



## **Department of Environment, Land, Water and Planning (DELWP)**

### **Forest Audit Program 2015 - The Protection of Mandatory Exclusion Areas from the Impacts of Timber Harvesting**

#### **Audit Report**

April 2016





# Executive summary

## Introduction

The Forest Audit Program (FAP) is administered by the Department of Environment, Land, Water and Planning (DELWP) as the environmental regulator responsible for timber harvesting on public land.

The FAP focuses on the environmental outcomes of timber harvesting operations and works to ensure continual improvement to systems and management. The FAP allows DELWP to commission external third party auditors to provide an objective and independent assessment of compliance with the regulatory framework, environmental performance of timber harvesting operations, and any areas where improvements can be made to the regulatory framework.

In the 2015 FAP DELWP adopted a “risk-based” approach to auditing, targeting “higher-risk” compliance priorities described under the *Code of Practice for Timber Production 2014* (DEPI 2014) (the Code) and the *Management Standards and Procedures For Timber Harvesting Operations in Victoria’s State Forests* (DEPI 2014) (the MSPs). The audit targets for 2015 include VicForests timber harvesting coupes that were subject to harvesting in 2013/14, and coupes that were (at the time of the audit) scheduled to be or were currently being harvested in 2014/15.

DELWP engaged GHD to undertake the 2015 Forest Auditing Program (FAP) for one of their identified compliance priorities: **the protection of mandatory exclusion areas from the impacts of timber harvesting**.

This report outlines the results of audits undertaken by GHD of 30 VicForests coupes across three Forest Management Areas (FMAs):

- 15 coupes within the Central Gippsland FMA
- 13 coupes within the Central FMA
- Two coupes within the Benalla – Mansfield FMA

The audits include an assessment of compliance against the mandatory requirements (prescriptions) for timber harvesting coupes as well as an assessment of the ‘environmental performance’ of the operations. GHD was required to develop a specific set of compliance criteria to assess compliance with the prescriptions.

The main objective of the audit is to assess compliance against the identified compliance priority. A combination of qualitative and quantitative measures were used to address this priority including discussions in office and on site with VicForests and completion of a workbook of compliance criteria. DELWP has advised that it will use the results of the audit as a means to improve the effectiveness of the regulatory framework.

## Audit Findings and Compliance

The level and detail documented by VicForests in each Forest Coupe Plan (FCP) varied. Whilst each coupe achieved 100% compliance against the audit criteria, in the professional opinion of the auditor, the FCPs could be improved by including more detail about exclusion areas and more clearly documenting the required controls for managing biodiversity values at each coupe. The FCPs should be regularly updated by VicForests throughout the planning and harvesting phases as this document is the key record of decisions made in managing each coupe.

## Conclusions

The auditor noted a number of examples of good practice during the audit, including:

- Meticulous record keeping in relation to the retention of seed and habitat trees within some FCPs;
- Conservative assessments of rainforest boundaries and required harvesting exclusion zones, with all buffers measured by the audit team greatly exceeding the minimum 40 m buffer width required under the Code; and
- Reuse of existing landings to minimise additional clearing of vegetation.

A number of areas for improvement were also identified, including:

- Lack of record keeping in relation to the retention of seed and habitat trees within some coupes;
- Some instances where VicForests internal (non-mandatory) Leadbeater's Possum (LBP) habitat checklist had not been undertaken or recorded in the FCP;
- Where mapped Special Protection Zone (SPZ) had been identified as being incorrect and requiring amendments, there was a low rate of application to DELWP to have the forest management spatial layers amended (noting this is not considered mandatory under Section 2.1.1.2 of the MSP);
- Lack of detail within FCPs as to the location of accidental tree falls during harvesting, and therefore limited information as to whether they have fallen into buffers or exclusion areas.

## Audit Recommendations

The report makes a number of recommendations to improve the accuracy of mapping of SPZ locations to enhance audit target selection, as well as 10 specific recommendations to improve the consistency of documentation recorded within FCPs. The audit recommendations are:

1. Inaccuracies in the spatial data of the location of SPZs are taken in to consideration by DELWP when selecting appropriate sites for future FAPs, and that measures are put in place to increase the likelihood of selecting sites with biodiversity values. Some suggested measures that might be put in place include:
  - Increasing the number of sites on which the initial desktop analysis is undertaken;
  - Enhance the current risk based approach, with a matrix on ecological values for all coupes, and select sites that are considered likely to have the most values, to maximise the chances of biodiversity values being present on site; and
  - Selecting sites where applications for amendments to SPZ/GMZ have been made.
2. To aid in future compliance monitoring work undertaken by auditors or DELWP, it is recommended that VicForests adopt a standardised level of documentation across coupes and FMAs.
3. VicForests set up checks to ensure LBP Habitat checks are happening in the field, and that they are being stored in a set place within the FCP for each coupe so that they can be easily accessed by staff managing the site to confirm the presence or absence of any biodiversity values.
4. If a coupe has only been re-opened for the use of the landing, VicForests include an updated "Coupe planning Checklist" in the FCP targeted around the re-opening of the landing, highlighting biodiversity values, i.e. that a Leadbeater's Possum Habitat checklist would not need to be completed due to the type of works proposed on site.

5. VicForests set up checks to ensure Rainforest ID checks are happening in the field, and that they are being stored in a set place within the FCP for each coupe so that they can be easily accessed by staff managing the site to confirm the presence or absence of any biodiversity values.
6. When mapping features that require an exclusion zone (i.e. Rainforest patches that require a 40 m buffer), VicForests clearly show on the maps within the FCP that the area mapped as rainforest either a) includes the 40 m buffer, or b) apply an additional 40 m buffer on to the rainforest mapping. This would make it clear to those on the ground where the buffer is and where the value to be protected, in this instance rainforest, is located.
7. VicForests make a submission to DELWP to update the SPZ layers when inaccuracies are identified during the field assessment so that the presence of an SPZ is updated within the DELWP spatial layers. This might be the removal or addition of an SPZ from within coupe boundaries, e.g. updating the SPZ layer for patches of Rainforest or the Alpine Walking Trail based on better spatial data for the location of the track. DELWP determines an appropriate response time for when VicForests submit applications to have areas re-zoned.
8. VicForests submit request to DELWP to update spatial layers for mappable features (i.e. Waterways, Alpine Walking Trail) which have been inaccurately modelled in some areas.
9. VicForests identify habitat retention areas on both the Operations and/or Post Harvest (regeneration) maps within the FCP. By mapping these areas it can be clearly determined whether appropriate habitat retention standards have been met.
10. VicForests identify the location of retained seed trees within the maps stored in the FCP, either by marking individual trees on the operations or post-harvest maps, or by adding a polygon to the maps outlining any areas where trees have been intentionally retained as seed trees. A figure (number) should also be included identifying the number of seed trees that have been retained, clearly highlighting that consideration in to seed tree retention has occurred.

Where seed trees are being retained for the dual purpose of habitat retention, VicForests should take the quality of trees retained as seed trees in to consideration, so that trees selected to be retained are those that are deemed as having a good probability of surviving and contributing hollows in the future. Refresher training of operational foresters needs to be maintained so that they are able to take full advantage of the opportunities to achieve optimal solutions on the ground.
11. VicForests introduce a requirement that forest contractors managing the coupes to include detail within the coupe diary entries outlining whether trees that have fallen/slid out of place have been retrieved or left in situ, and that they mark the location of all accidental tree falls on the operations maps, so that they correspond with the coupe diary notes. It should be clear whether any accidental tree falls have impacted any mandatory buffers or exclusion areas from both the coupe diary entries and the maps.
12. DELWP establish a clear regulatory requirement for VicForests to submit applications to DELWP to update spatial data layers where inaccuracies are identified during planning and field work associated with timber harvesting operations, and commit to a specified timeframe in which DELWP must respond (either approving or denying the request, or requesting additional information).
13. In the next review of the Code and MSP, DELWP considers providing further guidance on the requirements for assessing the presence of rare and threatened species during forest couple planning. This could include the use of a risk based approach where the need for and level of assessment required is determined based on the likelihood of occurrence and potential impact of harvesting on the rare or threatened species.

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Appendix A – GHD Audit Workbook

Appendix B – Example Coupe Work Books

# Abbreviations

DELWP	Department of Environment, Land, Water and Planning (previously DEPI / DSE)
DEPI	Department of Primary Industries (now DELWP)
DSE	Department of Sustainability and Environment (now DELWP)
EIA	Environmental Impact Assessment
EVC	Ecological Vegetation Class
FAP	Forest Audit Program
FCP	Forest Coupe Plan
FFG Act	<i>Flora and Fauna Guarantee Act 1998</i>
FMA	Forest Management Area
FMP	Forest Management Plan
FMZ	Forest Management Zone
GHD	GHD Pty Ltd
GMZ	General Management Zone
GPS	Global Positioning System
LBP	Leadbeater's Possum
RF	Rainforest
SMZ	Special Management Zone
SPZ	Special Protection Zone
TRP	Timber Release Plan
VBA	Victorian Biodiversity Atlas
VF	VicForests



# Definitions

Mandatory Exclusion Area	An area within GMZ or SMZ where timber harvesting operations are excluded from in accordance with the <i>Code of Practice for Timber Production</i> (DEPI 2014)
Gross Coupe Area	The entire coupe area within the coupe boundary including harvesting exclusions
Net Coupe Area	The gross coupe area less allowances made for harvesting exclusions
Planned	A coupe where coupe planning has been undertaken but harvesting has not yet commenced.
Active	Coupe where planning and harvesting has commenced or been completed.



# 1. Introduction

## 1.1 Purpose and scope of this report

The Forest Audit Program (FAP) is administered by the DELWP as the environmental regulator for timber harvesting on public land. VicForests is responsible for the planning and management of commercial timber harvesting activities undertaken in Victorian State forests, and these activities must be undertaken in accordance with all relevant requirements under the *Code of Practice for Timber Production 2014* (DEPI 2014) (the Code).

The FAP focuses on the environmental outcomes of timber harvesting operations and works to ensure continual improvement to systems and management and allows DELWP to commission external third party auditors to provide an objective and independent assessment of:

- Compliance with specified rules outlined in the regulatory framework;
- The environmental performance of timber harvesting operations, and any associated risks of harm to the environment; and
- Areas where improvements can be made to the regulatory framework.

In the 2015 FAP, DELWP adopted a “risk-based” approach to auditing, targeting “higher-risk” compliance priorities described under the Code and the *Management Standards and Procedures for Timber Harvesting Operations in Victoria’s State Forests 2014* (the MSPs). The audit targets for 2015 include VicForests timber harvesting coupes that were subject to harvesting in 2013/14, and coupes that were (at the time of the audit) scheduled to be or were currently being harvested in 2014/15.

DELWP engaged GHD to undertake the 2015 Forest Auditing Program (FAP) for one of their identified compliance priorities: **the protection of mandatory exclusion areas from the impacts of timber harvesting**.

The regulatory framework provides for the protection of a large number of forest values through the creation of “exclusion areas” where harvesting is not permitted. These include biodiversity values, cultural and heritage values and values that relate to recreation and tourism.

The relevant mandatory compliance obligations under the Code for the ‘protection of mandatory exclusion areas from the impacts of timber harvesting’ are detailed below in Table 1.

**Table 1 Mandatory compliance obligations under the Code**

Code Reference	Mandatory Prescription
2.2 Environmental Values in State Forests	
2.2.2 Conservation of biodiversity	
Addressing Biodiversity Conservation Risks Considering Scientific Knowledge	
2.2.2.4	During planning identify biodiversity values listed in the MSPs prior to roading, harvesting, tending and regeneration. Address risks to these values through management actions consistent with the MSPs such as appropriate location of coupe infrastructure, buffers, exclusion areas, modified harvest timing, modified silvicultural techniques or retention of specific structural attributes.
2.2.2.5	Protect areas excluded from harvesting from the impacts of timber harvesting operations.
2.2.2.7	Rainforest communities must not be harvested.

Code Reference	Mandatory Prescription
2.5 Timber Harvesting	
2.5.1 Coupe Management	
2.5.1.3	The location of coupe boundaries, Special Protection Zones, buffers, filters, exclusion areas, areas where special management applies and habitat trees must be easily distinguishable in the field.
Timber harvesting operations within areas that are not available for harvesting	
2.5.1.5	Timber harvesting operation (excluding haulage on existing approved roads) are not permitted in special protection zones, buffers, or other exclusion areas identified on the Forest Coupe Plan except where: <ul style="list-style-type: none"> <li>i. The removal of a limited number of trees is necessary for the construction and use of stream crossings or for river health; or</li> <li>ii. The operator has been sanctioned to remove a limited number of trees to protect public or worker safety or for forest health.</li> </ul>
2.5.1.6	Areas outside the coupe boundary or within special protection zones, buffers and other exclusion areas must be protected from damage caused by trees felled in adjacent areas. Trees accidentally felled into these areas may be removed only where sanctioned. Sanction will only be given if significant damage and disturbance of soil and vegetation outside harvestable area can be avoided.

This report outlines the results of audits undertaken for the 2015 FAP by GHD of 30 VicForests coupes across three Forest Management Areas (FMAs):

- 13 coupes within the Central FMA
- Two coupes within the Benalla – Mansfield FMA
- 15 coupes within the Central Gippsland FMA



**Figure 1 Victorian Forest Management Areas (FMA) Map**



The audits include an assessment of compliance against the mandatory requirements (prescriptions) for timber harvesting coupes as well as an assessment of the 'environmental performance' of the operations. GHD was required to develop a specific set of compliance criteria to assess compliance with these prescriptions.

The audit assessed a combination of qualitative and quantitative measures, including document review, discussions in office and on site with VicForests and completion of a workbook of compliance criteria. DELWP has advised that it will use the results of the audit as a means to improve the effectiveness of the regulatory framework.

## **1.2 Limitations and assumptions**

This report has been prepared by GHD for Department of Environment, Land, Water and Planning (DELWP) and may only be used and relied on by DELWP for the purpose agreed between GHD and the DELWP as set out in section 1.1 of this report.

GHD otherwise disclaims responsibility to any person other than DELWP arising in connection with this report. GHD also excludes implied warranties and conditions, to the extent legally permissible.

The services undertaken by GHD in connection with preparing this report were limited to those specifically detailed in the report and are subject to the scope limitations set out in the report.

The opinions, conclusions and any recommendations in this report are based on conditions encountered and information reviewed at the date of preparation of the report. GHD has no responsibility or obligation to update this report to account for events or changes occurring subsequent to the date that the report was prepared.

The opinions, conclusions and any recommendations in this report are based on assumptions made by GHD described in this report. GHD disclaims liability arising from any of the assumptions being incorrect.

GHD has prepared this report on the basis of information provided by DELWP and VicForests who provided information to GHD, which GHD has not independently verified or checked beyond the agreed scope of work. GHD does not accept liability in connection with such unverified information, including errors and omissions in the report which were caused by errors or omissions in that information.

The opinions, conclusions and any recommendations in this report are based on information obtained from, and testing undertaken at or in connection with, specific coupes and may have been limited to specific sample points. Site conditions at other parts of the site may be different from the site conditions found at the specific sample points. Site conditions may change after the date of this Report. GHD does not accept responsibility arising from, or in connection with, any change to the site conditions. GHD is also not responsible for updating this report if the site conditions change.

## 2. Audit scope

### 2.1 Audit objectives

The audit includes an assessment of compliance against the mandatory requirements (prescriptions) for timber harvesting coupes as well as an assessment of the 'environmental performance' of the operations. DELWP provided a list of the mandatory prescriptions relevant to the audit compliance priority *protection of mandatory exclusion areas from the impacts of timber harvesting*, for which GHD then developed compliance criteria.

The main objectives of the audit were to:

- Assess compliance against compliance priority: The protection of mandatory exclusion areas from the impacts of timber harvesting;
- Identify and report on opportunities for DELWP to improve the effectiveness of the regulatory framework; and
- Assess the actual or potential environmental impact that may arise from a non-compliance.

### 2.2 Audit scope and period

As discussed in the Introduction, the audit involved an assessment of 30 coupes across 3 FMA's:

- 13 coupes within the Central FMA
- Two coupes within the Benalla – Mansfield FMA
- 15 coupes within the Central Gippsland FMA

A workbook was completed for each individual coupe through desktop assessment of Forest Coupe Plans (FCPs), site visits to each target coupe and discussions with relevant VicForests representatives.

Field assessments for all 30 audit targets were conducted between 17 August and 10 September 2015 (Table 2 and Figure 2 to Figure 4). A VicForests performance representative was available during all of the in-office assessments and accompanied GHD for all on site audits. Local VicForests foresters were also available on site for a majority of the coupe audits.

### 2.3 Audit criteria

The prescriptions from the Code and MSP relevant to the audit scope were specified to the auditor by DELWP at the commencement of the audit. The auditor reviewed these prescriptions and developed specific audit criteria to test VicForests' compliance with the mandatory regulatory requirements. These audit criteria were reviewed and approved by DELWP before the desktop and field assessment commenced. The prescriptions and audit criteria are presented in Table 3.

**Table 2 Schedule of Audits**

Activity	FMA	Coupe Number	Coupe Name	Audit Date
VicForests office desktop assessments	Central Gippsland; Central; and Benalla – Mansfield	Forest Coupe Plans (FCPs) for all 30 coupes were assessed at a desktop level at the VicForests Woori Yallock and Noojee offices between 17-19 August 2015.		
Site Assessments	Central	301-556-0004	Bruce Almighty	24/08/2015
		295-515-0003	Boggy Creek	24/08/2015
		300-917-0005	Mosquito	24/08/2015
		300-503-0002	Cinders	25/08/2015
		299-501-0003	House	25/08/2015
		300-527-0001	Sherpa	25/08/2015
		309-508-0016	Thot	25/08/2015
		286-509-0008	Kevin	26/08/2015
		286-509-0004	Trevor	26/08/2015
		288-518-0008	Giraffe	26/08/2015
		288-516-0004	Barbie	26/08/2015
		320-502-0015	Fat Albert	27/08/2015
		320-501-0017	Roadhouse	27/08/2015
	Benalla – Mansfield	395-502-0004	Kelly Creek	07/09/2015
		395-503-0001	Nutcase	07/09/2015
	Central Gippsland	463-505-0010	Turkey Mound	08/09/2015
		463-502-0005	Stumpy Spur	08/09/2015
		463-501-0011	McCarthy Spur	08/09/2015
		463-502-0008	Leech Spur	08/09/2015
		461-507-0014	Stony Creek Rd.	08/09/2015
		461-507-0003	Stony Creek Spur	08/09/2015
		460-509-0014	Flanders	08/09/2015
		460-510-0001	Small Charity	08/09/2015
		481-501-0012	St Gwinnose	09/09/2015
		457-508-0002	TJ Lower	09/09/2015
		458-511-0008	Trig Boy	09/09/2015
		480-504-0026	Whitelaw Tk	09/09/2015
		482-501-0001	Hasp	10/09/2015
		487-501-0007	Shanahans	09/09/2015
		483-504-0025	Lower Growlers	10/09/2015

## **Figure 2   Coupes assessed within the Central FMA**



### **Figure 3   Coupes assessed within the Benalla-Mansfield FMA**

**Figure 4 Coupes assessed within the Central Gippsland FMA**

**Table 3     Audit Prescriptions and Criteria**

Origin	Section	Prescription	Audit Criteria
Code	2.2.2.4 - Addressing Biodiversity Conservation Risks Considering Scientific Knowledge	During planning identify biodiversity values listed in the MSPs prior to roading, harvesting, tending and regeneration. Address risks to these values through management actions consistent with the MSPs such as appropriate location of coupe infrastructure, buffers, exclusion areas, modified harvest timing, modified silvicultural techniques or retention of specific structural attributes.	Does FCP identify presence of biodiversity values? E.g. habitat trees (See Appendix 1) (table 12 MSPs); rare or threatened fauna, invertebrates (Table 13 MSPs) and flora (Table 14 MSPs).  See Appendix 1 for further detail on habitat trees.
			If threatened flora or fauna is identified within FCP, has/have the management action(s) specified in Tables 13 and 14 of the MSPs relevant to the FMA been applied?
			Does FCP identify and address risks to identified biodiversity values?
Code	2.2.2.5 – Addressing Biodiversity Conservation Risks Considering Scientific Knowledge	Protect areas excluded from harvesting from the impacts of timber harvesting operations.	Does FCP identify exclusion areas and appropriate buffers?  See MSPs 7.1.2 for info on exclusion areas.  More detail on buffers can be found within MSPs and within VicForest operating Procedures regulatory handbook 2014 v2.1 found online at <a href="http://www.vicforests.com.au/vicforests-regulatory-structure/vicforests-forest-management-system/policies-procedures-and-instructions">http://www.vicforests.com.au/vicforests-regulatory-structure/vicforests-forest-management-system/policies-procedures-and-instructions</a>
			Where exclusion areas are present (including any necessary buffers), are boundaries marked in the field or readily identified by physical features?
			Have all harvesting activities and impacts been excluded from these exclusion areas? i.e. no evidence of harvesting or harvesting machinery operating within exclusion areas. Complete Appendix 2.
Code	2.2.2.7 – Addressing Biodiversity Conservation Risks Considering Scientific Knowledge	Rainforest communities must not be harvested.	Does FCP identify any rainforest within or adjacent to the coupe area and appropriate rainforest buffers?
			If FCP identifies rainforest within or adjacent to the coupe area (Q7 above) have appropriate rainforest buffers been applied?  Refer to MSPs 4.4.9 for buffer requirements.
			Is there evidence in FCP that the required approach to delineation of rainforest boundaries (from MSPs) has been applied? i.e. Evidence of a rainforest assessment record within FCP.
			Where rainforest is present, rainforest buffer boundaries are marked in the field or readily identified by physical features.
			Have harvesting activities and impacts been adequately excluded from the rainforest and associated buffer areas? Complete Appendix 3.
Code	2.5.1.3 – Coupe Management	The location of coupe boundaries, Special Protection Zones, buffers, filters, exclusion areas, areas where special management applies and habitat trees must be easily distinguishable in the field.	Are coupe boundaries, SPZs, buffers, filters, exclusion areas, areas where special management applies and habitat trees that are identified within FCP easily distinguishable in the field?
Code	2.5.1.5 – Timber harvesting operations within areas that are not available for harvesting	Timber harvesting operation (excluding haulage on existing approved roads) are not permitted in special protection zones, buffers, or other exclusion areas identified on the Forest Coupe Plan except where:  The removal of a limited number of trees is necessary for the construction and use of stream crossings or for river health; or  The operator has been sanctioned to remove a limited number of trees to protect public or worker safety or for forest health.	Has timber harvesting been conducted within SPZs, buffers or other exclusion zones, where: The removal of a limited number of trees is necessary for the construction and use of stream crossings or for river health. If so was this sanctioned?
			Has timber harvesting been conducted within SPZs, buffers or other exclusion zones, where: The operator has been sanctioned to remove a limited number of trees to protect public or worker safety or for forest health.
			Has timber harvesting been conducted within SPZs, buffers or other exclusion zones, where: Tree removal has not been for the purposes of either i. or ii. above.
Code	2.5.1.6 – Timber harvesting operations within areas that are not available for harvesting	Areas outside the coupe boundary or within special protection zones, buffers and other exclusion areas must be protected from damage caused by trees felled in adjacent areas. Trees accidentally felled into these areas may be removed only where sanctioned. Sanction will only be given if significant damage and disturbance of soil and vegetation outside harvestable area can be avoided.	Are appropriate buffers applied to exclusion areas and are SPZs appropriately designed?
			Have any trees been accidentally felled into a SPZ, buffer or exclusion zone? Have any such trees been removed? Was this appropriately sanctioned?  Is evidence of any sanction provided?

## 3. Audit approach

### 3.1 Audit overview

The project required a combination of desk and field based audit to address biodiversity conservation risks, at 30 coupes managed by VicForests. A workbook was developed by the auditor to undertake the assessments (see Appendix A) against the criteria species within the [Code of Practice for Timber Production 2014](#) (DEPla) and the [MSPs for timber harvesting operations in Victoria's State forests 2014](#) (DEPIb).

### 3.2 Target selection

GHD was commissioned to undertake audits of 30 coupes across three FMAs, as detailed in section 2.2. Coupes to be audited were selected from a list of 52 (potential audit targets as advised by DELWP comprising 34 active, 14 planned, three active and planned and one other) potential VicForests coupes provided by DELWP which were deemed to meet the following requirements:

- Presence of or adjacent to a Special Protection Zone (SPZ) or Special Management Zone (SMZ)
- Harvested in 2013-2014 or 2014-2015

This advice was provided to DELWP by VicForests.

Audit targets were chosen randomly, and in one instance by proximity to Melbourne. Backup coupes were also identified as alternative audit targets in the event that one of the primary audit targets could not be audited due to unforeseen circumstances (e.g. bad weather, access issues etc.). The backup coupes were selected based on their proximity to existing clusters of coupes. Four backup coupes were identified per FMA (excluding Benalla-Mansfield where only two audit targets were provided).

Selected audit targets including back-ups were identified in GHD's Audit Plan (GHD 2015) which was approved by DELWP prior to work commencing.

Prior to the commencement of the audits on site VicForests advised GHD that no work had begun on the ground for some of the identified targets (Third Quarter 300-533-0001, Growlers Gap 483-504-0011 and Rojoes Junction 481-503-0005). Additionally during on the ground audits fallen trees prevented access to one of the audit targets (Coupe Alstergrens Rd: 480-505-0010). These events led to the following audit targets being completed. A full list of the coupes audited is provided within Table 2.

Of the selected and back-up audit targets the following were completed:

- 15 audit targets of which three were back-up targets within the Central Gippsland FMA
- 13 audit targets of which one was a back-up target within the Central FMA
- Two audit targets within the Benalla – Mansfield FMA

### 3.3 Audit approach

The initial desktop and site based audits were conducted over a three week period from 17 August to 10 September 2015.

#### 3.3.1 Project inception meeting

The auditor and GHD's project manager met with DELWP at the commencement of the project to confirm the audit scope, identify information needs and key audit contacts, and to confirm and agree upon timing for key deliverables.



### **3.3.2 Health and safety**

GHD set out to comply with DELWP occupational health and safety (OHS) standards and was familiar with the DELWP OHS policy and procedures.

Under GHD's procedures a safety plan was required that included specifications for remote field work and a daily safety call in procedure.

Whilst conducting the field based audits, GHD field staff undertook a daily 'pre-start safety meeting' with VicForests staff, as well as a brief induction to safety procedures at each coupe upon arrival.

No incidents or near misses occurred during the audit.

### **3.3.3 Audit workbooks**

A workbook was developed to undertake the desktop and field-based assessments in accordance with the regulatory requirements outlined in the [Code of Practice for Timber Production 2014](#) (DEPIa) and the [MSPs for timber harvesting operations in Victoria's State forests 2014](#) (DEPIb).

### **3.3.4 Desktop audit**

The desk-based component of the audit program included a review of documentary evidence and records, VicForests Coupe Information System, Forest Coupe Plans and conducting interviews (where necessary). The following information was reviewed within the FCPs as part of the desk-based assessment for each coupe selected for audit:

- Tactical Planning documentation
- Coupe diary entries
- Relevant maps and aerial photographs
- Harvest records
- Instances of non-conformity
- Relevant intra- and inter- agency correspondence

During the desktop audit a determination was made on which coupes to assess during the field audit. It was decided to exclude some coupes from the audit at this stage if desktop tactical planning had been undertaken but no field based planning completed (i.e. no site visits had been undertaken by VicForests to mark out any buffers or exclusion areas on the ground or to confirm the presence of biodiversity values within the coupe boundary). These coupes had not been harvested.

### **3.3.5 Site based audit**

Thirty coupes were assessed in the field as a part of the 2015 audit (see Table 2). Prior to undertaking the site-based audit at each coupe, a review of the desktop audit was undertaken, and a priority list of target areas was determined.

As a part of the field assessment of each coupe a number of parameters were assessed in accordance with the Code and the MSPs. Tasks undertaken during the field assessment included the following:

- Recording observations of site conditions;
- Taking representative photographs of site conditions as well as photos to aid in the assessment of compliance;
- Interviewing VicForests staff;

- Where rainforest was present, recording the width of buffers at a minimum of two locations to ensure appropriate exclusion areas had been applied to rainforest vegetation (minimum of 40 m exclusion areas);
- Where creeks and streams were present requiring exclusion for harvesting (or buffers), walking the boundaries to assess that harvesting had not encroached on these areas;
- Where Leadbeater's Possum habitat had been identified at either a desktop or field level by VicForests, assessing whether the vegetation present met the criteria to be classified as LBP habitat. If LBP habitat was identified as being present, walking the boundaries to assess that harvesting had not encroached on these areas;
- Where seed trees were required to be retained based on the MSPs, determining the required number of seed trees based on the total harvest area within the coupe and counting the number of trees that had been retained; and
- Where vegetation was required to be retained based on habitat retention outlined in the MSPs, determining the area of habitat required to be retained based on the total coupe area and the total harvest area within the coupe, and identifying where within a coupe these areas had been retained.

The results of these assessments are recorded in the audit field checklist and filed by the auditor as part of the audit file.

### **3.4 Risk assessment approach**

DELWP provided an Environmental Impact Assessment tool to assess the overall impacts of any non-compliance events detected during the audits as a part of the 2015 FAP. The use of this tool ensures consistency across audit projects.

This procedure was not required to be applied as there was no non-compliance identified during the audits of the 30 target coupes against the audit criteria.

## 4. Audit findings

The results of the audit findings have been compiled by FMA and summarised below in Table 4 to Table 6. More details on each of the coupes assessed, including the type of exclusion area (e.g. biodiversity values, rainforest, etc.) and summary of the key desktop and field notes is summarised by FMA and included below in Table 7 to Table 9. All of the coupes assessed achieved a result of 100% compliance against the assessed parameters; however some areas for improvement were identified during the audit and are described in Sections 5 and 6). A number of case studies have also been provided (Section 0) to demonstrate some of the issues observed during the audits despite their compliance.

### 4.1 Summary of audit results by FMA

The number of relevant audit criteria varied depending on the operational status of the coupe and presence and extent of biodiversity values. Out of the 18 audit criteria, between five and 11 were relevant to coupes assessed within the Central Gippsland FMA, between four and 12 criteria within the Central FMA and between one and four criteria were relevant for coupes within the Benalla-Mansfield FMA (noting the results for the Benalla-Mansfield FMA were based on a small sample size, with only two coupes assessed). It was expected that there would be a higher number of audit criteria questions applicable to each coupe across the three FMAs. However, the coupes were initially identified (by DELWP) with the aid of planning information provided by VicForests and spatial layers that have not been updated with the most recent information on biodiversity values (following site assessment by VicForests). Therefore, in many coupes incorrectly mapped SPZ highlighted the presence of biodiversity values within or immediately adjacent to coupes at a desktop level that were subsequently found to be absent by the VicForests staff managing these sites on the ground (and confirmed by the auditor during the field audit). Issues around updating the SPZ spatial data are discussed further in Section 5.2.

**Table 4 Summary of Audit Findings – Central FMA**

Forest Coupe	Code	Status	Audit Score	Number of criteria assessed
Barbie	288-516-0004	Completed 2013-2014	100%	9
Boggy Creek	295-515-0003	Completed 2013-2014	100%	4
Bruce Almighty	301-556-0004	Completed 2012-2013	100%	6
Cinders	300-503-0002	Completed 2010-2011	100%	5
Fat Albert	320-502-0015	Completed 2013-2014	100%	8
Giraffe	288-518-0008	Active	100%	12
House	299-501-0003	Planned resumption spring 2015	100%	5
Kevin	286-509-0008-B	Completed 2014-2015	100%	9
Mosquito	300-917-0005	Planned resumption spring 2015	100%	12
Roadhouse	320-501-0017	Completed 2014-2015	100%	7
Sherpa	300-527-0001	Active	100%	10
Thot	309-508-0016	Completed 2013-2014	100%	4
Trevor	286-509-0004	Completed 2014-2015	100%	4

**Table 5 Summary of Audit Findings – Benalla – Mansfield FMA**

Forest Coupe	Code	Status	Audit Score	Number of criteria assessed
Kelly Creek	395-502-0004	Completed 2013-2014	100%	1
Nuthouse	395-503-0001	Completed 2013-2014	100%	4

**Table 6 Summary of Audit Findings – Central Gippsland FMA**

Forest Coupe	Code	Status	Audit Score	Number of criteria assessed
Flanders	460-509-0014	Commenced 4/6/2015	100%	5
Hasp	482-501-0001	Completed 2014-2015	100%	7
Leech Spur	463-502-0008	Completed 2014-2015	100%	9
Lower Growlers	483-504-0025	Completed 2014-2015	100%	8
McCarthy Spur	463-501-0011	Completed 2014-2015	100%	5
Shanahans	487-501-0007	Completed 2013-2014	100%	6
Small Charity	460-510-0010	Completed 2014-2015	100%	11
St Gwinnose	481-501-0012	Completed 2014-2015	100%	5
Stony Creek Road	461-507-0014	Planned	100%	6
Stony Creek Spur	461-507-0003	Provisional clearance. Will not be operational in Sept 2015	100%	6
Stumpy Spur	463-502-0005	Completed 2014-2015	100%	11
TJ Lower	457-508-0002	Provisional clearance. Will not be operational in Sept 2015	100%	6
Trig Boy	458-511-0008	Planned	100%	9
Turkey Mound	463-505-0010	Completed 2013-2014	100%	11
Whitelaw Track	480-504-0026	Completed 2014-2015	100%	11



The summary tables focus on the audit criteria questions that were relevant to each coupe, based on the biodiversity values present on site, and are ordered by FMA.

The recommendations outlined in Table 7 to Table 9 are predominantly linked to the level and order of documentation provided by VicForests within the FCPs. Whilst each coupe achieved 100% compliance against the audit criteria, in the professional opinion of the auditor, the FCPs could be improved by including more detail, and more clearly documenting the required controls for managing the biodiversity values at each coupe. The FCPs should be regularly updated by VicForests throughout the planning and harvesting phases as it is the key document recording key decisions made in managing the coupe.

An example of the variation in FCP documentation can be seen between the FCPs for Stumpy Spur and Boggy Creek. This is presented in Case Study 1 below. A second case study which discusses two examples where no SPZs were present within the coupes assessed is also provided. The completed coupe audit workbooks for these coupes provide further information and are included in Appendix B<sup>1</sup>.

#### CASE STUDY 1 – Documentation within FCPs

The auditor found that the level of documentation outlining the decision making processes around compliance with The Code and the MSPs and the protection of mandatory exclusion areas from the tactical planning stage through to post harvesting varied substantially between coupes. The following coupe examples (Stumpy Spur and Boggy Creek) show contrasting examples of record keeping. VicForests foresters responsible for Stumpy Spur had maintained very detailed records within the FCPs, whilst the record keeping for Boggy Creek was much less detailed and made it difficult to ascertain how decisions on site were made despite still achieving full compliance. During the audit site visits, the foresters on site were able to adequately address queries relating to the audit criteria that were not able to be assessed from the documentation within the FCPs. To aid in future compliance monitoring work undertaken by auditors or DELWP, it is recommended that VicForests adopt a standardised level of documentation across coupes and FMAs.

##### **Stumpy Spur Coupe (463-502-0005)**

Assessment of this FCP identified meticulous record keeping which served as an example of good practice. The required Leadbeater's Possum (LBP) habitat checklist had been undertaken, there were maps identifying areas where vegetation had been excluded from harvesting for habitat retention, there was a Seed Tree Map identifying each seed tree retained on the coupe with a unique ID number that aligned with a table documenting information such as species/height/habitat value for each tree. The Operations Map clearly identified exclusion areas. The FCP was clear, easy to navigate through and provided clear instruction to the VicForests contractor undertaking the harvesting works at the coupe. Examples of the evidence supporting the audit finding are shown in below and in Appendix B.

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<sup>1</sup> These are provided as examples only. Workbooks were completed for each coupe assessed and are retained on GHD's audit file, as supporting audit evidence but were not intended to form part of this report.

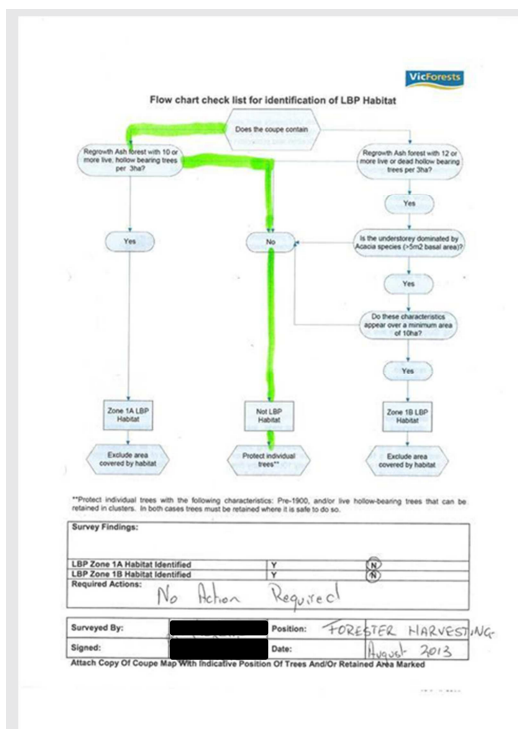


Plate 1 Stumpy Spur LBP habitat flow chart

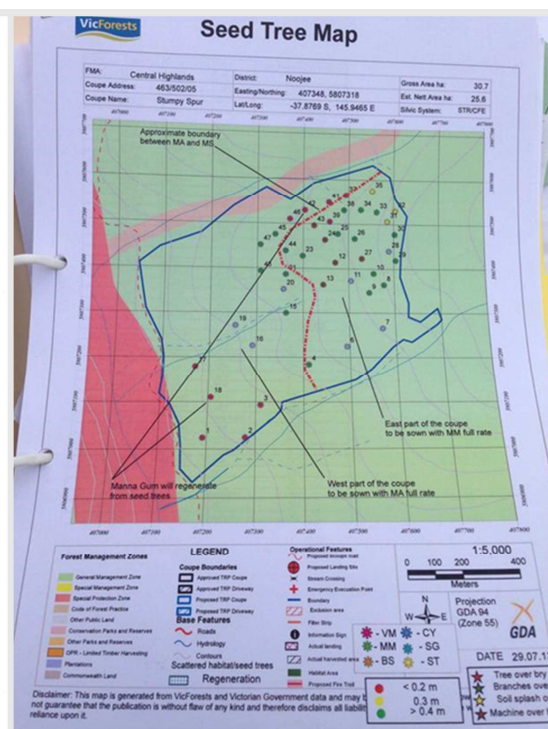
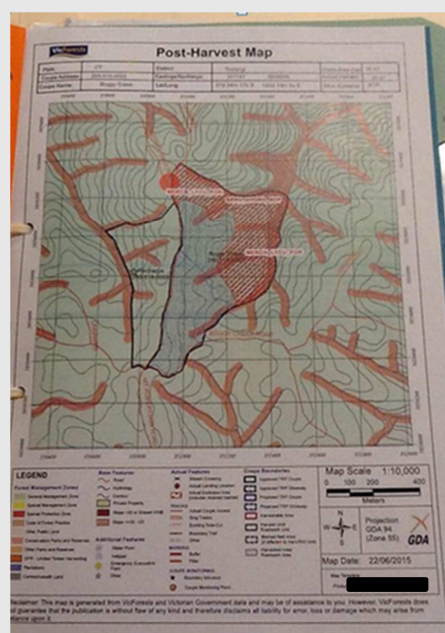
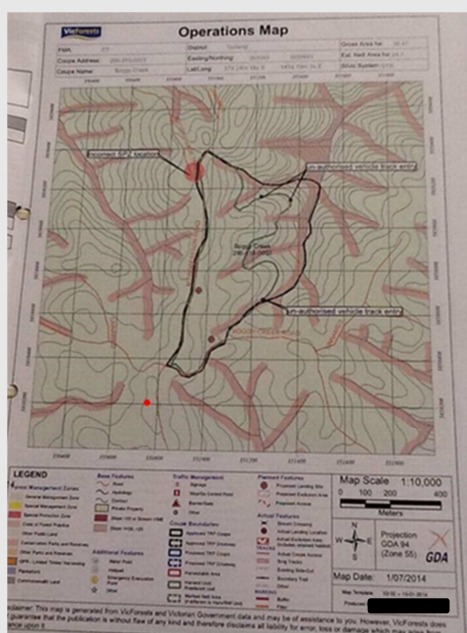


Plate 2 Stumpy Spur Seed Tree Map

**Key:** Green GMZ, Red – SPZ, Blue line - Proposed TRP Coupe.  
See Appendix B for full key

### Boggy Creek Coupe (295-515-0003)

Assessment of this FCP achieved 100% compliance, but there was insufficient detail within the FCP recording and supporting coupe planning decision making; requiring detailed discussion with the managing foresters involved. It was uncertain from the FCP and the site visit alone where the areas were within the coupe that had been excluded from timber harvesting for habitat retention. VicForests staff were able to identify these areas on site during discussions with the auditors, but this information was not clearly identifiable on any of the maps or documentation assessed in the FCP. Errors in the DELWP modelled spatial data provided to VicForests had been identified on site by VicForests staff during the preliminary site assessments, but no efforts had been made to have the spatial layers updated – this made it more difficult to confirm on site that the correct areas had been excluded from harvesting as the DELWP modelled data layers include incorrectly located gullies. Examples of the evidence supporting the audit finding are shown below and in and are provided in Appendix B.



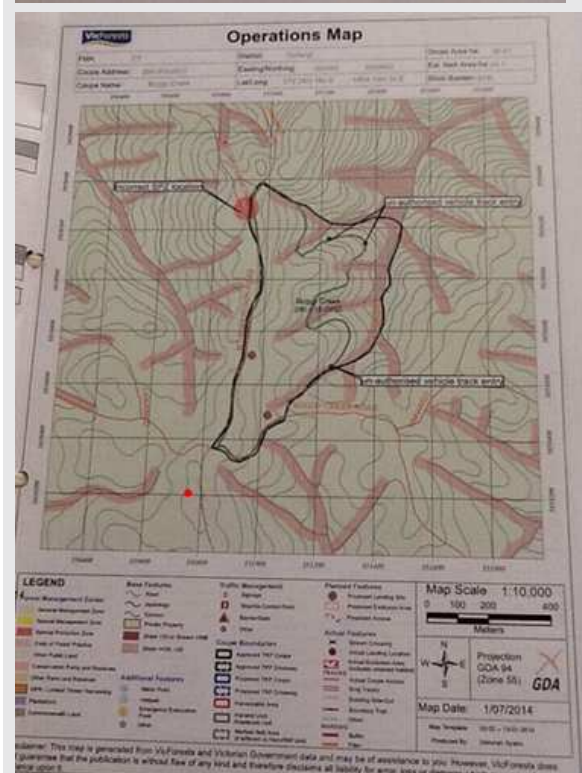
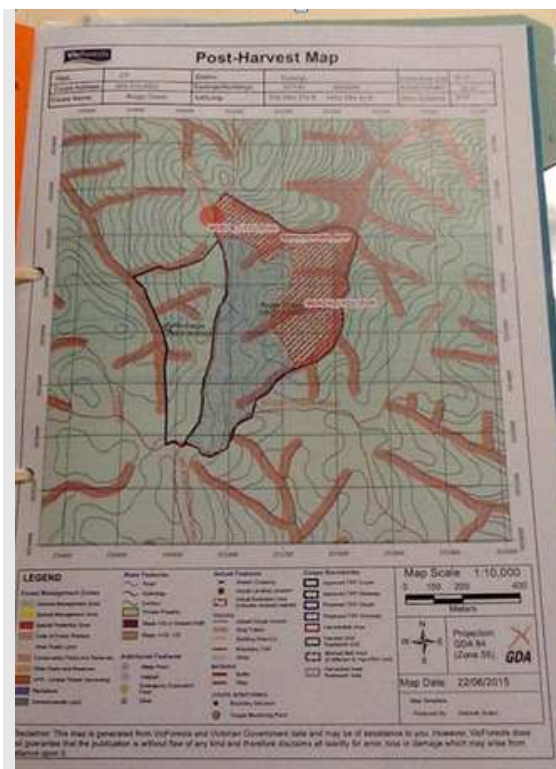


Plate 3 Boggy Creek Operations Map

Plate 4 Boggy Creek Post Harvest Map

**Key:** Green – GMZ, Red – SPZ, Pink – Slope  $\leq 30$ ,  $> 25$ , Blue – Other public land,  
Black line – Approved TRP Coupe, Red hash – Exclusion area

## CASE STUDY 2 – Absence of SPZs



The current process for acquiring coupes for selection as a part of the Forest Audit Program (FAP) requires DELWP to contact VicForests to request an initial list of coupes suitable for assessment against a range of criteria. DELWP then use this list to create a subset of sites to target during the desktop and field based audit.

During the 2015 FAP, a list of 52 coupes were provided to DELWP by VicForests, and GHD then selected 30 of these sites for assessment in 2015. The initial list of sites provided to DELWP for this audit program were identified by VicForests after an assessment aiming to identify coupes where SPZs were located (either entirely or partially) within the coupe boundary of individual sites.

Several coupes (e.g. House, Kevin, Mosquito, Turkey Mound) that were provided to DELWP during the initial target selection phase (having been identified as having SPZ's within the coupe boundary) were found not to have the specified SPZ within the coupe during the desktop and field based audit. In each of the examples cited above, the VicForests staff managing the coupes were aware that the SPZs included within the SPZ spatial layer were in fact absent or incorrectly mapped.

The inclusion of these coupes in the initial target selection phase by VicForests is likely a result of inaccuracies in the SPZ spatial data, as the sites selected by VicForests presumably only used desktop datasets. Whilst the SPZ spatial layers are managed and maintained by DELWP, DELWP relies on the provision of accurate information from those undertaking assessments on the ground in order to update the spatial layers and improve their accuracy. Under the Code and the MSP VicForests are not required/obligated to provide DELWP with corrections to the SPZ layer; though they are required to seek amendment of the SPZ layer before harvesting. Due to the perceived lengthy process that VicForests need to undertake to have the DELWP maintained spatial layers amended, VicForests staff managing coupes on the ground outlined to the auditor (during the field based audits) that their preference is to exclude areas mapped as SPZs from harvesting (even where no value relating to the SPZ is present), as to request an update to the SPZ spatial layers to enable them to harvest these areas takes too long and impacts their ability to manage the coupe.

#### **House Coupe (299-501-0003)**

This coupe is an example of a coupe provided to DELWP by VicForests for target selection based on the provision of data contained. This was one of the randomly selected 30 coupes audited by GHD.

Information provided for target selection indicated that this coupe contained:

- Special Protection Zone (SPZ) 299/01 located within the gross coupe boundary using the FMZ100 spatial overlay. The Special Protection Zone values are for Cool Temperate RainForest, EVC protection (Riparian Thicket);
- SMZ 299/03 within 200 m of boundary; and
- Special Protection Zone (SPZ) 299/01 located within 500 m of the gross coupe boundary using the FMZ100 spatial overlay. The Special Protection Zone values are for Cool Temperate Rainforest, EVC protection (Riparian Thicket).

Auditor desktop review of the FCP identified the Coupe Information System: Management Issues sheet (see Appendix B, Stumpy Spur Coupe Audit Workbook- Appendix 3) that indicated that rainforest was not present within the coupe boundary. The tactical planning sheet within the FCP indicates that rainforest could be within 500 m of the coupe but is not within the gross coupe boundary. No rainforest is identified within the coupe boundary description in the FCP.

The field audit confirmed that there was no rainforest present within the coupe boundary.

It is not clear if VicForests had made a submission to DELWP to update the SPZ layers with the inaccuracies so that the presence/absence of SPZs can be updated within the DELWP spatial layers.

In addition to providing updates to DELWP it is recommended that where a VicForest field assessment identifies a spatial discrepancy (e.g. presence or absence of an SPZ, or the presence of rainforest) then the FCP operations mapping should be updated so it is clear whether the area contains biodiversity values or not. DELWP has identified that in some instances a Rainforest zone may have been established to provide sub-catchment protection to an area that may not meet the requirements to be classified as an SPZ. In these instances the spatial data for these areas should clearly indicate the reason why they are not classified as SPZs so it is clear to both VicForests and DELWP as to the level of protection required.

There were no examples of the auditor identifying areas that should have been recorded as a SPZs that were not identified within the initial target selection information provided. Examples of the evidence supporting the audit finding are shown below and in and are provided in Appendix B.

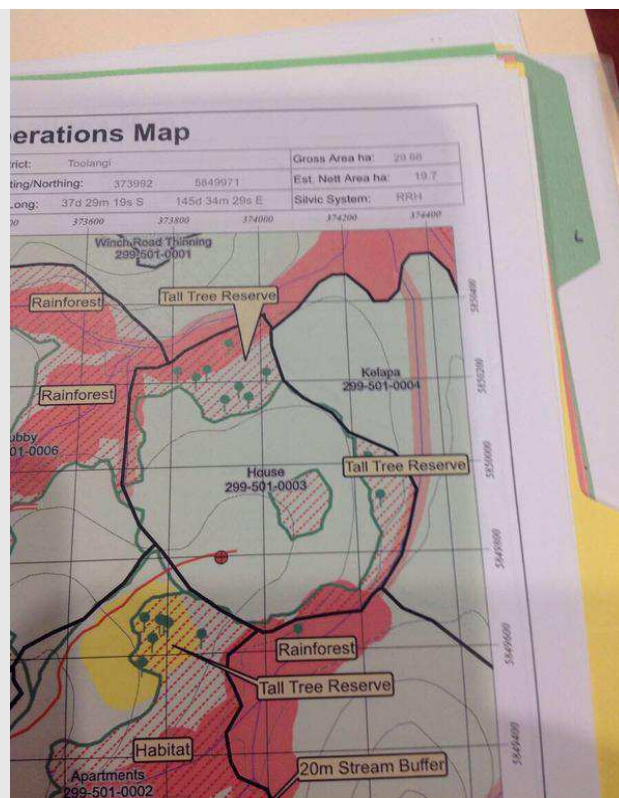


Plate 5 House Coupe Operations Map

**Key:** Green – GMZ, Red – SPZ, Yellow – SMZ, Pink – Slope  $\leq 30$ ,  $> 25$ ,  
Black line – Approved TRP Coupe, Red dots – Exclusion area

#### Thot Coupe (309-508-0016)

This coupe is an additional example where the SPZ/SMZ data provided to DELWP by VicForests indicates that a SPZ is located within the gross coupe boundary but upon auditor assessment it has been confirmed that it is absent.

The following information was documented in the FCP:

- Special Protection Zone (SPZ) 309/14 (Cool Temperate Rainforest) located within gross coupe boundary using spatial overlay with FMZ100. Mapped location of SPZ is incorrect whereby 1.6 ha requires re-zoning to GMZ. Approval will be sought from the relevant DEPI Regional Director for the SPZ modification to GMZ in accordance with Schedule 11 of DSE Management Procedures; and
- Coupe adjacent to Special Protection Zone (SPZ) 309/14.; Coupe adjacent (9 m) to Special Protection Zone (SPZ) 353/03.

Information provided indicates that VicForests are aware that the SPZ value does not actually occur within the coupe boundary and have requested via email in 2011 that the area is re zoned to GMZ.

No evidence of rainforest is present within the TRP based on auditor desktop assessment of the FCP. The appropriate flowchart for identification of a rainforest was undertaken and provided within the FCP. The flowchart determined that rainforest was not present within the coupe.

The Operations Coupe Plan notes that the “Mapped location of SPZ 309/14 is incorrect, whereby 1.6 ha requires rezoning to GMZ”. The FCP states that approval will be sought from the relevant DEPI (now DELWP) Regional Director for SPZ modification to GMZ in accordance with Schedule 11 of DSE Management Procedures. Email evidence of the correspondence with the DELWP was provided.

Advice from VicForest during the audit is that this SPZ has been rezoned (the SPZ layer has also been updated by DELWP) and no longer exists, therefore there are no special biodiversity values that require management present within the coupe.

Auditor site assessment confirmed that no rainforest was present within the coupe and the rezoning may have been appropriate.

Assessment of this coupe under the FAP may have been avoided by an update of the VicForests databases to indicate that the SPZ has been rezoned (as opposed to requires re-zoning) and to note that no SPZ was present within the coupe. Examples of the evidence supporting the audit finding are shown below and in and are provided in Appendix B.

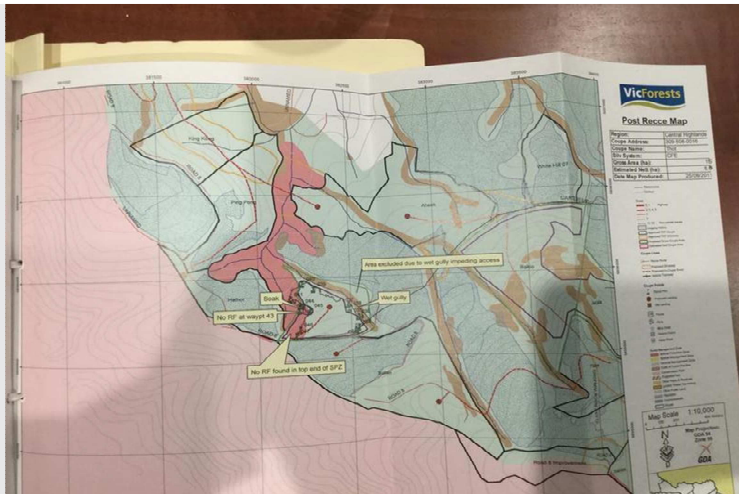


Plate 6 Thot Post Recce Map

**Key:** Green – GMZ, Red – SPZ, Blue – Other public land, Black line – Approved TRP Coupe

**VicForests**  
FOREST OPERATIONS COUPE PLAN - SECTION 5  
Forester Section - Management Actions & Approval Conditions  
309-508-0016 - Thot, Harvest Unit 309-508-0016-A - Thot  
Mareville, 309 - Achern  
Easting/Northing: 382332/563769 Zone 55. Latitude/Longitude: 37° 37' 3" S, 145° 40' 0" E

Issue identified	Value	Identified by spatial overlay as	Identified during field check as	How the value will be managed	Comments
Forest Management Zone within coupe	CFP - Code of Forest Practice	2.24	2.24	Buffer and filters to be applied to any permanent streams and drainage lines as per Table 2 of the Code of Practice for Timber Production 2007. Operations on steep slopes will be conducted as per section 2.2.1 of the Code of Practice for Timber Production 2007.	CFP applies to the gully running NW-SE on the north eastern boundary of the coupe. CFP will also apply to unmapped drainage lines on the western boundary, flowing into the major gully located on the western boundary. No areas > 50 degrees.
Forest Management Zone within coupe	GMZ - General Management Zone	11.25	11.25	Harvesting and Roading activities will be conducted in accordance with the Code of Practice for Timber Production 2007.	General Management Zone within gross coupe boundary.
Forest Management Zone within coupe	SPZ - Special Protection Zone	1.55	1.55	GMZ to GMZ proposal submitted to DEPI - 24/5/2013.	Special Protection Zone (SPZ) 309/14 located within gross coupe boundary using spatial overlay with GMZ/00. Mapped location of SPZ is incorrect whereby 1.6ha requires re-zoning to GMZ. Approval will be sought from the relevant DEPI Regional Director for the SPZ modification to GMZ in accordance with Schedule 11 of DSE Management Procedures.
Non-State Forest in coupe	Checked				
Non-State Forest in coupe	Not Present				
Non-State Forest in coupe	* None found *	0.00	0.00		Value not present
Other situation issues	Checked		Present	No public land lease. No further action.	A State Forest reserve and a reserve in the adjacent national park were identified by the Crown Land Tenure Layer.

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Plate 7 Thot Forest Operations Coupe Plan Sect 5



**Table 7      Coupe Values – Central FMA**

Central Forest Management Area									
Forest Coupe Name and No.	VicForests' SPZ/SMZ Reference	Does FCP identify biodiversity values?	Does FCP identify Rainforest present on site?	Does FCP identify LBP habitat present on site?	If required, was LBP ID check present?	Additional notes from document review	Additional notes from field visit	Complies with the Code and MSPs	Relevant Audit Recommendation (Refer Table 10)
Barbie 288-516-0004	Coupe adjacent to SPZ 287/01 for Leadbeaters Possum Reserve.; Additional Special Protection Zone identified for LBP and rainforest	Leadbeater's Possum habitat and rainforest	FCP identifies that rainforest is present immediately south of the site.	Yes	<b>No</b> , however habitat check was undertaken (see Additional notes from document review)	The FCP states that a LBP ID check needs to be undertaken. This was not found during the desktop audit and VicForests was not able to produce a copy of this document upon request. However, there was evidence that LBP habitat checks were undertaken in the field, including a biodiversity inspection map showing the track log that was walked while habitat assessments were undertaken.	<p>The field audit confirmed the presence of LBP habitat within the coupe – and rainforest adjacent to the coupe.</p> <p>The field inspection confirmed the absence of rainforest within the coupe, and the presence of rainforest adjacent to the coupe.</p> <p>Appropriate exclusion areas have been applied around LBP habitat and other exclusion areas on site, and these areas have been clearly marked and were identifiable in the field.</p>	Yes	2, 4
Boggy Creek 295-515-0003	Special Protection Zone (SPZ) 295/04 for Historic Site (Mt Robinson Mine Battery) located within 500 m of coupe boundary using spatial overlay with FMZ100. Location is actually 100 m south of centre of SPZ location, 20 m outside gross coupe boundary. Mapped location of SPZ is incorrect whereby 0.3 ha requires re-zoning to GMZ. However, some GMZ will require re-zoning to SPZ around the correct location of the Mine Battery.; Special Protection Zone (SPZ) 295/04 for Historic Site (Mt Robinson Mine Battery) located within gross coupe boundary using spatial overlay with FMZ100. Location is actually 100 m south of centre of SPZ location, 20 m outside gross coupe boundary. Mapped location of SPZ is incorrect whereby 0.3 ha requires re-zoning to GMZ. However, some GMZ will require re-zoning to SPZ around the correct location of the Mine Battery.	No biodiversity values identified within forest coupe plan.	No rainforest identified within or adjacent to the coupe area within the FCP.	N/A	N/A	The FCP identifies the requirement for exclusion areas along creeklines and gullies, and the mapping within the FCP suggests that appropriate exclusion buffers have been applied.	<p>When undertaking site field visit it was noted that harvesting had been excluded from waterway buffers. It was also noted that buffers shown on context map are modelled and do not very accurately mark actual drainage areas based on evidence of water flows in the field. The field audit confirmed that appropriate exclusion areas have been applied around waterways on site, and these areas have been clearly marked and were identifiable in the field.</p> <p>During the field visit it was noted that approximately 50 seed trees have been retained on the harvested portion of the coupe (approximately 25 ha). However, the majority of trees required to be retained to meet the requirement of 40 habitat trees per 10 ha are retained within the unharvested area around the coupe boundary. Discussions with the foresters on site confirmed an understanding of the requirements for seed tree retention and that the required number of seed trees were present, and had been retained within the unharvested buffer around the coupe. The field audit confirmed that an appropriate number of seed trees have been retained across harvested sections of the coupe.</p>	Yes	7,8

Central Forest Management Area									
Forest Coupe Name and No.	VicForests' SPZ/SMZ Reference	Does FCP identify biodiversity values?	Does FCP identify Rainforest present on site?	Does FCP identify LBP habitat present on site?	If required, was LBP ID check present?	Additional notes from document review	Additional notes from field visit	Complies with the Code and MSPs	Relevant Audit Recommendation (Refer Table 10)
Bruce Almighty 301-556-0004	SMZ 301/07 adjoins Coupe to the South. SMZ to protect values of Mt Dissapointment, its Summit and Blairs Hut. Due to the impact of the 2009 wildfire the visual amenity identified by SMZ 301/07 has been significantly changed.; SMZ 301/07 adjoins Coupe to the South. SMZ to protect values of Mt Dissapointment, its Summit and Blairs Hut. Due to the impact of the 2009 wildfire the visual amenity identified by SMZ 301/07 has been significantly changed.	No biodiversity values requiring protection identified within the forest coupe plan.	No rainforest identified within the FCP or during the field visit	N/A	N/A	<p>The Coupe Information System Management Issues Report states: "Present SMZ 301/07 adjoins coupe to the south. SMZ to protect values of Mount Disappointment, its summit and Blairs Hut. Due to the impact of the 2009 wildfire the visual amenity identified by SMZ 301/07 has been significantly changed".</p> <p>The FCP states that habitat retention will be planned to avoid single trees and clumps protruding along sensitive ridgelines. There is a line marked along the eastern boundary of the FCP identifying a 20 m buffer which acts as both habitat retention as well as a visual amenity buffer.</p> <p>The Operation Coupe Map and Coupe Diaries identified some accidental tree felling outside of the harvested boundary (the Grosse Coupe Area) within the coupe (the Net Coupe Area). The locations of the accidental tree falls had been clearly marked on the operations map, and the coupe diaries described the incidents and had been appropriately signed off/sanctioned by both the contracted forester and VicForests staff. All of the fallen trees were written up in the coupe diaries as having been pulled back in to the coupe.</p>	<p>The field audit confirmed that all harvesting activities had been kept within boundaries, and that there had been no encroachment of the SMZ to the south of the coupe. The boundaries of the harvested area were identifiable in the field having been marked with blue tape, however some sections of tape were not present as the coupe was harvested approximately three years ago.</p> <p>During the field audit the 20 m buffer along the eastern edge of the coupe was assessed and meets the habitat retention requirements for the coupe.</p> <p>During the field audit two of the locations where accidental tree falls had been marked was ground-truthed, the location of one tree fall was confirmed, but the second could not be distinguished in the field due to the extensive vegetation on site and a dense layer of eucalypt and acacia regeneration (to approx. 5 m tall). As the trees had been removed it was not considered feasible to locate the exact location of the falls given the time (approximately three years) that has passed since harvesting.</p>	Yes	N/A
Cinders	SPZ 300/01 (Murrindindi Rv Reserve, Cool Temperate RainFst) included as part of gross coupe boundary; Adjacent SPZ 300/01 (Murrindindi Rv Reserve, Cool Temperature RainFst)	Leadbeater's possum habitat present within 500 m of coupe.	No rainforest identified within or adjacent to the coupe within FCP- this was confirmed during field visit.	<500 m from site	<b>No</b> , however habitat check not required (see Additional notes from document review and field visit)	<p>The FCP states: "VicForests Field Guide for the Identification of Leadbeater's Possum Habitat checklist to be completed prior to harvesting". This checklist was not found during the desktop audit and VicForests were not able to produce a copy of this document upon request.</p> <p>There was no evidence in the FCP that other forms of LBP checks had been undertaken within the coupe prior to harvesting.</p> <p>The Coupe Diaries from 2011 (when the site was harvested) identified some accidental tree felling outside of the harvested boundary (the Grosse Coupe Area) within the coupe (the Net Coupe Area). The coupe diaries described the incidents and had been appropriately signed off/sanctioned by both the contracted forester and VicForests staff.</p>	<p>During the field audit it was identified that this coupe had not been harvested during the audit period (2013-14; 2014-15); instead only the landing was re-opened to provide access to the adjacent coupe (House of Ash) for timber removal, and the coupe had been cleared previously in 2010/11. The coupe was covered in dense eucalypt and acacia regrowth between 3-6 m tall, and whilst a small amount of regeneration may have been removed to re-open the landing, this vegetation would not have constituted Leadbeater's Possum habitat. Therefore the field audit confirmed that as no stands of forest were impacted/harvested, a habitat check was not required as impacts were contained within the existing landing.</p> <p>The field audit confirmed the presence of buffers, and that no exclusion areas were encroached, and that the boundaries of the harvested areas from 2010/11 were still clearly evident and marked with blue tape. The audit also confirmed that the SPZ adjacent to the re-opened landing had not been impacted by the recent works.</p>	Yes	3

Central Forest Management Area									
Forest Coupe Name and No.	VicForests' SPZ/SMZ Reference	Does FCP identify biodiversity values?	Does FCP identify Rainforest present on site?	Does FCP identify LBP habitat present on site?	If required, was LBP ID check present?	Additional notes from document review	Additional notes from field visit	Complies with the Code and MSPs	Relevant Audit Recommendation (Refer Table 10)
Fat Albert 320-502-0015	Coupe adjacent to Special Protection Zone (SPZ) 320/01; Coupe adjacent to Special Protection Zone (SPZ) 320/01.	The coupe is located within Spotted Tree Frog (STF) catchment, but not within 1 km of any known STF sites and not within STF management zones.  FCP states that Leadbeater's Possum habitat is present with 500 m of coupe	No rainforest areas identified within or adjacent to coupe within the FCP.	<500 m from site	Yes	<p>The FCP states that Leadbeater's Possum habitat is present with 500 m of coupe, and that VicForests ID for LBP habitat checklist needs to be undertaken prior to harvesting. Checklist undertaken and no LBP habitat identified within coupe.</p> <p>The coupe context map identifies areas along the eastern and south-eastern boundary of the coupe that have been retained for habitat purposes.</p> <p>The proposed operation map within the FCP includes individually marked scattered trees that were proposed to be retained as seed trees on the site.</p> <p>The FCP identified an accidental tree fall outside of the harvest area (but not within a buffer or exclusion area), that could not be retrieved due to the steep slopes. The location of this tree fall was not marked on any maps within the FCP. The FCP described the incident and had been appropriately signed off/sanctioned by both the contracted forester and VicForests staff.</p> <p>Note: Following the submission of the draft report VicForests provided an electronic copy of the Post-Harvest map showing the location of tree falls that occurred during harvesting.</p>	<p>The field audit confirmed the likely absence of Leadbeater's Possum habitat within the coupe, this assumption was based on the condition of vegetation that had been retained adjacent to the harvested areas.</p> <p>Whilst discussions on site with the forester suggested that the areas of vegetation that had been retained had been selected primarily due to the steep slope, the field audit identified that these areas contain high quality habitat for a range of fauna species, and that an appropriate amount of habitat had been retained within the coupe.</p> <p>The field audit confirmed that an appropriate number of seed trees have been retained across harvested sections of the coupe and these had been appropriately selected. However, there has been a poor survival rate of these individuals at this site.</p> <p>The field audit did not assess the accidental tree fall, as the location of the fall was unknown. However, the fall was appropriately sanctioned within the FCP documentation.</p>	Yes	9, 10, 11
Giraffe 288-518-0008	0.1ha of SPZ 287/01 Leadbeaters Possum reserve mapped within gross boundary. Gross coupe shape taken right up to Number 5 Road where the assumed SPZ/GMZ boundary is. Mapped location of SPZ has small areas below No 5 Road.; 1. SPZ 287/01 for Leadbeaters Possum reserve adjacent to coupe. 2. 288/02 For Snobs Creek linear reserve, Cool Temperate Rainforest located 425 m from coupe.	0.1 ha of SPZ 287/01 Leadbeater's Possum reserve mapped within gross boundary.	Threatened EVCs modelled within coupe: Cool Temperate Rainforest (16.83) (rainforest EVC detected within overlay). 16.8 ha of rainforest within the coupe	Yes (0.1 ha)	<b>No</b> , however habitat check was undertaken (see Additional notes from document review and field visit)	<p>The FCP identifies that LBP habitat ID sign off is required to be completed (in coupe planning checklist). VicForests confirmed during audit that this LBP habitat check has not been undertaken. However, the operations maps shows the track log that was undertaken throughout the coupe looking for LBP habitat, providing evidence that sufficient survey effort had been put in to assessing any potential LBP habitat within the coupe.</p> <p>The FCP states that the VicForests field inspection confirmed the presence of Rainforest adjacent to the coupe along the eastern boundary only (and not within the coupe). The mapping in the FCP identifies the rainforest adjacent to the coupe but it is not clear whether the appropriate buffer (40 m) has been incorporated in to the exclusion areas shown on the map.</p>	<p>Only a small portion of the coupe had been harvested at the time of the audit, but the entire site had been marked out on the ground with blue tape using appropriate buffers.</p> <p>The field audit confirmed the absence of Leadbeater's Possum habitat within the coupe.</p> <p>The rainforest exclusion area on the eastern edge of the coupe was identified during the field audit as being present and outside of the coupe boundary, the exclusion areas around the rainforest was measured and a &gt;40 m buffer applied and had been marked with blue tape and was clearly identifiable in the field.</p>	Yes	5

Central Forest Management Area									
Forest Coupe Name and No.	VicForests' SPZ/SMZ Reference	Does FCP identify biodiversity values?	Does FCP identify Rainforest present on site?	Does FCP identify LBP habitat present on site?	If required, was LBP ID check present?	Additional notes from document review	Additional notes from field visit	Complies with the Code and MSPs	Relevant Audit Recommendation (Refer Table 10)
House 299-501-0003	Special Protection Zone (SPZ) 299/01 located within gross coupe boundary using FMZ100 spatial overlay. The Special Protection Zone values are for Cool Temperate RainForest, EVC protection (Riparian Thicket).; SMZ 299/03 within 200 m of boundary.; Special Protection Zone (SPZ) 299/01 located within 500 m of the gross coupe boundary using FMZ100 spatial overlay. The Special Protection Zone values are for Cool Temperate RainForest, EVC protection (Riparian Thicket).	SPZ 299/01 cool temperate rainforest located within gross coupe boundary (3.28) ha.  Patches of 'tall trees' were also identified within the coupe. These tall trees have been referred to as 'Giant Trees' within the FCP.	Coupe issues sheet indicates that rainforest is not present. Tactical sheet indicates RF could be within 500 m of coupe, but not in coupe. Intend to use 40 m buffers. No rainforest identified in coupe boundary description	N/A	N/A	The FCP states that while tactical planning stage identified rainforest, that the coupe does not contain rainforest.  The FCP states that patches of tall trees (79-85 m tall) are present within the coupe (Mountain Ash dominant), and possibly 1939 regrowth. There was no specific reference to preserving these trees as habitat trees but the FCP states that these trees will be excluded from harvesting. The tall trees have been included in the operations maps and are clearly marked as exclusion areas with the caption "Tall Tree Reserve".	The field audit confirmed that Rainforest was not present within the coupe.  The field audit confirmed that all of the patches of 'tall trees' within the coupe were correctly marked on the operations maps contained within the FCP, and that these areas had been excluded from harvesting. The boundaries around these exclusion areas had been marked with flagging tape and were clearly identifiable in the field.	Yes	6a
Kevin 286-509-0008	SPZ 286/07 barred galaxias and cool temperate rainforest mapped within gross coupe shape. SPZ area follows mapped streams along the northern and southern boundaries. Stream which forms the southern boundary is a wide depression which would normally require a 10 m filter. It is also not mapped in the correct location. Mapped location of SPZ is incorrect whereby approx. 2ha requires re-zoning to GMZ.; SPZ 286/03 historic Area, Clark and Pearce No. 1 Winch located 180 m from the coupe.	SPZ 286/07 barred galaxias and cool temperate rainforest mapped within gross coupe shape. SPZ layer was updated upon submission to DEPI (now DELWP) as confirmed these values were not present within TRP.	Rainforest and Barred Galaxias habitat identified within coupe at tactical planning stage. FCP states these values are not present within the coupe.	N/A	N/A	The mapped SPZ follows the mapped stream along the northern and southern boundaries of the coupe. The FCP identified that the stream that forms the southern boundary is mapped incorrectly, whereby approximately 2 ha of the coupe requires re-zoning to GMZ.  The FCP includes documentation of a request submitted by VicForests (8 February 2013) to DEPI (now DELWP) to modify the SPZ boundary for both Trevor and Kevin (Biodiversity values identified within the SPZ layer include Rainforest/Barred Galaxias), and remove the SPZ from the coupe area. This request was approved by DEPI on 8 March 2013.  The FCP (Section 5) states that the coupe is located within Little Rubicon Barred-Galaxias catchment area and that three streams will require a 30 m buffer. However, the FCP later states that Barred-Galaxias habitat is not present within the coupe and DEPI approved the removal of the SPZ related to this value from within the coupe boundary.  The FCP identified six accidental tree falls (trees sliding) outside of the harvested boundary (the Grosse Coupe Area) within the coupe (the Net Coupe Area). The coupe diaries confirm that one of these was pulled out and the location marked on the operations map, two slid over the boundary on a snig track at the entry to the coupe, and one slid over boundary above the snig track at entry.  The FCP coupe diary entries described the incidents but did not always describe the location and/or whether the trees had been removed or left in place. The coupe diary entries had been appropriately signed off/sanctioned by both the contracted forester and VicForests staff.	Field audit confirmed the absence of Rainforest within and immediately adjacent to the coupe.  The field audit confirmed that appropriate exclusion areas were present within the coupe and were marked with flagging tape and easily identifiable in the field.  The location of the accidental tree falls was described but not marked on the maps, therefore the exact location was not known and could not be assessed in the field. However, appropriate sanctions were in place within the FCP.	Yes	6a, 7, 11



Central Forest Management Area									
Forest Coupe Name and No.	VicForests' SPZ/SMZ Reference	Does FCP identify biodiversity values?	Does FCP identify Rainforest present on site?	Does FCP identify LBP habitat present on site?	If required, was LBP ID check present?	Additional notes from document review	Additional notes from field visit	Complies with the Code and MSPs	Relevant Audit Recommendation (Refer Table 10)
Mosquito 300-917-0005	Special Protection Zone (SPZ) 300/02 (Rainforest) along western boundary; SPZ 297/04 (Leadbeaters Possum, Old-growth, Rainforest, Sooty Owl habitat protection, RFSOS, concentration of flora at the limit of their range, Recreation site) within 500 m west of coupe.	FCP identifies that SPZ 300/02 for Leadbeater's Possum habitat is within gross coupe boundary, but that the VicForests field assessment determined there was not LBP within the gross coupe area.  Rainforest also present (Murrindindi Reserve).	Rainforest only present adjacent to coupe, not within coupe boundary.  No rainforest flow diagram sighted in the FCP. However rainforest is adjacent to coupe boundary and not within TRP.	FCP identifies that SPZ 300/02 for LBP habitat is within gross coupe boundary, but that the VF field assessment determined there to be no LBP within the gross coupe area	<b>No</b> , however habitat check was undertaken (see Additional notes from document review and field visit)	The FCP states: "VicForests Field Guide for the Identification of Leadbeater's Possum Habitat checklist to be completed prior to harvesting". This was not identified during the desktop audit and VicForests were not able to produce a copy of this document upon request.  The FCP states that VicForests undertook field based habitat assessments for LBP and determined that LBP habitat was not present on site, however during these assessments a number of large and hollow bearing trees were identified, and these trees have been mapped and included in the 'post-recce' maps within the FCP.  The FCP states that a 40 m buffer is required for areas mapped as rainforest within the coupe. Whilst no Rainforest Check/Flow diagram was sighted, the FCP states that rainforest is not actually present within the coupe, but that rainforest is present adjacent to the coupe.  The FCP maps identify a gully on the eastern boundary of the coupe that should be excluded from harvesting.	The field audit confirmed the absence of LBP habitat within the coupe, and that areas where hollow bearing trees were mapped and identified within the 'post recce' maps had been excluded from harvesting.  The field audit confirmed that there was no rainforest present within the coupe, but that rainforest was present adjacent to the coupe. The field audit confirmed that all harvesting had remained within the coupe boundaries, and that a >40 m buffer had been applied to areas confirmed as rainforest adjacent to the coupe. Blue tape was present marking the edges of the exclusion areas so they were clearly identifiable within the field.  The field audit confirmed the presence of an unharvested gully along the eastern boundary of the coupe.	Yes	6a
Roadhouse 320-501-0017	Special Management Zone (SMZ) 457/01 (Landscape) located along Warburton - Woods Point.; SPZ SPZ incorrectly mapped, Special Protection Zone (SPZ) 320/07 - Recreation Site (The Triangle) located within gross coupe boundary using spatial overlay with FMZ100. Mapped location of SPZ is incorrect whereby 0.8 ha requires re-zoning to GMZ. Actual location of recreation site is ~100 m SSE of mapped location. Actual location is outside coupe boundary.; Special Management Zone (SMZ) 457/01 located within gross coupe boundary. Access to the coupe requires roading through the SMZ.; Coupe adjacent to Special Protection Zone (SPZ) 320/07(Recreation Site).	FCP tactical planning stage states that Spotted Tree Frog catchment falls within coupe and within 500 m of coupe. However there are no known STF sites within the coupe.	FCP does not identify any rainforest within or adjacent to the coupe area therefore rainforest buffers are not required.	N/A	N/A	The FCP documentation includes a management action for STF catchment – it requires new roads to be located 50 m from any stream, unless sediment control is in place. This is compliant with STF management zone requirements (page 78, appendix 3 of MSPs). Plan indicates no confirmed presence of STF on coupe or within 500 m of the coupe.  The FCP identified an accidental tree fall within a buffer that could not be retrieved due to the steep slopes. The location of this tree fall was not marked on any maps within the FCP. The FCP described the incident and had been appropriately signed off/sanctioned by both the contracted forester and VicForests staff.	The field audit confirmed that only one new road was opened, and that it was 112 m from the edge of the buffer (well over requirements for streamlines within STF catchment).  Scattered trees had been retained across the site but they were not shown on maps within FCP). The supervisor on site during the field audit confirmed that these had been retained as seed trees. Whilst not specifically retained as habitat trees, they fill the gaps between forested areas to ensure there are no gaps >150 m between trees retained within the coupe, which follows the MSPs. The retained seed trees within the coupe are not hollow bearing, however an assessment of the trees surrounding the harvested areas within the coupe suggest that there was unlikely to have been hollow bearing trees within the TRP boundary.  Areas had been retained as habitat around the edges of the TRP boundary, but these areas had not been marked on the maps within the FCP despite being identifiable in the field.  The edges of the harvested areas had all been marked with flagging tape and were clearly identifiable within the field.  The field audit did not assess the accidental tree fall, as the exact location of the fall was unknown. However, the fall was appropriately sanctioned within the FCP documentation.	Yes	9, 10

Central Forest Management Area									
Forest Coupe Name and No.	VicForests' SPZ/SMZ Reference	Does FCP identify biodiversity values?	Does FCP identify Rainforest present on site?	Does FCP identify LBP habitat present on site?	If required, was LBP ID check present?	Additional notes from document review	Additional notes from field visit	Complies with the Code and MSPs	Relevant Audit Recommendation (Refer Table 10)
Sherpa 300-527-0001	SPZ 300/01 Murrindindi River Reserve and Cool Temperate Rainforest mapped with gross coupe shape. FMZ mapping not clear where the 100 m stream buffer is.; Adjacent SPZ 300/01. Murrindindi River Reserve and Cool Temperate rainforest; SPZ 300/02 located 361 m from coupe.	<p>FCP states no biodiversity values are present within the coupe.</p> <p>This is slightly contradicted as the FCP also states that 0.42 ha of Cool Temperate Rainforest (CTRF) is present within coupe.</p> <p>The FCP identifies potential Leadbeater's Possum (LBP) habitat within 500 m of coupe (but not within the coupe).</p>	FCP states that 0.42 ha of CTRF is present within coupe, and that 9.13 ha is within 500 m of the coupe.	<500 m from site	Yes	Leadbeater's flow chart check was completed for coupe and stored in FCP. The LBP check list determined that LBP habitat was not present within the coupe.	<p>The field audit confirmed the absence of LBP habitat within the coupe.</p> <p>During the field audit buffer measurements were recorded for the 0.42 ha area mapped as rainforest within the coupe boundary along the north western boundary. The buffer was found to be &gt;40 m (the required exclusion width) at three points measured along the patch.</p> <p>During the field audit exclusion areas were clearly identifiable, having been marked with blue flagging tape.</p>	Yes	N/A
Thot 309-508-0016	Special Protection Zone (SPZ) 309/14 located within gross coupe boundary using spatial overlay with FMZ100. Mapped location of SPZ is incorrect whereby 1.6ha requires re-zoning to GMZ. Approval will be sought from the relevant DEPI Regional Director for the SPZ modification to GMZ in accordance with Schedule 11 of DSE Management Procedures.; Coupe adjacent to Special Protection Zone (SPZ) 309/14.; Coupe adjacent (9 m) to Special Protection Zone (SPZ) 353/03.	Rainforest identified during the tactical planning stage, however the SPZ has been re-zoned so no biodiversity values present within the coupe.	Rainforest not present within TRP. The SPZ for rainforest within the coupe has been re-zoned.	N/A	LBP habitat flowchart was not required but had been undertaken and was stored within FCP.	<p>The flowchart for the identification of rainforest had been undertaken and was included within the FCP. The flowchart determined that rainforest was not present within the coupe.</p> <p>Forest Operations Coupe Plan notes that the "Mapped location of SPZ 309/14 is incorrect, whereby 1.6 ha requires re-zoning to GMZ. FCP states that approval will be sought from the relevant DEPI (now DELWP) Regional Director for SPZ modification to GMZ in accordance with Schedule 11 of DSE Management Procedures</p> <p>Advice from VicForests during the audit is that SPZ 353/03 has been rezoned and no longer exists, therefore there are no biodiversity values present within the coupe. The SPZ layer for these areas has since been updated.</p> <p>The Flowchart for LBP habitat was included within the FCP and had determined that LBP habitat was not present on the site.</p>	<p>The field audit confirmed that no Rainforest or LBP habitat was present within the coupe.</p> <p>The field audit confirmed that the harvest boundary had been marked off with blue flagging tape and was clearly identifiable in the field.</p>	Yes	N/A

Central Forest Management Area									
Forest Coupe Name and No.	VicForests' SPZ/SMZ Reference	Does FCP identify biodiversity values?	Does FCP identify Rainforest present on site?	Does FCP identify LBP habitat present on site?	If required, was LBP ID check present?	Additional notes from document review	Additional notes from field visit	Complies with the Code and MSPs	Relevant Audit Recommendation (Refer Table 10)
Trevor 286-509-0004	Gross area mapped to major streams from aerial photo. Includes SPZ 286/07 Barred Galaxias (1) and Cool Temperate Rainforest (2).; SPZ 286/07 Barred Galaxias (1) and Cool Temperate Rainforest (2) within 500 m	LBP listed as present within 500 m and checklist required before harvesting commences.	Request was submitted to DEPI to modify SPZ boundary for both Trevor and Kevin (rainforest/Barred Galaxias) and remove from the coupe area made 8 February 2013. Approved 8 March 2013	<500 m from site	<b>No</b> , however a habitat check for LBP was undertaken (see Additional notes from document review and field visit).	<p>Whilst no LBP habitat flowchart was able to be located, there was evidence to suggest that LBP habitat search had been undertaken and was not identified within the coupe.</p> <p>The mapped SPZ follows the mapped stream along the northern and southern boundaries of the coupe. The stream that forms the southern boundary is mapped incorrectly, whereby approximately 2 ha of the coupe requires re-zoning to GMZ. The FCP includes documentation of a request submitted by VicForests (8 February 2013) to DEPI (now DELWP) to modify the SPZ boundary for both Trevor and Kevin (Biodiversity values identified within the SPZ layer include Rainforest/Barred Galaxias), and remove the SPZ from the coupe area. This request was approved by DEPI on 8 March 2013 (within one calendar month).</p> <p>Coupe diary records indicate that three trees accidentally slid over the harvest boundary on to the snig track at the coupe entry on 3/04/2015. The FCP described the incident and had been appropriately signed off/sanctioned by both the contracted forester and VicForests staff.</p>	The field audit confirmed the absence of Rainforest and LBP habitat within the coupe.	Yes	2



**Table 8      Coupe Values – Benalla Mansfield FMA**

Benalla Mansfield Forest Management Area									
Forest Coupe	VicForests' SPZ/SMZ Reference	Does FCP identify biodiversity values?	Does FCP identify Rainforest present on site?	Does FCP identify LBP habitat present on site?	If required, was LBP ID check present?	Additional notes from document review	Additional notes from field visit	Complies with the Code and MSPs	Relevant Audit Recommendation (Refer Table 10)
Kelly Creek 395-502-0004	Special Management Zone (SMZ) 395/04 for Designated Catchment (Ryans Creek) and Historic Site (grave)	No biodiversity values identified within the FCP	No rainforest identified within or adjacent to the coupe within the FCP	None identified	N/A	Habitat trees have been retained on site as seed trees. These were marked up on maps within the FCP in grid formation.  FCP identifies a significant Blackberry infestation adjacent to the site.	The field audit confirmed the presence of seed trees and that an appropriate number had been retained on site.  The field audit confirmed that the site boundaries had been marked with blue flagging tape and were clearly identifiable within the field.  There was a lot of retained timber on the site, this was discussed within VicForests during the audit and VicForests identified that this coupe was likely to be opened up for the removal of firewood and would not be burnt.	Yes	N/A
Nutcase 395-503-0001	Coupe within SMZ 395/04 Ryans Creek SWSCA; Coupe adjacent to Ryans Creek SWSCA SMZ 395/04; SPZ 395/03 (EVC Protection Swampy Riparian Woodland) located 200 m to west of coupe.; SPZ 397/02 (Powerful Owl and Riparian Forest) located 210 m to the east of coupe	The FCP identified Powerful owl SPZ 397/03 approximately 210 m east of coupe.  The FCP states that no biodiversity values were identified within the coupe.	No rainforest identified within or adjacent to the coupe within the FCP	None identified	N/A	The area where seed trees had been retained was marked up on the Coupe Plan map within the FCP. Habitat trees have been retained as seed trees and along the coupe boundaries.  Coupe diary records indicate that one tree accidentally slid over the harvest boundary due to rot (tree was rotten on the butt) on 6/03/2013. The location of the tree fall was marked up on the Operations map within the FCP. A decision was made to leave the fallen head in place. The coupe diary entry within the FCP described the incident and had been appropriately signed off/sanctioned by both the contracted forester and VicForests staff.	The field audit confirmed the presence of seed trees and that an appropriate number had been retained on site.  The field audit confirmed that the site boundaries had been marked with blue flagging tape and were clearly identifiable within the field.  The location of the tree fall could not be identified during the field audit due to the extensive regrowth since harvesting had occurred, despite the location being marked on the Operations map. This tree had not fallen into an exclusion area or buffer. Therefore no additional assessment required.	Yes	N/A

**Table 9      Coupe Values – Central Gippsland FMA**

Central Gippsland Forest Management Area									
Forest Coupe	VicForests' SPZ/SMZ Reference	Does FCP identify biodiversity values?	Does FCP identify Rainforest present on site?	Does FCP identify LBP habitat present on site?	If required, was LBP ID check present?	Additional notes from document review	Additional notes from field visit	Complies with the Code and MSPs	Relevant Audit Recommendation (Refer Table 10)
Flanders 460-509-0014	SPZ 460/01 linear reserve along west boundary; Coupe located in SPZ 460/01 linear reserve.	The FCP states that no biodiversity values were identified within the coupe.	No	None identified	N/A	The FCP identifies that an SPZ exists adjacent to the site along its western boundary, no buffer is required for this SPZ (it is a linear reserve).	<p>A sufficient number of seed trees had been retained for the area that had been harvested at the time of the audit.</p> <p>The western boundary of the site was clearly marked with flagging tape, clearly excluding the SPZ adjacent to the coupe from harvesting. Harvesting had not been undertaken to the edge of this boundary at the time of the field audit.</p> <p>During the field audit gully and stream exclusion boundaries were observed as having been marked with blue flagging tape, and were clearly identifiable. Harvesting was still underway at the time of the audit.</p>	Yes	N/A
Hasp 482-501-0001	Special Management Zone (SMZ) 482/02 is located within gross coupe boundary. The SMZ value is for Landscape view from Erica. The requirements of this plan will affect 32.2 ha of the gross coupe area; Special Management Zone (SMZ) 482/02 located within 200-500 m of coupe boundary. The SMZ value is for Landscape view from Erica. The requirements of this plan will affect 32.2 ha of the gross coupe area; Special Protection Zones (SPZ) 482/03 (LBP habitat & Cool Temp RF) & 482/01 (Sooty Owl habitat, LBP, Cool Temp RF, RFSOS, Landscape) are located within 200-500 m of coupe boundary using FMZ100 spatial overlay.	An SPZ for LBP Habitat and Rainforest was identified during tactical planning stage. The FCP states that SPZ had been incorrectly mapped and that no biodiversity values were present within the coupe.	Rainforest absent: Rainforest check has been completed 19/11/2013. Flowchart states that no Rainforest is present within the coupe.	No	Yes	<p>LBP checklist had been undertaken (28/11/13) and stated that there was no LBP habitat within the coupe. The FCP states that while there were some rainforest species in the creek, not patches of rainforest present within the coupe. The SPZ was re-zoned (confirming absence of rainforest) however the originally marked 'SPZ' has been excluded from harvesting.</p> <p>Flowcharts were stored within the FCP for LBP habitat and Rainforest, both determined that these values were not present within the coupe.</p> <p>Request was submitted to re-zone SPZ 482/05 to GMZ in March 2012. A letter within the FCP from DELWP confirms that the area can be re-zoned and is not Rainforest/SPZ. Due to lengthy process to get SPZ rezoned the area mapped as SPZ was excluded from harvesting (and is now classified as GMZ).</p>	<p>As the process to get the SPZ re-zoned was slow in this instance, the area originally mapped as an SPZ was retained on site. This meant that during the field audit the area could be assessed for the presence or absence of biodiversity values. The field audit confirmed that there was no rainforest or LBP habitat within these areas.</p> <p>The field audit confirmed that exclusions areas along the creek have been excluded from harvesting and were marked with flagging tape and clearly identifiable in the field.</p>	Yes	6b

Central Gippsland Forest Management Area									
Forest Coupe	VicForests' SPZ/SMZ Reference	Does FCP identify biodiversity values?	Does FCP identify Rainforest present on site?	Does FCP identify LBP habitat present on site?	If required, was LBP ID check present?	Additional notes from document review	Additional notes from field visit	Complies with the Code and MSPs	Relevant Audit Recommendation (Refer Table 10)
Leech Spur 463-502-0008	SMZ 463/03 - Landscape within 500 m east of coupe boundary.; Coupe adjacent to Special Protection Zone (SPZ) 463/02 - Linear reserve & 463/05 - Cool Temperate Rainforest; SPZ 463/04 (Linear reserve, River reserve, Cool Temperate RainFst, Recreation site) within 500 m south gross coupe boundary.; SPZ 463/02- Linear Reserve is within the TRP boundary. The boundary of the SPZ aligns with Bennies Ck Road. This has been checked by GPS by VicForests and used by DEPI in amending this boundary in 2013.	Modelled LBP habitat identified during tactical planning stage on coupe.	Buffer included in SPZ. Additional "habitat" buffer added between road and SPZ	Modelled LBP habitat on coupe. Inspected and VicForests determined it was not LBP habitat	Yes	A LBP Habitat flowchart had been undertaken and was stored within the FCP, the flowchart documentation stated that LBP habitat was not present on site, and that the area was dominated by Mountain Grey Gum.  A linear SPZ was included on mapping immediately south of the coupe in the FCP.	The field audit confirmed that there was no LBP habitat present within the coupe.  The boundaries of the site were marked with flagging tape and clearly identifiable in the field.  There was a linear SPZ immediately south of the coupe along its southern boundary, the SPZ and the coupe was separated by a road, and therefore the area to be excluded from harvesting was clearly identifiable during the field audit. An additional 'habitat buffer' had been included immediately north of the road boundary that buffered the SPZ. This area was identifiable in the field and was clearly marked on the Operations map as areas to be retained for habitat within the coupe.	Yes	N/A
Lower Growlers 483-504-0025	Special Protection Zone (SPZ) 483/04 (LBP, Cool Temperate Rainforest, Old Growth, Landscape) located within gross coupe boundary; Special Protection Zone (SPZ) 483/04 (LBP, Cool Temperate Rainforest, Old Growth, Landscape) within 200-500 m of gross coupe boundary.	FCP states that "Special Protection Zone (SPZ) 483/04 (LBP, Cool Temperate Rainforest, Old Growth, Landscape) located within Grosse coupe boundary	Rainforest check was undertaken and it has been confirmed rainforest not present.	Yes	Yes	LBP checklist has been undertaken and confirmed the presence of LBP habitat within the coupe. Areas that had been determined to be retained for fauna habitat were clearly marked up on maps within the FCP.  Rainforest Checklist had been undertaken and determined that Rainforest was not present within the coupe. FCP states that while Myrtle was identified within the northern gully, the cover of Myrtle was <70% and did not meet thresholds to be classified as Rainforest.  These forms were not identified within the FCPs during the desktop audit but VicForests were able to send copies of these documents through upon request.	The field audit confirmed the presence of LBH habitat and that appropriate exclusion areas had been put in place for LBP habitat and that these areas had not been encroached during harvesting.  The field audit confirmed the presence of some Rainforest Species, and that the thresholds for an area to be classified as Rainforest had not been met, and therefore the absence of Rainforest within the coupe.  Exclusion areas and buffers were marked with flagging tape and were clearly identifiable in the field.  The field audit confirmed that the area that was shown to have been retained on the post-harvest map is accurate to what had been cleared on the ground, which means a greater area had been retained than what was initially proposed for harvest.	Yes	2, 3

Central Gippsland Forest Management Area									
Forest Coupe	VicForests' SPZ/SMZ Reference	Does FCP identify biodiversity values?	Does FCP identify Rainforest present on site?	Does FCP identify LBP habitat present on site?	If required, was LBP ID check present?	Additional notes from document review	Additional notes from field visit	Complies with the Code and MSPs	Relevant Audit Recommendation (Refer Table 10)
McCarthy Spur 463-501-0011	SMZ 463/03 (1/ Landscape, 2/ Research site) is present along SE side of coupe; SMZ 463/03 (1/ Landscape, 2/ Research site) within 200-500 m of coupe NE/SE boundary.	Modelled LBP habitat shown on context maps. But FCP states that field assessment s identified no biodiversity values present within the coupe.	No rainforest identified	No.	Yes	<p>The LBP habitat flowchart was undertaken and determined that there is no LBP habitat within the coupe. However notes on maps within the FCP identify that LBP habitat is present immediately adjacent to the site, but only to the west of the stream (and therefore outside of the western boundary of the coupe). The SPZ/Habitat layer has been modified to reflect the absence of LBP habitat within the coupe.</p> <p>No LBP habitat within the coupe, but present to the west of the coupe. The 'final map' within the FCP shows that the SPZ layer has been modified and that there is no SPZ mapped within the TRP.</p> <p>The FCP identifies that a number of trees had accidentally fallen over boundaries (not within exclusion areas or buffers). FCP states that some of these were retrieved and that some were left where the slopes were too steep and it would have been unsafe to retrieve them. The location of the tree falls were not identified on any of the marked up Operations maps within the FCP. The coupe diary entries within the FCP described the incidents and they had been appropriately signed off/sanctioned by both the contracted forester and VicForests staff.</p>	<p>The field audit confirmed that the areas to the west of the site that had been confirmed as containing LBP habitat had been marked on the ground with pink flagging tape and were clearly identifiable in the field.</p> <p>Field audit confirmed that this is a mixed forest site. Habitat trees have been retained as seed trees throughout the coupe, and a sufficient number have been retained for the area that has been harvested.</p>	Yes	11
Shanahans 487-501-0007	Special Protection Zone (SPZ) 487/09 - (Linear Reserve, Recreation Site & Landscape) runs along South Face Rd. The values of this SPZ are not present at this location.; SPZ 487/09 Linear Reserve, Recreation site (Alpine Walking Tk), Landscape SMZ (Thomson Valley Road) runs along South Face Rd.; SPZ 487/01 (Linear Reserve) within 200 m west of coupe boundary	FCP states no biodiversity values within the coupe.	FCP states that there is no rainforest within or adjacent to the coupe	FCP states LBP habitat is within 500 m of the coupe	N/A	<p>The FCP included an SPZ (National Park) within the coupe TRP, but this SPZ layer had been incorrectly mapped and did not line up with the actual boundary of the National Park. The SPZ has been amended to reflect the true park boundary.</p> <p>The FCP identifies LBP habitat within 500 m of coupe, but states there is no biodiversity values within the coupe.</p>	<p>The field audit confirmed that the SPZ layer had been incorrectly mapped.</p> <p>The field audit confirmed there was no LBP habitat present within the coupe.</p> <p>Exclusion areas along gully's had not been encroached and were marked with flagging tape and clearly identifiable in the field. These areas are also considered as habitat because this area is being harvested post fire, and different prescriptions apply as the coupe has been harvested for fire salvage</p>	Yes	N/A

Central Gippsland Forest Management Area									
Forest Coupe	VicForests' SPZ/SMZ Reference	Does FCP identify biodiversity values?	Does FCP identify Rainforest present on site?	Does FCP identify LBP habitat present on site?	If required, was LBP ID check present?	Additional notes from document review	Additional notes from field visit	Complies with the Code and MSPs	Relevant Audit Recommendation (Refer Table 10)
Small Charity 460-510-0001	Special Management Zone (SMZ) 459/05 (Landscape - Baw Baw Road) located within gross coupe boundary; Special Management Zone (SMZ) 459/05 (Landscape - Baw Baw Road) within 200-500 m of gross coupe boundary.	FCP identifies pockets of rainforest within coupe	Yes – Rainforest flowchart confirmed presence of Rainforest within coupe.	N/A	N/A	<p>Pockets of Rainforest have been identified within the coupe in the FCP mapping, and appropriate buffers have been identified on maps within FCP (40 m) for rainforest pockets.</p> <p>The Post Harvest map within the FCP identifies areas that had been retained as reserved habitat. Other areas had also been marked to be excluded due to the steep slope present at certain areas within the coupe.</p> <p>The FCP identifies that a number of trees had accidentally fallen over boundaries (not within exclusion areas or buffers). FCP states that some of these were retrieved and that some were left where the slopes were too steep and it would have been unsafe to retrieve them. The location of the tree falls were not identified on any of the marked up Operations maps within the FCP. The coupe diary entries within the FCP described the incidents and they had been appropriately signed off/sanctioned by both the contracted forester and VicForests staff.</p>	<p>The field audit confirmed that appropriate buffers (&gt;40 m) had been applied to areas of rainforest within the coupe.</p> <p>The field audit confirmed that all areas that were proposed to be retained, including areas of habitat reserve, had been excluded from harvesting.</p> <p>All exclusion areas and buffers were marked with flagging tape and were clearly identifiable in the field.</p>	Yes	11
St Gwinnose 481-501-0012	Special Management Zone (SMZ) 481/02 (Landscape - Thomson Valley Road, Thomson Dam Wall Road & Mt St Gwinear Road) located within gross coupe boundary.; Special Management Zone (SMZ) 481/02 (Landscape - Thomson Valley Road, Thomson Dam Wall Road & Mt St Gwinear Road) located within 200-500 m of coupe boundary.; Special Protection Zone (SMZ) 481/01 (Linear Reserve, Landscape - Thomson Valley Road SMZ & South Cascade Creek & Cool Temperate Rainforest) located within 200-500 m of coupe boundary.	FCP does not identify biodiversity values within the coupe.	FCP states that there is no rainforest within or adjacent to the coupe (Rainforest ID check was completed)	No habitat within the coupe, but habitat expected within 500 m of the coupe	Yes	<p>LBP checklist has been undertaken and confirmed the absence of LBP habitat within the coupe. A Rainforest checklist was also completed and confirmed the presence of some rainforest species, however the cover of rainforest species did not meet the threshold to be considered Rainforest, therefore this check confirmed the absence of Rainforest within the coupe.</p> <p>These two checklists/documents were not identified during the initial desktop audit, however VicForests were able to supply these documents upon request.</p> <p>The FCP states that a Special Management Area (VFSMP86-LBPAG-High Probability LBP Occupancy Areas) within 500 m of coupe boundary.</p> <p>The FCP states that VicForests will undertake the ID of Leadbeater's Possum field checklist. Note: LBP checklist was not on the coupe file during the desktop audit, but VicForests have since emailed a PDF copy of the form through (as well as rainforest ID form).</p> <p>Maps within the FCP identify that appropriate exclusion areas and buffers had been applied to the site and that suitable habitat had been retained.</p>	The field audit confirmed that appropriate exclusion areas were in place and had been marked with pink flagging tape across the site. These boundaries were clearly identifiable in the field.	Yes	2



Central Gippsland Forest Management Area									
Forest Coupe	VicForests' SPZ/SMZ Reference	Does FCP identify biodiversity values?	Does FCP identify Rainforest present on site?	Does FCP identify LBP habitat present on site?	If required, was LBP ID check present?	Additional notes from document review	Additional notes from field visit	Complies with the Code and MSPs	Relevant Audit Recommendation (Refer Table 10)
Stony Creek Road 461-507-0014	Special Management Zone (SMZ) 461/05 (Landscape) located within gross coupe boundary; Special Management Zone (SMZ) 461/05 (Landscape) located adjacent to coupe boundary.	FCP identifies that threatened flora have been identified previously within the coupe however these are no longer protected values within this FMA (see additional site notes).	FCP states that there is no rainforest within or adjacent to the coupe	Patch of LBP habitat on maps in northern corner of coupe. This area has been excluded from harvesting and an appropriate buffer has been applied.	<b>No</b> , but the FCP did not list this as a requirement for this coupe.	<p>The FCP states that while Fluffy-fruit Wood-sorrel was recorded in 1990 in south-eastern section of the coupe, it is not listed in the central highlands FMP and therefore no action is required. FCP states that DSE (now DELWP) will be consulted if specimens of Tree Geebung are found (records of this species from 1990).</p> <p>The FCP identifies that a number of trees had accidentally fallen over boundaries (not within exclusion areas or buffers).</p> <p>The FCP states that some of these were retrieved and that some were left where the slopes were too steep and it would have been unsafe to retrieve them. The location of the tree falls were not identified on any of the marked up Operations maps within the FCP. The coupe diary entries within the FCP described the incidents and they had been appropriately signed off/sanctioned by both the contracted forester and VicForests staff.</p>	<p>The field audit confirmed that the area surrounding the patch of LBP habitat included on the maps was not harvested during recent operations, the coupe was harvested in 2012/2013 and provisionally cleared and then re-opened in 2014/15 to harvest 1 ha. The area that was harvested in 2012/2013 has since been burnt and seeded.</p> <p>The field audit confirmed that habitat trees retained as seed trees were easily identifiable during the field. Coupe boundaries have been marked with blue flagging tape and were easily identifiable in the field.</p>	Yes	11
Stony Creek Spur 461-507-0003	Special Management Zone (SMZ) 461/05 (Landscape, RFSOS) located within gross coupe boundary; Special Management Zone (SMZ) 461/05 (Landscape, RFSOS) adjacent to coupe boundary.	FCP identifies that threatened flora have been identified previously within the coupe however these are no longer protected values within this FMA (see additional site notes).	No rainforest identified within the FCP	No	N/A	<p>The FCP states that while Tree Geebung has been recorded at the site historically, this species is no longer listed in the central highlands FMP and therefore no action is required. FCP states that DSE (now DELWP) will be consulted if specimens of Tree Geebung are found (no notes of recent records of this species).</p> <p>The Operation Coupe Map and Coupe Diaries identified some accidental tree felling outside of the harvested boundary (the Grosse Coupe Area) within the coupe (the Net Coupe Area). The locations of the accidental tree falls had been clearly described, and the incidents and had been appropriately signed off/sanctioned by both the contracted forester and VicForests staff. All of the fallen trees were written up in the coupe diaries as having been pulled back in to the coupe.</p> <p>FCP identified a stream side exclusion area mapped along eastern boundary of coupe.</p>	The field audit confirmed that stream side exclusion areas had not been encroached during harvesting, and that coupe boundaries have been marked with blue flagging tape and were easily identifiable in the field.	Yes	N/A
Stumpy Spur 463-502-0005	Less than 0.2 ha of SPZ 463/02 - Linear reserve occurs within gross coupe boundary. Patch of SPZ occurs above Bennie Creek Road.; SPZ 463-02 - Linear reserve adjacent to western boundary of coupe.; SPZ 463/05 - Cool Temperate Rainforest within 500 m of coupe boundary.	FCP Identifies SPZ 463/02 (Rainforest)	FCP states that "less than 0.2 ha of SPZ 463/02 - Linear reserve occurs within gross coupe boundary. Patch of SPZ occurs above Bennie Creek Road." FCP states SPZ not within harvesting area.	LBP Habitat identified during tactical planning stage and LBP habitat flowchart required to be prepared.	Yes	<p>The LBP habitat check had been undertaken and determined that LBP habitat was not present within the coupe.</p> <p>The FCP states that seed trees have been retained on site, these have been individually mapped and included on a 'Seed Tree Map' in the FCP. There was also a corresponding table with the ID number for each tree, tree species, crown size, crop, tree height as well as comments on whether the trees provided habitat. The maps within the FCP also identify areas to be retained for habitat retention.</p>	<p>The field audit confirmed the absence of LBP habitat within the coupe.</p> <p>The field audit confirmed that the seed trees included within the mapping in the FCP had been retained, and that these trees were sufficient to meet the seed tree retention requirements for the site.</p> <p>The field audit confirmed that all exclusion areas and areas retained as habitat had not been encroached by harvesting, these areas were marked with flagging tape and were easily identifiable in the field.</p>	Yes	N/A

Central Gippsland Forest Management Area									
Forest Coupe	VicForests' SPZ/SMZ Reference	Does FCP identify biodiversity values?	Does FCP identify Rainforest present on site?	Does FCP identify LBP habitat present on site?	If required, was LBP ID check present?	Additional notes from document review	Additional notes from field visit	Complies with the Code and MSPs	Relevant Audit Recommendation (Refer Table 10)
TJ Lower 457-508-0002	SPZ 457/06 (Alpine Walking Track) was wrongly mapped. It's supposed to be just outside coupe boundary and is a 50 m buffer along the Australian Alps Walking Track. The physical location will be used to measure the buffer width; Special Protection Zone (SPZ) 457/06 (Alpine Walking Track) runs through southern section of coupe.	No LBP or other biodiversity values identified in coupe or within 500 m	No rainforest identified	N/A	N/A	<p>The FCP states that seed trees have been retained on site, these have been individually mapped and included on a 'Seed Tree Map' in the FCP. There was also a corresponding table with the ID number for each tree, tree species, crown size, crop, tree height as well as comments on whether the trees provided habitat. The maps within the FCP also identify areas to be retained for habitat retention.</p> <p>The mapping within the FCP identifies the presence of an SPZ for the Alpine Walking Trail within the southern portion of the coupe.</p> <p>The Coupe Diaries within the FCP identified some accidental tree felling outside of the harvested boundary within the coupe (but not within exclusion areas or buffers). The locations of the accidental tree falls had been clearly described and had been appropriately signed off/sanctioned by both the contracted forester and VicForests staff. All of the fallen trees were written up in the coupe diaries as having been pulled back in to the coupe.</p>	<p>The field audit confirmed that the Seed Trees and the areas proposed to be retained for habitat within the FCP had been excluded from harvesting.</p> <p>The field audit confirmed that all exclusion areas and areas retained as habitat had not been encroached by harvesting, these areas were marked with flagging tape and were easily identifiable in the field.</p> <p>The field visit confirmed that the SPZ layer for the Alpine Walking Trail is mapped incorrectly, the alpine trail is a few hundred meters south outside the coupe boundary.</p> <p>The harvesting has not been completed at this site and will resume over summer.</p>	Yes	7
Trig Boy 458-511-0008	Special Protection Zone (SPZ) 458/03 (Recreation site - Australian Alps Walking Tk) located within 500 m of coupe boundary.; Special Protection Zone (SPZ) 458/08 (Leadbeaters Possum) is located within 500 m of coupe boundary.; Special Protection Zone (SPZ) 458/06 (Old-growth - Heathy dry forest; Recreation Site - Alpine Walking Tk; and Linear Reserve) is located within 500 m of coupe boundary.; 50 m buffer of Australian Alps Walking track along Upper Thomson Road is within coupe. This has been incorrectly mapped in FMZ100	FCP identifies does not identify biodiversity values within the coupe.	Yes	Yes - required to complete form	Yes	<p>The FCP States that LBP habitat was not picked up at coupe marking stage but hollow bearing trees were identified in the field. A flow chart for the identification of LBP habitat was completed and signed off and determined that LBP habitat was not present in the coupe.</p> <p>The FCP identifies SPZ 458/06 (Old growth forest-heathy dry forest) within 500 m of coupe boundary.</p>	<p>The field audit confirmed that the Seed Trees had been retained within the small section of the coupe that had been harvested at the time of the field audit.</p> <p>The field audit confirmed that all exclusion areas and areas retained as habitat had not been encroached by harvesting, were marked with flagging tape and were easily identifiable in the field.</p> <p>The harvesting has not been completed at this site and will resume over summer (only 3-4 hectares had been harvested at the time of the field audit).</p>	Yes	N/A



Central Gippsland Forest Management Area									
Forest Coupe	VicForests' SPZ/SMZ Reference	Does FCP identify biodiversity values?	Does FCP identify Rainforest present on site?	Does FCP identify LBP habitat present on site?	If required, was LBP ID check present?	Additional notes from document review	Additional notes from field visit	Complies with the Code and MSPs	Relevant Audit Recommendation (Refer Table 10)
Turkey Mound 463-505-0010	SPZ 463/01 (Cool Temperate RainFst) and 463/05 (Reference Area buffer, Cool Temperate RainFst, Leadbeaters Possum, Linear reserve) in gullies along north, east and west boundaries of coupe; SPZ 463/01, 463/02 and 463/05 within 500 m of coupe boundary.	SPZ for Rainforest identified within the coupe boundary.	No – SPZ layer needs to be updated reflect the absence of rainforest within the coupe.	Yes - FCP states that the LBP habitat checklist needs to be undertaken and signed prior to harvesting	Yes	Leadbeater's Possum Habitat flowchart has been undertaken and confirmed that LBP habitat is not present within the coupe. The FCP identifies SPZ for rainforest within coupe. SPZ Amendment map shows one additional area of SPZ and one small area that has been re-zoned as GMZ. Map shows no rainforest within SPZ despite being classified as rainforest on the SPZ layer. The Coupe Diaries within the FCP identified two accidental tree falls outside of the harvested boundary within the coupe (but not within exclusion areas or buffers). The locations of the accidental tree falls had been clearly described, and the incidents and had been appropriately signed off/sanctioned by both the contracted forester and VicForests staff. All of the fallen trees were written up in the coupe diaries as having been pulled back in to the coupe. The FCP clearly identified areas for habitat retention on the operations and post-harvest maps.	The field audit has confirmed the absence of LBP habitat within the coupe. The field audit confirmed that all exclusion areas and areas retained as habitat had not been encroached by harvesting, these areas were marked with blue flagging tape and were easily identifiable in the field. The field audit confirmed the absence of Rainforest within the areas that had been marked as an SPZ (for Rainforest) within the coupe. This SPZ layer has not been updated to reflect lack of rainforest. The area has been retained, but as rainforest is not present there is no requirement for an additional buffer/exclusion area around the 'incorrectly mapped' vegetation. However, a 40 m buffer/exclusion area has been applied to the areas that have been retained.	Yes	6a, 6b
Whitelaw Track 480-504-0026	Special Protection Zone (SPZ) 480/06 (Cool Temperate Rainforest) located within gross coupe boundary. Rainforest confirmed to be present during field reconnaissance; Special Protection Zone (SPZ) 480/03 (Linear Reserve, Cool Temperate Rainforest & Leadbeaters Possum) located within 0-200 m of gross coupe boundary.	FCP identifies presence of habitat trees (pre 1900 trees) that need to be retained.	Rainforest assessment and maps in file (see attached). The VicForests field Assessment identified areas of rainforest that were not mapped as SPZ - these areas are identified in FCP.	Yes	Yes	The VicForests field Assessment identified areas of rainforest that were not mapped as SPZ - these areas were assessed using the Rainforest ID check and were confirmed to meet the thresholds to be classified as Rainforest. These additional areas are identified in FCP.	The field audit confirmed that appropriate protection had been put in place for trees identified as 'pre-1900' and these trees had not been impacted by harvesting. The field audit confirmed the presence of rainforest, and measured the applied buffer at four locations and an appropriate buffer (>40 m) had been applied around these areas. Exclusion areas along streams/gully's had been marked with flagging tape and were easily identifiable in the field.	Yes	N/A

## 5. Recommendations

The audit assessed 30 coupes, located in the Benalla-Mansfield, Central and Central Gippsland Forest Management Areas of Victoria. A high level of conformance was achieved across the thirty coupes, with all sites achieving 100% compliance. However, in the auditors professional opinion there were a number of areas for improvement, these related to poor documentation of the decision making process around protecting biodiversity values, inaccurate spatial database layers to assist when identifying exclusion areas (i.e. SPZs), as well as areas where the regulatory framework could be improved.

### 5.1 Selection of coupes for audit

The coupe selection process was undertaken with the aim of selecting sites that would be likely to have contained biodiversity values within the TRP. However, due to the inaccuracy of the spatial data set (i.e. SPZ layers), a number of coupes were selected for audit that may not have been chosen if the spatial data layers had been amended with the most up to date information available (based on the field assessments undertaken by VicForests staff and their contractors).

**Recommendation 1:** It is recommended that potential spatial data inaccuracies are taken in to consideration when selecting appropriate sites for future audits, and that measures are put in place to increase the likelihood of selecting sites containing biodiversity values. Some suggested measures that might be put in place include:

- Mandate that VicForests submit zoning amendments to DELWP when modelled values are found not to be present;
- Increasing the number of sites on which the initial desktop analysis is undertaken;
- Enhance the current risk based approach, with a matrix on ecological values for all coupes, and select sites that are considered likely to have the most values, to maximise the chances of biodiversity values being present on site; and
- Look in to selecting sites for review where applications for amendments to SPZ/GMZ have been made to confirm these are based on valid assessments.

### 5.2 Documentation within FCPs

The level of documentation outlining the decision making processes around compliance with the Code and the MSPs and the protection of mandatory exclusion areas from the tactical planning stage through to post harvesting varied substantially between coupes. The auditor identified a number of examples of good practice, where particular foresters had maintained very detailed records within the FCPs, and examples where despite still achieving full compliance, record keeping within some FCPs made it difficult to ascertain how decisions on site were made. During the audit site visits, the foresters on site were able to adequately address queries relating to the audit criteria that were not clear from the documentation within the FCPs.

**Recommendation 2:** To aid in future compliance monitoring work undertaken by auditors or DELWP, it is recommended that VicForests adopt a standardised level of documentation across coupes and FMAs.

A further eleven specific audit recommendations have been identified (Table 10 and Section 5.3.1) based on the issues within documentation within the FCPs for the 30 coupes assessed during the 2015 FAP.

**Table 10 Recommendations for improving documentation around compliance within FCPs**

Audit Recommendation	Issues identified during the audit supporting this recommendation	Relevant to the following 2015 FAP coupes	Relevant Audit Criteria (Refer Appendix A)
<b>Recommendation 3</b>  VicForests set up checks to ensure LBP Habitat checks are happening in the field, and that they are being stored in a set place within the FCP for each coupe so that they can be easily accessed by staff managing the site to confirm the presence or absence of any biodiversity values.	<b>Leadbeater's Possum Checklist not always completed</b>  Within some FCPs there was a clear indication that a 'Flow chart check list for the identification of Leadbeater's Possum Habitat' form was required to be undertaken prior to harvesting. However, four coupes identified as requiring the checklist from the Central FMA were missing these forms within the FCPs.  Note: The auditor initially identified 12 coupes where the documentation with the FCP stated that the checklist was required but was not found within the FCP during the desktop audit. VicForests was able to provide scanned copies of the checklist for seven of the 12 coupes during the field audits.  There also appeared to be inconsistency in when the checklist was required to be undertaken. This is particularly the case where LBP habitat was identified within 500 m of a coupe boundary. For example at Trevor and Cinders LBP habitat was identified within 500 m of the coupes, and there was documentation within the FCP stating that a checklist should be completed prior to harvesting, but no checklist was identified within the FCP. At Sherpa and Fat Albert LBP habitat was identified within 500 m of the coupe and the checklist had been completed and was located within the FCP.	Barbie  Trevor  Lower Growlers  St Gwinnose	1, 2, 3
<b>Recommendation 4</b>  If a coupe has only been re-opened for the use of the landing, VicForests should include an updated "Coupe planning Checklist" in the FCP targeted around the re-opening of the landing, highlighting biodiversity values, i.e. that a Leadbeater's Possum Habitat checklist would not need to be completed due to the type of works proposed on site.	<b>Documentation around re-opening a coupe landing unclear</b>  Within one coupe (Cinders) there had been no harvesting activities undertaken during the recent period when the coupe was open. The coupe landing had merely been re-opened to allow access for tree removal from the adjacent coupe (House of Ash). This is an example of a good outcome for biodiversity, as the decision to re-open the existing landing enabled less vegetation removal at House of Ash.  However it was not initially clear from the documentation within the FCP that the coupe had not been harvested in the 2013-14 or 2014-15 season, and that all of the clearing works at the site were undertaken in 2010/11.	Cinders	1, 2, 3
<b>Recommendation 5</b>  VicForests set up checks to ensure Rainforest ID checks are happening in the field, and that they are being stored in a set place within the FCP for each coupe so that they can be easily accessed by staff managing the site to confirm the presence or absence of any biodiversity values.	<b>Unclear when a Flow chart checklist for the identification of Rainforest is required to be undertaken</b>  Within some FCPs there was a clear indication that a 'Flow chart check list for the identification of Rainforest' form was required to be undertaken prior to harvesting. In each instance where this document was required to have been completed it was easily located within the FCP.	Barbie  Lower Growlers	1-3, 7-10
<b>Recommendation 6</b>  When mapping features that require an exclusion zone (i.e. Rainforest patches that require a 40 m buffer), VicForests clearly show on the maps within the FCP that the area mapped as rainforest either a) includes the 40 m buffer, or b) apply an additional 40 m buffer on to the rainforest mapping. This would make it clear to those on the ground where the buffer is and where the value to be protected, in this instance rainforest, is located.	<b>Not always clear whether buffers and exclusion zones have been applied to biodiversity values on maps within FCPs</b>  Within some FCPs the documentation stated that the VicForests field inspection confirmed the presence of Rainforest EVC within or adjacent to the coupe. The mapping in the FCP identified the rainforest patches, but it was not clear from the mapping within the FCP whether the appropriate buffer (40 m) has been incorporated in to the exclusion areas shown on the map or whether a buffer needed to be applied in addition to the polygons mapped.	Giraffe	1-3, 7-10
<b>Recommendation 7a</b>  VicForests make a submission to DELWP to update the SPZ layers when inaccuracies are identified during the field assessment so that the presence of an SPZ is updated within the DELWP spatial layers.  This might be the removal or addition of an SPZ from within coupe boundaries, e.g. updating the SPZ layer for patches of Rainforest or the Alpine Walking Trail based on better spatial data for the location of the track.	<b>Inaccurate SPZ spatial data and lengthy process to have layers amended</b>  Even if SPZ layers cannot be easily updated immediately, if the VicForests field assessment confirms absence (or presence) of biodiversity values (i.e. LBP habitat), update the operations mapping located within the FCP so it is clear whether an area is significant or not. For example, at McCarthy Spur the SPZ layer was removed and was not included within the 'Final Map' stored in the FCP – this made it clear that there was no SPZ present within the coupe according to VicForests, but it is not clear if this layer update has been fed back to DELWP.  Comments were made on more than one occasion that the time taken to update SPZ layers by DELWP was so slow that it was not worth making the effort. The forest planning process needs to be interactive between VicForests and DELWP and it is incumbent on DELWP that requests for changes to SPZ layers receive a timely response. Similarly, where habitat trees are retained in a strip manner along the edge of an SPZ (no requirement for in-coupe trees to be retained) it was unclear if the mapped retained area was advised to DELWP so that the SPZ could be updated.	House  Kevin  Mosquito  Turkey Mound	1, 7, 8, 12
<b>Recommendation 7b</b>  DELWP determine an appropriate response time and action for when VicForests submit applications to have areas re-zoned, and commit to meeting this target		Hasp  Turkey Mound	

Audit Recommendation	Issues identified during the audit supporting this recommendation	Relevant to the following 2015 FAP coupes	Relevant Audit Criteria (Refer Appendix A)
<p><b>Recommendation 8</b></p> <p>VicForests to submit requests to DELWP to update spatial layers for mappable features (i.e. Waterways, Alpine Walking Trail, Rainforests) which have been inaccurately modelled in some areas.</p>	<p><b>Inaccuracies in DELWP spatial layers</b></p> <p>A number of mappable features (i.e. waterways and streams, the Alpine Walking Trail) were identified as being mapped incorrectly during the audit.</p> <p>During the field audits it was noted that VicForests had applied appropriate exclusion areas and buffers to waterways within the coupes, and that these areas had been clearly marked and were identifiable in the field. However this was at times difficult to assess as the modelled locations of the streams and waterways was often incorrect.</p> <p>As the buffers shown on the context maps for creeks and streams are modelled, they often did not very accurately mark the actual drainage areas based on water flows within the coupe (e.g. Boggy Creek).</p> <p>In one coupe an SPZ layer for the Alpine Walking Trail was mapped as occurring within the coupe boundary, but in actual fact the alpine walking trail is a few hundred meters south outside of the coupe boundary (the Net Coupe Area).</p> <p>The adjacent map demonstrates the presence of the Alpine Walking Trail and buffer within the TJ Lower coupe boundary, however field assessment confirmed that this SPZ layer is incorrectly mapped and the Alpine Walking Trail actually occurs a few hundred metres south outside the coupe boundary.</p> <div data-bbox="1626 233 2205 1003"></div> <p>Plate 8 TJ Lower Operations Map</p> <p><b>Key:</b> Green – GMZ, Red – SPZ, Pink – Slope &lt;=30, &gt;25, Blue line – Proposed TRP Coupe, Black line – Approved TRP Coupe, Red line – Road,</p>	<p>Boggy Creek</p> <p>Kevin</p> <p>TJ Lower</p>	<p>1, 12, 16</p>
<p><b>Recommendation 9</b></p> <p>VicForests identify habitat retention areas on both the Operations and/or Post Harvest (regeneration) maps within the FCP. By mapping these areas it can be clearly determined whether appropriate habitat retention standards have been met.</p>	<p><b>Not always clear where vegetation retained for habitat is located within a coupe from the mapping within the FCP</b></p> <p>Within some FCPs there is detailed mapping identifying areas of vegetation that have been excluded from harvesting for habitat retention, including an area figure marked on the maps (in ha) for each polygon that is to be excluded. This level of detail made it very easy to confirm that consideration for appropriate habitat retention had occurred and that the Code / Standards and Procedures had been followed.</p> <p>Standard practice for coupes appeared to be retaining areas of vegetation required for habitat retention as a buffer around the coupe boundary. However in most cases these areas of habitat retention had not been marked up on the operations or post-harvest maps within the FCP.</p> <p>The results from the field audit suggest a high level of compliance, but the decision making process on how this came about is often not clear within the FCP, nor is it obvious from the FCP that consideration to meeting habitat retention requirements has occurred from merely looking at the FCP records.</p> <p>When interviewed on site the foresters were usually able to point out the areas that had been intentionally retained and these areas were sufficient to comply with the Code / MSPs</p> <p>At one coupe, Boggy Creek, a suitable area for habitat retention had been excluded from harvesting and requirements for seed trees had been met. However, upon interviewing the forester, the areas excluded from harvesting had been excluded because the timber in these areas was not considered merchantable. Whilst sufficient areas of habitat had been retained to meet the Code /MSPs, it was not clear from either the documentation within the FCP or discussions with the forester that habitat retention had been taken in to consideration whilst planning works within the coupe.</p>	<p>Boggy Creek</p>	<p>12</p>



Audit Recommendation	Issues identified during the audit supporting this recommendation	Relevant to the following 2015 FAP coupes	Relevant Audit Criteria (Refer Appendix A)
<b>Recommendation 10a</b>  VicForests identify the location of retained seed trees within the maps stored in the FCP- either by marking individual trees on the operations or post-harvest maps, or by adding a polygon to the maps outlining any areas where trees have been intentionally retained as seed trees. A figure (number) should also be included identifying the number of seed trees that have been retained, clearly highlighting that consideration in to seed tree retention has occurred.	<b>Not always clear where seed trees have been retained within a coupe, or that consideration has been given to the probability of these trees surviving, from the documentation within the FCP</b>  The results from the field audit suggest a high level of compliance with regards to the retention of an appropriate number of seed trees within harvested portions of the coupes. However, the decision making process on how this came about is often not clear within the FCP, nor is it obvious from the FCP that consideration to meeting seed tree retention requirements has occurred from merely looking at the FCP records (i.e. within the Gippsland FMAs, four to five seed trees per ha of harvested forest are required to be retained).  Within some FCPs the identification of individual trees being retained as seed trees within a coupe is very clear, with GPS points recorded for each seed tree, with a corresponding table within the FCP outlining each tree with an ID number, way point, and species identification (e.g. Stumpy Spur, Nutcase, and Fat Albert). This level of detail made it very easy to confirm that consideration for appropriate retention of seed trees had occurred and that the Code / MSPs had been followed.  However, whilst conducting the on-site audit a physical count could be undertaken of the seed trees that were retained, and the number was sufficient to comply with the Code / MSPs (e.g. Boggy Creek). When interviewed on site the foresters were aware of the requirements for seed tree retention as outlined in the Code / Standards and Procedures.  Furthermore, most seed trees did not have hollows and in many cases the quality of the seed trees was such that they were unlikely to develop hollows for some time. Where seed trees are retained as part of a habitat tree contribution it would be useful if the retained trees had sufficient size and vigour to have a good probability of surviving to develop developing hollows. In some cases where seed trees have a dual role as habitat trees it was apparent that the foresters were unaware of this dual role. So while the outcome in the field was being achieved, there opportunity for onsite selection of more appropriate trees was potentially missed.	Fat Albert  Roadhouse	12
<b>Recommendation 10b</b>  Where seed trees are being retained for the dual purpose of habitat retention, VicForests should take the quality of trees retained as seed trees in to consideration, so that trees selected to be retained are those that are deemed as having a good probability of surviving and contributing hollows in the future.  Refresher training of operational foresters needs to be maintained so that they are able to take full advantage of the opportunities to achieve optimal solutions on the ground.		Fat Albert  Roadhouse	
<b>Recommendation 11</b>  VicForests introduce a requirement that forest contractors managing the coupes to include detail within the coupe diary entries outlining whether trees that have fallen/slid out of place have been retrieved or left in situ, and that they mark the location of all accidental tree falls on the operations maps, so that they correspond with the coupe diary notes.  It should be clear whether any accidental tree falls have impacted any mandatory buffers or exclusion areas from both the coupe diary entries and the maps.	<b>Not always clear where accidental tree falls have occurred, and whether they have impacted buffers and/or exclusion areas</b>  Within some FCPs foresters had marked the approximate location of accidental tree falls with an 'x' and a date on the operations map filed within the FCP.  This map could then be cross-referenced with the coupe diary entry outlining any accidental tree falls, whether the tree was retrieved, and whether the fall had been sanctioned.  This clear identification of the location of any falls made assessing the fall locations in the field possible, and provided further evidence that the activity had been sanctioned through discussion between VicForests and the contractors managing the coupes.  Standard practice for coupes appeared to be writing up any accidental tree falls within the coupe diary and having the event signed off by VicForests and the contractor (without marking locations on maps).	Fat Albert  Kevin  McCarthy Spur  Small Charity  Stony Creek Road	17 / 18

### 5.3 Recommendations in relation to the regulatory framework

During the audit GHD identified a number of opportunities for DELWP, as the environmental regulator, to improve the effectiveness of the regulatory framework.

Issues encountered with the regulatory framework are outlined in Sections 5.3.1 and 5.3.2 below.

#### 5.3.1 Forest management zoning and updating existing SMZs and SPZs

Section 2.1 of the Management Standards requires:

- Where a value that requires protection via the establishment or amendment of an SPZ or SMZ is found in the field, application to amend the SPZ or SMZ must be made to the Secretary or delegate prior to the commencement of operations (2.1.1.3).
- Where an SPZ or exclusion area within an SMZ is based on a modelled value or incorrectly mapped geographic feature that is found not to exist in the field or is incorrectly located, application may be made to the Secretary prior to the commencement of the timber harvesting operation to convert the area to GMZ (2.1.1.2).

Accordingly the regulatory framework only requires VicForests to apply to DELWP for updates to SPZs and other significant value layers where values requiring protection exist, although it is suggested as good practice in Section 2.1.1.2. There is no current mandatory requirement for VicForests to update the information where modelled values are found or are incorrectly mapped.

VicForests has advised that the application process for conversion to GMZ has been historically slow/arduous from VicForests' perspective, and that VicForests staff have become reluctant to put applications in because they either take too long or are not followed through at all.

Accordingly, an important opportunity to update the DELWP forest management datasets is then lost, and the understanding of the quantum and the distribution of the protected value continues to be erroneous. This in turn has implications for future decision making processes as to the level of threat which exists for a value and the level of impact on the value when a catastrophic event such as wildfire occurs. The auditor is concerned that there is no requirement for anyone from either party to do anything about this.

In the case of this audit, it also resulted in a number of coupes being selected for audit when fewer or no ecological values requiring the application of a mandatory exclusion area actually existed for the selected coupe. This created a level of inefficiency in this audit project. In some cases the sites selected for audit were sites where, if SPZ/values had been updated by VicForests before providing its coupe list to DELWP, they may not have been included as potential audit targets by DELWP. There is opportunity to increase the value of a targeted audit, as well as the value of the spatial layers maintained by DELWP.

It is therefore recommended that there should be a process/requirement for VicForests to submit applications to DELWP to update layers where inaccuracies are identified before commencement of harvesting, and a specified timeframe in which DELWP must respond (either approving or denying the request, or requesting additional information).

**Recommendation 12:** DELWP establish a clear regulatory requirement for VicForests to submit applications to DELWP to update spatial data layers where inaccuracies are identified during planning and field work associated with timber harvesting operations, and commit to a specified timeframe in which DELWP must respond (either approving or denying the request, or requesting additional information). This maximum turn around period in which DELWP must respond to VicForests will be important in allowing VicForests to manage areas of forest effectively and to continue with their planning processes to meet operational requirements.



### 5.3.2 Management of threatened species (discussion)

The Federal Government and the State of Victoria have developed legislation to determine the threat or rarity status for flora and fauna species and to determine the levels of conservation that are required for these species. Threatened species within Victoria can be listed under one or more of the following legislation:

- Commonwealth [Environment Protection and Biodiversity Conservation Act](#) 1999 (EPBC Act)
- Victorian [Flora and Fauna Guarantee Act](#) 1988 (FFG Act)

Additionally advisory lists of threatened flora and fauna are maintained by DELWP: [Advisory List of Rare or Threatened Plants in Victoria \(VROTS\)](#), [Advisory List of Threatened Vertebrate Fauna](#) or [Advisory List of Threatened Invertebrate Fauna](#)

It appears that an important element is missing within the MSPs in relation to the protection of rare and threatened species listed under the aforementioned legislation. Part of the purpose of the Code and the MSPs is to provide appropriate processes to protect forest values including threatened flora and fauna (and their habitat) where they occur in, or in close proximity to, harvesting coupes. The majority of rare or threatened flora and fauna species listed in the MSPs (Table 13 and Table 14) are referred to within Section 2.1.1.3 of the same document, where the following management is recommended:

*“Where evidence of a value that requires protection via the establishment of an SPZ or SMZ is found in the field application must be made to the Secretary or delegate prior to commencement of the timber harvesting operation to create or amend an SPZ or SMZ in accordance with Appendix 5 the Planning Standards, SMZ applications must be accompanied by an SMZ plan and must be complied with during timber harvesting operations”.*

This statement indicates in general terms the management actions to be followed when a rare or threatened species is identified in the field, however SPZs and SMZs currently only provide protection to threatened species (and not to rare species listed only under the DELWP Advisory lists for rare and threatened species). Furthermore, there is a lack of detailed guidance for VicForests as to the level of surveys required (if any) for the majority of these species when undertaking forest coupe planning.

There are notable exceptions to this rule, such as Leadbeater’s Possum, *Gymnobelidus leadbeateri*, where detailed prescriptions exist regarding the identification of habitat but surveys for colonies are voluntary. VicForests has developed its own Habitat Flowchart / Checklist to help determine the presence or absence of LBP habitat within a coupe during the planning stage. It is understood that VicForests will also be undertaking pre-harvest surveys for LBP to identify unknown colonies in “high risk” coupes in 2016.

It is uncertain whether targeted surveys of any kind are required for the majority of rare and threatened flora and fauna species included within the MSPs<sup>2</sup>, regardless of their listing under Commonwealth or State legislation. There are guidelines in place about what to do if a species is found, but many of these rare and threatened species are seasonal and cryptic, and therefore difficult to locate in the field without appropriately designed and targeted surveys. Put simply if one was not to look it would be highly unlikely for the value to be found during routine field checks.

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<sup>2</sup> Species listed in the Management Standards and Procedures, Appendix 3, Table 13 and 14

During the tactical coupe planning stage, desktop assessments may identify the likely or known occurrence of rare or threatened species and for selected threatened species detailed prescriptions are outlined for 'known populations'. For instance, detailed prescriptions have been included within the MSPs for Leadbeater's Possum, a significant fauna species with known habitat requirements (where habitat suitability can be assessed at any time of the year).

However, there are no guidelines for the majority of the listed flora and fauna species as to whether detailed in-coupe assessments are required to ascertain the likely presence or absence based on the specific habitat requirements present in the field. Due to the cryptic nature of many of these species (e.g. *Pseudomus fumeus*, Smoky Mouse; and *Caladenia concolor*, Crimson Spider-orchid), the chance of happening across many of these species during general coupe reconnaissance is minimal. Without guidelines in place as to the type of survey effort and timing for each species it is likely that populations of rare and threatened species are not being identified prior to coupe harvesting and potentially may be negatively impacted.

This same level of uncertainty applies to the reasoning behind management prescriptions, with some species listed under the EPBC Act having detailed management prescriptions outlined (e.g. *Litoria spenceri*, Spotted Tree Frog; and *Astelia australiana*, Tall Astelia), while many other federally listed flora species refer only to the general statement from section 2.1.1.3 (listed above) (e.g. *Dasyurus maculatus*, Spot-tail Quoll; and *Boronia galbraithiae*, Aniseed Boronia). This results in EPBC Act-listed species with only general management prescriptions applied to them, being managed in the same way as species listed as poorly known under VROTs (the lowest classification for significance within Victoria).

The inclusion of a mixture of mandatory and more general statements around the management of rare and threatened flora and fauna species can be confusing. Whilst the MSPs and the Code need to be consistent with the relevant conservation legislation, where prescriptions for management are vague and do not provide clear direction, it has the potential to diminish the importance of those species DELWP considers to be most significant when managing public forests.

**Recommendation 13:** In the next review of the Code and MSP, DELWP considers providing further guidance on the requirements for assessing the presence of rare and threatened species during forest couple planning. This could include the use of a risk based approach where the need for and level of assessment required is determined based on the likelihood of occurrence and potential impact of harvesting on the rare or threatened species.

## 6. Conclusions

The audit objective was to assess the 'environmental performance' of harvesting activities and to assess whether they are compliant with the mandatory requirements (prescriptions) for timber harvesting coupes, prioritising the protection of mandatory exclusion areas from the impacts of timber harvesting.

The audit assessed 30 coupes, located in the Benalla-Mansfield, Central and Central Gippsland Forest Management Areas of Victoria. A high level of conformance was achieved across the thirty coupes, with all sites achieving 100% compliance.

The auditor noted a number of examples of good practice, including:

- Meticulous record keeping with relation to the retention of Seed Trees and Habitat within some FCPs;
- Conservative application of rainforest boundaries, with all buffers measured greatly exceeding the minimum 40 m buffer width required; and
- Reuse of existing landings to minimise additional clearing of vegetation.

Whilst a number of incidents of good practice were identified during the audit, a number of areas for improvement were identified as well:

- Lack of record keeping with relation to the retention of Seed Trees and Habitat within some coupes;
- Some incidents where the VicForests prescribed LBP Habitat checklist had not been undertaken;
- Where SPZ layers had been identified as being incorrect and requiring amendments, low rate of application to DELWP to have these spatial layers amended; and
- Lack of detail within some FCPs as to the location of accidental tree falls during harvesting, and therefore information as to whether they have fallen in to buffers or exclusion areas.

It is recommended that steps are put in place to improve consistency of documentation recorded within FCPs, as well as improving the ability for VicForests staff to have spatial layers relating to biodiversity values amended to improve the quality of the spatial data set managed by DELWP so that the most up to date information is accessible to all forest managers.

## 7. References

DEPI (2014a) *Code of Practice for Timber Production 2014*. Victorian Government Department of Environment and Primary Industries

DEPI (2014b) *Management Standards and Procedures for timber harvesting operations in Victoria's State forests 2014*. Victorian Government Department of Environment and Primary Industries

DSE (2009) *Action Statement Flora and Fauna Guarantee Act 1998 No. 238: Cool Temperate Rainforest, Dry Rainforest (Limestone), Warm Temperate Rainforest (Coastal East Gippsland), Warm Temperate Rainforest (Cool Temperate Overlap, Howe Range), Warm Temperate Rainforest (East Gippsland Alluvial Terraces), Warm Temperate Rainforest (Far East Gippsland), Human Activity which results in artificially elevated or epidemic levels of Myrtle Wilt within Nothofagus-dominated Cool Temperate Rainforest*. Victorian Government Department of Sustainability and Environment

DSE (2011) *A Field Guide to Rainforest Identification in Victoria: Differential species keys for the delineation of rainforest boundaries*. Prepared by David Cameron July 2011, on behalf of the Victorian Government Department of Sustainability and Environment

VicForests (2013) *Rainforest Identification Guideline: Version 1.8*. Prepared by VicForests

VicForests (2014) *VicForests Instruction: Regrowth Retention Harvesting- Version 1.7*. Prepared by VicForests

# Appendices

# **Appendix A – GHD Audit Workbook**



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## **Appendix B – Example Coupe Work Books**

### **Coupe Work Book for:**

Stumpy Spur (Central Gippsland Forest Management Area)

Boggy Creek (Central Forest Management Area)

House (Central Forest Management Area)

Thot (Central Forest Management Area)

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