

## Attachment 11.1.2



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Our Ref: S22/73  
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Mr David Taylor  
The Chief Executive Officer  
Shire of Nannup  
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Dear Mr Taylor

### **APPLICATION FOR DEVELOPMENT APPROVAL – OLD FOLLY PLANTATION**

As you may be aware the Forest Products Commission (FPC) has recently negotiated a conditional agreement to purchase several lots to the east of the town of Nannup. The FPC would like to acquire this land for establishment as a softwood (pine) plantation but with respect for the Shire's Town Planning Scheme and Local Planning Policy for Plantations and Agroforestry (LPP 23), the purchase agreement is conditional upon the FPC receiving appropriate development approval.

Accordingly please find attached an Application for Development Approval for the proposed plantation along with relevant supporting information including a Plantation Management Plan setting out the proposed management of the site.

The land in question is located between two sections of the FPC's existing Folly Plantation. The property was previously established as pine plantation in the late 1960's but in recent years under private ownership it has been predominantly unmanaged.

The FPC acknowledges the Shire's desire to preserve landscape values in the region. In its current condition the property is not visually appealing and presents a significant fire hazard. The proposed planting is in a location which has a strong history of pine plantations being part of the landscape. Additionally as the planting does not extend all the way to the Brockman Highway on the southern side, views across the valley will be maintained with the plantation providing a pleasing backdrop.

As part of the plan to re-establish plantation on the site the FPC will be seeking to work with stakeholders to extend the existing trails network in the vicinity. As you are aware the FPC is a partner in the development of the Tank 7 trails which are located in the adjoining FPC managed Folly Plantation which has significantly increased visitor numbers to the Nannup district. The FPC has been contacted by a number of trail developers and cycling event organisers with an interest in extending the current networks through the property which is subject of this application. These proposals include use of part of the Asplin Road Arboretum as a recreation area.

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It is acknowledged that a portion of the property falls within 3km of the Nannup townsite within which zone plantations are generally discouraged under LPP23. However the FPC is of the opinion that the benefits to the shire potentially available through extension of the existing trail networks, combined with the return of responsible management on the property may justify an exemption from this component of the policy.

The FPC manages all of its plantation in accordance with the Australian Forestry Standard and Environmental Management System ISO 14001. These standards ensure the FPC's management responsibly addresses all relevant factors relating to the environmental, social, cultural and financial impacts of its operations. The FPC's alignment with these standards is regularly independently audited.

The proposal to purchase this property for plantation development represents part of the State Government commitment to expand the State's softwood estate thereby ensure sawmills and associated manufacturing businesses have security of resource well into the future. The softwood industry is an important employer in the South West region including the 11 FPC staff currently employed in the Nannup office. Planting of this property to pine would also generate approximately 90,000 Australian Carbon Credit Units (ACCU's) assisting in progress towards Australia's target of net zero emissions by 2050.

I thank you for your time in considering this proposal.

Yours sincerely

David Guille  
Manager Forest Assets

13 January 2023

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# Plantation Management Plan

## “OLD FOLLY”





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The following maps and documents are attached:

Map 1: Location Map

Map 2: Concept Plan

Attachment 1 - Extract from DBCA Blackwood District Fire Preparedness and Response Plan

Attachment 2 - Blackwood Valley Zone Response Plan

Attachment 3 – FPC147 Guidelines for applying operation restrictions to manage fire risk

Attachment 4 – Contractor procedure F1 – Fire Requirements

**References:**

- *Code of Practice for Timber Plantations in Western Australia*
- *Guidelines for Plantation Fire Protection*
- *Local Authority Firebreak Orders*
- *FPC Plantation Procedures, Technical Specifications & Work Instructions*
- *Code of Practice for the use of agricultural and veterinary chemicals in Western Australia*
- *Forest Products Act WA (2000)*
- *Carbon Rights Act (2003)*
- *Environmental Protection (Clearing of Native Vegetation) Regulations (2004)*
- *Wildlife Conservation Act (1950)*
- *Environmental Protection and Biodiversity Conservation Act 1999.*
- *Soil and Land Conservation Act*
- *Bush Fires Act (1954)*
- *Occupational Health and Safety*
- *Safety and Health Code for Native Forest / Hardwood Logging and Plantation Logging*



# PLANTATION MANAGEMENT PLAN PRIVATE PROPERTY

FPC421

Refer to [Plantations Flowcharts](#) for applicable procedures

## 1. INTRODUCTION

The Forest Products Commission (FPC) is the Western Australian State Government statutory authority with responsibility for managing the State's renewable timber resources.

The FPC has negotiated with the current owners to purchase the following lots in the Shire of Nannup conditional upon Development Approval being received for establishment of a pine plantation across the majority of the property. The FPC has identified approximately 271 ha as being suitable for this use.

<b>Land Description</b>	<b>Current Owner</b>
Lot 1 Diagram 23683:	MIRANNIE NOMINEES PTY LTD
Lot 4 Diagram 22291:	as above
Lot 31 Deposited Plan 228954:	Gemma BOWDEN & Justin BRAJKOVICH
Lot 32 Deposited Plan 228954:	MIRANNIE NOMINEES PTY LTD
Lot 33 Deposited Plan 228954:	as above
Lot 43 Deposited Plan 228954:	as above
Lot 44 Deposited Plan 228954:	as above
Lot 45 Deposited Plan 228954:	as above

The proposal to purchase this property for plantation development represents part of the State Government commitment to expand the State's softwood estate thereby ensure sawmills and associated manufacturing businesses have security of resource well into the future. Planting of this property to pine would also generate approximately 90,000 Australian Carbon Credit Units (ACCU's) assisting in progress towards Australia's target of net zero emissions by 2050.

If established the planting will add to the FPC's Folly Plantation which adjoins the property to both the north and south.

This management plan outlines the following in relation to this proposal:

1. Introduction
2. Land information
3. Plantation Establishment Plan
4. Plantation Tending Plan
5. Fire Management Plan
6. Timber Harvesting Plan (interim)
7. Authorisation

## 2. LAND INFORMATION

### 2.1. Area

The property has a total area of 341 hectares and is located on Folly Road to the east of the Nannup townsite. The surrounding area is zoned for agriculture and there are two *Pinus radiata* plantations nearby; one adjacent to the northern boundary of the property (Folly Road), and another immediately to the south, just across the Brockman highway. Both are segments of FPC's Folly plantation.

The property was originally cleared farmland that was purchased by the West Australian Government in the 1960s for the purposes of softwood plantation establishment. The plantation - Folly - was established in the late 1960's by the Forest Department. The Department and its successor agency – the Department of Conservation and Land Management (CALM) – managed it until the early 1990s when the land was sold. In recent years management on the property has been limited to opportunistic harvesting of self-seeded pine “wildlings” with the majority of the property left fallow.

The immediate area and the general landscape has a long established association with pine plantations. The area has also enjoyed a recent increase in recreational activity largely due to the popularity of mountain bike trails. The FPC is a partner in the development of the Tank 7 trails which are located in the adjoining Folly Plantation. The FPC would welcome the opportunity to work with trail developers for an extension of the existing network onto the subject property should the proposed plantation be approved.

The property has an average rainfall of approximately 920mm and is outside the nearest Public Drinking Water Supply Area (PDWSA).

Some images of current land status are shown below:



*Pockets of grassland with scattered remnant Pinus radiata trees*



*Regenerated blue gum plantation (Eucalyptus globulus) with extensive stump coppice from 2-5m high*



*Harvested ex P. radiata plantation currently fallow*





*Clumps of Eucalypt saplings and isolated trees (C. calophylla and E. grandis)*

## 2.2. Locality Map and access roads

A Location Map and Concept Plan are attached. These maps define the proposed extent of the new plantation and outlines the location of the property in relation to Nannup townsite, neighbours, existing roads and the other segments of the existing Folly plantation.

There are two main access roads into the property: Folly Road from the western side and Folly Form from the east.

## 2.3. Natural Features

### 2.3.1. Significant landscapes, streams, rivers, lakes, ponds, swamps, drains etc

A visual assessment was completed in October 2019 to identify landscape features for consideration during plantation development.

General landscape features of the property will be maintained, and new plantation will only be established in areas where plantations – either *Pinus radiata* or *Eucalyptus globulus* - were previously grown. All existing remnant native vegetation will be retained.

There are several lower and medium level ephemeral streams with some natural vegetation including The Dry Brook. A buffer of a minimum of 10 metres has been placed on these waterways in accordance with the Code of Practice for Timber Plantations WA. Actual buffer sizes vary from 10 to 50m according to the prevailing landform and soil type (see attached Concept Plan). The areas are excluded from the new planting and, where present, the existing vegetation will be allowed to grow on.

It is expected that 20 to 30 ha of land associated with creek lines will be excluded from planting in this manner. The original vegetation is generally eucalyptus tree species and endemic shrub understory and mixture of various grass species.





*The Dry Brook*

While there are no large water bodies; i.e. lakes / dams etc, within the property, there are several old water points (see *example below*) that will be upgraded to ensure full functionality in a wildfire situation. Additional points may also be constructed pending further assessment of wildfire risk.



*Degraded waterpoint adjacent to Zircon Rd*



### 2.3.2 Principal soil types

Soil types consist of loamy duplexes (loams and clay loams over clay) with some areas of discontinuous granite and small pockets of gravel.

#### 8) Duplex soils typical of those found within the property



### 2.3.3 Areas of native vegetation with high or low natural integrity

With the exception of a few pockets of variable density vegetation on the stream banks adjacent to Zircon Road, and some isolated individual or groups of *Corymbia calophylla* (marri) trees regenerated from the original clearing decades ago, very few areas of native vegetation remain within the property. What little does exist will not be disturbed.

Forest Type – Jarrah/marri/flooded gum

Extent – mostly confined to the creek lines and some small scattered islands throughout the location with some individual and groups of paddock trees.

Condition – The health of the eucalypt upper story vegetation is generally fair, however minimal understorey is present due to previous landuse.

Pests or diseases – It is expected that some declared and problem weeds will be present including blackberry and cottonbush, due to adjacent known weeds and possibly from past activities.

Proposed future management – Minimal management will take place due to the small size of the remnant islands. The Dry Brook will be left undisturbed from all operations.

### 2.3.4 Cultural and heritage values

The following actions were taken to determine the presence of cultural and heritage sites on the property:

- a) The Nannup Shire Municipal Historical Inventory was checked for the presence of significant values, and while no sites were recorded, the Shire expressed strong interest in retaining Asplin Arboretum in its present state. FPC recognises the value of the arboretum and will undertake some improvements in due course, including general weed control and internal track maintenance. It might also consider ways of capitalising on the arboretum's recreation potential to the benefit of interest groups and the wider Nannup community.



- b) A search for Heritage Council registered sites was completed; No sites are present.
- c) Department of Biodiversity Conservation and Attractions (DBCA) and/or Department of Indigenous Affairs database's were checked for registered indigenous sites and the following applies:
- i. The Blackwood River and some of its tributaries constitute an indigenous heritage site. The Dry Brook creek line is a registered Aboriginal Heritage Site of mythological nature with no restrictions. Nil new disturbance will take place however there are several small areas that have been established previously that will be established again.
  - ii. There is a known heritage site – Zircon Road Falls - located on the property. The site is within the stream zone and will be excluded from disturbance associated with plantation operations. The FPC will support public access to this site.

### 2.3.5. Threatened and Priority Species and Ecological Communities

Where activities related to this tree farm are likely to directly or indirectly affect threatened and priority species of flora, fauna and ecological communities, the following Acts, Regulations and Plans will be complied with:

- Environmental Protection (Clearing of Native Vegetation) Regulations 2004 (WA)
- Wildlife Conservation Act 1950 (WA)
- Environmental Protection and Biodiversity Conservation Act 1999 (Cwth)

DBCA's IMB database has been checked. 1 threatened species site has been recorded in the vicinity of the proposed planting area. This record relates to foraging habitat for the Carnaby cockatoo which will be enhanced by the proposed development with *Pinus radiata* being a preferred food source for this species.

## 2.4. Improvements

### 2.4.1 Buildings

The only structure present on the property is a large concrete water tank at the intersection of Asplin and Folly Roads. This will be retained and used for water storage to facilitate future fire suppression.

### 2.4.2 Roads, bridges, creek crossings

There is an existing unsealed road/track system that will allow access during plantation establishment. Some additional minor construction and upgrade of internal and boundary tracks or creek crossings may be required to facilitate access for ongoing maintenance, along with some surface upgrade once the harvesting phase commences, to allow for the safe and efficient extraction of timber.





*Example of an internal road*

#### 2.4.3. Fences, gates, powerlines, Communication cables and dams

##### **Fences**

Fences are located within and surrounding the property. The quality of fencing ranges from good, to poor, to non-existent. It is not envisaged that grazing will be undertaken in the plantation and as such upgrades will be restricted to those situations where there is a neighbouring requirement.

##### **Power line easements**

There are no power lines within the property/proposed plantation.

##### **Communication cables**

There are no underground communication cables within the proposed plantation.

##### **Water Supply Pipes**

There are no water supply pipes within the proposed plantation.

#### 2.4.4. Sensitive Areas

Identification of sensitive areas took place during field reconnaissance, interpretation of aerial photographs and checking of relevant databases. Sensitive areas identified within, adjacent to, and along access ways to the proposed plantation are listed below along with the precautionary measures required to protect them.

- i. Immediate neighbours: on Lots 11, 12, 30, 41, 42, 75, 79, 402, 502 and 11090. These neighbours will be added to the FPC's plantation stakeholder database and will be consulted and formally notified of plantation operations as they are scheduled.
- i. Asplin Arboretum: retain undisturbed until further plans are drawn up for possible improvements
- ii. The Dry Brook: Install a minimum 10m wide 'no disturbance' buffer either side of the watercourse.
- iii. The Nannup townsite: installation of a 50m Fuel Reduced Buffer on the western boundary of the plantation.



The status of these sensitivities and the requirement to undertake precautionary measures will be reviewed prior to chemical-spraying activities to ensure protection measures are current and appropriate.

Other sensitivities considered in this process include: Vineyards

Orchards

Apiary sites

Adjacent National Parks and reserves

Organic Farms

Public Drinking Water catchments

Natural waterways, lakes, swamps etc

Close Dwellings incl. Neighbours

School bus stops



### 3. PLANTATION ESTABLISHMENT PLAN

A plantation should be located to achieve maximum commercial viability while ensuring environmental, social, aesthetic and cultural values are not compromised. Appropriate planting design will help to redress environmental problems associated with rising water tables, salinity and erosion.

The proposed planting is in an location which has a strong history of pine plantations as part of the landscape. As the planting does not extend all the way to the Brockman Highway on the southern side views across the valley will be maintained with the plantation providing a pleasing backdrop.

#### 3.1. Species to be planted and source of stock

It is proposed that the site will be planted with *Pinus radiata* seedlings sourced from the FPC Manjimup Nursery.

#### 3.2. Areas to be planted, compartment sizes

It is anticipated that approximately 263 hectares of plantation can be established on the property. The Concept Plan provides an indicative compartment layout. Compartments range in size from 1.5 to 34.8 hectares. The final location of compartment breaks will be determined by on ground conditions (trafficability) however maximum compartment size will be approximately 30 hectares. This compartment size is consistent with the *Guidelines for Plantation Fire Protection (FESA 2011)* and the Shire of Nannup's Bushfire Risk Compliance Notice.

#### 3.3. Access roads and firebreaks

Access roads and firebreaks are shown on the Concept Map. External firebreaks will be 15 metres wide with 10 metre wide internal firebreaks, as per the *Guidelines for Plantation Fire Protection (FESA 2011)*. Firebreak maintenance to local authority standards will be the responsibility of the FPC. Annual assessment will occur to ensure firebreaks continue to conform to internal FPC standards as well as those of the Nannup Shire.

#### 3.4. Site preparation and planting technique

May vary slightly depending on the condition of the area to be prepared/planted:

1. Sections of pasture with scattered *Pinus radiata* trees - once part of the wider plantation area;
2. Remaining trees will be harvested wherever possible;
3. Any unharvested trees will be pushed over, heaped and burned;
4. Pre-plant chemical treatment for weed control. Application by air (helicopter) or ground (tractor towing a spray-rig), depending on accessibility;
5. Rip-mounding and hand-planting with seedlings.
  
6. Sections of unharvested *Pinus radiata* plantation;
  - a) Remaining trees will be harvested/removed;
  - b) Harvesting debris will be heaped and burned;
  - c) Pre-plant chemical treatment for weed control;
  - d) Flatter sections will be rip-mounded and hand-planted with seedlings;
  - e) In steeper sections, seedlings will be hand planted straight into disturbed soil

7. Sections of eucalypt plantation (*E globulus*) coppice
  - a) Coppice to be harvested for biomass market;
  - b) Redeveloping coppice will be sprayed or mulched;
  - c) Chopper roll for sprayed areas;
  - d) Hand-planting with seedlings
8. Sections of harvested *Pinus radiata* plantation – currently fallow
  - a) Harvesting debris will be heaped and burned
  - b) Pre plant chemical treatment to control weeds
  - c) Hand-planting;

Stocking rates:

- The stocking rate to be applied is 1333 seedlings per hectare at a spacing of 3m x 2.5m.

### **3.5. Direction of planting lines in relation to contours and natural drainage**

The plantable area consists of loamy duplex soils in undulating country with steep slopes in excess of 15 degrees in some places. The property is in the intermediate rainfall zone, so the erosion hazard on these slopes was assessed as high. In order to facilitate drainage without causing erosion, planting rows will be aligned slightly off the contour (fall 1:200)



*Typical steep slopes looking north from Asplin Road*

### **3.6. Description of weed control methods and buffer zones**

Broad and strip spray applications using a range of herbicides permitted for forestry use may be utilised, depending on the weed species present and those predicted to germinate during the establishment phase.





Ground applications are utilised wherever possible, but aerial application may be considered where access is restricted and/or time frames for application are reduced and large areas need to be sprayed within a short period of time.

Pesticide use in relation to planting within Public Drinking Water Supply Areas, or any other areas managed for drinking water, is always regulated in accord with the 'use of herbicides in water catchment areas', but as the property falls outside a PDWSA, the regulation does not apply in this case. Instead, the status of sensitive areas and the requirement to undertake precautionary measures will be reviewed prior to a spray event to ensure measures are current and appropriate.

All prescriptions for herbicide/pesticide application will adhere to FPC specifications and all herbicide/pesticide application will be carried out by FPC contractors having the appropriate Health Department Licenses.

### **Expected treatments**

Broad spray / strip spray /spot spray may be required and if so, will be in accordance with FPC's Technical Specifications.

The Dry Brook adjacent to Zircon Rd is designated as a sensitive area. A minimum twenty-metre wide spray-free buffer zone either side of the stream will be observed to prevent stream contamination

### **3.7. Control of vermin and declared weeds**

The site was checked for the presence of pests, vermin and declared weeds.

Kangaroos and rabbits are present, and it is anticipated that there will be some minor impact from browsing on newly planted. FPC will take all reasonable steps to control kangaroos and rabbits in order to prevent excessive damage to seedlings, and any control program will be run with licensed operators according to relevant acts.

The following declared weeds were found within the property:

- *Cirsium vulgare* – Spear thistle
- *Gomphocarpus fruticosus* – Cotton Bush
- *Phytolacca octandra* - Inkweed
- *Rubus sp.* - Blackberry
- *Silybum marianum* - Variegated thistle
- *Solanum linnaeanum* - Apple of Sodom

FPC will implement a weed control program for eradicating/controlling these weeds before, during and after planting.

### **3.8. Clearing of woody vegetation (native or exotic), including paddock trees to be removed.**

Some woody vegetation, comprising mostly remnant *Pinus radiata* trees in the western part of the property, and eucalypt coppice from harvesting in the eastern part, will be cleared in preparation for planting.

The heaping and burning of debris produced by this clearing will be completed in accordance with local fire-season restrictions and carried out in the autumn prior to planting.



No areas of remnant vegetation notifiable under the Soil and Land Conservation Act of Western Australia will be cleared as part of the proposed planting.



## **4. PLANTATION TENDING PLAN**

### **4.1. Fertilising schedule**

Fertiliser is generally applied to softwood plantations at establishment and after first thinning. FPC staff will monitor the progress of the plantation over its lifetime and prescribe fertiliser applications if nutrient deficiencies are highlighted from analysis of foliar and soil samples.

### **4.2. Weed management**

Weed status will be monitored on a regular basis in the first year after establishment and intermittently thereafter via spot inspections.

It is expected that some second year weed control will be necessary as part of the ongoing maintenance. All prescriptions applied will adhere to FPC specifications.

### **4.3. Monitoring and contingencies for disease and pests**

The FPC is committed to minimising the risk of introduction and spread of pests, diseases and weeds; minimising damage from fire and disturbance activities and mitigating the adverse effects of weather-related events.

Plantings will be monitored on a fortnightly basis during the period September through to January during the first year after establishment and 3-6 monthly in subsequent years. Pests will be controlled as and when required using registered APVMA pesticides and licensed operators operating under all specifications as required by relevant authorities and Acts.

### **4.4. Road and break maintenance**

Firebreak maintenance in accordance with Local Government Authority guidelines will be the responsibility of the FPC. Pre-existing firebreaks will be maintained, and where required, new ones created and maintained for the life of the plantation.

### **4.5. Grazing strategy**

The current owners do not graze livestock. The terrain and land use history make it unlikely that the FPC would consider integrating grazing with the proposed plantation.

### **4.6. Firebreak Pruning**

Pruning will be carried out on trees adjacent to firebreaks in order to ensure safe access for fire suppression efforts and to assist in managing risk to adjoining values. Standards will be consistent with *Guidelines for Plantation Protection – FESA (2011)*.

The fuel reduced buffer proposed for the boundary closest to the Nannup townsite will be established by early thinning using a whole tree extraction system which will reduce the density of trees without leaving harvest debris on site. This will assist fire suppression by reducing fire behaviour and improving access and visibility.



#### **4.7. Pruning and thinning schedule**

It is expected that the plantation will be thinned twice (Years 12 and 20) before the final harvest at year 30.

The stocking of trees will be reduced by approximately 50% at each thinning.

Thinning will be 'from below', meaning the best growing trees are retained at a spacing that will allow the final years of growth to be maximised. The schedule of operations will depend on the rate of growth achieved and the market opportunities available during the life on the plantation.

Pruning will not be undertaken for wood quality purposes (fire protection only).





## 5. FIRE MANAGEMENT PLAN

The objective of the Fire Management Plan is to establish the infrastructure to prevent fires escaping or entering plantations, and to determine the operational response in the event of a wildfire.

In the first instance, the plan aims to mitigate risk(s) and provide a framework for responders if a fire does occur.

All fire control activities must adhere to the *Bush Fires Act (1954)*.

### 5.1. Landowner property details

<b>Name</b>	Forest Products Commission
<b>Address</b>	Level 2/61 Victoria Street, Bunbury, 6230
<b>Phone Number</b>	9225 5288
<b>Location Number (s)</b>	Lots 1, 4, on diagram 23683 Lots 31, 32, 33, 43, 44 & 45 on deposited plan 228954
<b>Species of Trees Planted</b>	<i>Pinus radiata</i>
<b>Total Area Planted</b>	279 ha
<b>Previous Land Use and Condition (i.e. pasture, ex bush, ex plantation)</b>	Ex softwood (pine) and hardwood (blue gum) plantation
<b>Adjacent Land Use (i.e. farmland, forest, nature res.)</b>	FPC pine plantation to the north east; grazing land to the north west; ex-pine plantation now PP to the west with Nannup townsite to the west of that; ex-pine plantation to the south with FPC pine plantation beyond that, native forest (State Forest) to east.

### 5.2. Property details of neighbouring locations

<b>NAME</b>	<b>LOCATION NUMBER(S)</b>
Craig McFarlane	Lot 11
Amanda Truscott	Lot 11089
Leigh Conway	Lot 30
Catharina Van Der Laan	Lot 281
FPC	Lot 6
Brooks Hire	Lot 8
Mirannie Nominees	Lot 42 and Lot 3



Perry Coleman	Lot 501
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**5.3. Fire agencies**

AGENCY	ADDRESS	PHONE NUMBER	CONTACT PERSON/ POSITION
FPC Duty Officer	Various locations	9725 5288	Fire Duty Officer
FPC Bunbury	Level 2 Bunbury Tower	9725 5288	Greg Hodgson Manager Fire Protection
Department of Parks and Wildlife	Blackwood District	9752 555	District Fire Coordinator
Shire of Nannup	15 Adam Street, Nannup	9756 1018	
Shire of Nannup		9756 1156 or 0427 975 611	Robin Mellema Chief Fire Control Officer
Department Fire and Emergency Services	Lower South West	9771 6800 or 1800 198140	District Officer

**5.4. Risk of ignition**

Potential ignition sources are mainly restricted to lightning strikes, powerlines, adjoining roads, vehicle exhaust sparks and escapes from burning operations on surrounding land.

FPC, working in conjunction with Department of Parks and Wildlife (DPaW or 'Parks and Wildlife' – a division of DBCA) have implemented a comprehensive daily-fire-management-notification-system for plantation harvesting operations. All FPC operations also conform with the Department's daily fire risk and operational restrictions.

Please refer attachments:

- *FPC147 Guidelines for applying operation restrictions to manage fire risk*
- *Contractor procedure F1 – Fire Requirements*

**5.5 Detection of fires**

FPC has a formalised Memorandum of Understanding (MoU) with Parks and Wildlife to ensure that in the event of wildfire, DPaW assists with the protection of FPC plantations located within 3km of DPaW estate. The MoU also ensures that these same plantations are covered by the DPaW wildfire detection system; i.e. aerial spotter flight, manned towers and remote sensing.

Detection of fires may also be undertaken by FPC staff and contractors, neighbours and passers-by.

All fires should be reported via the 000 emergency number.

**5.6 Location of fire control equipment**



The FPC and dedicated fire agencies will provide fire suppression equipment and infrastructure to meet an effective and sustained fire response in accordance with the developed and successfully demonstrated Blackwood Valley Zone Response Plan (see Appendix 2). FPC can deploy multiple light units and up to 3 heavy duty fire trucks heavy units to this area in a relatively short period of time. These appliances come with fully trained staff and can be deployed by the FPC Duty Officer in liaison with the local CBFCA or Incident Controller. The closest manned FPC units are located in Nannup. The Nannup office is the base for 8 light units and 1 heavy duty fire truck.

The nearby East Nannup Bush Fire Brigade has access to several private fire units from neighbouring properties. We are advised that the Shire has a grader and loader available, and DFES purpose built firefighting units, all available for use in a fire emergency whether assisting under canopy or not, depending on training and equipment suitability.

It is acknowledged that many brigade volunteers are not currently trained to respond to fire under forest canopy (whether native or plantation species) and that equipment may not be suited to this purpose however it is expected that these resources may be utilised in preventing potential spread into adjoining pastured land.

The FPC has 3 fire trucks (2700Lt) and over 20 fire suppression units (fast attacks and trailer mounted fire appliances) that are staffed during the fire season within the southwest region. The following table provides a breakdown of the location of FPC fire equipment and fire staff

FPC Office Location	Number of fire ready staff	Fire Equipment
Nannup	8	1 Heavy Duty Tanker (3,000 litre) 8 Slip on 400 litre light units
Collie	3	1 Heavy Duty Tanker (3,000 litre) 3 Slip on 400 litre Light Units
Harvey	3	3 Slip on 400 litre light units
Bunbury	6	3 Slip on 400 litre light units
Manjimup	9	1 Heavy Duty Tanker (3,000 litre) 3 Slip on 400 litre light units

The FPC also has capacity to access DBCA's fire resources through working arrangements between the two agencies. DBCA has significant resources available from their closest depot in Nannup and Kirup which has 7 heavy duty fire trucks and 5 light units with an approximate travel time of 30 minutes.

The FPC is also an associate member of the Forest Industries Federation Western Australia (FIFWA) and the Plantations Fire Response Group. FIFWA supports the responsible and sustainable management of WA forests and plantations and appreciates the fire threat to their



resource and broader community and has recognised the importance of a unified approach in the control and management of wildfire near or within the plantation estate.

The industry manages plantations across many local government areas and the Southwest of WA and work together under a formal agreement to integrate and maintain fire suppression capabilities and critical local knowledge of plantations that fire managers can call upon in a wildfire situation.

The FPC also maintains a Duty Officer roster over the prescribed fire season. The Duty Officer is the principal point of contact for deployed crews in coordinated response with fire authorities. The duty officer will liaise closely with the CBFCO/Incident controller over crew deployment & experience, shift changes and specialised equipment needs.

It should also be noted that whenever a forestry operation takes place on the property by a contractor employed by the FPC, the contractors are required to have firefighting equipment onsite. The amount and type of units varies, depending on the type of operation, time of year and operational fire risk. Generally, the minimum is one 400 litre unit per machine. During harvest operations, it is commonplace to have 3 light units and a heavy duty onsite.

In addition to the above and for your information, the FPC has capacity to support local Brigades fire response with funds to provide additional equipment that can assist with an initial effective response.

## **5.7 Initial attack on fires**

Upon detection of a fire on or threatening the property the FPC Duty Officer will immediately dispatch rostered and otherwise available suppression resources. These resources will deploy under the direction of the controlling authority with the primary objectives of minimising the potential impact on the plantation and preventing the fire spreading onto adjoining land. Between the 1<sup>st</sup> of December and the 31<sup>st</sup> of March other agencies will deploy in line with minimum requirements of the Zone Response Plan:

- Two aerial suppression aircraft
- One appliance from each LGA
- One officer from BFB
- 12,000L Bridgetown water tanker
- One appliance from DBCA
- One staff member from DFES

Initial attack on a fire will be determined by fire behaviour, weather conditions and fuel structures. It is proposed that the Incident Controller with support from experienced FPC staff, will assess each fire, against the following values in order of priority and initiate a coordinated response with the appropriate fire management structures to achieve these objectives.

1. Human life.
2. Community, State assets & infrastructure,
3. Property rural infrastructure
4. Cost of suppression in relation to values threatened.

With fire behaviour and the above values in mind response strategies should follow this order of priority as a guide;





1. Direct attack on head fires by ground and air resources where Head Fire Rate of Spread (HFROS) and access allows.
2. parallel attack on head fire by extinguishing flank fire working towards the head fire;
4. Limit fire spread to pre-determined internal strategic firebreaks.
5. Limit fire spread to compartment breaks;
6. Limit fire spread to property boundary firebreaks;
7. Fall back to neighbouring properties, roads or where fire can be safely extinguished.

The FPC has several very experienced Duty Officers and maintains its own in-house duty officer roster during the fire season. The duty officer is the principal point of contact for all enquiries and in the event of a fire, the key responsibility of the Duty Officer is to liaise with the incident management team and other agencies on:

- Suppression strategies
- crew deployment;
- crew experience;
- shift changes and
- specialised equipment needs.

The FPC also has staff included in the DPaW roster for fire emergency availability (FEA). These staff fill planning roles at the control point, or operational roles forward of the control point, such as Operations Officer, Divisional Commander or Sector Commander.

## **5.8 Firebreaks**

External firebreaks are planned to be 15 metres wide and internal breaks 6 or 10 metres wide as shown in the attached Concept Plan. Firebreaks will be constructed and maintained in accordance with Shire Regulations and the Guidelines for Plantation Fire Protection.

Fire breaks will be maintained to be free of flammable material with a minimum 4 m trafficable width and 4.5 m vertical clearance.

Firebreak maintenance will be completed annually. Treatments may include spraying or grading as well as pruning of edge trees depending upon specific circumstances.

The fuel reduced buffer proposed for the boundary closest to the Nannup townsite will be established by early thinning using a whole tree extraction system which will reduce the density of trees without leaving harvest debris on site. This will assist fire suppression by reducing fire behaviour and improving access and visibility.

## **5.9 Water supplies**

Existing water points within the plantation will be maintained and /or upgraded to provide permanent water within a twenty-minute turnaround to all points within (see attached Concept Plan). Primary water points will be the existing tank at Asplin and Folly and the earthen dam on Asplin Road in Lot 32 (improvement required). New water points may also be constructed where considered necessary.

There are several water points in the section of Folly plantation just to the north that can be drawn upon (also shown on Concept Plan).



#### **5.10 Direction indicators of water points, road signs and other features**

Sources suitable for use as water points are marked on the Concept Plan for this plantation.

All internal water points will be signposted with directional markers.

#### **5.11 Measures to protect infrastructure, powerlines, gas pipelines and Communication Cables**

There are no powerlines, pipelines or cables present on the property.

#### **5.12 Surrounding fuels**

Surrounding fire fuels consist of well managed grazed paddocks (to north west) pine plantation (north and south) and native forest (east). There are highly variable fuels present in lifestyle lots to the south, east and west. The FPC provides funds to DBCA to undertake property protection burns in native forest adjacent to plantation assets and Ellis Creek State Forest to the east of the proposed plantation would receive increased priority should the plantation be established.



## 6. TIMBER HARVESTING PLAN

### 6.1 Timetable

First and second thinning will occur when trees are approximately 12 and 20 years of age respectively. Final harvest will occur at age 30 (approximately).

During a first thinning, every fifth row (extraction or 'E' row) is removed to allow access for the machine harvester. Trees are then selectively removed to achieve the desired basal area density for the stand. The second thinning also involves the selective removal of trees. The final harvest is a clearfall with all remaining trees being removed

### 6.2 Machinery

The length of time until the planned final harvest means that it possible that technological innovations may alter industry standards.

The current standards are as follows;

- Machine harvesters - tracked excavators fitted with a felling/debarking head;
- Forwarders - all wheel drive rubber tyred tractor;
- Truck configurations – trucks for haulage will be a combination of pocket road trains and 8 wheel drives dependent upon grade and track conditions

### 6.3 Environmental safeguards

Harvesting operations will comply with all aspects of the *Code of Practice for Timber Plantations in Western Australia*.

Roads will be maintained during harvesting operation to minimize erosion and preserve water quality.

The risk of introducing pests or diseases via harvesting activities will be assessed prior to harvesting and appropriate hygiene measures will be adopted.

### 6.5 Safety

All associated operations will be as safe as possible and comply with *Occupational Health and Safety* and the *Safety and Health Code for Native Forest/ Hardwood Logging and Plantation Logging* will be observed.

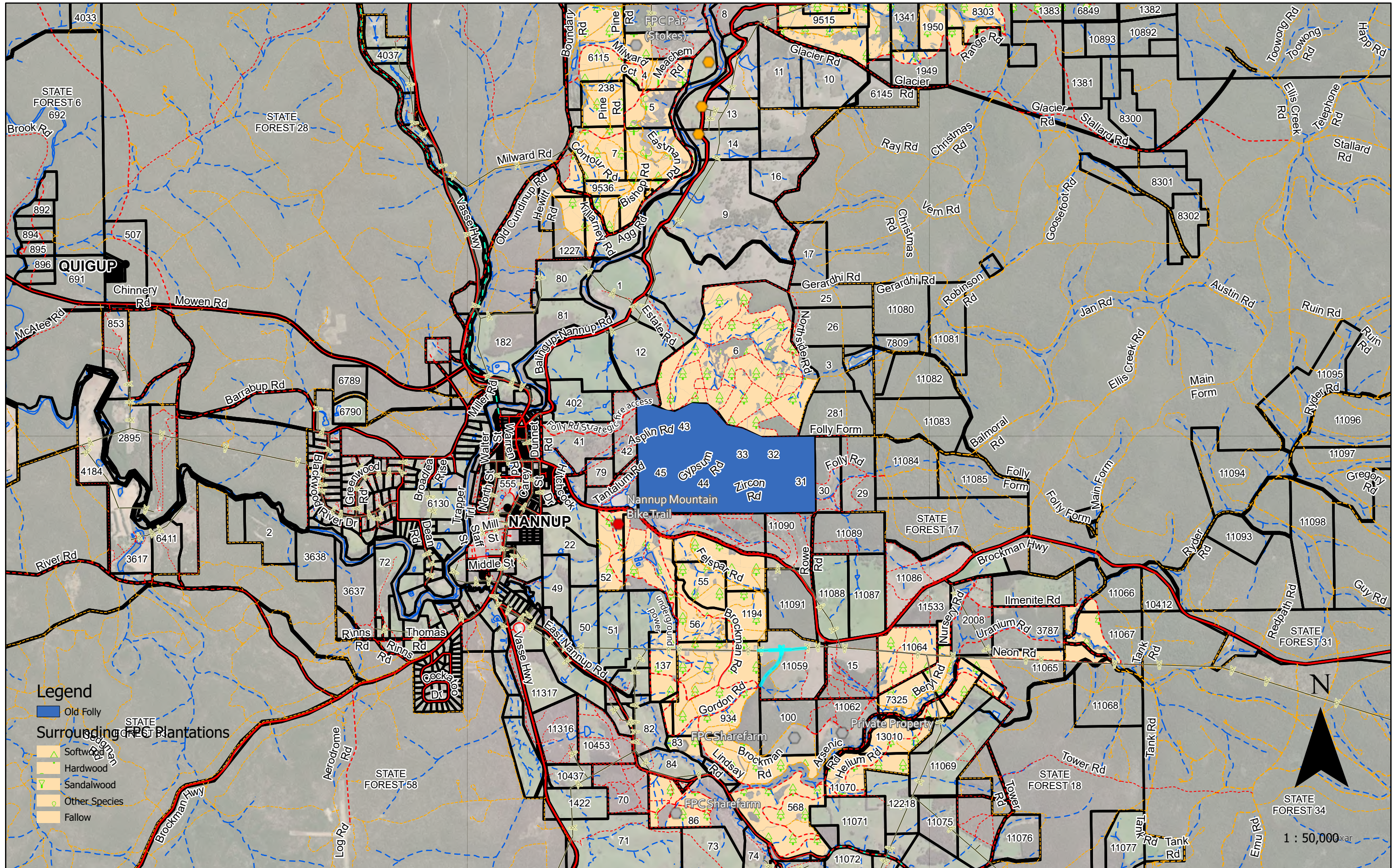
## 7. AUTHORISATION

Approved by Manager, Forest Management:

13/1/23



# Old Folly Plantation Location Map





# Planned Plantation: OldFolly

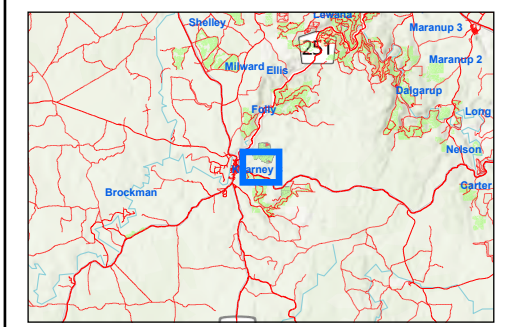
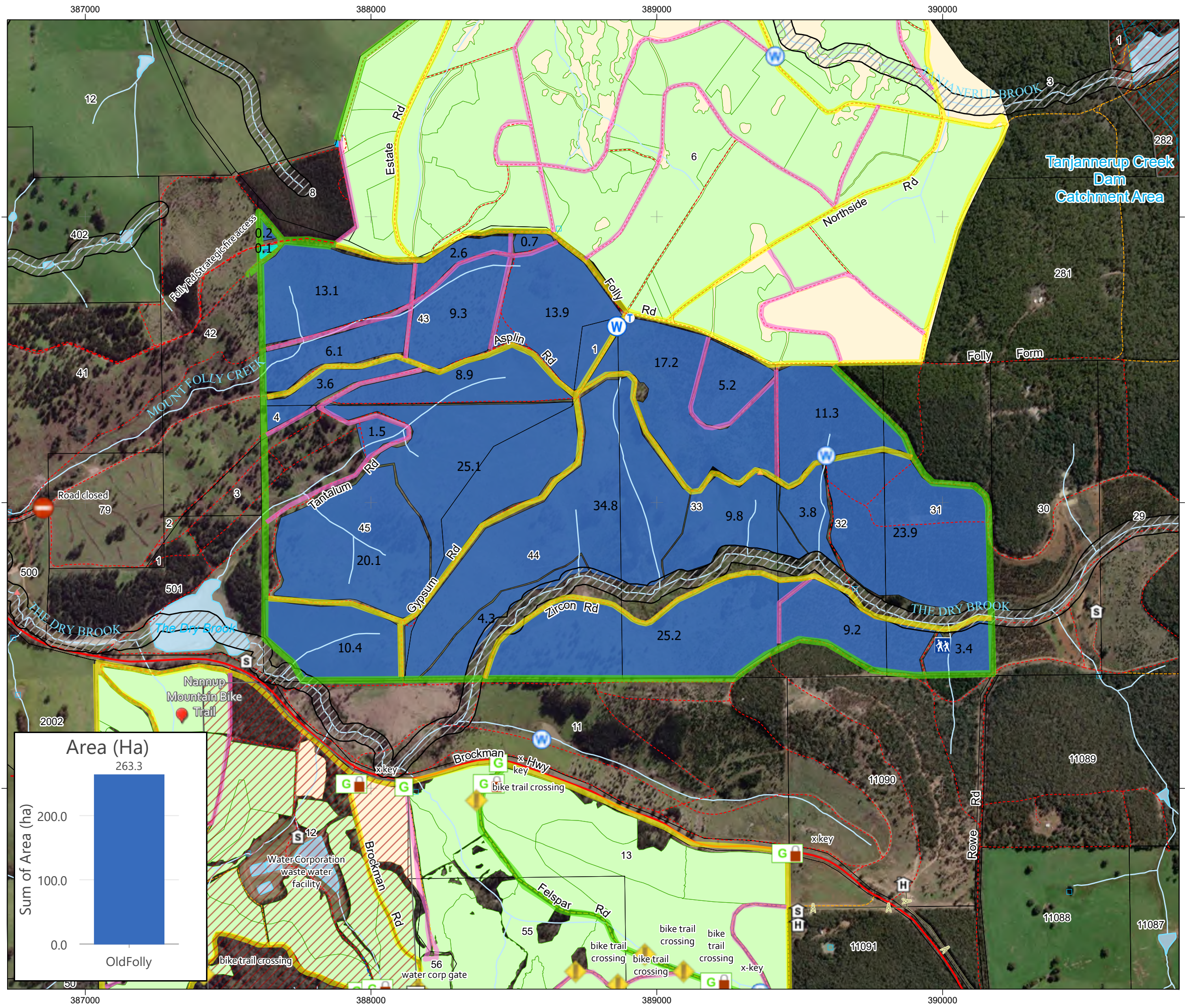
## Concept Plan

### 263.3Ha

#### Desktop Area Only

L.G.A.: SHIRE OF NANNUP  
 DBCA District: BLACKWOOD  
 Water Catchment: HARDY ESTUARY-BLACKWOOD RIVER

- |   |   |  |
|---|---|--|
| <ul style="list-style-type: none"> <li>Concept Area</li> <li>Operational Fuel Breaks</li> <li>Fuel Break (6m)</li> <li>Fuel Break (10m)</li> <li>Fuel Break (15m)</li> <li>Threatened and Priority Fauna (DBCA-037)</li> <li>Threatened - Endangered</li> <li>Ratis Heritage Sites</li> <li>Aboriginal Heritage Places (DPLH-001)</li> <li>Recreation Sites (CDDP)</li> <li>Distribution Overhead Powerlines (WP-031)</li> <li>Roads (LGATE-012)</li> <li>Main Road (Sealed)</li> <li>Minor Road (Unsealed)</li> <li>Track (Unsealed)</li> <li>Other</li> </ul> | <ul style="list-style-type: none"> <li>Roads (LGATE-134)</li> <li>Forestry Road (Unsealed)</li> <li>Forestry Track (Unsealed)</li> <li>Cadastral Boundaries</li> <li>Water Points (LGATE-017)</li> <li>Earth Dam</li> <li>Tank</li> <li>Water Courses (LGATE-018)</li> <li>Minor River</li> <li>Water Bodies (LGATE-016)</li> <li>Water Body</li> <li>Reservoir Protection Zone</li> <li>Public Drinking Water Source Areas (DWER)</li> <li>Protection Area-P1</li> <li>Protection Area-P2</li> <li>Protection Area-P3</li> </ul> | <ul style="list-style-type: none"> <li>Protection Area-P3*</li> <li>Protection Area-NA</li> <li>FPC Plantations</li> <li>Fallow</li> <li>Softwood</li> <li>External Sensitivities</li> <li>Recreation</li> <li>FPC Points of Interest</li> <li>External Gate</li> <li>External Gate (Locked)</li> <li>Internal Gate</li> <li>Hazard</li> <li>Shed</li> <li>No Access</li> <li>Phone Reception</li> <li>Water Point</li> <li>Water Point - Tank</li> <li>FPC Lines of Interest</li> <li>Access Track</li> <li>Pipeline</li> <li>FPC Polygons of Interest</li> <li>Sensitive Site</li> </ul> |
|---|---|--|



Scale 1:12,500 (A3)  
 0 130 260 390 520 650  
 Metres

Projection: Universal Transverse Mercator CM117E Zone 50  
 Datum: Geocentric Datum of Australia 1994 (GDA 1994)  
 © 2023 Western Australian Land Information Authority



COMMISSION PLAN FOR OPERATIONAL USE ONLY  
 Compiled by: matthewj Date: 12/01/2023



### 3.3.3 *DBCA Suppression Response to Bushfire on or near FPC Plantations*

#### **SCOPE**

These response arrangements are applicable to the management of bushfires on, or threatening, FPC plantations in the South West Land Division of Western Australia. This includes all and or parts of the Swan, South West, Warren, South Coast, Wheatbelt and Mid-West DBCA Regions (as shown below in Figure 2).

Four plantation categories and their corresponding response arrangements which are to be considered by DBCA Duty Officers upon notification of a bushfire incident are outlined below.

Categories 1 & 2 are applicable only in the Swan, South West and Warren DBCA Regions.

Categories 3 & 4 are applicable across all DBCA Regions within the South West Land Division as described above.

#### **CATEGORY 1 – BUSHFIRES IN FPC PLANTATIONS ON DBCA MANAGED LAND**

Parks and Wildlife is responsible for fire management including bushfire for all fires on, or threatening, DBCA managed lands (including Executive Director freehold land). The department will respond in a timely and adequate manner in accordance with legislation, State priorities and interagency arrangements, and to a degree that is appropriate to the:

- Safety of fire management personnel
- Values at risk
- Prevailing and forecast weather
- Availability of resources
- Cost of suppression operations
- Likelihood of long-term impact or net gain to the environment
- The nature of any pre-existing response arrangements

Relevant DBCA Duty Officer to notify FPC Duty Officer as soon as practicable.

#### **CATEGORY 2 – BUSHFIRES IN FPC PLANTATIONS WITHIN 3 KILOMETRES OF BUT NOT ON DBCA MANAGED LAND**

The landowner and the Local Government Authority (LGA) are responsible for fire management and bushfire suppression.

Includes both Sharefarm plantations, and plantations established on land purchased by FPC.

The suppression response will be as for Category 1.

Relevant DBCA Duty Officer to notify FPC Duty Officer as soon as practicable.

### **CATEGORY 3**

- a) **BUSHFIRES IN FPC PLANTATIONS GREATER THAN 3 KILOMETRES FROM DBCA MANAGED LAND WITHIN THE SWAN, SOUTH WEST AND WARREN REGIONS**
- b) **BUSHFIRES IN ALL FPC PLANTATIONS OUTSIDE OF THE SWAN, SOUTH WEST AND WARREN REGIONS**

The landowner and the LGA are responsible for fire management and bushfire suppression.

The relevant DBCA Duty Officers may or may not dispatch suppression resources based on a request from the LGA Chief Bushfire Control Officer (CBFCO).

Relevant DBCA Duty Officer to notify FPC Duty Officer as soon as practicable.

### **CATEGORY 4 – BUSHFIRES IN PRIVATE PLANTATIONS**

The landowner and the Local Government Authority are responsible for incident management and suppression. DBCA **do not** have any bushfire suppression agreements with any private plantation owners.

Any response will be based on requests from the LGA CBFCO.

**Note:** In all the above categories the response will also take into consideration guidance given in the DBCA Fire Management Policy 19, and the various DBCA Regional and District Fire Preparedness and Response Plans.



Figure 2: South West Land Division of Western Australia

## **3.4 Other Fire Response**

### **3.4.1 South West Response Zone**

When active between 1<sup>st</sup> December and 31<sup>st</sup> March 0800-1800, there will be an immediate response from Parks and Wildlife for fires occurring on CALM Act tenure.



# Blackwood Valley Zone Response Plan

Operational Protocols

2021 – 2023 Bushfire Season



**Arrangements between and signatories:**

- Chief Executive Officer, Shire of Bridgetown - Greenbushes;
- Chief Executive Officer, Shire of Donnybrook - Balingup;
- Chief Executive Officer, Shire of Nannup;
- Department of Fire & Emergency Services (DFES) Superintendent Lower South West;
- Department of Biodiversity Conservation and Attractions, Parks & Wildlife Service; (DBCA) South West Regional Manager;
- Department of Biodiversity Conservation and Attractions, Parks & Wildlife Service; (DBCA) Warren Regional Manager;
- Forest Products Commission SW Manager.

**Date of this Document:** 28/01/2022

**Review Date:** 30/10/2024

**Document Custodian:**

To provide comment on this document please contact:

Lower South West Superintendent - Phil Brandrett

Phone: 9771 6800

**Amendment Table**

AMENDMENT		DETAILS	AMENDED BY: (INITIALS)
NO.	DATE		
1	2019	Response plan drafted	P. Brandrett
2	Dec 2020	Minor review	N. Hall
3	Jan 2022	Minor Review – Air Support Contacts for LGA, Amendment table, Table of contents	N. Hall
4			
5			
6			

**Amendments:**

Minor amendments to the response plan will be permitted to be updated as required, any significant amendments will require acknowledgement and approval by the below listed agency representatives.

**Endorsed by:**

 <hr/> <p>T. Clynch CEO Shire of Bridgetown - Greenbushes</p>	 <hr/> <p>B. Rose CEO Shire of Donnybrook - Balingup</p>
 <hr/> <p>D. Taylor Shire of Nannup</p>	 <hr/> <p>D. Guille Forest Products Commission, Manager of Forest Management</p>
 <hr/> <p>24/2/2022</p> <p>A. Ennis Department of Biodiversity Conservation and Attractions Parks and Wildlife Service, South West A/Regional Manager</p>	<p>Digitally signed by Tim Foley Date: 2022.02.22 11:28:06 +08'00'</p> <hr/> <p><b>Tim Foley</b></p> <p>T. Foley Department of Biodiversity Conservation and Attractions Parks and Wildlife Service, Warren A/Regional Manager</p>
<p><b>Phil Brandrett</b></p> <p>Digitally signed by Phil Brandrett Date: 2022.01.31 11:06:52 +08'00'</p> <hr/> <p>P. Brandrett Department of Fire and Emergency Services Lower South West Region - Superintendent</p>	



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## **Introduction**

The Blackwood Valley Zone in the context of these arrangements is an area identified along a section of the Blackwood River within the Shires of Bridgetown – Greenbushes, Donnybrook – Balingup and Nannup (see Appendix 1). The area is a mixture of land tenures and uses including State forest, Nature Reserves, private land holdings and State and private plantations. The area also supports several tourism values including holiday camps, wineries and portions of the Munda – Bididi trail and Bibbulmun Track.

Historically, the Blackwood Valley has been impacted by significant bushfires over the last 15 years. During this time there has been a reduction in the presence of localised state firefighting resources in the area due to a reduction in the timber industry and a change in the management structure and arrangements. The heightened bushfire potential in this area increases the reliance on effective fire suppression during the summer months. It is recognised that fire suppression is the result of both the timely detection of fire and the application of an aggressive initial attack on the fire. Given the spatial distribution of suppression forces and the array of fire combat agencies operating in the area, an agreed automated response across agencies is pivotal to provide effective suppression during the early stages of fire development.

## **Blackwood Valley High Risk Bushfire Zone**

A special response zone designated as Blackwood Valley Zone has been established along the Blackwood Valley because:

- The area diverse vegetation complexes, steep topography, poor access, high fuel loadings in some areas and a lack of readily available firefighting water which results in rapidly escalating fires which have the potential to threaten life and property.
- The area contains significant State and private plantation assets which requires a timely and coordinated suppression response from all parties.
- A rapid, aggressive and coordinated interagency response from ground and aerial suppression resources is required to minimise the likelihood of significant loss of life and major damage to property in a vulnerable area.
- There are areas of poor radio and mobile phone reception which can limit the effectiveness of emergency response unless the communication resources are effectively integrated.

## **Operational Times**

Indicative operational period for automatic response is 1<sup>st</sup> December to 31<sup>st</sup> March, which covers the entire Prohibited Burning Period and parts of the Restricted Period, between 0800hrs – 1800hrs.

- Operational periods can be suspended for specified periods after consultation & agreement between DBCA (District Manager, Blackwood and Donnelly Districts), DFES (Regional Duty Coordinator Lower South West), and Local Government (Chief Bushfire Control Officer (CBFCO) Shire of Bridgetown-Greenbushes / CBFCO Shire of Donnybrook-Balingup and CBFCO Shire of Nannup).

- Operational periods can be altered for specified periods should seasonal or fire conditions prove unfavorable. This will be through consultation and agreement between DBCA (District Manager, Blackwood and Donnelly Districts), DFES (Regional Duty Coordinator Lower South West), and Local Government (CBFCO's Shire of Bridgetown – Greenbushes, Donnybrook – Balingup & Nannup)
- Aerial suppression resources available daily from 0600 – 1800hrs during the contracted period (subject to operational contingencies and other operational priorities) will be:
  - Two 214B Helitaks online from 0900 – 1800hrs from the 15<sup>th</sup> Dec - 31<sup>st</sup> March;
  - Two fixed-wing aircraft available from 0600 – 1800hrs from 1<sup>st</sup> December (nominal date only).

### **Supervisor Communication Centre (SCC)**

Zone Response arrangements apply to all Grass/Scrub/Bushfires within Operational Times. The SCC may use discretion when mobilising to other types of fires however, input from local knowledge will take priority.

From here forth 'Grass/Scrub/Bushfires' will be collectively referred to as 'Bushfire'.

### **Zone Response**

Responses to notification of a Bushfire within the Zone area are to be an **automatic** multi-agency turnout, and should comprise of **at least**:

- One appliance from each of the relevant Local Government;
- One officer from the local government bushfire brigade in which the fire is located;
- Mobilisation of the Bridgetown 12000L water tanker (mobilisation as per normal procedures through Group-call/000 agreement);
- One appliance and one staff member from DBCA;
- One staff member from DFES (RDC to mobilise); and
- Two aerial suppression aircraft (DBCA Blackwood DDO to mobilise through State Operations Air Desk - ph: 9414 7970 fax 9414 7859).
- Email: [stateoperationsairdesk@dfes.wa.gov.au](mailto:stateoperationsairdesk@dfes.wa.gov.au)  
[StateFirebombingDesk@dbca.wa.gov.au](mailto:StateFirebombingDesk@dbca.wa.gov.au)

### **First Arriving Officer**

Upon arrival of the first appliance, the first arriving officer shall:

- Complete a size-up;
- Confirm resourcing requirements through sitrep (PAFTACS);
  - BFS – through DFES Comcen or DFES Regional Duty Coordinator;
  - DBCA – through DBCA Blackwood DDO.
- Prioritise whether aerial resources are required. If not, stand them down.
- Establish an Operations Point;
- Establish a Command Channel (identify local channel e.g. using the default communication plan channels outlined below); and
- Establish a Ground Controller and delegate IMT Functions if necessary.



## **Command & Control**

The basis for operational management is State Hazard Plan Fire (interim) and Part 4 of the SEMC State Emergency Management Framework.

In addition, the following principles applying to bushfire response:

- Following initial attack, the controlling agency of incidents will usually be tenure based. That is, a fire on DBCA tenure will be managed by DBCA; Local Government tenure will be managed by the CBFCO or their delegate. If required, transfer of control can be achieved under Sections 45A and 45 of the *Bush Fires Act 1954* or appointing an Authorised Person under Section 13 of the *Bush Fires Act 1954* where required.
- As soon as practicable after a fire has been declared Level 2 or 3, the IMT should be based at one of the Incident Control Centres located within the local government area. Incident Control Vehicles (ICV) and the state logistics cache should be considered to improve facility capabilities.

## **Responsibilities**

**DFES COMCEN** (9395 9209) will ensure:

- Reports of bushfire are interrogated with permit burns during Restricted Burn Period;
- Reports of bushfire are interrogated with DBCA prescribed burns – notification found on the Daily Burn Summary;
- Crews are notified of land tenure;
- Mobilise pre-determined resources according to the zone mobilisation:
  - BFS – Local Government Group-call, SMS;
  - DBCA – Blackwood DDO (DBCA Blackwood DDO will mobilise all aerial suppression resources through State Operations Air Desk ph. 9414 7970
  - Email to: [Stateoperationsairdesk@dfes.wa.gov.au](mailto:Stateoperationsairdesk@dfes.wa.gov.au) - or
  - [StateFirebombingDesk@dbca.wa.gov.au](mailto:StateFirebombingDesk@dbca.wa.gov.au)
- The DFES Regional Duty Coordinator is notified.

**DFES Regional Duty Coordinator** (1800 512 111) will ensure:

- Contact is made with the IC to determine if IMT support is required. Operations Point and Command Channel will be confirmed ASAP;
- DFES Comcen is notified of resourcing requirements if IC is unable to contact Comcen;
- DBCA Blackwood DDO is contacted to establish communications link;
- South West Region RDO is advised;
- A DFES staff member is mobilised and;
- FPC Duty Officer is notified (9725 5288) to establish communications link.

**DBCA Blackwood DDO** (9752 5555) will ensure:

- DFES Comcen is immediately notified of all new bushfires within the Response Zone;
- Mobilise DBCA resources – minimum one appliance and aerial suppression resources;
- Aerial suppression resources and Air Attack Supervisor should be advised Ground Controller Channel will be 638;



- Mobilise DBCA staff member;
- Contact is made with the South West Region RDO to advise of initiation of the Response Zone requirements;
- Contact is made with the DFES Regional Duty Coordinator; and
- Contact the Warren Region RDO on 0437 692 518 to confirm airbase management requirements if aerial operations are required from Manjimup.

**Local Government CBFCO or representative** will ensure:

- DFES Comcen is immediately notified of all calls within the Response Zone;
- One appliance from each of the relevant Local Government is mobilised;
- One officer from the local government bushfire brigade in which the fire is located is mobilised;
- If fire on private property contact nearest DBCA Duty Officer to mobilise all aerial suppression resources through State Operations Air Desk 9414 7970 if required.
- Mobilisation of the Bridgetown 12000L water tanker (mobilisation as per normal procedures through Group-call/000 agreement); and
- Contact is made with the DFES Regional Duty Coordinator.

**Forest Products Commission Duty Officer** (9725 5288) will ensure:

- Mobilise FPC resources as appropriate for plantation protection – minimum one appliance;
- Support the identification of impacted or likely to be impacted plantations and assist DFES RDC notify relevant owners/managers (Plantation Managers Fire Agreement); and
- Contact is made with the DFES Regional Duty Coordinator.

*Note: Aerial Suppression resources turnout is only available during the contracted period and is subject to availability.*

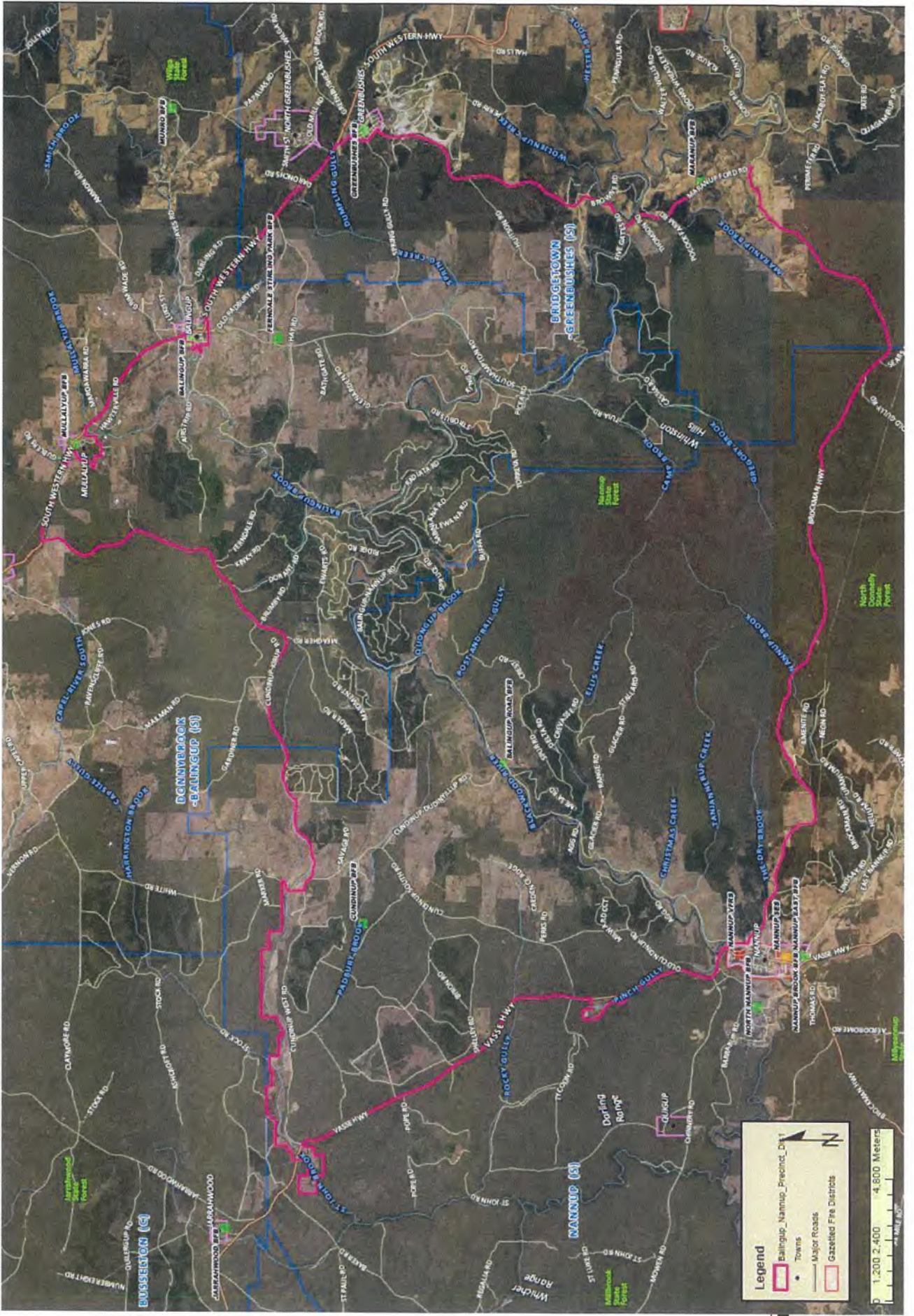
## **Communications**

Communications within the Zone will follow the default Communications Plan.

<b>Command Channel</b>	
<b>Location</b>	<b>Channel</b>
LGA (BFS) Bridgetown-Greenbushes	197
LGA (BFS) Donnybrook-Balingup	106 / 144
LGA (BFS) Nannup	146
DBCA Manjimup	505 / 71
DBCA Kirup	642
DBCA Nannup	618 / 61 or 635 / 63
Air Operations – Primary Channel	638



# Appendix 1 – Response Map







Perth hills and South West softwood plantations					
Fire danger index (JFDI)	0-60	61-100	101-140	141+	LGA harvest and vehicle movement ban
<b>High risk operations (all steel tracked machines, harvesters, excavators, bull dozers, and chainsaws)</b>					
Low site fire hazard					
High site fire hazard					
Extreme site fire hazard	<b>No machine operations to occur on these sites from December 15th to March 15th without Strategic Asset and Fire Managers approval</b>				
<b>Medium risk operations (rubber tyred/tracked machines including; graders, skidders, harvesters, forwarders, front end loaders, infield chippers on cleared site)</b>					
Low site fire hazard					
High site fire hazard					
Extreme site fire hazard					
<b>Low risk operations (graders, light vehicles and trucks on formed roads and spraying activities)</b>					
Low site fire hazard					
High site fire hazard					
Extreme site fire hazard					

**Key**

Contractors must meet the following requirements prior to commencing work:

- No restrictions

---

- Operator within phone/radio contact with Supervisor (Supervisor in phone contact with DBCA Duty Officer and FPC).

---

- Minimum of 1 light unit per machine

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- Minimum of 2 light units on site

---

- Compulsory grab tank (min 400L) attached to forwarder or other approved machine-based suppression capacity on site located within 100m of active machine.

---

- Minimum of 1 manned (2 operators available) heavy duty fire tank unit, minimum of 1 light unit per machine to be stationed on site, and remain and inspect the site for 1 hour after machine stops work.

---

- Minimum of grab tank (forwarder) or other approved machine based suppression capacity and a minimum of 1 light unit and heavy duty to be stationed on site and remain and inspect the site for 1 hour after machine stops work.

---

- Cease operations and inspect the site for 1 hour after machine stops work.

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- \*** Exception - Loading and transporting logs from a cleared break or landing is permitted providing Operator within phone/radio contact with DBCA Duty Officer and FPC Supervisor. Minimum of 2 manned light units to be stationed on site and to remain and inspect the site for 15 minutes after machine stops work.

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- \*\*** Exception - Rubber tyred vehicles travelling along formed roads. Does not include machinery conducting road maintenance.



These restrictions are a guideline only. Senior Operational Manager or Fire Duty Officer may consider further restrictions if conditions change.

Silviculture Operations:

Tracked machines working on cleared sites for establishment purposes may be assessed as Medium Risk Operations subject to approval from the Manager Silviculture and Manager Fire Protection.

Note: These guidelines do not apply to fire suppression activities.

**Definitions**

**Low site fire hazard** - Ground prepared for establishment (windrowed, heaping crusher rolled, mounded)

**High site fire hazard** - Heavy fuel loadings (including all standing plantations with dry needle bed)

**Extreme site fire hazard** - Steep slopes > 14 degrees and containing exposed rock and with heavy fuel loads (includes cured harvesting debris / red tops)

**On site** - located so as to support any potential ignition point within five minutes

**Heavy duty manned (2 operators)** - 4-wheel drive truck with 2,700 litre water tank and pump rate 1,200 litres per minute. Trucks must have capacity to deliver min 100m hose lay response with appropriate nozzle.

**Light unit/Fast Attack** - 4WD vehicle or attached trailer with 400 litres of water and 5 hp pump, rake and/or shovel



## 1. Purpose / objectives

1. Minimise the chance of uncontrolled fire impacting life and property, community and industry assets and associated environmental values.
2. Ensure contractors are aware of opportunities to provide basic skills to their employees to help mitigate fire risk and safely provide initial suppression efforts to protect their equipment and surrounding forest assets.
3. This checklist is applicable to Native Forest and Plantations operations only.

## 2. PROCEDURE

### The Contractor must:

1. Adhere to this procedure and operational restrictions as instructed at all times
2. Ensure all personnel and equipment complies with this procedure at all times. Failure to comply may result in the suspension of services until the fault is rectified.
3. Ensure all field employees have successfully completed the FPC Fire Awareness module within the first six months of employment and provide FPC with details of all current employees if not consistent with industry training records.
4. Ensure that all personnel conform with the minimum standards for Personal Protective Equipment (PPE) for all fire suppression activities.
5. Take all necessary precautions to prevent the occurrence or spread of fire in their worksite.
6. Not light fires in any forest area without the permission of the FPC (FPC) and local fire authority. (DBCA, Shire FCO)
7. During the Restricted and Prohibited burning periods, notify the FPC of their intent to work on weekends or public holidays by midday of the preceding workday. The FPC Duty Officer (FPC DO) will determine if the proposed work can occur and what restrictions will apply.
8. Monitor the State's emergency broadcaster (ABC radio) and the Department of Fire and Emergency Services website (<http://www.dfes.wa.gov.au/totalfirebans/Pages/default.aspx>) for any Local Government imposed bans.

### The FPC must:

9. Ensure the [FPC810 Checklist – Contractor Fire Responsibilities](#) is completed during the second week of December on **ALL ACTIVE OPERATIONS** during the span of that week and copies retained on Contractors operational file and within the 788FP Annual Fire Requirements.
10. Notify the contractor during the Restricted and Prohibited burning periods of any operational restrictions based on the forecast fire danger such as shut down times, additional suppression equipment required and/or the requirement to monitor the site for 1 hour after the machine has come to rest.

11. Advise the relevant fire manager of the intended worksite location of Contractor(s) during the Restricted and Prohibited period.
12. Consult with the relevant land manager and the FPC DO during the Restricted and Prohibited burning periods regarding the Contractor's intention to work on weekends or public holidays and any fire related requirements that may be necessary.

## 2.1 Vehicles and equipment

### The Contractor must (at all times):

1. Ensure all vehicles and equipment (including chainsaws) entering the forest have:
  - An effective exhaust system maintained in good working order (BFR 1954 24A.5).
  - Appropriate spark arrester fitted to all internal combustion engines (BFR 1954 24A.5(b)).
  - A fire extinguisher in a sound and efficient condition; defined as a container filled with at least 7.5 litres of water and has a pump capable of discharging that water (BFR 1954 3).
  - A fire rake or shovel with their fire unit.
  - For graders and bulldozers: exhaust systems that discharge emissions vertically upwards (BFR 1954 37A(b)).
2. Light vehicles must remain within 10 m of roads.
3. Daily machine start-up procedures should include a check that the machine is clean of combustible material, particularly the spaces between the engine and engine guards.

## 2.2 Fire-fighting appliances

### During the Restricted and Prohibited burning periods, or as determined by the FPC the Contractor must:

1. Provide on-site, and maintain in good working order, a mobile fire-fighting unit consistent with the requirements of the Guidelines for applying stipulated operational restrictions for that specific operation site. Comprising of a full water tank with a minimum capacity of 400 litres connected to a powered pump with minimum of 20 m heat tolerant PVC/Nitrile hose and capacity to pump 100L/min (minimum).
2. Locate the fire suppression unit/s as per applicable Guidelines for applying operation restrictions to manage fire risk – [FPC145](#), [FPC146](#) and [FPC147](#).
3. Ensure all personnel at the worksite can safely operate the fire-fighting unit in the event of an emergency.
4. Remain on site for one hour after the machine has closed down and work is complete on days when restrictions based on the FDR are applied.

## 2.3 Smoking

1. Is prohibited in all forest operations, except where the ground surface is clear of all vegetation or other flammable material.
2. There will be no smoking of cigarettes within six metres of any refuelling site.

## 2.4 On-site maintenance – Hot Works

### The Contractor must:

1. Only conduct in-forest maintenance involving hot works once authorisation from the FPC is obtained and ensure:
  - All hot work to be carried out on mineral earth breaks.
  - Before hot work, the area will be wet down with a fire unit in a 6m radius.
  - There shall be more than one person onsite while carrying out hot works.
  - A serviceable fire unit will be on standby at the site of the hot work.
2. Not undertake hot works on days when a Total Fire Ban has been imposed for the area of operation.

### The FPC must:

3. Consult with the relevant land manager regarding the intended timing and location of any hot works authorised during the Restricted and Prohibited period, for work on ALL land tenures.

## 2.5 Fire suppression on or near the worksite

1. **In the event of a fire occurring the contractor must call 000 fire emergency** in the first instance to log the incident with COMCEN (Department of Fire and Emergency Services Communication Centre). Where radio / phone communications are limited, this may require immediately travelling to the nominated emergency communications point in the contractor's emergency safety plan for the worksite to initiate the 000 call.
2. Once the emergency call has been made then the contractor must call the FPC DO (**08 9725 5288**). The FPC DO will liaise with the land manager on the further coordination for the effective and efficient management of the fire incident.
3. Within employee capacity and training and due consideration for personal safety, endeavour to suppress a fire starting on, or in the vicinity of, the worksite until fire crews arrives.
4. Be competent in the use of the on-site suppression equipment to protect life and property.
5. Assist with the evacuation of personnel and equipment.
6. Pay for any costs incurred by the contractor in suppressing or attempting to suppress a fire on their worksite resulting from the Contractor's operations.

**The Contractor should follow the FPC Wildfire Emergency Response ADVISE process in reporting and responding**

- *Alert someone who can contact others to seek help to suppress*
- *Defend if safe to do so, take action to suppress where safe and skills support action*
- *Vocalise “communicate” your movements constantly, so others are aware of your situation, location*
- *Identify safe escape routes should fire escalate*
- *Safety zone, know where they are and when to go there*
- *Equipment is critical, ensure PPE is always used when responding to wildfire*

**2.6 Wildfire fire risk appreciation and operational restriction guidelines process.**

1. All worksites will be allocated a site risk for fire, based on local topography, soil types, fuel types and loadings.
2. Operation type, method and machines will be considered to establish operational risk.
3. Restriction to activities will be determined by applying the Fire Danger Rating, forecast weather conditions for site and operational risk. The capacity of FPC staff, contractors, and other fire agencies to respond to wildfire for the operational period will also be taken into consideration.
4. Daily restriction details will be forwarded to Contractor managers each day by email (FPC199). It will be the managers responsibility to forward these restrictions on to all employees and ensure compliance.