIC BURN PLAN

Document title: FCNSW Fire Management Plan		Version No.: 1	Page **31** of **41**
Document ID: D00271354	Owner: State Fire Manager	Issue date: August 2019	Review date: August 2024

WARNING: a printed copy of this document is uncontrolled. Please verify this is the latest version prior to use.

8. Response

As discussed in Section 4.4 Risk management, the risk profile for bushfires varies across the landscape. Because of this, FCNSW applies a system to enable us to prioritise our response accordingly.

FCNSW mapped bushfire risk at a landscape level. This process identified:

» Interface areas of life, property and forest which pose a high risk. Under the right conditions, fire that have started in State forest, both native and plantation, could impact on these interface areas within a 24-hour timeframe.
» High value wood supply areas of high importance to wood supply obligations.
» Partially cleared and fragmented landscape areas where forests and agricultural production are intermixed, with low population density (and generally dispersed)
» Upland and mountain forest areas with near-contiguous forest cover, sparse population in remote/isolated properties/settlements, and a low probability of fires which start in the area spreading to population centres.

The outputs of this mapping process were used to inform the development of Regional Fire Response Priority maps (RFRP maps). The approach in developing these maps is shown in Sections 8.1 and 8.2.

In addition to risk-based response planning, FCNSW considers the following key priorities in response to wildfire:

» Firefighter and public safety over all other fire suppression considerations.
» Control of wildfires threatening life, property, other community and environmental values at risk on or near our managed lands will be given priority , subject to consideration of overall needs.
» The asset or environmental values at risk
» Forecast weather
» Resource availablility
» Supplementing or supporting local resources

Response will be in accordance with FCNSW operating procedures and guidelines and the NSW system of coordinated firefighting.

Document title: FCNSW Fire Management Plan		Version No.: 1	Page **32** of **41**
Document ID: D00271354	Owner: State Fire Manager	Issue date: August 2019	Review date: August 2024

WARNING: a printed copy of this document is uncontrolled. Please verify this is the latest version prior to use.

8.1   SOFTWOOD PLANTATION DIVISION

Priority level	Criteria
Very high	Major plantation areas/ groups where potentially high maximum probable loss scenarios are credible
High	All remaining plantation areas (not classified as Very High) and situated in positions at the outer end of response times from key plantation fire response staging areas
Standard	Off-estate timbered country in landscape areas around plantations, from where uncontained fires could become a threat to plantations in adverse weather and therefore a potential concern to FCNSW

TABLE 7 PRIORITISATION LEVELS FOR FIRE RESPONSE PRIORITY MAPS - SOFTWOOD PLANTATION DIVISION

8.2   HARDWOOD FORESTS DIVISION

8.2.1   Coastal

Priority level	Criteria
High	A combination of the significant human life and property exposure areas and high-value wood supply areas as mapped in the risk landscapes mapping process
Intermediate	The partially cleared and fragmented landscape areas where forests and commercial agricultural production are intermixed, with low population density
Standard	The upland and mountain forest areas in more remote parts of the FCNSW FPA

TABLE 8 PRIORITISATION LEVELS FOR FIRE RESPONSE MAPS FOR COASTAL HARDWOOD FORESTS, HFD

8.2.2   Western

Priority level	Criteria
High	The Pilliga Cypress and Koondrook red gum forest areas where potentially large-scale impacts to wood supply could arise from fires in those areas
Intermediate	Lands adjacent to the Pilliga and Koondrook from where fires could spread into the high priority forest areas
Standard	All other forest areas

TABLE 9 PRIORITISATION LEVELS FOR FIRE RESPONSE MAPS FOR WESTERN REGION, HFD

8.3   FIRE ORGANISATION AND COORDINATION

FCNSW implements the Australian standard control and command structure for wildfire suppression, which follows the Australian Inter-Service Incident Management System (AIIMS). AIIMS provides a common management framework to assist with the effective and efficient control of incidents. The

Document title: FCNSW Fire Management Plan		Version No.: 1	Page **33** of **41**
Document ID: D00271354	Owner: State Fire Manager	Issue date: August 2019	Review date: August 2024

WARNING: a printed copy of this document is uncontrolled. Please verify this is the latest version prior to use.

framework applies to a range of incidents from small to large and provides the basis for an expanded response as the incident grows in size and complexity.

The management of wildfires involving other agencies and organisations conforms to the structures described in BFMC Coordinated Bushfire Operations Plans or as determined by RFS Regional/ District Incident Coordination Centers.

Each wildfire with resources deployed is allocated an incident level from 1 (lowest) to 3 (highest), which is determined by incident size and complexity. This incident level is reviewed as the size, complexity and impact of the incident changes over time.

Fire Class	Definition
1	A fire under the control of the responsible fire-fighting authority, whether or not incidental. Low level assistance is provided by other agencies. The Incident Controller is the OIC of the first suppression unit (from any fire-fighting authority) at the fire. Arrangements may be made to transfer control to the first available & suitably qualified FCNSW or RFS person on the scene.
2	A fire, which by necessity, involves or is expected to involve, more than one agency, and where the BFMC has appointed a person to take charge of fire-fighting operations across all land tenures.
3	A major fire where the appointment of an Incident Controller has been made or is imminent under the provisions of Section 44 *Rural Fires Act 1997*

TABLE 10 FIRE CLASSES

An Incident Action Plan is developed for the control of each wildfire identified as either Class 2 or Class 3 using the NSW RFS ICON application.

The content of the incident action plan is determined by the incident level and nature.

8.4   FIRST RESPONSE ARRANGEMENTS

In NSW, any fire-fighting authority may respond to any reported fire on any land. If FCNSW is the first response authority to a fire burning on any land in NSW, including State forest, FCNSW must:

» Notify the RFS of this initial response as soon as practicable.
» As soon as practicable, a situation report (SITREP) must be forwarded to the RFS (via ICON) detailing fire location, size, behaviour, resources in attendance, local weather, alert level, proposed containment strategy and any injuries or property damage.
» The RFS must be provided with regular updated SITREPs and discuss any significant proposed changes to strategy prior to their implementation with the local RFS duty officer.

The authority making the first response to a fire on FCNSW lands assumes control of that fire. The local RFS duty officer may direct that control of the fire be handed to the RFS or FCNSW. That person will then assume the role of Incident Controller (IC).

The RFS has the power to appoint the IC to a fire, regardless of tenure or the objectives of other agencies, however it is expected that this takes place in a consultative manner.

8.5   FIRE SUPPRESSION ON NATIONAL PARK

FCNSW may undertake initial attack on fires on adjoining National Park lands which have the potential to impact onto State forest land **and** where National Parks & Wildlife Service (NPWS) cannot respond in a timely manner.

FCNSW will contact the relevant NPWS office prior to commencement of initial attack and seek advice regarding the use of heavy plant, possible work, health and safety hazards and environmental or culturally sensitive areas. If prior contact with the local National Parks office is not possible, advise the regional NPWS office of the commencement of work as soon as it is practicable to do so.

8.6   USING HEAVY PLANT

FCNSW has a responsibility to ensure that all heavy plant used within FCNSW workplaces meets minimum standards for operator protection. Plant must be fitted with ROPS, FOPS and OPS which meets the relevant Australian or International Standard (refer to WHS Procedure 4.16 Protective Structures on Heavy Plant).

During an emergency firefighting situation, powered mobile plant that does not comply to Australian or International Standards may need to be used as a last resort. This may include situations where the risk of fire has increased rapidly and there is insufficient time to source compliant powered mobile plant. This non-compliant powered mobile plant may be used during these circumstances after completing a risk assessment.The assessment should consider the risk of exposure to the element not controlled by ROPs FOPs or OPG's e.g. slope and risk of roll over (ROPs), risk of falling trees and or branches (FOP's) risk of long woody material entering the cabin (OPG's).

If a fire on State forest is under the control of a RFS Incident Controller, they may choose to use heavy plant that is not compliant. Similarly, they should conduct a risk assessment around its use, and are responsible for any issues arising from non-compliance.

FCNSW Plant supervisors may use their discretion to re-task non-compliant mobile plant to less riskier situations or refuse to manage such equipment if they have concerns.

Heavy plant and plant transport contacts are contained within local Pre-incident Plans. Plant may also be registered in FCNSW Plant Hire Data Base and can be procured with a Purchase Order.

Where a hire agreement does not exist, request a copy of the company's Certificate of Currency for their worker's compensation and public liability insurance (plus vehicle registration certificate if applicable). **A hire agreement can be drawn up later if one does not already exist.**

8.7   AIRCRAFT

Initial Attack

Requests for aircraft assistance on initial attack are made by the Duty Officer through the local RFS District office (refer to Fire and Radio Intranet for documentation) If the RFS duty officer agrees that an aircraft is required/ available, they will request an aircraft through the RFS State Air desk. It is likely that FCNSW will pay for all costs associated with requested aircraft. If the RFS duty officer says that an aircraft is not required/ available, contact FCNSW Fire and Radio Branch Duty Officer to request further assistance.

Document title: FCNSW Fire Management Plan		Version No.: 1	Page **35** of **41**
Document ID: D00271354	Owner: State Fire Manager	Issue date: August 2019	Review date: August 2024

WARNING: a printed copy of this document is uncontrolled. Please verify this is the latest version prior to use.

For much of the fire season, the RFS have aircraft based along the coast and tablelands. Remote Area Fire Teams (RAFT) may be available for deployment on State forest fires where required to fight fires in remote areas with limited access. Contact the local RFS duty officer to discuss RAFT deployment.

FCNSW may, of its own accord, pre-emptively locate aircraft for standby response. SPD contract aircraft during the fire season – located in Tumut and Bathurst Management Areas. Other reasons would include:

» existing fires in the area, or
» there has been or is lightning forecast across the area.

These arrangements are discussed and approved by relevant managers.

FPAs should advise Fire Management Branch of any aircraft requirements, as they will assist with procurement and advice around suitability.

Any engagement of aircraft should be arranged in consultation with the State Air Desk.

When working with aircraft at a fire, ensure that there is communication with the aircraft and that the pilot is asked to inform ground staff before commencing water bombing.

Ongoing fires

Past day one, FCNSW is expected to pay for aircraft costs on Class 1 or 2 fires (refer Table 10 Fire classes).

If a fire becomes a class 3 fire, stand all aircraft down, if it is safe to do so,and have them re-engaged by the Incident Controller, otherwise FCNSW will continue to pay for any aircraft which continues to work on the fire and was engaged prior to the class 3 declaration.

Surveillance aircraft

Where and when aerial surveillance flights are commissioned, communication and flight coordination should occur between FCNSW, National Parks & Wildlife Service (NPWS), and Rural Fire Service prior to engagement. This ensures that any areas of concern for each agency are planned into the flight path. Surveillance aircraft requested through the RFS State Air desk by the RFS duty officer will be paid for by the RFS.

8.8 REMOTE AREA FIRE FIGHTING

FCNSW staff do not generally undertake remote area fire-fighting where access is only via helicopter, nor do we supply crew members for remote area fire-fighting via helicopter. If remote area firefighting is required and we can or need to access by foot, then all firefighters should be at arduous level fitness, and have the necessary skills and training to perform the tasks required. Refer to section 5.3.2 Training for further information.

8.9 OPERATIONAL GUIDELINES

FCNSW Fire Management Branch maintain a series of operational guidelines and standard operating procedures for fire management, reporting, firefighter safety, briefings, incident management, communications, aircraft use, equipment, media, finance and training. These are available on the Fire and Radio Intranet.

Document title: FCNSW Fire Management Plan		Version No.: 1	Page **36** of **41**
Document ID: D00271354	Owner: State Fire Manager	Issue date: August 2019	Review date: August 2024

WARNING: a printed copy of this document is uncontrolled. Please verify this is the latest version prior to use.

8.10   COMMUNICATIONS AND REPORTING

There are various levels of communication and reporting involved in fire management activities that are defined by systems and processes established through coordinated firefighting arrangements between the NSW Fire Authorities. These include systems, such as BRIMS for fuel management operations, and ICON for fire reporting at the state level.

Internally, FCNSW follow defined reporting and communications procedures.

8.11   CLASS 1 FIRES

FPA handle locally, update/ manage ICON and report incidents to Regional/Functional Fire Management Staff for situational awareness across the business.

8.12   CLASS 2 FIRES

FPA handle locally in collaboration with required agencies determining and activating Incident Control and Incident Management Team structure, update ICON and report as soon as practicable to Regional/functional Fire Management Staff for:

» support,
» situational awareness across the business and
» reporting up to SMT

8.13   CLASS 3 FIRES

Once declared, FPA assist as per coordinated firefighting arrangements with Rural Fire Service https://www.rfs.nsw.gov.au/__data/assets/pdf_file/0010/9586/Policy-2-2006-Management-of-Bush-Fire-Operations.pdf and report to Regional/functional Fire Management Staff and Fire Management Branch for:

» support
» direct access to Rural Fire Service head office to assist/ update/ direct
» situational awareness across the business and
» reporting up to Senior Management Team

8.14   ENFORCEMENT, PATROLS AND TOTAL FIRE BANS

Where there is sufficient evidence to suggest that a person (or persons) was responsible for deliberately lighting or negligently causing a fire on land FCNSW manages, or a fire that subsequently enters onto our managed lands, action may be taken to recover the costs of suppression and/or damage caused by the fire. Prosecution will be considered.

FCNSW will, as appropriate, report the incident to the RFS and police and assist where possible.

Document title: FCNSW Fire Management Plan		Version No.: 1	Page **37** of **41**
Document ID: D00271354	Owner: State Fire Manager	Issue date: August 2019	Review date: August 2024

WARNING: a printed copy of this document is uncontrolled. Please verify this is the latest version prior to use.

FCNSW undertakes patrols in areas where barbecues and campfires are commonly used, where necessary, to ensure compliance with fire legislation and to provide advice and assistance regarding the wise and proper use of fire.

FCNSW may close forests to public access when there is elevated fire danger (e.g. Total Fire Bans) and risk of ignition, or when wildfires in forest estate pose a risk to the public. Closures will be in line with SOP 18-52: Forest Closures.

Document title: FCNSW Fire Management Plan		Version No.: 1	Page **38** of **41**
Document ID: D00271354	Owner: State Fire Manager	Issue date: August 2019	Review date: August 2024

WARNING: a printed copy of this document is uncontrolled. Please verify this is the latest version prior to use.

9. Recovery

All recovery operations and actions post fire should be carried out in accordance with the Incident Action Plan for the fire. This will be in accordance with "Make Safe Provisions" as defined by the RFS or in accordance with FCNSW internal provisions which generally utilize standards applied to other forestry operations.

Further significant recovery operations for FCNSW may include salvage operations for commercially recoverable timber and replanting of plantations or silvicultural operations to facilitate regeneration.

9.1   WILDFIRE RECOVERY

FCNSW undertake or assist other agencies to undertake recovery activities, including supporting wildfire affected communities in reconstruction of the physical infrastructure and restoration of social and economic wellbeing.

Other wildfire recovery actions may include operations to salvage, repair, rehabilitate or replace fire damaged assets and sites disturbed by fire control operations. Where the fire is under the control of RFS, these activities are planned and agreed to as part of the recovery strategy before the fire is set to "out".

9.2   REHABILITATION

FCNSW undertake rehabilitation of disturbance resulting from firefighting operations as soon as practical after the wildfire is contained. Where substantial rehabilitation works are or will be required, a rehabilitation plan is prepared and implemented (refer to due diligence planning in line with the activity).

In some circumstances, the fire may be declared a natural disaster and funding for rehabilitation and recovery works may be available under the Natural Disasters Recovery Fund.

Where possible, rehabilitation activities such as erosion control measures should be undertaken in conjunction with control activities.

Document title: FCNSW Fire Management Plan		Version No.: 1	Page **39** of **41**
Document ID: D00271354	Owner: State Fire Manager	Issue date: August 2019	Review date: August 2024

WARNING: a printed copy of this document is uncontrolled. Please verify this is the latest version prior to use.

10. Data capture, monitoring and reporting

10.1 ICON

10.1.1 Wildfire

Details for each individual wildfire including situation reports, intelligence, mapping, photos, video, documents, predictions, and Incident Action Plans (IAP) will be developed or uploaded into the RFS' reporting system (ICON). This system is the one "point of truth" for all wildfire operations in NSW.

FCNSW does not maintain a separate fire recording or reporting system, other than working details and planning that may take place in FCNSW fire duty rooms. All detail including logs, maps and planning should be captured and stored in case it needs to be produced later, and where appropriate, uploaded into ICON against the relevant fire.

Individual fire reporting requirements can be developed from ICON and annual data capture and reporting will be rolled up through ICON reports.

10.1.2 Prescribed burning

All prescribed burns are uploaded and managed through ICON prior and during operational burning to ensure that the RFS and the public are informed of prescribed burns being undertaken.

10.2 BRIMS

There is a planned migration of BRIMS to a new system, known as "Guardian".

» FCNSW Prescribed Burn plans under the BFEAC, IFOA and EP&A Act are entered into the RFS BRIMS system.
» Plantation re-establishment burn plans are not required to be entered in BRIMS.

10.2.1 Prescribed burning

FCNSW maintains an annual Operational Prescribed burn spreadsheet to capture all FCNSW prescribed burning activity and extent, however annual reporting is through BRIMS.

10.2.2 Cultural burning

Cultural burning operations should be planned according to the Bush Fire Environmental Assessment Code and managed in the same way as other prescribed burning.

10.3 CURRENCY AND COMPETENCY

Staff who participate in fire related operational activities including both wildfire and prescribed burning should log the details of their hours and operational roles in TREES. This enables capture of activity for maintenance of currency and competency against fire qualifications.

Document title: FCNSW Fire Management Plan		Version No.: 1	Page **40** of **41**
Document ID: D00271354	Owner: State Fire Manager	Issue date: August 2019	Review date: August 2024

WARNING: a printed copy of this document is uncontrolled. Please verify this is the latest version prior to use.

10.4 POST INCIDENT AND END-OF-SEASON DEBRIEFS AND REPORTS

Major fire suppression events undertaken by FCNSW staff may be subject to a post incident debrief.

End of season debriefs are also undertaken and actions or "lessons learnt" identified and addressed in training, procedure review and/or development or communicated out to all firefighting staff.

The format and scope of the post incident debrief depends on the incident level and the nature of events during the incident. The style of debriefing can range from an informal discussion between firefighting personnel on a small incident, to a formal debriefing on a complex incident.

10.5 MONITORING AND RECORDING

RFS systems, such as ICON and BRIMS (soon to be replaced by Guardian), are the "source of truth" for most records regarding fire in NSW.

FCNSW sources data, such as fire histories on a regular basis to update GIS layers and to inform annual planning and reporting.

Requirements for additional records or reporting, such as a fire investigation, planning developments, training and Quality Assurance Audits/Operational Inspection Reports will be maintained in a format that complies with FCNSW' Records Management Policy. Refer below.

What	FCNSW system
Training records	PeopleStreme
Time and role	TREES
Safety, environment or social hazards and incidents	RiskWare
Fleet related repairs and costs	Fleetnet
Expenses and costs	Finance One

TABLE 11 FIRE RELATED MONITORING AND RECORDING IN FCNSW