

Reliance Forest Fibre

FOREST MANAGEMENT PLAN



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Authorised by: Owen Hoffman, General Manager			

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RFF acknowledges and pays respect to the Tasmanian Aboriginal community as the traditional and original owners and continuing custodians of the land managed by RFF

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Introduction

Reliance Forest Fibre (RFF) manages a large dispersed estate of approximately 29,000ha across Tasmania. This estate on Permanent Timber Production Zone Land (PTPZL) is leased from Sustainable Timber Tasmania as a Forest Right under the Forest Management Act 2013. RFF as the owner of the Forest Right has engaged AKS Forest Management Services (AKSFMS) as a specialist forest manager to maximise the investment returns to the forest owners and minimise the risks associated with forest management. The relationship between RFF and AKSFMS is described in management contracts.

RFF responsibilities include:

- Contract Approval;
- Sales and marketing;
- Contractor Payment;
- Budget approval;
- Strategic Management Decisions;
- Woodflow modelling;
- Provision of a spatial management system

AKSFMS is the principal management contractor engaged to manage the estate on behalf of Reliance Forest Fibre. AKSFMS has management and harvesting responsibility for the estate including:

- Plantation establishment and maintenance;
 - Site establishment (clearing, cultivation, spraying, planting and primary fertilising), Secondary fertilising,
- Weed and pest control;
- Fire protection;
 - Fire preparedness and maintenance,
- Road construction and maintenance;
- Harvesting and transport of plantation product;
- Monitoring of third party operations (i.e. harvesting);
- Neighbour (stakeholder) relations;
- Inventory programs;
- Spatial data (using the Land Resource Management system (LRM));
- Maintenance of Certification to ensure compliance

RFF is committed to the practices and principles of environmentally sustainable forest management, the provision of a safe working environment, and excellence in the business of sustainable plantation forestry from the seedling to the market.

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Purpose

This forest management plan prescribes the framework for strategic management of the Defined Forest Area. It specifies the policies, principles and management objectives that underpin environmentally sustainable forest management, a safe working environment, optimized economic outcomes and risk mitigation. It aligns the organisation to meet or exceed its statutory obligations and comply with AS4708.

Systematic Management

RFF’s Sustainable Forest Management Policy is a declaration of the company’s commitment to the principles and practices of sustainable forest management and its corporate responsibilities to its staff, investors, customers and the community. It is a publicly available document found on the RFF website.

“Tasmania’s forest management system is a comprehensive system for delivering ecologically sustainable forest management across all land tenures. The system comprises an overarching legislative and policy framework, and associated planning and operational systems. It is complemented by adaptive management and continuous improvement process incorporating research findings and feedback processes associated with compliance and enforcement systems, stakeholder engagement and monitoring and review mechanisms.” Department of State Growth 2017

Implementation

Forest management in Tasmania is governed by the *Forest Practices Act 1985* and is implemented through the *Forest Practices Code 2015* (FPC). The FPC provides a practical set of legally enforceable guidelines to sustainably manage forests and provide protection of the natural and cultural values of the forest during forest operations. The Forest Practices system is a co-regulatory approach to management with Forest Practices Officers (FPOs) appointed by the Board of the Forest Practices Authority (FPA). An FPO’s primary responsibility is to ensure compliance with the Act and the Code through powers given to them under section 40 of the Act – these are called FPO (Inspecting). FPOs who are trained in the preparation of FPPs FPOs (Planning) have an additional power delegated to them by the FPA under section 43 of the Act to consider applications for forest practices plans for certification, refusal or amendment.

FPOs are mainly employed by industry but are responsible to the FPA on issues associated with forest practices. The FPA provides independent monitoring and enforcement of the Act and provisions of the FPC. FPOs are responsible for developing Forest Practices Plans (FPPs) that are site-specific operational plans, certified to comply with the FPC.

FPOs are highly trained professionals with significant operational experience who are required to be nominated and accepted as candidates and undertake intensive training in forest practices. Competence is maintained and enhanced through regular compulsory refresher courses and specialist training across all aspects of forest practices. Preparation of FPPs involves a thorough understanding of the site, identifying any issues through the special values evaluation process, interrogating the available databases of recorded sites, other references and FPA publications, development of a digital operations map, the notification of neighbours, use of an FPP checklist and a peer review process. The plan clearly identifies the location of known sites and prescriptions to

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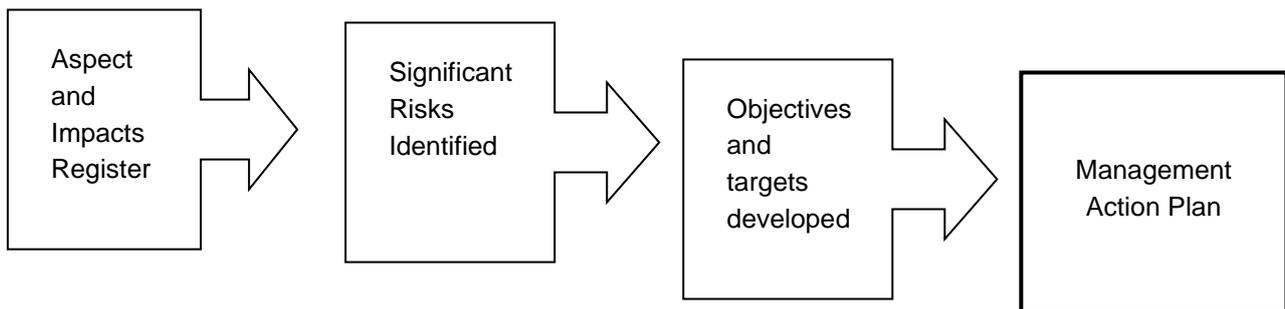
manage special values, it identifies landings, stream classes, and buffers and any defined watercourse crossings. As an operational plan, it also defines the harvesting machinery to be used and the principal processor. Once signed it is then distributed and discussed on-site with the chosen contractor as a compulsory element of operational induction.

The FPA provides a significant resource to the industry through the specialists engaged across the disciplines of botany, zoology, soil and water, geoscience and cultural heritage. The team of highly regarded specialists undertake research and provide advice supporting FPO's in the development of plans and the management of the forest estate. Specialist planning tools have been developed including the Threatened Fauna Adviser that provides decision support and endorsed management prescriptions under Agreed Procedures for the management of threatened species.

The forest practices system also provides for the protection and management of Matters of National Environmental Significance.

Aspects, Impacts, Objectives and Targets

Forest management from the forest to the mill door will always carry a level of risk. RFF/AKSFMS has used the Aspects and Impacts register to identify a number of risks which are considered significant and have developed risk management strategies. An overview of the process is provided with the detailed approach found in procedures and the Management Action Plan.



The Management Action Plan identifies Objectives and sets targets so that the risk posed by an activity is managed. The objectives contained within the plan are long term strategic objectives and are reviewed at the Annual Management Review Meeting or as required.

The significant risks identified and objective and targets for forest management are summarized below

1. Wildfire

- a. Objective: Minimise the risk of wildfire and escapes from controlled burn and impacts of smoke on communities.
- b. Targets: A series of targets have been developed to achieve the objective including: Limiting wildfire entering or starting in the RFF DFA to training of staff for involvement in multi-agency fires.

2. Environmental Weeds and diseases

- a. Objective: Minimise the risk of spreading weeds and fungal pathogens
- b. Targets: include monitoring the occurrence of weeds to the implementation of the Machinery Washdown Guidelines.

3. Chemical Use

- a. Objective: To minimize the risk to RFF of negative stakeholder reactions from spraying operations used to manage the RFF forest estate
- b. Targets: includes; no overspray onto neighbour properties, apiarists bees and waterways

4. Forest Practices

- a. Objective: To ensure that all aspects of the Forest Practices Code are met and exceeded where possible.
- b. Targets: No breaches of the Forest Practices Code or Forest Practices Plans to where possible and practical, exceed minimum regulatory standards for forest management activities.

5. Road Accidents -Transport of Logs

- a. Objective: To manage the level of risks of accidents associated with log haulage from the RFF DFA
- b. Targets: Zero accidents associated with cartage operations from coupes within RFF DFA

Monitoring & Auditing

RFF has a comprehensive approach to monitoring operations and ensuring compliance via a system of internal audits. External audits are provided by a third-party certification body and the FPA’s annual compliance program. Monitoring of operations provides feedback to contractors and RFF on multiple variables including safety, production and forest practices compliance. Monitoring is aided by the use of field tablets and appropriate software with reports feeding into monthly operations meetings. The annual internal audit is a sample across all activities and informs the annual Management Review.

Non-conformances found are actioned appropriately to their severity. The review of monitoring and conformance aids the development of training and improvements in procedures, planning and implementation.

Continual Improvement Cycle



As part of RFFs commitment to continual improvement, management documents will be reviewed on a five yearly basis or as required. RFF has also implemented a process of internal and external auditing, thorough and detailed incident investigation as well as a process of ongoing operational monitoring that will provide a framework for continual improvement.

Stakeholder comment/feedback received through the May 2019 plan review period has been included in this final version of the plan.

Legislative Requirements

Tasmania's forest management system encompasses a range of legislation administered by a number of State Government agencies and authorities and applies to both public and private land tenures.

The following key Tasmanian legislation underpins the forest management system:

- *The Forest Practices Act 1985 and Forest Practices Regulations 2017, which provide for sustainable forest management associated with the growing and harvesting of forests on public and private land;*
- *The Forest Management Act 2013, which prescribes the Permanent Timber Production Zone Land and the Forestry Corporation (now Sustainable Timber Tasmania) as the land manager;*
- *The Nature Conservation Act 2002 and the Threatened Species Protection Act 1995 which provide protection for listed flora, fauna and threatened vegetation communities; and*
- *The National Parks and Reserves Management Act 2002 which prescribes management requirements for much of the Tasmanian reserve system.*

A full suite of legislation affecting forest management is provided in the Legislation Register.

3 YEAR PLANS

It is a statutory requirement under the Forest Practices Act (section 27) for any company producing 100,000 tonnes of wood or more per year to submit a 3YP to the FPA. Section 27(5) requires a summary of the plan to be sent to each local authority exercising jurisdiction over the transport route. This has resulted in the industry holding annual consultation meetings with local government RFF as a larger forest company, (producing more than 100,000 tonnes of wood product annually) is required to produce three-year wood production forecasts that include:

- Locations of land from which timber is intended to be harvested
- Approximate volumes to be harvested from each location
- Routes for transport from each location
- Reafforestation measures that are proposed

RFF participates, through AKSFMS, in the annual three-year forest industry planning meetings with councils.

Resource Description: Defined Forest Area

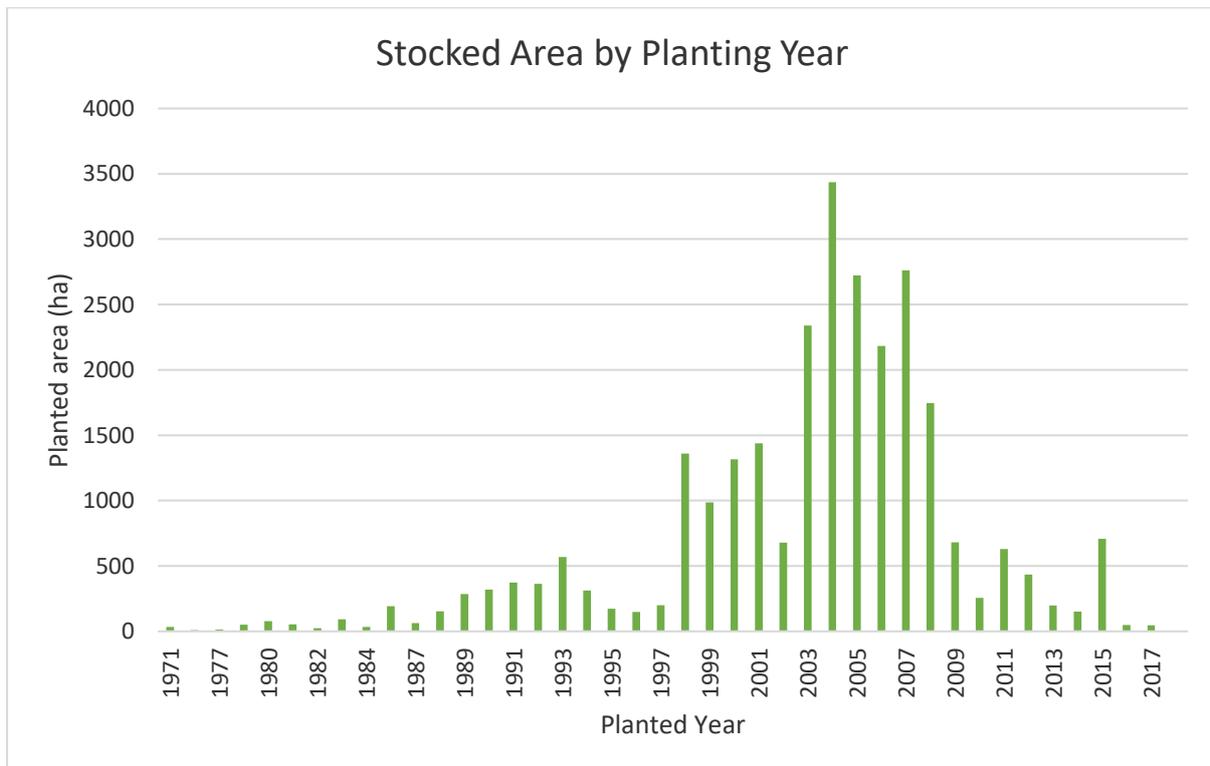
The RFF Defined Forest Area (DFA) is dispersed throughout the PTPZL across Tasmania. The DFA has coupes generally between 10 and 100 ha with a median of approximately 30 ha on former native forest sites. Clearing of native forest for plantations by the former Forestry Tasmania was phased out in 2006.

The components of the DFA as shown in table 1 below, comprised of 27,095 ha hardwood plantations (predominantly *Eucalyptus nitens* with some *E. globulus*), 1,537 ha native vegetation (forest and non-forest) and approximately 999 ha of infrastructure-other (roads, easements, unplanted areas, dams).

Table 1 – RFF Estate As At 6th October 2017

Category	Land-use	Area (ha)
Productive Area	<i>E. nitens</i> plantation	17,614
	<i>E. globulus</i> plantation	4,917
	Ash species <i>Eucalyptus</i> plantation	1,004
	Mixed <i>Eucalyptus</i> spp.	397
	Fallow	3,163
Non-Productive Area*	Native Forest	1,492
	Non-Forest	45
	Infrastructure	999
TOTAL		29,632

Age Class Distribution (6th October 2017)



The graph shows the age class distribution of the RFF estate and demonstrates that the majority of the plantation establishment activity took place between 1998 and 2008.

Plantation area

The RFF DFA is predominantly located on ex-native forest sites. Plantations were established by Forestry Tasmania (now Sustainable Timber Tasmania) and private companies on State Forest (now PTPZL) from the early 1990s through to 2016. RFF purchased a forestry right over the DFA, comprising a portion of the hardwood plantation estate on PTPZL, in October 2017.

RFF is managing the estate to optimize the value of wood fibre production for international markets.

Native Forest

The RFF estate has a small proportion of native forest and non-forest vegetation. These small areas were effectively inherited as part of the logical mapping of the Forest Right boundaries and are mostly included streamside buffers and small “islands” within the boundary of the Forestry Right.

The native forest is field verified as planning for FPP production is undertaken on a coupe. Assessments are based on the relevant Bio-regional “Forest Botany Manual” issued by the FPA. At a regional level, un-verified forest typing is available on the LIST and Conserve databases. These are derived from aerial imaging and interpretation, based on the Forest categories from the Tasmania Regional Forest Agreement (1997). If the forest is a threatened vegetation community of greater than 1 ha protection is provided by the Tasmanian *Nature Conservation Act 2002*. A natural values analysis of the estate has identified that while a number of coupes contain vegetation mapping units classified as threatened, none of them is more than 1ha with the majority less than 0.05ha. These vegetation types may be more extensive outside the coupe and routine plantation management activities will not negatively impact them. *ECOTas Internal report*.

Native forest will be maintained for biodiversity outcomes unless there is a requirement for minor infrastructure development related clearing.

Adjacent Lands

The RFF estate is widely distributed across Tasmania. As it is dispersed throughout the PTPZL the majority of the RFF estate’s only neighbour is PTPZL, State-owned forested land managed by Sustainable Timber Tasmania (STT) for either timber production or conservation. Other neighbours include forested land and agricultural land owned and managed by private companies and individuals.

RFF as a responsible corporate citizen and member of the Tasmanian community is committed to healthy engagement with its neighbours.

Native Title

There is no native title claim on any land managed by RFF within Tasmania.

Maps and Data

A comprehensive GIS-based stand record system, Land Resource Management (LRM) has been developed for use by RFF. It is an application for managing tabular and spatial information.

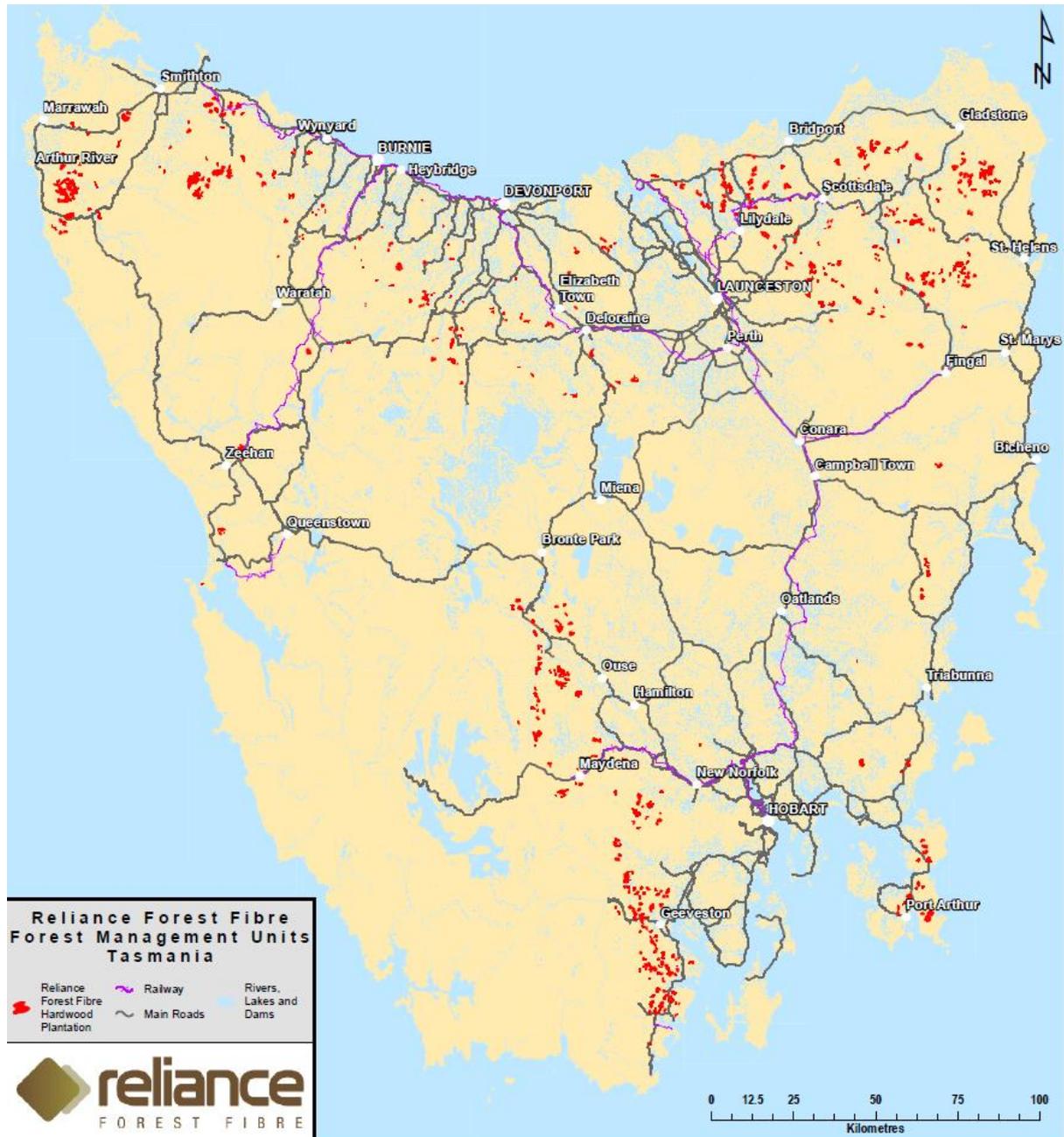
The system has significant capability with the potential to manage many land and plantation attributes.

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Defined Forest Area Maps

Maps describing the DFA are available on the RFF website *insert link to website here*

The estate as at 6th October 2017 is shown in the map below



Chain of Custody

Products produced from the RFF DFA are chain of custody certified to the first point of sale or transfer. All product is identified as certified by delivery information that states the origin within the DFA, the harvest and transport contractors, the destination/customer and the certified weight or volume of the product. All delivery/weighbridge dockets will provide the correct certification information including the certificate number, the claim 100% AFS/PEFC certified and the URL where

the current certificate can be viewed. Monthly invoices also identify the loads and certification claims.

Logs are to be securely loaded and it is the truck driver's responsibility to ensure that log loading and securing is undertaken to comply with the Heavy Vehicle National Law Regulations 2014. Truck routes are specified by RFF and contractors are made aware of known hazards or restrictions such as school bus routes and times.

Stakeholders

RFF is committed to a positive stakeholder engagement process. Affected stakeholders, including neighbours, local government and other industry are regularly engaged through the operational process and notified through FPA "Notice of Intent" requirement. Forest management staff proactively engage with stakeholders to build trust and productive relationships.

Communication with all stakeholders is undertaken through the initial plan development and review, planning and the various stages of operational activity.

Dispute resolution

A dispute resolution protocol has been developed to provide a clear pathway to bring complaints and potential disputes to an agreeable solution wherever possible. In the absence of a solution and the parties remaining aggrieved there is further due process through, facilitation, mediation or arbitration as a last resort to provide an independent result binding on both parties.

Publicly available documents

RFF provides publicly available information on its web site that includes:

- RFF AS4708 Certificate;
- The Sustainable Forest Management Policy;
- The Forest Management Plan;
- Defined Forest Area maps;
- Summaries of recent certification audits

Biodiversity

Overview

An estate wide analysis of natural values undertaken by private consultant ECOtas, has demonstrated that the Reliance Forest Fibre coupes support biodiversity values that can be appropriately managed through the existing provisions of the Tasmanian Forest Practices system using the tools, databases and planning prescriptions.



Grey Goshawk, *Accipiter novaehollandiae*

Threatened Species Management

Tasmania’s Forest Practices system provides a comprehensive mechanism for managing the biodiversity values found in forest operations. FPOs use biodiversity evaluation sheets and interrogate various databases as part of the preparation process for drawing up a FPP to cover an area to be harvested. Databases for known sites and predicted zones include the Conserve Database administered through STT and the FPA’s Biodiversity Values Database updated through the Department of Primary Industries, Water and Environment (DPIPWE) Natural Values Atlas. Information gained from desktop analysis is always verified in the field by the FPO as part of the field inspection process.

Flora

Flora values are assessed during the development of the site-specific FPP. FPOs are trained in the use of the regionally specific Forest Botany Manuals and assess the coupe for vegetation communities and including Rare and Threatened Communities and species. FPA specialists may be contacted and site-specific plans developed to manage any impacts of forest operations.

Fauna

Fauna assessments are undertaken during the development of an FPP. FPOs have access to GIS databases and known locations are identified and incorporated into the planning system. FPOs are trained in the use of the Threatened Fauna Advisor enabling them to generate species prescriptions to inform the FPP and provide operational outcomes.

The Threatened Fauna Advisor is a joint development between the FPA and the Threatened Species Unit of DPIPWE. The Agreed Procedures provide equivalent or greater protection than that provided by the *Threatened Species Protection Act 1995*.

Forest Productive capacity

Forest Management

Silvicultural Systems

RFF's plantation management model aims to produce fibre and solid wood, and silviculture may be adjusted to produce optimum outcomes. The focus is on best practice site preparation and establishment and maintaining plantation health and vigour.

The primary management objective is to maximise the value of wood products grown and harvested from the land as well as maintaining the long-term productivity of the land and other environmental values. Although this objective is the main driver it is also influenced by other site-specific factors such as soil, rainfall, altitude and exposure, and factors pertinent at the time including commercial/marketing factors, and operational constraints.

Species Selection

E nitens (shining gum) is the predominant plantation species in the RFF estate, comprising approximately 74% of the planted area and is well suited to productive sites up to an elevation of 700m ASL. The RFF estate will be replanted mainly to *E nitens*. *E globulus* (Tasmanian Blue Gum) is a preferred species in some markets and will be planted on appropriate sites, usually below 300m ASL. *Pinus radiata* will be considered as an option for planting where the site is most suitable for this species.

RFF does not use genetically modified organisms/trees (GMO's) in its forest management. This is defined in more detail in AS4708-2013 In summary the Standard states that genetically modified trees are, *Trees in which the genetic material has been altered in a way that does not occur naturally by mating and/or natural recombination*. RFF only uses seedlings grown from seed sourced from seed orchards using traditional crop breeding methods.

Plantation establishment

Optimum establishment, seedling survival and growth is fundamental to achieving vigorous and productive plantations.

RFF source the best available seed to be grown on by several nurseries to manage risk and provide some hardened stock for earlier and higher altitude planting.



Establishment operations aim to:

- Reduce excessive competition via mechanical and/or chemical means that may impact on planting efficiency, tree growth and development;
- Ensure seedling survival by planting during the spring period;
- Use the most appropriate cultivation and planting configuration. This may include planting within established rip lines, between stumps;
- Improve growth rates with the individual seedling application of controlled release fertiliser at the time of planting;
- Reduce browsing pressure through rapid early growth and using approved control measures when browsing pressure reaches trigger points;
- Minimise costs while providing optimum growing conditions

Regular monitoring of establishment works ensures quality standards are maintained.

Research and Development

RFF is part of a group of companies managed by Global Forest Partners L.P. which are well represented on the Forest and Wood Products Association and appropriate research groups. The RFF estate also hosts UTAS research projects focused on leaf area index as a measure of fertiliser optimisation. The DPIPW Save the Devil Program undertakes work in the RFF estate on the Tasman Peninsula.



RFF is a contributor to several National institute for Forest innovation NIFPI projects. These currently include Eagle Eye a technologically advanced project investigating wedge tailed eagle ecology.

Rate of harvest

Harvest rates are aligned with RFF’s business objectives and market opportunities while being cognisant of the estate's capability to produce over the long term

Monitoring of Forest growth

Growth models

Growth and yield system outputs are used with Woodstock planning and optimization software to help produce strategic, tactical and operational plans that meet business economic and sustainability goals.

Forest Assessment

RFF undertakes estate based inventory on a preharvest and recovered volume basis. The data collected informs the growth models to predict yield and input into the Woodstock model.

Harvesting

All harvesting is undertaken in accordance with the Forest Practices Code 2015. RFF engages contractors with specialist skill, modern equipment and safety systems to undertake the scheduled harvesting of the plantation estate. Contractors are highly trained, and the competency of all harvesting crew members is regularly assessed. Prior to commencing operation, the AKSFM Regional Manager, together with the contractor, develops a Forest Operations Safety Plan (FOS plan). The FOS plan is governed by the Forest Safety Code and is signed by the Regional Manager and all harvesting crew members. It identifies known and likely hazards to be present at a work site and establishes risk mitigation measures to reduce the risk to an acceptable level. Risks identified during the operation can be added and evaluated.

RFF harvesting operations aim to optimise utilisation using the most appropriate and cost-effective harvesting configuration for the terrain, and considering the products to be produced. This may also be affected by the cart distance and haulage configuration which may include rail. Haulage contractors are responsible for safe loading and delivery of product using nominated cart routes and observing load limits, speed limits and school bus times on known bus routes.

Fire (Unplanned)

The Fire Action Plan provides a systematic approach to unplanned fire suppression in line with State fire management protocols. The Fire Action Plan is annually updated as it is both an operational plan and a reference document. It includes an outline of procedures relating to responsibility, preparedness, the detection and suppression of fires, a register of available resources and a fire duty roster across the organisation. AKSFM is represented on the Forest Industry Fire Management Committee (FIFMC) that oversees the procedure, *Fire Prevention at Forest Operations*. Its objective is to minimise the incidence of wildfire resulting from forest operations.



Fire management priority is to protect life, property, plantation assets and prevent the spread of fire from the RFF estate onto neighbouring land. RFF supports in-principle the Inter-Agency Fire Management Protocol, an

annually updated cooperation agreement with first attack as a priority regardless of tenure. RFF conducts pre-season audits on mandatory equipment of all harvesting contractors with repeat checks over the summer fire period to ensure that required equipment is on-site and operational

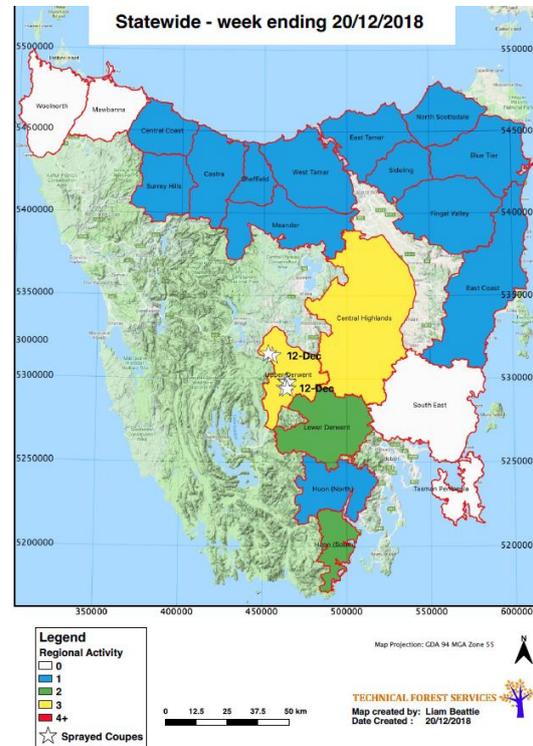
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Forest Health

Maintenance of forest health and vigour is a key objective in managing the plantation estate for optimum wood flows. Routine coupe inspection and an annual assessment identify and report on any identified issues.

Appropriate control measures are strategically implemented when there is a threat to the estate and/or a legislative requirement. Implementation may include ground-based spraying of weeds, aerial spraying of damaging insects, thinning and fertilising to improve stand vigour and professional shooting to reduce browsing pressure.

Insect damage and damaging insect/predator population monitoring are conducted throughout the high-risk months, normally Nov-Feb. Intervention, usually aerial spraying by helicopter is undertaken when populations reach thresholds. Aerial application of chemicals and biocides is strictly controlled, requiring neighbour notification, accurate records including chemical use, crop type, location, flight paths and wind speed and direction. If possible, a cooperative approach to aerial spraying is undertaken with neighbouring plantation owners.



Other pathogens

Phytophthora cinnamomi

Phytophthora cinnamomi (Pc) often called root rot fungus is an introduced pathogen that attacks the roots of at least 130 Tasmanian species. If infected sites are disturbed, are poorly managed or machines carry spores the pathogen can have a significant impact on biodiversity. While Pc can affect the native vegetation within the plantation estate, RFF remains vigilant and operates within the guidelines established by the FPA. The FPA Flora Technical Note No 8 provides a comprehensive understanding and approach to minimizing the spread and effect of Pc. It identifies areas of high risk where the *Phytophthora* hygiene measures must be implemented.

Standard hygiene measures for machinery washdown are implemented across RFF operations.



Myrtle Rust

Myrtle rust *Puccinia psidii* is a more recently identified introduced pathogen of the *Myrtaceae* family. It is considered the most significant and serious threat to our biodiversity and commercial forest industry. It has been detected in several states including Tasmania but at this stage appears limited to nursery stock. RFF field staff and forest managers are familiar with the bright yellow pustules that form on the soft growing tips of *Myrtaceae* leaves, stems and buds. Biosecurity Tasmania will be notified if myrtle rust is observed in the RFF estate.

Machinery hygiene

To ensure that weeds and diseases are not translocated throughout the DFA by machinery, RFF has strict machinery hygiene procedures on its operational plans and relevant specifications. Machinery is checked by the forest manager prior to the commencement of any new operation on the RFF estate. The Tasmanian Washdown Guidelines for Weed and Disease Control establish a standard for washdown. A washdown site is chosen ensuring run-off will not enter any watercourse or water body. The guidelines provide checklists for ensuring a thorough washdown is achieved. Washdown is to be identified on the Coupe Start-up Checklist.

Introduced genetics – Wildling Management

Genetic pollution can be an issue that has long term biodiversity impacts. Eucalypt plantations of *E.nitens* and *E.globulus* have the potential to hybridise with endemic eucalypts from the subgenus *Symphyomyrtus*. Perhaps the most common possibility is hybridisation between planted *E. nitens* and endemic *E. ovata*. The FPA has produced a comprehensive guide, Flora Technical Note 12: Eucalypt Hybridisation. Monitoring of existing plantations adjacent to susceptible native forest is undertaken and the presence of hybrid/unusual seedlings is reported to the FPA. Hand weeding is the usual method of control. However high-risk areas must be referred to the FPA when planning re-establishment of new plantations.

RFF has a small area of *Pinus radiata* plantation, there is no known gene mixing risk with endemic species however, pine wildlings can pose a problem. RFF staff monitor for wildlings in areas adjacent to pine plantations and take appropriate action if they are present.

Degraded Forest – Rehabilitation

Under the contractual arrangements with STT, RFF by agreement with STT can hand back areas that are degraded or not performing. This process is managed under the Forestry Right and the Handback of Unproductive Areas and DFA Handover procedures.

Fire damaged forest will be assessed for the extent of the damage to determine future management of the stand. Severely fire damaged stands on productive sites will be re-established to *the most suited species*. Stands that have been lightly burnt may be grown on or scheduled for harvest. Extensive wildfire damage will require an estate analysis and possible rescheduling of wood flows. Assessment of damage will be undertaken as soon as practical post the fire event.

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Chemical usage

RFF is committed to minimise chemical use across the estate and throughout all operations and seeks to use cost-effective alternatives where available. The use of chemicals is strictly controlled and bound by codes of practice. Chemicals are used for:

- Weed control;
- Fertiliser at planting (slow release at the time of planting);
- Insect control

There has not been any use within the RFF DFA by RFF of any of the chemicals listed on the World Health Organisation banned chemicals register, class 1a Extremely Hazardous Chemicals and class 1b Highly Hazardous Chemicals.

Soil and Water Resources

Soils

The maintenance and care of soils are fundamental to sustainable forest management and the long term productivity of the estate. Soil types are identified during the development of FPPs and operational plans are adapted to minimise nutrient loss, control and prevent unacceptable rates of erosion and landslides, minimise soil compaction and puddling and mixing of topsoils and subsoils.

The FPC and guidelines provide prescriptions for the management of forest operations based on erosion class and landslip hazard. Specific issues are also addressed that may impact on forest roading and access. FPA specialists are engaged when issues cannot be resolved.

Water

RFF recognises the need to maintain or improve water quality associated with the management of its estate. The water protection provisions in the Forest Practices Code 2015 are recognised by the State Government Policy on Water Quality Management.

All watercourses require protection during forest operations. The type of protection required depends on the nature of the catchment, size and permanence of the watercourse, the volume of water carried and any natural and cultural values.

The FPC provides for stream buffers of natural vegetation with minimum width prescriptions from 10m to 40m that are dependent on catchment size. Soil erosion affects the quality of runoff water and potential stream turbidity. Forestry tracks and firebreaks are cross-drained with inter-drain distance dependant on slope and erosion class. These drains reduce flow velocity and disperse water into surrounding vegetation.

The widespread distribution of the estate provides a straight forward approach to coupe dispersal across the landscape. The FPC provides strict provisions for the protection of town and domestic water catchments and intakes, special provisions are required in the FPP where a domestic intake is within 2km of a proposed operation.

Geomorphology

The RFF estate consists of plantations established on former native forest sites dispersed throughout Tasmania. The majority of geomorphological issues have been addressed at establishment by STT with areas excluded from clearing, cultivation and planting. However, if features and karst issues are identified they will be addressed through the FPP planning process with the input of FPA specialists.

Carbon

Sustainable forest management and silvicultural improvements including improvements in the areas of establishment, tree breeding and growth contribute to carbon storage.

Note: under the Forestry Right STT retains entitlement to carbon rights. The following relates to the requirements of AS4708 to provide a calculation of estate carbon.

An estimate of current and future carbon is calculated using equations developed specifically for Tasmanian native forests and *E nitens* and *E. globulus* plantations. The calculations are based on inventory estimates for merchantable volume and include the carbon cost of extraction that relates to carbon emissions for harvesting and transport, equating to 8.36 tonnes of carbon per 1,000 tonnes of wood extracted.

RFF endeavours to minimise fossil fuel use by:

- Maintaining plantation health and vigour to increase harvesting efficiency;
- Encouraging the use of modern fuel-efficient vehicles and plant adhering to maintenance schedules prescribed by the manufacturer;
- The use of the shortest legal cartage routes and rail where possible.

Cultural Values

RFF planning recognises the need for the identification and protection of Aboriginal heritage and cultural heritage.

Indigenous

There are no existing rights or land title claims over the DFA.

The protection of Aboriginal cultural heritage in Tasmania is principally governed by the Aboriginal Relics Act 1975. Under this Act, Aboriginal cultural heritage is defined as any place, site or object made or created by, or bearing the sign of the activities of the original inhabitants of Tasmania or their descendants. The Aboriginal Relics Act 1975 protects all Aboriginal relics; interference with a relic can only occur consistent with a permit issued by the responsible Minister.

When planning an FPP Aboriginal cultural heritage values are identified and planned for according to FPA procedures. Identification of previously known sites is undertaken by interrogating the Conserve database curated by STT and the Aboriginal Heritage Register administered by Aboriginal Heritage Tasmania. The information in both databases is sensitive and confidential and can only be accessed by FPA-endorsed Aboriginal heritage FPOs and database managers.

When known or new sites are identified they are field verified and management prescriptions developed for the protection of the site. Monitoring is undertaken during operations to ensure the site-specific prescriptions are being applied and protection of the values is being achieved.

Non-indigenous

FPPs are developed with an awareness of existing cultural heritage sites. The FPA has developed a planning guideline based on extensive experience and research into the cultural heritage within Tasmanian forests. *“Significant heritage sites and places are protected through identification, recording and assessment during planning, prescriptions in forest practices plans, and implementation during operations.”* FPA 2017

New sites are unlikely to be found in the RFF plantation estate and known sites will have an existing management prescription or have been avoided.

Social and Economic Benefits

As a larger plantation owner of a Tasmania wide estate RFF plays an important part in the Tasmanian economy. RFF directly employs over 100 people in administration, forest management, establishment, harvest, cartage and processing. An employment multiplier of 2.2 generated by the EconSearch RISE model predicts more than 220 jobs generated by the RFF enterprise predominantly based around the DFA in Tasmania. The majority of our workforce comes from rural and regional areas representing smaller communities where the forest industry provides valuable employment. Our businesses support local procurement where possible

Optimal Use

RFF seeks to optimise returns from its estate by maintaining plantation health and vigour and efficient harvest practices. Continual improvements are sought in establishment through site preparation and management practices and seedling quality. Efficiency in harvesting is achieved by minimising stump heights and matching the equipment to the terrain and product output.

Improvements in transport to market is an area of operations that is under review as long carts from one end of the island to the other are an issue. Rail capacity versus more efficient road transport configurations are considered during harvest scheduling.

RFF owns and operates a woodchip processing facility at the deep-water port of Bell Bay. It markets its wood products to international customers as chips and logs to provide best returns. Marketing is dynamic and also relates to shipping efficiencies.

Skills development

RFF is committed to maintaining a high level of professionalism across its workforce. This is achieved for employees and contractors by providing training opportunities for staff to work competently based on, and accredited to, nationally recognised competency standards. RFF also supports equal employment opportunities, identifies and implements actions to support employment and skills development of its workers. RFF employs foresters who have attained FPO accreditation and are supported in their training through the continuum of courses offered by the FPA and others.

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Health and Safety

RFF is committed to providing a safe, healthy work environment for its employees, contractors, customers and visitors.

RFF prepares a FOS Plan of all its operations prior to commencement and conducts regular audits of operations that include a safety review. Hazards are identified such as school bus routes and times. High-risk school bus routes are identified and observed by a no-cart period for log trucks.

The Forest Safety Code (Tasmania) 2007 has been recognised unchanged by the new Work Health and Safety Act 2012. The Forest Safety Code addresses many safety issues within the format of 'general principles of safety'; these principles identify hazards that occur across a number of forest operations. This forms the basis of RFF FOS plans and safety management.

Access and Security

The RFF Estate is widely dispersed throughout the Permanent Timber Production Zone land. The broad dispersal makes controlling security through locked gates impractical. There are occasions when active operations and high value, vulnerable assets will have access limited with locked boom gates when staff or contractors are not present.

RFF works together with STT and the forest industry to maintain a vigilant watch over illegal activity in the forest. Any suspicious or illegal activity observed by our staff or contractors is recorded and reported to the appropriate authority.

Management plan review

This Forest Management Plan provides a cohesive statement of how RFF manages its estate in compliance with AS4708. It is the oversight document for the forest management system that is subject to continual improvement and review. The Forest Management Plan will be reviewed in its entirety every five years.

A handwritten signature in blue ink, appearing to read "Owen Hoffmann", with a long horizontal stroke extending to the right.

Owen Hoffmann

General Manager



Contact details

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Legislation: See RFF Legislation Register

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