

SFM HCV Assessment and Process
SFM Group Scheme
Forest Management Units – Green Triangle Limestone and Western
Australia

([FSC-STD-30-005 V1-1 EN](#))



Contact details

SFM Environmental Solutions Pty Ltd
20 Penola Road
Mount Gambier SA 5290
Tel: (08) 8778 1236
Email: info@sfmes.com.au
Web: <http://www.sfmes.com.au>

December 2023



Contents

| | | |
|-----|---|----|
| 1 | INTRODUCTION | 3 |
| 1.1 | General..... | 3 |
| 1.2 | Focus of Assessment..... | 3 |
| 1.3 | Scope of Assessment | 3 |
| 1.4 | High Conservation Values (HCV's) Evaluation Framework and the FSC Australia National Forest Stewardship Standard (NFSS) - Annex G | 6 |
| 1.5 | Legislative Requirements | 7 |
| 1.6 | Stakeholders..... | 8 |
| 2 | ASSESSMENT OF HIGH CONSERVATION VALUES | 9 |
| 2.1 | Summary of High Conservation Values | 9 |
| 2.2 | HCV 1 | 9 |
| 2.3 | HCV 2 | 1 |
| 2.4 | HCV 3 | 3 |
| 2.5 | HCV 4 | 7 |
| 2.6 | HCV 5 | 11 |
| 2.7 | HCV 6 | 13 |
| 3 | LIST OF ACRONYMS AND ABBREVIATIONS..... | 17 |
| 4 | REFERENCES | 18 |
| | Appendix 1a: Property locations for Green Triangle Limestone (GTL) FMU (As at December 2023) | 19 |
| | Appendix 1b: Property locations for Western Australia Limestone (WAL) FMU (As at December 2023) | 20 |
| | Appendix 2a: Rare, threatened and endangered flora and fauna species likely to use properties in the GTL FMU..... | 21 |
| | Appendix 2b: Rare, threatened and endangered flora and fauna species likely to use properties in the WAL FMU | 32 |

1 INTRODUCTION

1.1 General

SFM Environmental Solutions Pty Ltd (SFM) currently operates a Group Scheme for Forest Management ([FSC-STD-30-005 V1-1 EN](#)) under the Forest Stewardship Council ® (FSC ®) system, in which individual landowners may join the Group and gain the benefits of certification, subject to committing to the FSC [Principles and Criteria](#). SFM holds the certificate ([SA-FM/COC-002984](#)) and acts as the Group Manager, undertaking forest management responsibilities on behalf of the Group to the FSC Australia National Forest Stewardship Standard ([FSC-STD-AUS-01-2018 EN](#)). The current scope of SFM's current FSC certificate is for plantations on private property. Properties within the Group Scheme form the Forest Management Units (FMUs). Two FMU's are included; the Green Triangle Limestone (GTL) FMU and Western Australia Limestone (WAL) FMU.

SFM's publicly available 'SFM Natural, Cultural and High Conservation Values Management Plan', provides an overarching high-level view of how SFM manage HCV's. This document, the '**SFM HCV Assessment and Process for entry into SFM Group Scheme**', describes the HCV assessment and process for all properties that have been added to the Group Scheme. Stakeholder engagement and review of this document is SFM's primary tool for assessing and managing HCV's.

SFM also holds Sustainable Forest Management certification AS4708 (Responsible Wood). Areas managed under Responsible Wood (RW) certification are within SFM's Defined Forest Area (DFA). The coupes within the DFA may differ from the FMU due to landowner wishes, customer demands and properties ineligible for FSC certification (for example conversion of plantation to agriculture).

1.2 Focus of Assessment

SFM has well-established policies, plans and procedures in place that demonstrate conformance with the above RW and FSC standards due to being continuously third-party certified for over since 2010. E.g. see SFM's publicly available [Forest Management policy](#), [Forest Management Plan](#) and [Audit Results](#) for third party RW/ FSC assessments undertaken on SFM over the period.

The specific focus of this document is to demonstrate the HCV assessment process for entry of any property to an FMU and the SFM FSC Group Scheme. The HCV assessments are consistent with:

- the FSC Australia National Forest Stewardship Standard ([NFSS FSC-STD-AUS-01-2018 EN](#) specifically Principle 9 (High Conservation Values) and [Annex G](#)). [Annex G](#) provides clear HCV definitions, recommendations of best available information for each HCV, and an assessment pathway for each HCV.

Annex G is SFM's key reference document for classification of HCVs.

1.3 Scope of Assessment

The scope of this HCV assessment is for suitable/eligible established hardwood (*E. globulus*) and softwood (*P. radiata*) plantations within the Limestone Plantations estate located in the Green Triangle and Western Australia regions.

SFM began managing the Victorian and South Australian Limestone Plantations on the 1st of July 2014, and the Western Australian Limestone Plantations on the 1st of September 2016. The Limestone Plantations consist of approximately 14,129 hectares located across a broad geographical area (Green Triangle Region & Western Australia) and is owned by the Trust Company Australia Pty Ltd as Trustee for the Australia New Zealand Forest Fund. Australian Blue Gum Plantations (ABP) hold leases (and hence forest management responsibility) over approximately 37% (encumbered/leased portion) of the Limestone Plantations until harvesting of the first / second rotation. Once harvesting is complete, a management handover occurs and SFM take over full management responsibilities.

As properties are handed back to SFM from ABP, they are assessed for HCVs prior to becoming part of the SFM GTL or SFM WAL FMU under the SFM Group Scheme. The initial HCV assessment process was completed in 2015 and focused on 16 properties (2,299 hectares) in Limestone Plantations for the 'SFM GTL FMU', followed by a second round of assessments in 2016 which added a further 19 properties (3,815 hectares) in Limestone Plantations to the 'SFM GTL FMU' and then a third and fourth round of properties (52 in total) was assessed and added to the SFM GTL GMU and the SFM WAL FMU in early 2018. Properties that form part of the Group Scheme are listed below in Table 1, 2, and 3. The location of the properties is shown in Appendix 1a and 1b.

Table 1. Round 1 properties by FMU that form part the SFM Group Scheme

| Plantation | FMU | State | Property Name | Shire | Plantation Area | Title Area |
|------------|-----|-------|---------------|--------------------|-----------------|---------------|
| Limestone | GTL | VIC | Basil | Moyne | 57.2 | 64.8 |
| Limestone | GTL | VIC | Carroll | Moyne | 83.2 | 93.0 |
| Limestone | GTL | VIC | Harrip | Southern Grampians | 110.8 | 130.6 |
| Limestone | GTL | VIC | Kalambra | Glenelg | 251.0 | 283.5 |
| Limestone | GTL | VIC | Kraft | Moyne | 61.9 | 76.3 |
| Limestone | GTL | VIC | Kruger | Southern Grampians | 216.9 | 246.8 |
| Limestone | GTL | VIC | Manly | Moyne | 37.2 | 47.3 |
| Limestone | GTL | VIC | Pettit | Moyne | 50.6 | 61.2 |
| Limestone | GTL | VIC | Shalders | Moyne | 106.6 | 137.8 |
| Limestone | GTL | VIC | Sheehan | Moyne | 105.7 | 122.2 |
| Limestone | GTL | VIC | Shider | Moyne | 133.8 | 170.9 |
| Limestone | GTL | VIC | Sproal | Moyne | 201.9 | 251.7 |
| Limestone | GTL | VIC | Sutherland | Southern Grampians | 383.5 | 448.4 |
| Limestone | GTL | VIC | Tarrone | Moyne | 31.6 | 42.2 |
| Limestone | GTL | VIC | Terrence | Southern Grampians | 57.5 | 63.0 |
| Limestone | GTL | VIC | Vandriel | Glenelg | 50.5 | 59.7 |
| | | | TOTAL | | 1939.9 | 2299.4 |

Table 2. Round 2 properties by FMU that form part of the SFM Group Scheme

| Plantation | FMU | State | Property Name | Shire | Plantation Area | Title Area |
|------------|-----|-------|----------------------|---------|-----------------|------------|
| Limestone | GTL | VIC | Baloo | Moyne | 107.3 | 120.8 |
| Limestone | GTL | VIC | Cobbadah | Glenelg | 146.8 | 178.1 |
| Limestone | GTL | VIC | Danyenah/Kirkpatrick | Moyne | 125.8 | 134.8 |
| Limestone | GTL | VIC | Dyer | Moyne | 163.6 | 186.4 |
| Limestone | GTL | VIC | Evergreen | Moyne | 131.2 | 142.9 |
| Limestone | GTL | VIC | Hines | Glenelg | 334.7 | 378.6 |
| Limestone | GTL | VIC | Hodges | Moyne | 43.6 | 51.5 |
| Limestone | GTL | VIC | Hunter | Glenelg | 29.9 | 34.5 |

SFM HCV Assessment Process for entry into SFM Group Scheme – Forest Management Unit's – Green Triangle Limestone and Western Australia (FSC-STD-30-005)

| Plantation | FMU | State | Property Name | Shire | Plantation Area | Title Area |
|------------|-----|-------|---------------|----------------------|-----------------|---------------|
| Limestone | GTL | VIC | James | Glenelg | 204.0 | 238.4 |
| Limestone | GTL | VIC | Jewell | Southern Grampians | 204.9 | 255.9 |
| Limestone | GTL | VIC | Koondoola/Leo | Moyne | 97.5 | 131.9 |
| Limestone | GTL | VIC | McCaskill | Moyne | 95.0 | 127.0 |
| Limestone | GTL | VIC | Phoines | Glenelg | 202.0 | 252.3 |
| Limestone | GTL | VIC | Purcell | Moyne | 390.6 | 472.3 |
| Limestone | GTL | VIC | Riordan | Moyne | 114.8 | 134.0 |
| Limestone | GTL | VIC | Runnymede | Glenelg | 312.0 | 575.8 |
| Limestone | GTL | VIC | Spring Creek | Moyne | 29.6 | 32.9 |
| Limestone | GTL | VIC | Sobey | Glenelg | 186.6 | 211.9 |
| Limestone | GTL | VIC | Waverley West | Naracoorte Lucindale | 128.6 | 153.1 |
| | | | TOTAL | | 3048.5 | 3813.4 |

Table 3. Round 3 properties by FMU that form part of the SFM Group Scheme

| Plantation | FMU | State | Property Name | Shire | Plantation Area | Title Area |
|------------|-----|-------|---------------|----------------------|-----------------|---------------|
| Limestone | GTL | SA | Brinkworth | Naracoorte Lucindale | 1158.4 | 1501.4 |
| Limestone | GTL | VIC | Bulloch Swamp | West Wimmera | 1512.9 | 2259.1 |
| Limestone | GTL | VIC | Castine | West Wimmera | 363.0 | 471.9 |
| Limestone | GTL | VIC | Greenwald | Glenelg | 65.4 | 124.2 |
| Limestone | GTL | VIC | Hennigs | West Wimmera | 238.8 | 263.3 |
| Limestone | GTL | SA | Miltana | Naracoorte Lucindale | 259.6 | 371.4 |
| Limestone | GTL | VIC | Sim | Moyne | 108.6 | 116.7 |
| Limestone | GTL | VIC | The Gums | Moyne | 104.7 | 145.7 |
| Limestone | GTL | SA | Tomich North | Naracoorte Lucindale | 517.5 | 675.0 |
| Limestone | WAL | WA | Bramwell | City of Albany | 248.1 | 349.9 |
| Limestone | WAL | WA | Cheynes | City of Albany | 370.4 | 449.9 |
| Limestone | WAL | WA | Davidson | City of Albany | 300.2 | 407.7 |
| Limestone | WAL | WA | Frawley | City of Albany | 231.3 | 276.8 |
| Limestone | WAL | WA | Lucknow | Shire of Boyup Brook | 89.1 | 107.2 |
| Limestone | WAL | WA | Maringa West | City of Albany | 227.3 | 339.6 |
| | | | TOTAL | | 5795.3 | 7859.4 |

Table 4. Round 4 properties by FMU that form part of the SFM Group Scheme

| Plantation | FMU | State | Property Name | Shire | Plantation Area | Title Area |
|------------|-----|-------|---------------|------------|-----------------|------------|
| Limestone | GTL | VIC | Harland Hills | Dergholm | 102.5 | 125.7 |
| Limestone | GTL | VIC | Hill | Warrabkook | 27.7 | 31.3 |
| | | | TOTAL | | 130.2 | 157 |

Any new properties that require certification will be assessed using the approach outlined in this document. This may be as properties leave the management control of ABP or as SFM take on management of additional properties that require certification.

1.4 High Conservation Values (HCV's) Evaluation Framework and the FSC Australia National Forest Stewardship Standard (NFSS) - Annex G

SFM refers to Annex G: Framework for Assessment, Management and Monitoring of High Conservation Values for HCV definitions, best available information for HCV's, and a clear assessment pathway for each HCV. Note that the definition for HCV5 is more detailed in Principle 9.1 of the [NFSS](#) than [Annex G](#) and has therefore been used below.

The six HCVs as recognised by FSC are:

- HCV1 – Specifies diversity. Concentrations of biological diversity including endemic species, and rare, threatened or endangered species, that are significant at global, regional or national levels;
- HCV2 – Landscape-level ecosystems and mosaics. Intact Forest Landscapes and large landscape-level ecosystems an ecosystem mosaics that are significant at global, regional or national levels, and that contain viable populations of the great majority of the naturally occurring species in natural patterns of distribution and abundance;
- HCV3 – Ecosystems and habitats. Rare, threatened, or endangered ecosystems, habitats or refugia;
- HCV4 – Critical ecosystem services. Basic ecosystem services in critical situations, including protection of water catchments and control of erosion of vulnerable soils and slopes;
- HCV5 – Community needs. Sites and resources fundamental for satisfying the basic necessities of local communities or Indigenous Peoples (for livelihoods, health, nutrition, water, etc.), identified through engagement with these communities or Indigenous Peoples;
- HCV6 – Cultural values. Sites, resources, habitats and landscapes of global or national cultural, archaeological and historical significance, and/or of critical cultural, ecological, economic or religious/sacred importance for the traditional cultures of local communities or Indigenous Peoples, identified through engagement with these local communities or Indigenous Peoples.

SFM undertook a review of the FSC Australia [Directory of Information Sources](#) (referred to in the evaluation framework) to identify applicable and current data sources for the assessment of HCVs within the scope of the planned FMUs. Additional/up to date information sources were added to this dataset and superfluous information was removed. SFM also referred to the best available information as documented in Annex G.

The key external sources of information used, and that continue to be used, are:

Nature Kit Victoria;

Nature Maps South Australia;

Nature Map Western Australia;

Aboriginal Cultural Heritage Register and Information System (ACHRIS) Victoria;

Taa wika Portal (SA Aboriginal Portal);

Aboriginal Heritage Inquiry System (AHIS) Western Australia;

SFM HCV Assessment Process for entry into SFM Group Scheme – Forest Management Unit's – Green Triangle Limestone and Western Australia (FSC-STD-30-005)

Atlas of Living Australia; and

EPBC Protected Matters Search Tool

Where available, SFM imports datasets into SFM's Resource Management System (GIS) from government agencies and can use this information to assist with the planning process.

1.5 Legislative Requirements

The SFM GTL FMU cover forests in South Australia and Victoria, while the SFM WA FMU covers forests in Western Australia. A wide range of legislation applies to management of forests over the three states. The main legislation applicable to forest management at a commonwealth level is the *Aboriginal and Torres Strait Islander Heritage Protection Act 1984* and the *Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act 1999)*. The purpose of this legislation is to preserve and protect areas of Indigenous and national environmental significance. SFM maintains a Legislative Register and Planning Documents for each state that list the relevant legislation, its purpose, and SFM's control measures to ensure management activities are compliant. Legislation specific to forest operations on private property is summarised below.

Victoria

The key state legislation related to Victorian forest operations on private property is the *Conservation, Forests and Lands Act 1987* and the *Code of Practice for Timber Production 2014*. Along with the Code is the document '*Management Guidelines for the Code of Practice for Timber Production on Private Land (native vegetation and plantations) in Victoria*' which aids in the interpretation of the Code.

There are many other key pieces of legislation relevant to the protection of HCVs that are referenced in the Code. These include the *Aboriginal Heritage Act 2006 (and the Aboriginal Heritage Amendment Act 2016)* and *Aboriginal Heritage Regulations 2018*, *Catchment and Land Protection Act 1994*, and the *Flora and Fauna Guarantee Act 1988 (FFG Act 1988)*. Local government is responsible for ensuring compliance with planning systems and provisions within the Victoria Planning Provisions.

South Australia

The core legislation in South Australia related to forest operations and the protection of HCVs on private property is the *Forest Property Act 2000*, *Environmental Protection Act 1993*, *Aboriginal Heritage Act 1988*, *Heritage Places Act 1993*, , *Native Vegetation Act 1991*, and the *National Parks and Wildlife Act 1972 (NPW Act 1972)*. The *Guidelines for Plantation Forestry in South Australia 2009*, while not a 'legal' document, is an excellent guide to management of plantation forestry in SA and has many references to legislation, regulations, and other key documents. The local government is responsible for compliance with the planning system under the *Planning, Development and Infrastructure Act 2016*.

Western Australia

The *Code of Practice for Timber Plantations in Western Australia*, while a voluntary code, is a great resource that lists legislation relevant to forest operations on private property in WA and the protection of HCV's. Key legislation in WA is the *Planning and Development Act 2005*, *Environmental Protection Act 1986*, *Soil and Land Conservation Act 1945*, *Aboriginal*

Heritage Act 1972, Biodiversity Conservation Act 2016, Forest Products Act 2000, Conservation and Land Management Act 1984, and the Heritage Act 2018.

1.6 Stakeholders

SFM realises that the involvement of stakeholders and their continued input into the planning processes is vitally important. Such stakeholders include local community groups and representatives, neighbours, industry groups, contractors, customers, Aboriginal groups, all levels of government, environmental non-government organisations (ENGOS) and forest users.

Through the HCV planning, Estate Planning, and Property Management Plan (PMP) preparation stages, SFM identifies stakeholders using a variety of measures including industry contacts, ENGO groups and associations, personal meetings and through use of the FSC Australia Directory of Information Sources. Stakeholder contact information is retained in SFM's Stakeholder Register, while interactions with stakeholders are recorded on SFM's Stakeholder Communications Register. SFM's Stakeholder Engagement Plan describes the management processes for dealing with all stakeholder related issues.

2 ASSESSMENT OF HIGH CONSERVATION VALUES

2.1 Summary of High Conservation Values

For specialist independent input, independent consultants (Landtech Consulting (Peter Austin), Australis Biological (Dr Robin Adair) and Dr Gillian Craig for WA properties) have been used for initial ground and desktop HCV assessments. SFM have then undertaken a classification of HCV's using a combination of consultant advice and reports, professionals at the Glenelg Hopkins Catchment Management Authority, BirdLife Australia, inhouse knowledge, and HCV information from previous property managers. The below tables summarise where HCV's were found in each FMU by property and HCV type.

Where HCV's have not been identified, SFM still consider remnant native vegetation and wetlands are of conservation value. These areas are marked on SFM's internal mapping system and are excluded from forestry related activities. Properties without HCV's present have not been included in the below tables.

Table 5. HCV outcomes for the Green Triangle Limestone FMU

| Green Triangle Limestone FMU | | | | | | | | |
|------------------------------|------------|---------------|-----------|--------|-----------|--------------|---------|---------|
| HCV | Brinkworth | Bulloch Swamp | Greenwald | Pettit | Runnymede | Waverly West | Miltana | Purcell |
| HCV1 | YES | YES | NO | NO | YES | NO | NO | NO |
| HCV2 | NO | NO | NO | NO | NO | NO | NO | NO |
| HCV3 | NO | YES | YES | NO | NO | NO | NO | NO |
| HCV4 | NO | NO | NO | NO | NO | YES | NO | NO |
| HCV5 | NO | NO | NO | NO | NO | NO | NO | NO |
| HCV6 | NO | NO | NO | YES | NO | NO | YES | YES |

Table 6. HCV outcomes for the Western Australia Limestone FMU

| Western Australia Limestone FMU | | |
|---------------------------------|----------|--------------|
| HCV | Davidson | Maringa West |
| HCV1 | YES | YES |
| HCV2 | NO | NO |
| HCV3 | NO | NO |
| HCV4 | NO | NO |
| HCV5 | NO | NO |
| HCV6 | NO | NO |

2.2 HCV 1

See [Annex G](#) NFSS for:

- definition of 'refugia', 'significant concentrations', areas that contain significant concentrations or rare and threatened species' and 'areas with significant seasonal concentrations of species'

- best available information
- assessment pathway
- values to be assessed
- management guidance

Scope:

Species diversity. Concentrations of biological diversity including endemic species, and rare, threatened or endangered species (RTE), that are significant at global, regional or national levels.

Under the Interim Biogeographic Regionalisation for Australia (IBRA), properties are located in the Warrnambool Plain, Victorian Volcanic Plain, Glenelg Plain, and Dundas Tablelands in Victoria, Lucindale in South Australia, and the Esperance Plains and Jarrah Forest regions in south-west Western Australia.

The Victorian Volcanic Plain is considered 1 of 15 national biodiversity hotspots, stretching from Melbourne to Portland, and includes 65 species listed as nationally threatened and 173 species threatened at a state level which highlights its importance. The South-East South Australia/South-West Victoria hotspot (Glenelg Plain & Lucindale) straddles the state border and is also considered 1 of 15 national biodiversity hotspots. This hotspot is known to hold high value wetlands and scattered remnant native vegetation. Located within the Esperance Plains and Jarrah Forest IBRA regions is the Busselton Augusta biodiversity hotspot. The Busselton Augusta hotspot contains heathlands and shrublands that support hundreds of different plants, many of which are endemic and endangered, and a wide range of fauna.

The Green Triangle Region & South-West Western Australia has a history of intensive agricultural land use prior to the establishment of plantations. This has resulted in a reduction in structurally diverse habitat niches. Remnant vegetation areas are typically isolated from other vegetation, degraded, small compared to the surrounding protected area network, and lack connectivity to other remnant areas in the landscape. The majority of wetlands have been modified by rural drainage schemes, grazing and pasture improvement. Feral animals, grazing pressure, sedimentation and salinity, and fire continue to pose a risk to remnant habitat and RTE species. In WA, *Phytophthora cinnamomi*, a pathogen, is a huge threat to remaining areas of vegetation as described in the 2018 'Threat Abatement Plan for Disease in Natural Ecosystems caused by *Phytophthora cinnamomi*'. Despite this, RTE species may still utilise such areas where structurally diverse habitat niches exist. The assessment of HCV1 aims to highlight areas of 'habitat critical to survival' of RTE species on a regional scale.

Key Information Sources:

1. Nature Kit Victoria (previously Biodiversity Interactive Map)
2. Nature Maps South Australia
3. Nature Maps Western Australia
4. EPBC Protected Matters Search Tool
5. Victorian Biodiversity Atlas

6. Atlas of Living Australia (ALA)
7. Species Profile and Threats Database / Recovery Plans
8. Fauna in Eucalypt and Pine Plantations in the Green Triangle of south eastern South Australia and south-western Victoria 2009
9. Previous managers HCV information and classifications
10. Stakeholder Engagement

Planning Approach:

1. Consult the 'best information available' as recommended by [Annex G](#) to identify relevant datasets that provide information on the likely presence of rare, threatened and endangered species and their habitats (e.g. nesting and feeding areas) and prepare lists and maps of potential HCV accordingly. Cross check this with the [Directory of Information Sources](#) (referred to in the evaluation framework).
2. Consult experts and other knowledgeable stakeholders to identify HCV's (e.g. sites with higher potential for presence of rare, threatened and endangered species).
3. Undertake field assessments at each property to identify known and previously unidentified potential habitat, communities, breeding places or foraging/feeding places for rare, threatened and endangered species.
4. Areas containing or likely to contain such species are identified and marked on maps to be included in PMP's.
5. Identify management required to maintain and/or enhance identified HCV's, including exclusion areas and/or management prescriptions. Recommendations to enhance and manage habitats with the potential to support significant species to be included in PMP's.
6. HCV1 areas are marked on maps and included in PMP's.
7. Develop a program for periodic monitoring and adaptive management as required and record details in the Monitoring Database.
8. Consult stakeholders on assessment, management and monitoring.
9. Finalise assessment and implement management and monitoring plan.

Assessment Method:

When undertaking a desktop assessment by interrogation of databases, a 1km buffer zone was placed around the properties. The above listed information sources were used as they provide differing data. For example, the Victorian Biodiversity Atlas, Nature Kit VIC, Nature Maps SA and WA, and the ALA provide actual records of species sighted in a specific area, whereas the EPBC Tool shows the likelihood of Commonwealth listed species being present based on models of preferred habitat and other sources. All properties were then inspected in the field by an ecologist to provide a more detailed assessment of the presence of rare, threatened and endangered species and potential habitat. Species that may utilise the properties based on available habitat are presented in Appendix 2a and 2b. Species that were identified on site have been noted.

Survey effort focused on species listed in legislation such as the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999*, the *Victorian Flora and Fauna Guarantee Act 1988*, the *South Australian National Parks and Wildlife Act 1972*, and the *Western Australian Biodiversity Conservation Act 2016*.

The Victorian Advisory List was also considered. The aim of the Victorian Advisory List is to increase community awareness of threatened species and encourage community members to become involved in activities to protect threatened species, thereby reducing the risk of their conservation status worsening. The Western Australian Threatened Flora - Rare Flora Notice was also referenced. Although not a list of 'legislated' threatened species, its purpose is similar to the Victorian Advisory List.

Findings:

Brinkworth

HCV1 was determined to be present at the Brinkworth property in areas of Heathy Woodland which consist of an overstorey of Brown Stringy Bark (*E. baxteri*) Both over storey species provide critical feeding habitat for the South Eastern Red-tailed Black Cockatoo (RTBC) which is listed as Endangered in South Australia under the *NPW Act 1972* and Endangered under the national *EPBC Act 1999*. The top threats to the survival of the RTBC are food shortages; impacts of fire on food; feeding habitat loss; grazing impacts on foraging sites; fragmentation; weed invasion; nest site availability; human interference with nests; firewood harvesting; nest predation and invasion of *Acacia longifolia subsp. sophorae*.

SFM have selected the largest and most intact remnant areas of *E. baxteri* and classified them as HCV1 due to providing food source critical to the Endangered RTBC, providing habitat for other RTE species as listed in Appendix 2a, and being significant on a regional scale.



Photo 1: Remnants of Heathy Woodland at Brinkworth which contain critical feeding and potential nesting habitat for the nationally and state listed endangered South-Eastern Red-tailed Black Cockatoo (*Calyptorhynchus banksii graptogyne*)

Small and degraded areas of Stringy Bark forest are still protected under legislation and sound environmental principles, however, do not meet the HCV1 classification.

Bulloch Swamp

HCV1 was determined to be present at the Bulloch Swamp property in areas of large and high quality Heathy Woodland/Seasonally Inundated Shrubby Woodland/Plain Sedgy Woodland with an overstory of Brown Stringy Bark (*E. baxteri*) and River Red Gum (*E.camaldulensis*) that provide a food source critical to the survival of the South Eastern Red-tailed Black Cockatoo (*Calyptorhynchus banksii graptogyne*) and also in areas that contain hollow bearing trees within 4km of large Stringy Bark reserves. SFM consider hollow trees within proximity of the species main food source of equal importance as known nesting sites. In a proposed amendment to the ES03 Environmental Significance layer in the Glenelg Planning Scheme, Maron (2017) describes such habitats and any areas of hollow bearing trees within 4km as critical to the survival of the species. Some hollow bearing trees at Bulloch Swamp (*E. viminalis* spp. *cygnetensis* and *E. camaldulensis*) are estimated to be over 150 years old.

There are several threats to HCV1 in Bulloch Swamp – domestic stock pressure; past grazing impacts; timber removal; invasion of exotic species; pressure from movement of vehicles and equipment within remnants which are typically narrow and vulnerable. The survey advised that there are potential habitats for Brolga in the wetlands as swans have been seen present in the area. Therefore protection of wetlands are also important in Bulloch Swamp to reduce the impacts from threats.



Photo 2: An example of one of the highest quality remnants of Heathy Woodland at Bulloch Swamp which contains critical feeding habitat for the nationally and state listed endangered South-Eastern Red-tailed Black Cockatoo (*Calyptorhynchus banksii graptogyne*)



Photo 3 & 4: Hollow bearing trees at Bulloch Swamp which provide critical nesting habitat for the nationally and state listed endangered South-Eastern Red-tailed Black Cockatoo (*Calyptorhynchus banksii graptogyne*)

The size and quality of these reserves also provides habitat for other RTE species as listed in Appendix 2a. Comparatively smaller and more degraded areas of forest elsewhere on the property are still protected under legislation and sound environmental principles, however, do not meet the HCV1 classification.

Davidson

Davidson is located in 1 of 15 national biodiversity hotspots in Western Australia, the Busselton Augusta hotspot. The Busselton Augusta hotspot is known for its wide range of endemic and endangered flora and fauna.

Davidson contains a high-quality reserve in the NW corner of the property of approximately 45ha in size. The reserve contains an assortment of high quality over storey species such as Marri (*Corymbia calophylla*), Swamp Yate (*Eucalyptus occidentalis*), Paperbark (*Melaleuca striata*), Candlestick Banksia (*Banksia attenuata*) and Bull Banksia (*Banksia grandis*) and highly diverse shrub and herbaceous layer. Hollow bearing Marri trees are also evident across the reserve which provide ideal nesting habitat for species such as Carnaby's Cockatoo (*Calyptorhynchus latirostris*), Baudin's Cockatoo (*Calyptorhynchus baudinii*) and the Forest Red-tailed Black-Cockatoo (*Calyptorhynchus banksii naso*). Such species also feed on seeds of the main tree species identified on site such as the Marri (*Corymbia calophylla*) and Banksias (*Banksia attenuate*, *B. grandis*). This reserve has been assigned HCV1 based its high habitat values and rich understorey values that likely support a range of RTE species as mentioned above and listed in Appendix 2b, and hollow-bearing trees that can support a range of RTE fauna species.



Photo 6: The Davidson reserve exhibits both size and key flora resources to support various RTE species. The reserve has a rich understory dominated by varied structural attributes of the Proteaceae genera.

Maringa West

Maringa West, also located in the Busselton Augusta national biodiversity hotspot, contains HCV1 in three sections of remnant native forest due to high potential for RTE species to exist as listed in Appendix 2b, the intact nature, high relative structural attributes, size, quality, and connectivity of the remnants to surrounding State Forest, and the remnants containing populations of the threatened Good's Banksia (*Banksia goodii*) which is listed as Endangered on the EPBC Act 1999 and is considered likely to become extinct or rare in WA based on the provisional Threatened Flora - Rare Flora Notice.

Runnymede



Photo 9: A high quality remnant of *E. calophylla* woodland at Maringa West.

HCV1.1 was determined to be present at the Runnymede property. This property has an environmental significance overlay for Red-tailed Black Cockatoo (*Calyptorhynchus banksii graptogyne* - Endangered) habitat. The survival of the species depends very much on the availability of nesting sites, which are generally River Red Gums. Widespread protection of hollow bearing trees, particularly isolated specimens, is a critical factor in ensuring the survival of this species. Runnymede has a large number of mature, hollow bearing red gums, which are remnants of EVC719 - Grassy Woodland (Photo 10). No nests are known on the property, but as it is located within 5km of the species main food source (Stringybark) it is considered to be of equal importance as known nesting sites.



Photo 10: Remnants of Grassy Woodland at Runnymede contain potential nesting habitat for the nationally endangered Red-tailed Black Cockatoo (*Calyptorhynchus banksii graptogyne*)

On properties where HCV has not been identified, all remnant native vegetation and wetlands are still considered by SFM to be of conservation value. These areas are marked on SFM's internal mapping system and are excluded from forestry related activities.

General Management Strategies:

1. Management prescriptions within PMPs are designed to assist the maintenance of populations throughout its range, and to ensure prescriptions within PMPs are included within operational plans and are communicated effectively to all operational staff and contractors.
2. Prescriptions shall be consistent with those specified in recovery/action plans developed under Commonwealth and State legislative procedures.
3. Contractor induction to operational plans requires sign off that they understand all the requirements and conditions contained within the operational plans.
4. Reserves, exclusion zones and areas of HCV have been mapped accurately on SFM's internal maps to ensure protection during forest operations.

5. Monitor the implementation of management prescriptions within the PMP whilst undertaking routine monitoring and periodic auditing of forest operations.
6. Ecologist's recommendations for biodiversity enhancement and monitoring are included within PMP's and progressively adopted across the FMU.

Special Management Strategies:

1. All properties in the Green Triangle Region will be monitored for the presence of the South Eastern Red-tailed Black Cockatoo (RTBC) as SFM staff conduct field operations and property inspections. All sightings will be reported to the South-Eastern Red -tail Black Cockatoo Recovery Team.
2. Stock will be excluded from all HCV areas, including the RTBC, to protect from damage and allow natural regeneration.
3. Areas will be monitored for illegal firewood harvesting and human interference.
4. All dead and live nesting trees (mature red gums) to be retained and protected.
5. Any revegetation works to restore the tree canopy should include species natural to the area. Direct planting or seeding is recommended. Restoration will be targeting areas such as (but not limited to) RTBC feeding habitat, high value EVCs or remnant vegetation that forms riparian corridors and wetlands.
6. Areas of HCV will be monitored for the presence of noxious weeds and managed accordingly. E.g. WA properties have several known areas of Sydney Golden Wattle (*Acacia longifolia*), and Victorian Tea Tree (*Leptospermum laevigatum*). Green Triangle properties may have areas invaded by Radiata Pine (*P. radiata*).
7. Management of Phytophthora in WA which typically impacts the *Proteaceae* and *Myrtaceae* generas.
8. Control of pest animals such as Foxes, Rabbits and Deer.
9. Restrict movement of vehicles and equipment within narrow remnants.

2.3 HCV 2

See [Annex G](#) NFSS for:

- definition of 'large landscape-level ecosystems/native forests', 'intact forest landscapes', 'regionally significant', 'native forests', 'Indigenous' & 'habitat connectivity'
- best available information
- assessment pathway
- values to be assessed
- management guidance

Scope:

HCV 2 recognises landscape-level ecosystems and mosaics. Intact Forest Landscapes and large landscape-level ecosystems and ecosystem mosaics that are significant at global, regional or national levels, and that contain viable populations of the great majority of the naturally occurring species in natural patterns of distribution and abundance.

HCV 2 does not include man-made, converted, heavily degraded or fragmented ecosystems extensively modified by human activity, especially land clearing and farming (Page 31 of [Common Guidance for the Identification of High Conservation Values](#)).

Given the scope of this assessment (existing plantation only) it is considered unlikely that any area of plantation will meet the criteria for HCV 2. However, in the unlikely event that SFM managed plantations adjoin forest that may be classified as HCV 2, SFM has identified key information sources and developed a planning approach and management strategies. From a precautionary principle, the focus of SFM management activity is to ensure that 'disturbance' is not introduced to any native vegetation (consistent with approach for HCV 1).

Key Information Sources:

1. Nature Kit Victoria (previously Biodiversity Interactive Map)
2. Nature Maps South Australia
3. Nature Maps Western Australia
4. EPBC Protected Matters Search Tool
5. Aerial Photos (SFM Resource Management System)
6. Stakeholder engagement with Trust for Nature
7. Intact Forest Landscapes

Planning Approach:

1. Consult the 'best information available' as recommended by [Annex G](#) to identify relevant datasets and prepare lists and maps of potential HCV accordingly. Cross check this with the [Directory of Information Sources](#) (referred to in the evaluation framework).
2. Consult experts and other knowledgeable stakeholders to identify HCV's (e.g. consultation with Trust for Nature to check for presence of private conservation covenants on properties adjacent to plantations that are not identified in national and state data sets and if the adjoining conservation areas meet HCV2 requirements).

3. Field assessment of plantation area and surrounds to verify and possibly refine knowledge of any known values. Additional or unknown values may also be identified through this process.
4. Identify management required to maintain and/or enhance identified HCV's, including exclusion areas and/or management prescriptions.
5. HCV2 areas are marked on maps and included in PMP's.
6. Develop a program for periodic monitoring and adaptive management as required and record details in the Monitoring Database.
7. Consult stakeholders on assessment, management and monitoring.
8. Finalise assessment and implement management and monitoring plan.

Findings:

No HCV2 forest was identified. Land surrounding most properties is used for grazing or timber production. The localised and regional landscape is highly modified and scores poorly for connectivity and proximity to native vegetation.

Field assessment and interrogation of databases found several plantations with reserves adjacent to larger areas of protected State Forest such as Purcell which is located on the southern boundary of the Budj Bim Landscape/ Mt Eccles National Park. Purcell was established on cleared land historically used for grazing. Another property, Runnymede, is opposite to the Bahgallah Bushland Reserve located on the North side of the Glenelg River. Runnymede was also established on cleared land historically used for grazing. Neither property meets the HCV2 requirements of large landscape level forests. Based on the [Annex G](#), to be considered a regionally significant large landscape level forest, containing the management unit (property) or contained within the management unit (property), would need to be thousands or tens of thousands of hectares in size.

General Management Strategies:

1. Management prescriptions will be designed to maintain or enhance the condition of HCV2 within native forest that is within or adjoins plantations subject to operational activity (see also Management Strategies for HCV1).
2. Include endorsed prescriptions in the PMP and operational plans.
3. Monitor the implementation of management prescriptions within the PMP and operational plans whilst undertaking routine monitoring of forest operations. This may include monitoring for impacts in adjoining native forest; for example, windthrow, wildlings, weeds, pests and disease.

2.4 HCV 3

See [Annex G](#) NFSS for:

- definition of 'ecosystems', 'habitats', 'rare', 'threatened', 'refugia', 'conservation', 'old-growth forest' & 'landscape'
- guidance on old-growth forest
- best available information
- assessment pathway
- values to be assessed
- management guidance

Scope:

HCV3 recognises ecosystems and habitats. Rare, threatened, or endangered ecosystems, habitats, or refugia.

The Commonwealth has identified nationally threatened ecological communities, which align with specific Ecological Vegetation Classes (EVC's) or vegetation communities. Areas of HCV3 forest can occur as remnant native forest patches within or adjacent to the plantation, but most have been significantly degraded through intensive agricultural practices prior to the establishment of plantations. HCV3 considers vegetation communities that are rare and under threat at global, national, or regional levels.

SFM's Native Vegetation Management policy states that there will be no clearing of native forest to plantation or other non-forest issues except where limited clearing is required for infrastructure or required by law.

Key Information Sources:

1. Nature Kit Victoria
2. Nature Maps South Australia
3. Nature Maps Western Australia
4. EPBC Protected Matters Search Tool
5. Species Profile and Threat Database
6. EVC benchmarks and Criteria for Bioregional Conservation Status of EVC's in VIC
7. Listing Advice for Nationally Threatened Ecological Communities
8. Provisional List of Threatened Ecosystems of SA
9. Proteaceae Dominated Kwongkan Shrubland: a nationally protected ecological community (Guide)
10. FSC Directory of Information Sources where deemed necessary
11. Stakeholder engagement with Glenelg Hopkins Catchment Management Authority and the South East Natural Resources Management Board.

Assessment Pathway:

1. Consult the 'best information available' as recommended by [Annex G](#) to identify relevant datasets and prepare lists and maps of potential HCV accordingly. Cross check this with the [Directory of Information Sources](#) (referred to in the evaluation framework) to ensure information sources specific to ecosystem and range mapping are checked (relevant sources are listed above).
2. Undertake field assessments at each property to identify known and previously unidentified vegetation communities. Undertake threat assessment of management activities on identified HCV's.
3. Consult experts and other knowledgeable stakeholders to identify HCV's (e.g. consultation with ecologists to refine knowledge at sites with higher potential for presence of rare, threatened and endangered vegetation communities).
4. Identify management required to maintain and/or enhance identified HCV's, including exclusion areas and/or management prescriptions.
5. HCV3 areas are marked on maps and included in PMP's.
6. Develop a program for periodic monitoring and adaptive management as required and record details in the Monitoring Database.
7. Consult stakeholders on assessment, management and monitoring.
8. Finalise assessment and implement management and monitoring plan.

Assessment Method:

Under the Interim Biogeographic Regionalisation for Australia (IBRA), the properties assessed are in the Warrnambool Plain, Victorian Volcanic Plain, Glenelg Plain, Wimmera, and Dundas Tablelands in Victoria, Lucindale in South Australia, and the Esperance Plains, Mallee, Jarrah Forest regions in south-west Western Australia. Most of the bioregions have been extensively cleared. The depletion and fragmentation of ecosystems means that intact remaining areas are likely to be highly significant for biodiversity.

Mapping tools for each state were interrogated by identifying EVC's/vegetation communities in the area, and the relevant global, national and state conservation status.

The field survey component was undertaken by specialist consultants and SFM and focused on ecosystems listed in legislation such as the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999*, the *Victorian Flora and Fauna Guarantee Act 1988*, the *South Australian National Parks and Wildlife Act 1972*, and the *Western Australian Biodiversity Conservation Act 2016*.

At the state level, South Australia has no legal listing system for threatened ecosystems, however the Provisional List of Threatened Ecosystems of SA provides some guidance on ecosystems that are under threat and rare at the bioregional level. In Victoria, in addition to the *FFG Act 1988* Threatened List which includes ecological communities, there is also a bioregional EVC benchmark system and set criteria for bioregional conservation status which provide an excellent guide to the percentage cover of an EVC in relation to its former range. Western Australia has a list of Threatened Ecological Communities (TECs) which lists threatened communities by IBRA region.

HCV3 has been assigned based on a consideration of the following attributes:

SFM HCV Assessment Process for entry into SFM Group Scheme – Forest Management Unit's – Green Triangle Limestone and Western Australia (FSC-STD-30-005)

- conservation status (rarity) of the ecosystem present,
- patch size in relation to remnant areas in the surrounding landscape,
- quality of the ecosystem:
 - retention of large trees,
 - retention of tree canopy cover,
 - retention and diversity of understory lifeforms,
 - presence of appropriate recruitment,
 - absence of weeds,
 - organic litter and logs,
 - diversity of wetland species and evidence of inundation,
- proximity and links to other native vegetation,
- presence / support for RTE species.

Findings:

The EPBC protected matters reports identified six nationally threatened ecological communities known or expected to occur within 5km of each property:

- Grassy Eucalypt Woodland of the Victorian Volcanic Plain
- Grey Box (*Eucalyptus microcarpa*) Grassy Woodlands and Derived Native Grasslands of South-eastern Australia
- Natural Temperate Grassland of the Victorian Volcanic Plain
- Seasonal Herbaceous Wetlands (Freshwater) of the Temperate Lowland Plains
- Subtropical and Temperate Coastal Saltmarsh
- White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland

Based on assessment of the criteria provided in the relevant EPBC listing advice, and via field assessment, no nationally significant threatened ecological communities were identified on the properties.

Properties were assessed for conservation significance at the bioregional level and HCV3 was identified at four properties which is detailed below. The properties with HCV3 present are Bulloch Swamp and Greenwald.

Bulloch Swamp

HCV3 occurs at the Bulloch Swamp property in several locations of Aquatic Herbland EVC (653) which is Endangered in the Glenelg Plan at the bioregional level. Under the Criteria for Bioregional Conservation Status of EVC's, a status of Endangered means that there is <10% of this EVC remaining compared to its original range (less than 10% of pre-European extent). The Aquatic Herbland EVC occurs in the form of three wetlands that are of very high quality and are currently supporting nesting habitats for the Brolga (*Grus rubicunda*), and other wetland birds. Nesting pairs of the Brolga in Victoria are estimated at around 200-250 and wetlands of such high quality and of the Endangered conservation status in the Glenelg Plain provide invaluable 'critical' habitat

SFM have classified the three wetlands as HCV3 due to the bioregional conservation status of 'Endangered' and the significance of the wetlands on a bioregional scale, the high quality of the wetlands, and the wetlands providing nesting habitat for the Brolga (*Grus rubicunda*) and other wetland birds.

Areas of remnant forest and wetlands located elsewhere on the property that are not considered threatened are still protected under legislation and sound environmental principles, however, do not meet criteria for HCV3 classification.



Photo 11: An aerial view of an extremely high-quality Aquatic Herbland (wetland) which is Endangered in the Glenelg Plain and contains nesting habitat for the Brolga (*Grus rubicunda*) which is Threatened in Victoria under the FFG Act 1988.

Greenwald

Greenwald contains two patches of native vegetation of Lowland Forest (EVC 16) and Herb-rich Foothill Forest EVC (23), both of which are Vulnerable in the Glenelg Plain, meaning only 10%-30% of the pre-European extent remains. The total area is approximately 35ha and is dominated by Messmate (*E.obliqua*). The EVC's represented on the property are also well represented in the immediate local area however the diversity and condition of the remnants warrant classification of HCV3. The reserves in Greenwald display a varied cohort of tree age-classes, with some trees estimated at over 200 years old. In addition to the arboreal habitat elements, understory habitats of Native Grass Tree (*Xanthorrhoea minor spp. Lutea*), Bracken (*Pteridium aquilinum var esculentum*), and Gahnia (*Gahnia radula*) provide refugia for species such as the FFG and EPBC listed Southern Brown Bandicoot and Long-Nosed Potoroo.

There are several threats identified in HCV3 in Greenwald – invasion of weeds such as Sweet Pittosporum (*Pittosporum undulatum*), Coastal Wattle (*A. longifolia subsp sophorae*) and European Blackberry (*Rubus fruticosus*); and grazing pressure from domestic stock are apparently in some areas.



Photo 12: HCV3 reserve at Greenwald showing varied tree cohort age classes with both *E. baxteri* and *E. ovata* tree species. Some trees are estimated at over 200 years old. The reserve is of high quality with mixed tree canopy arboreal habitat elements and Native Grass Tree (*Xanthorrhoea minor* spp. *Lutea*), Bracken (*Pteridium aquilinum* var *esculentum*) and Gahnia (*Gahnia radula*) dominated understory which provides key habitat for the Southern Brown Bandicoot and Long-Nosed Potoroo, FFG and EPBC listed species.

General Management Strategies:

1. Management prescriptions are designed to maintain or enhance the condition of threatened communities within or adjoining plantations subject to operational activity (see also Management Strategies for HCV 1).
2. Monitor the implementation of management prescriptions within the PMP whilst undertaking routine monitoring of forest operations. This may include monitoring for impacts in adjoining native forest; for example, hybridisation, wildlings, weeds, pests and disease.
3. Prescriptions shall be consistent with those specified in recovery/action plans developed under Commonwealth and State legislative procedures.
4. Contractor induction to PMPs requires sign off that they understand all the requirements and conditions contained within the PMPs.
5. Reserves, exclusion zones and areas of HCV have been mapped accurately on SFM's internal maps to ensure protection during forest operations.
6. Monitor the implementation of management prescriptions within the PMPs whilst undertaking routine monitoring and periodic auditing of forest operations.

Special Management Strategies:

1. Stock will be excluded from all HCV areas to protect from damage and allow natural regeneration.
2. Areas will be monitored for illegal firewood harvesting and human interference.
3. Any revegetation works should include species natural to the area.
4. Areas of HCV will be monitored for the presence of noxious weeds and managed accordingly. Green Triangle properties may have areas invaded by Radiata Pine (*P. radiata*).
5. Control of pest animals such as Foxes and Rabbits.

2.5 HCV 4

See [Annex G](#) NFSS for:

- intent
- guidance on critical situations, ecosystem services and values
- best available information
- assessment pathway
- values to be assessed
- management guidance

Key Information Sources:

SFM HCV Assessment Process for entry into SFM Group Scheme – Forest Management Unit's – Green Triangle Limestone and Western Australia (FSC-STD-30-005)

1. SFM Natural, Cultural and High Conservation Values Management Plan
2. Glenelg Hopkins Regional Catchment Strategy 2022-2027
3. FSC Directory of Information Sources where deemed necessary
4. Index of condition database (DELWP)

Scope:

This HCV recognises critical ecosystem services. Basic ecosystem services in critical situations, including protection of water catchments and control of erosion of vulnerable soils and slopes. Substantial alteration of these forests is likely to result in an unacceptable impact on the delivery of ecosystem services.

Assessment Pathway:

1. Consult the 'best information available' as recommended by [Annex G](#) to identify relevant datasets and prepare lists and maps of potential HCV accordingly. Cross check this with the [Directory of Information Sources](#) (referred to in the evaluation framework) to ensure all relevant information sources are checked (relevant sources are listed above). Identify indicators of flood risk, soil erodibility and erosion risk, fire risk, water catchment and water quality through interrogation of databases.
2. Undertake field assessments at each property to identify potential areas that provide basic ecosystem services in critical situations. Undertake threat assessment of management activities on identified HCV's.
3. Consult experts and other knowledgeable stakeholders to identify HCV's (e.g consultation with local ecologist to refine knowledge at sites with higher potential of providing basic ecosystems in critical situations).
4. Identify management required to maintain and/or enhance identified HCV's, including exclusion areas and/or management prescriptions.
5. HCV4 areas are marked on maps and included in PMP's.
6. Develop a program for periodic monitoring and adaptive management as required and record details in the Monitoring Database.
7. Consult stakeholders on assessment, management and monitoring.
8. Finalise assessment and implement management and monitoring plan.

Findings:

Protection from flooding

Some of the properties historically contained wetlands, and some properties still contain wetlands. Wetlands are important landscape features that reduce the impacts of flooding by holding and slowing floodwater. Most wetlands have been modified by drainage schemes and agricultural practices, which has greatly reduced the ecosystem services they once provided. Any wetlands in the properties assessed that do continue to hold water were not identified to be offering any services "critical" to protecting local communities or the environment.

Runnymede contains a small area of Rural Floodway overlay associated with the Glenelg River floodplains. The purpose of this planning control is to maintain the free passage and

temporary storage of flood waters, minimise flood damage and ensure compatibility with flood hazards, local drainage conditions and the minimisation of soil erosion, sedimentation and silting. The majority of the Runnymede property is significantly elevated and does not provide any significant protection from flooding to upstream or downstream areas.

Flood risk in relation to a decrease of forest cover was also considered however no properties were considered to provide protection services "critical" to protecting local communities or the environment.

Protection from erosion

Geomorphology across the properties is variable, ranging from gentle plains and slowly permeable soils, to rapidly drained sandy soils.

Runnymede contains a steep, treeless escarpment typical of the Casterton area. Land slips are evident, but comparison of historic and recent aerial imagery suggests the slips have stabilised (Photo 15). SFM have also complete a revegetation project in this area in conjunction with the Glenelg Hopkins Catchment Management Authority (GHCMA) as a preventative measure.



Photo 15: Locations of Landslips at Runnymede using 2010 imagery. Comparison of aerial photos shows landslips have not significantly changed since at least 1953.

Waverly West contains a creek that is a tributary to the Crawford River, noted for being in poor condition in the upper reaches. Some erosion is evident at the intersection of the creek line and the western boundary, attributable to lack of creek line vegetation on the neighbouring property. The creek line within the property was revegetated with non-indigenous species 15- 20 years ago and now provides an important but localised stabilising function (Photo 16). HCV 4 status has been assigned as a precautionary measure.



Photo 16. The main watercourse traversing the Waverly West site has been restored between 15-20 years ago to arrest critical soil erosion. Photo credit – Landtech.

Protection from destructive fires

Forests that may provide barriers to the spread of destructive fires include rainforest and wet sclerophyll gullies. These forest types are not present in this group of properties.

Clean water catchments

The properties are located across various catchments in gently undulating to flat landscapes that have been mostly cleared for agriculture. The landscapes that properties are located in have a wide range of land use types. Remnant native vegetation areas within this group of properties are small and/or degraded, offering little in maintaining clean water catchments. None of the properties assessed were located in local drinking water catchments, and therefore not deemed to be providing services to prevent a “critical” situation.

General Management Strategies:

1. Apply and monitor compliance with PMP for the coupe and with the current Code of Practice.
2. Participate in the industry planning process to promote strategic planning within water catchments between the forest managers of different tenures.
3. Time operations to ensure sites are harvested at the appropriate time of the year, depending on the likelihood of soil and water issues in wet conditions.
4. Ensure appropriate roading, harvesting and silvicultural prescriptions are used to minimise any potential soil movement during or post operation.
5. Ensure streamside reserves are adequately demarcated in the field.
6. Minimise the requirement for stream crossings wherever possible.

7. SFM is working with Nature Glenelg Trust, Glenelg Hopkins Catchment Management Authority and Basalt to Bay Landcare network to identify opportunities for waterway and wetland restoration.
8. SFM will routinely notify affected stakeholders (e.g. neighbours, councils etc.) of the intent to carry out forest operations, which helps identify any other stakeholders to be affected (for example unregistered domestic outtake points)
9. Implement and follow chemical application codes of practice requirements.
10. SFM undertakes an annual firebreak maintenance program to minimise the risk of spread of landscape level fire.

Special Management Strategies:

Waverly West

1. Exclude stock from creek.
2. Any areas identified as active areas of erosion will be addressed with advice from the Glenelg Hopkins Catchment Management Authority.

2.6 HCV 5

See [Annex G](#) NFSS for:

- definition of 'local communities', 'basic human needs', 'damage', 'affected stakeholders', 'ecosystems', 'Indigenous', 'ecosystems', 'fundamental', 'HCV's', 'monitoring', 'adaptive management'
- values to be assessed
- best available information
- assessment pathway
- management guidance

Scope:

HCV5 recognises forest areas that are fundamental to meeting basic needs of local communities. Basic needs are values on which local people are critically dependent. Potential fundamental basic needs include unique sources of water for drinking and other daily uses; food, medicine, fuel, building and craft resources; the production of food crops and subsistence cash crops; protection of "agricultural" plots against adverse microclimate, and traditional farming practices. Loss of the resources from this area would have a significant impact on the supply of the resource and decrease local community well-being.

Information Sources:

1. Declared Water Supply Catchments in Victoria & South Australia
2. Proclaimed Area Maps of Western Australia
3. Field Assessment
4. Stakeholder consultation
5. FSC Directory of Information Sources where appropriate

Assessment Pathway:

SFM HCV Assessment Process for entry into SFM Group Scheme – Forest Management Unit's – Green Triangle Limestone and Western Australia (FSC-STD-30-005)

1. Consult the 'best information available' as recommended by [Annex G](#) to identify relevant datasets and prepare lists and maps of potential HCV accordingly. Cross check this with the [Directory of Information Sources](#) (referred to in the evaluation framework) to ensure all relevant information sources are checked (relevant sources are listed above).
2. Consult experts and other knowledgeable stakeholders to identify HCV's.
3. Undertake threat assessment of management activities on identified HCV's.
4. Identify management required to maintain and/or enhance identified HCV's, including exclusion areas and/or management prescriptions. Management strategies to maintain and/or enhance areas identified under HCV5 should be developed in cooperation with representatives and members of affected local communities and Indigenous peoples.
5. Develop a program for periodic monitoring and adaptive management as required. Summarise findings in the Conservation Monitoring Database and record any identified issues on the CPAR system.
6. Consult stakeholders on assessment, management and monitoring.
7. Finalise assessment and implement management and monitoring plan.

Stakeholder consultation with affected stakeholders will routinely occur whilst preparing HCV assessments and Property Management Plans (PMPs). Through these processes SFM will identify traditional uses of the plantation and any surrounding native forest. Where traditional uses are present, SFM will consult and engage with affected stakeholders on the planned forest operation. SFM will identify any concerns they may have and, where practicable, design management prescriptions to protect these values.

Findings:

No areas within the SFM GTL FMU or the SFM WA FMU were assessed as being fundamental to meeting basic needs of local communities – hence no areas of HCV 5 have been identified.

Aboriginal people live within the broader community, and have access to food stores, modern health services and medicines. The properties assessed do not contain foods and medicines fundamental for local traditional uses.

Drinking water sources for local people include groundwater and collected rainwater. None of the properties are in declared water supply catchments.

General Management Strategies:

1. Where values are identified, insert appropriate management prescriptions to protect values within the PMP.
2. Monitor the implementation of management prescriptions within the PMP whilst undertaking routine monitoring of forest operations.

2.7 HCV 6

See [Annex G](#) NFSS for:

- definition of 'habitats', 'landscapes', 'critical', 'communities' or 'Indigenous Peoples', 'engagement', 'local communities' and 'cultural significance'
- values to be assessed
- best available information
- assessment pathway
- management guidance

Scope:

HCV 6 recognises cultural values, sites, resources, habitats and landscapes of global or national cultural, archaeological and historical significance, and/or of critical cultural, ecological, economic or religious/sacred importance for the traditional cultures of local communities or Indigenous Peoples.

Information Sources:

1. Victorian Heritage Database
2. South Australian Heritage Places Database
3. State Heritage Register WA
4. Australian Heritage Database
5. Australian Heritage Places Inventory
6. Victorian Aboriginal Cultural Heritage Register and Information System (ACHRIS)
7. Taa wika Portal (SA Aboriginal Portal);
8. Aboriginal Heritage Inquiry System (AHIS) for Western Australia
9. Aboriginal Heritage Map (Cultural Heritage Sensitivity Layer Online)
10. SFM Resource Management System – Cultural Heritage Sensitivity Layer
11. Aboriginal Cultural Heritage Poster Series
12. Practice Note: Significant Ground Disturbance
13. Reconciliation SA – Map of Aboriginal Australia
14. Stakeholder consultation (e.g. RAP's)

Assessment Pathway:

8. Consult the 'best information available' as recommended by [Annex G](#). Cross check this with the [Directory of Information Sources](#) (referred to in the evaluation framework) to ensure all relevant information sources are checked prior to undertaking field survey (relevant sources are listed above).
9. Consult experts and other knowledgeable stakeholders to identify HCV's (Liaison with local Aboriginal Parties or Cultural Heritage Advisors to refine knowledge of sites).

10. Undertake a field survey, refer to the Aboriginal Cultural Heritage Poster Series to aid recognition of potential sites.
11. Undertake threat assessment of management activities on identified HCV's by following the SFM Conservation Monitoring procedure Summarise findings in the Conservation Monitoring Database and record any identified issues on the CPAR system.
12. Identify management required to maintain and/or enhance identified HCV's, including exclusion areas and/or management prescriptions. Management actions and will be captured in the Conservation Monitoring Database. Specific management prescriptions will be added to the Property Management Plan.
13. Consult stakeholders on assessment, management and monitoring.

Findings

HCV 6.1 Aesthetic values

The Department of Premier and Cabinet commissioned a study to identify special landscape values in South West Victoria. None of the properties are located along the major viewing corridors identified in the study.

HCV 6.2 Historic values of global or national cultural or archaeological significance

The Buji Bim Cultural Landscape – Mt Eccles Lake Condah Area occurs within the vicinity of SFM managed properties (in the area north of Tyrendarra, east to Bessibelle, and north to Macarthur). This landscape was included in the National Heritage List on 20th July 2004 and was inscribed on the World Heritage List on the 6th July 2019. SFM acknowledge the cultural significance of this special landscape and the importance it has to the Gunditjmarra Traditional Owners. The Purcell property near Bessibelle borders this landscape, with a small area of story rise landform projecting onto the property. This area has been discussed below under 'spiritual and cultural values' and has been assigned HCV.

HCV 6.3 Long term research sites

No long-term research sites were identified.

HCV 6.4 Social (including economic) values

No social or economic values relevant to local communities or Indigenous people were identified.

HCV 6.5 Spiritual and cultural values

The properties are all freehold title and are in the traditional country of the Gunditjmarra and/or Eastern Maar peoples in Victoria, the Buandig peoples in South Australia, and the Minang and Kaniyanh peoples in Western Australia. It is considered very unlikely that Aboriginal peoples are currently living within existing plantations on private property in Victoria, South Australia, or Western Australia.

Under the Commonwealth Native Title Act 1993, the valid grant of a freehold estate (other than certain types of Aboriginal and Torres Strait Islander land) on or before 23 December 1996 is known as a 'previous exclusive possession act'. This means that native title has been extinguished over the area. Native title claimants are not allowed to include land and waters covered by previous exclusive possession acts in their applications; therefore, they would normally exclude freehold areas. A native title application may, however, be made over freehold land on the basis that freehold was invalidly granted, but the chances of this happening are very low.

Aboriginal heritage may still exist on freehold titles, and these sites (registered or unregistered) are protected under the Victorian *Aboriginal Heritage Act 2006 & Aboriginal Heritage Amendment Act 2016*, the South Australian *Aboriginal Heritage Act 1988*, and the Western Australian *Aboriginal Heritage Act 1972*. Information about registered sites is available to landholders on application to the relevant department in SA and VIC and is available online without application for WA properties.

There are mapped areas of cultural heritage sensitivity in Victoria, which are landforms and land categories that are generally regarded as more likely to contain Aboriginal cultural heritage. The Victorian state government planning controls apply to development within properties containing these areas, and an online tool is available to determine if a planned activity requires a cultural heritage management plan. Within the plantations, these areas are mostly associated with waterways and wetlands located on or adjacent to the properties. SFM employs buffer zones and machinery exclusion around all major watercourses for the conservation of water values, biodiversity and possible cultural values within these zones consistent with the Victorian Code of Practice 2014.

SFM has identified two registered Aboriginal Heritage Sites on the Pettit property known as Montrose Mound 1 and Montrose Mound 2. Aboriginal mounds are places where Aboriginal people lived over long periods of time. Mounds often contain charcoal, burnt clay or stone heat retainers from cooking ovens, animal bones, shells and stone tools. SFM has sought advice from a cultural heritage advisor on the future management of these sites.

Another registered site falls immediately north of the Purcell boundary as discussed under HCV 6.2 above, associated with the stony rise landform. A small part of this landform projects into the Purcell property. This landform has been assigned as HCV based on advice from a cultural heritage advisor and Aboriginal Affairs Victoria.

A grave site of European Heritage has been identified on the Miltana property. The grave is located on a section of the property which is dominated by native vegetation which is managed for conservation values. Very little is known about the grave with research suggesting it belongs to a 22 year old woman who passed away in 1862.

No other sites of European Heritage have been identified.

General Management Strategies:

1. Where known sites exist, develop appropriate management prescriptions and maps in consultation with local aboriginal parties or other relevant authorities for inclusion in PMPs
2. Include Indigenous community in the process when making management decisions for sites with known Aboriginal heritage.

3. Monitor for impacts on any sites during periods of operational activity.
4. SFM will allow full access, if requested, to all areas under management for research or traditional use such as ceremonies, gathering, hunting, access to important sites or as part of teaching law and customs to future generations. Access may be denied due to health and safety concerns but not unnecessarily so.

Special Management Strategies:

Purcell

1. The property has been assessed by a cultural heritage advisor. It was determined that areas of archaeological potential at this location are restricted to the stony rise landform feature.
2. Harm to this aboriginal place can be avoided by continuing to avoid the stony rise feature that exists within the property boundaries.
3. If harm to this place cannot be avoided, a mandatory cultural heritage permit (CHP) or Cultural Heritage Management Plan (CHMP) will be required for management of this place prior to the proposed activity.

Pettit

1. There is an area of Aboriginal Cultural Heritage Sensitivity on the property, associated with the Eumeralla River at the East of the property. The area is either plantation or firebreak and contains registered Aboriginal sites (Montrose mound 1 and mound 2). The site has been assessed by a cultural heritage advisor and consultation is ongoing.
2. Harm to this aboriginal place can be avoided by not undertaking any ground disturbing operations within the area.
3. If harm to this place cannot be avoided, a mandatory cultural heritage permit (CHP) or Cultural Heritage Management Plan (CHMP) will be required for management of this place prior to the proposed activity.

Miltana

1. The grave is located on a section of the property which is dominated by native vegetation which is managed for conservation values.
2. Harm to the grave site can be avoided by ensuring no ground disturbing operations occur within the conservation area.

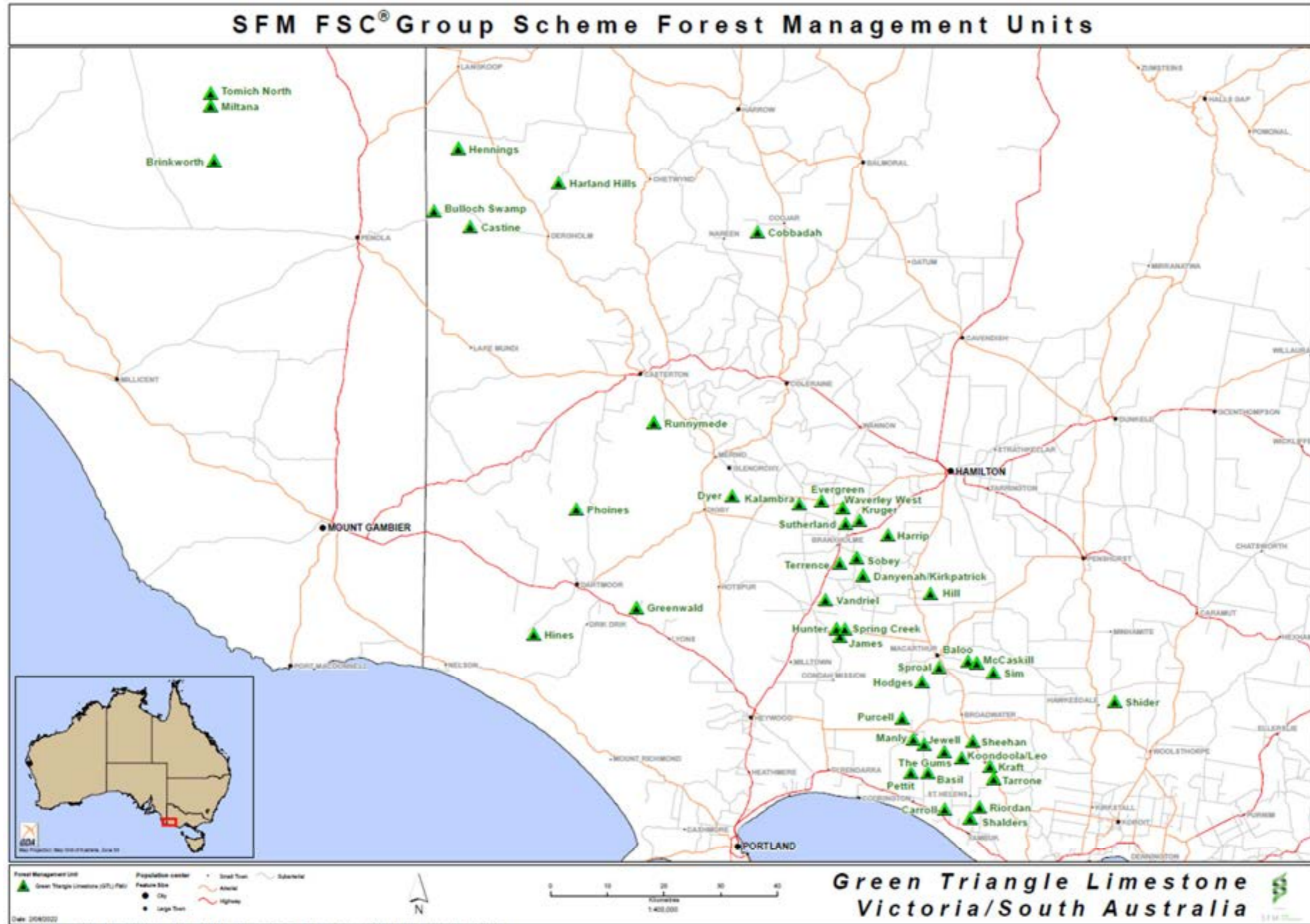
3 LIST OF ACRONYMS AND ABBREVIATIONS

| | |
|-------|---|
| ABP | Australian Bluegum Plantations |
| BC | Biodiversity Conservation Act 2016 |
| CMA | Catchment Management Authority |
| DELWP | Department of Environment, Land, Water and Planning |
| ENGOS | Environmental Non-Government Organisations |
| EVC | Ecological Vegetation Class |
| EPBC | Environment Protection and Biodiversity Conservation Act 1999 |
| FFG | Flora and Fauna Guarantee Act 1988 |
| FMU | Forest Management Unit |
| FSC | Forest Stewardship Council |
| HCVs | High Conservation Values |
| IBRA | Interim Biogeographic Regionalisation for Australia |
| NPWA | National Parks and Wildlife Act 1972 |
| PMP | Property Management Plan |
| SFM | Sustainable Forest Management – |

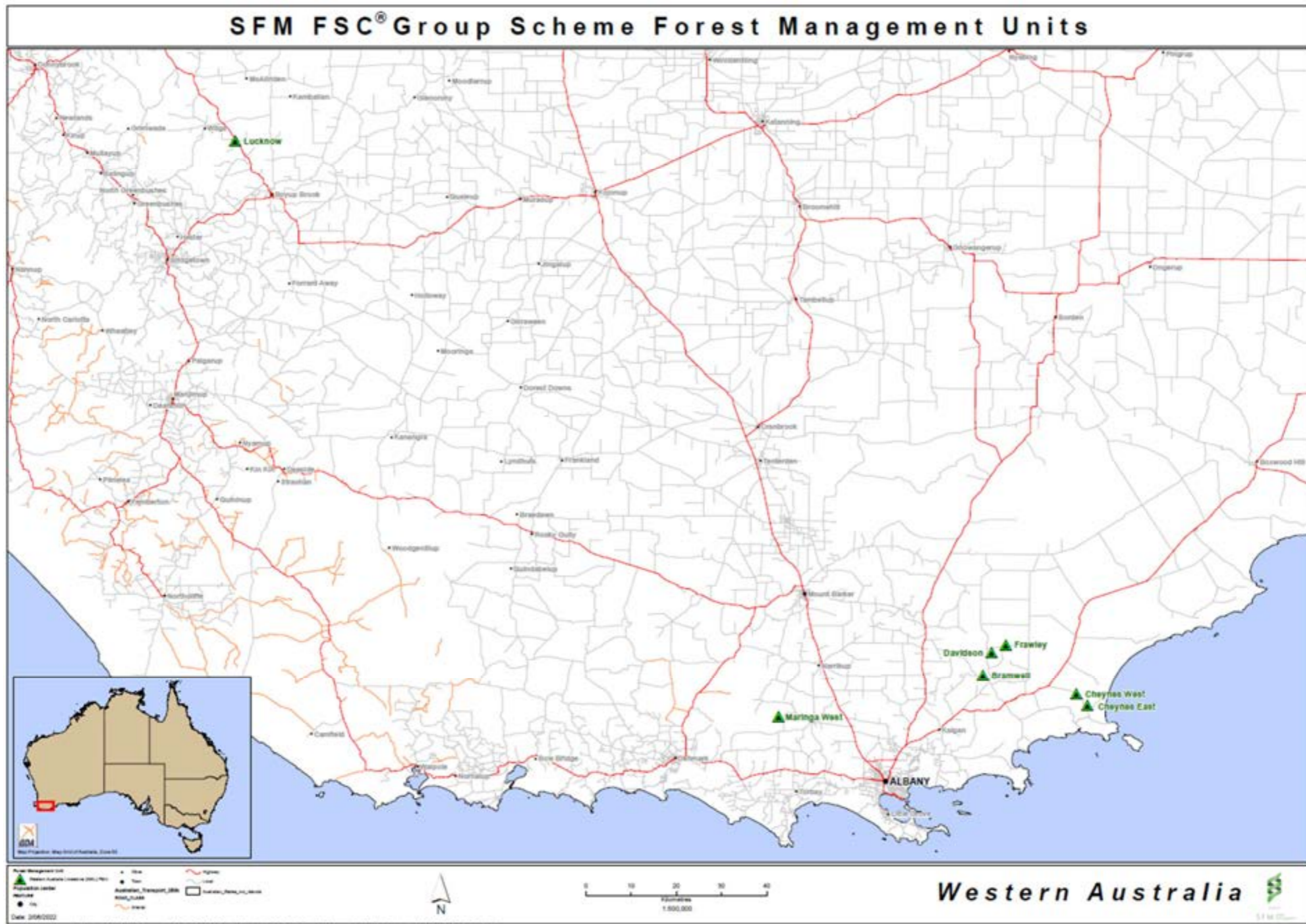
4 REFERENCES

- Commonwealth of Australia (2018). Threat abatement plan for disease in natural ecosystems caused by *Phytophthora cinnamomi*. Retrieved 28th April, 2020, from <http://www.environment.gov.au/system/files/resources/ee1f3b9f-6e2e-4a01-86f3-6abb167fb443/files/tap-phytophthora-cinnamomi-2018.pdf>
- Forest Stewardship Council – Australia (2012). The Directory of Information Services. Forest Management Australia Limited, North Melbourne. Retrieved 16 April from <http://au.fsc.org/high-conservation-values.208.htm>
- Maron, M. (2017). Ecological Evidence on proposed planning scheme amendment C82 updating ES03 in Glenelg Planning Scheme. Retrieved from http://www.glenelg.vic.gov.au/files/Planning/Glenelg_C82_RTBC_ESO3_Amendment_Expert_Report_wiith_attachments_27_November_2017.pdf
- State Wide Integrated Flora and Fauna Teams (2017). *South West Victoria Brolga Research Project*. Retrieved 20th December, 2017, from <http://victorianbrolgastudy.com.au/>

Appendix 1a: Property locations for Green Triangle Limestone (GTL) FMU (As at December 2023)



Appendix 1b: Property locations for Western Australia Limestone (WAL) FMU (As at December 2023)



Appendix 2a: Rare, threatened and endangered flora and fauna species likely to use properties in the GTL FMU

| FMU | Lifeform | Scientific Name | Common Name | Habitat requirements | Potential properties based on habitat requirements | Identified in FMU? | EPBC Act | Vic FFG Threatened List | SA NPW Act |
|-----|-----------|-----------------------------------|-----------------------------------|--|---|---------------------|-----------------------|-------------------------|------------|
| GTL | Amphibian | <i>Pseudophryne bibronii</i> | Brown Toadlet | Remnant native woodland and along drainage lines | Phoines, Kraft, Sheehan, Tarrone | No | | Endangered | Rare |
| GTL | Amphibian | <i>Litora raniformis</i> | Growling Grass Frog | Wetland, dams, rivers, creeks, drainage lines | Bulloch Swamp, Castine, Baloo, Dyer, McCaskill, Purcell, Runnymede, Sobey, Phoines, Kraft, Tarrone, Sheehan | No | Vulnerable | Vulnerable | |
| GTL | Amphibian | <i>Pseudophryne semimarmorata</i> | Southern Toadlet, Marbled Toadlet | Glenelg River and Bowtell creek | Runnymede, Kruger, Sutherland, Sproal, Kraft, Sheehan, Tarrone, Shalders | No | | Endangered | Vulnerable |
| GTL | Bird | <i>Botaurus poiciloptilus</i> | Australasian Bittern | Densely vegetated wetlands. | Bulloch Swamp, Baloo, Dyer, Purcell, Sobey, Sutherland, Shalders | No | Endangered | Critically Endangered | |
| GTL | Bird | <i>Spatula rhynchotis</i> | Australasian Shoveler | Wetland, dams, rivers, creeks, drainage lines. | Baloo, Dyer, Sobey, Kalambra, Kruger, Sutherland, Shider, Sproal, Shalders | No | | Vulnerable | Rare |
| GTL | Bird | <i>Rostratula australis</i> | Australian Painted Snipe | Wetlands with mosaic of low, patchy vegetation. | Bulloch Swamp, Castine, Baloo, Koondoola_Leo, Sobey, Shalders | No | Endangered | Critically Endangered | Endangered |
| GTL | Bird | <i>Ceyx azurea</i> | Azure Kingfisher | Glenelg River and Bowtell creek | Baloo, Dyer, Sobey, Pettit, Runnymede | No | | | |
| GTL | Bird | <i>Ceyx azurea azurea</i> | Azure Kingfisher | Not known | | No | | | Endangered |
| GTL | Bird | <i>Ninox connivens connivens</i> | Barking Owl | Woodland | Sproal | No | | Critically Endangered | Rare |
| GTL | Bird | <i>Falco subniger</i> | Black Falcon | Woodland | Kalambra, Sutherland, Terrence, Vandriel, Sproal, Kruger | No | | Critically Endangered | Rare |
| GTL | Bird | <i>Oxyura australis</i> | Blue-billed Duck | Wetland areas | Sutherland, Sproal, Shalders | No | | Vulnerable | Rare |
| GTL | Bird | <i>Antigone rubicunda</i> | Brolga | Wetland areas | Bulloch Swamp, Castine, Tomich North, Miltana, Greenwald, Purcell, Kruger, Sutherland, Shider, Sproal, Pettit, Manly, Sheehan, Basil, Tarrone, Shalders | Yes (Bulloch Swamp) | | Endangered | Vulnerable |
| GTL | Bird | <i>Hydroprogne caspia</i> | Caspian Tern | Wetlands and waterways | Shalders | No | | Vulnerable | |
| GTL | Bird | <i>Calidris ferruginea</i> | Curlew Sandpiper | Wetlands & dams | Bulloch Swamp, Castine, Tomich North, Miltana, Sutherland, Terrence, Kraft, Shalders | No | Critically Endangered | Critically Endangered | Endangered |
| GTL | Bird | <i>Stagonopleura guttata</i> | Diamond Firetail | Woodland | Sproal | No | | Vulnerable | Vulnerable |
| GTL | Bird | <i>Stictonetta naevosa</i> | Freckled Duck | Wetland areas | Shalders | No | | Endangered | Vulnerable |

| FMU | Lifeform | Scientific Name | Common Name | Habitat requirements | Potential properties based on habitat requirements | Identified in FMU? | EPBC Act | Vic FFG Threatened List | SA NPW Act |
|-----|----------|---|----------------------------------|---|---|--------------------|-----------------------|-------------------------|------------|
| GTL | Bird | <i>Plegadis falcinellus</i> | Glossy Ibis | Wetland areas | Sproal, Shalders | No | | | Rare |
| GTL | Bird | <i>Accipiter novaehollandiae</i> | Grey Goshawk | Sub-optimal foraging and transient, plantation not suitable for breeding | Jewell, Kruger, Sutherland, Kraft, Manly, Sheehan, Basil, Tarrone | No | | Endangered | Endangered |
| GTL | Bird | <i>Pluvialis squatarola</i> | Grey Plover | Wetlands | Shalders | No | | Vulnerable | |
| GTL | Bird | <i>Pezoporus wallicus wallicus</i> | Mainland/Eastern - Ground Parrot | Close to water. Eucalyptus woodlands and mallee shrublands. | Kraft, Sheehan, Tarrone | No | | Endangered | Endangered |
| GTL | Bird | <i>Gelochelidon nilotica macrotarsa</i> | Gull-billed Tern | Wetlands and waterways | Shalders | No | | Endangered | |
| GTL | Bird | <i>Thinornis cucullatus cucullatus</i> | Eastern Hooded Plover | Wetlands | | No | Vulnerable | Vulnerable | Vulnerable |
| GTL | Bird | <i>Melanodryas cucullata cucullata</i> | (South-eastern) Hooded Robin | Sub-optimal foraging and transient, plantation not suitable for breeding. Can be found in drainage lines. | Hodges, Waverly West, Sproal, Pettit | No | | Vulnerable | Rare |
| GTL | Bird | <i>Tringa stagnatilis</i> | Marsh Sandpiper | Wetlands | Shalders | No | | Endangered | |
| GTL | Bird | <i>Tyto novaehollandiae novaehollandiae</i> | (Southern) Masked Owl | Forests, woodlands, and riparian vegetation along waterways. | Greenwald, Sproal | No | | Critically Endangered | Endangered |
| GTL | Bird | <i>Pezoporus occidentalis</i> | Night Parrot | Close to water. Eucalyptus woodlands and mallee shrublands. | Hennings | No | Endangered | | Endangered |
| GTL | Bird | <i>Neophema chrysogaster</i> | Orange-bellied Parrot | Wetlands and waterways | | No | Critically Endangered | Critically Endangered | Endangered |
| GTL | Bird | <i>Grantiella picta</i> | Painted Honeyeater | Sub-optimal foraging and transient, plantation not suitable for breeding. May occur in native forests with <i>Eucalyptus</i> & <i>Acacia</i> species. Connected to presence of mistletoe. | Brinkworth, Bulloch Swamp, Castine, Hennings, Tomich North, Miltana, Evergreen, McCaskill | No | Vulnerable | Vulnerable | Rare |
| GTL | Bird | <i>Ninox strenua</i> | Powerful Owl | Open forests and woodlands. Sheltered gullies in | Greenwald, Runnymede, Waverly West, Manly, Sheehan, Basil | No | | Vulnerable | Endangered |

| FMU | Lifeform | Scientific Name | Common Name | Habitat requirements | Potential properties based on habitat requirements | Identified in FMU? | EPBC Act | Vic FFG Threatened List | SA NPW Act |
|-----|----------------------|---|--|---|--|--------------------|-----------------------|-------------------------|------------|
| | | | | wet forests with dense understoreys especially along watercourses. | | | | | |
| GTL | Bird | <i>Haematopus fuliginosus</i> | Sooty Oystercatcher | Wetland | Shalders | No | | | Rare |
| GTL | Bird | <i>Calyptorhynchus banksii graptogyne</i> | South Eastern Red-tailed Black Cockatoo | Heathy woodland (E. baxteri, E. arenacea), E. camaldulensis hollows, areas of remnant veg | Brinkworth, Bulloch Swamp, Castine, Greenwald, Hennings, Tomich North, Miltana, Phoines, Runnymede, Waverly West, Kruger, Sutherland, Terrence | No | Endangered | Endangered | Endangered |
| GTL | Bird | <i>Cinclosoma punctatum</i> | Spotted Quail-thrush | Woodland | | No | | | Endangered |
| GTL | Crustacean | <i>Geocharax falcata</i> | Grampians Bush Yabby | Wetlands and waterways | Tarrone, Kraft | No | | Endangered | |
| GTL | Crustacean | <i>Engaeus sericatus</i> | Hairy Burrowing Crayfish | Wetland areas | Purcell, Shider | No | | Vulnerable | |
| GTL | Ecological community | | Buloke Woodlands of the Riverina and Murray-Darling Depression Bioregions | | NA | No | Endangered | | |
| GTL | Ecological community | | Grassy Eucalypt Woodland of the Victorian Volcanic Plain | | NA | No | Critically Endangered | | |
| GTL | Ecological community | | Grey Box Grassy Woodlands and Derived Native Grasslands of South-eastern Australia | | NA | No | Endangered | | |
| GTL | Ecological community | | Natural Temperate Grassland of the Victorian Volcanic Plain | | NA | No | Critically Endangered | | |
| GTL | Ecological community | | Seasonal Herbaceous Wetlands (Freshwater) of the Temperate Lowland Plains | | NA | No | Critically Endangered | | |
| GTL | Ecological community | | White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and | | NA | No | Critically Endangered | | |

| FMU | Lifeform | Scientific Name | Common Name | Habitat requirements | Potential properties based on habitat requirements | Identified in FMU? | EPBC Act | Vic FFG Threatened List | SA NPW Act |
|-----|----------|----------------------------------|--------------------------|---|---|--------------------|------------|-------------------------|------------|
| | | | Derived Native Grassland | | | | | | |
| GTL | Fish | <i>Prototroctes maraena</i> | Australian Grayling | Rivers and streams with cool clear moderate flow | Greenwald, Runnymede | No | Vulnerable | Endangered | |
| GTL | Fish | <i>Galaxiella pusilla</i> | Eastern Dwarf Galaxias | Slow flowing and still shallow, permanent and temporary freshwater wetlands, drains, streams, and creeks. | Bulloch Swamp, Castine, Greenwald, The Gums, McCaskill, Runnymede | No | Vulnerable | Endangered | |
| GTL | Fish | <i>Galaxiella toourtkoourt</i> | Little Galaxias | Slow flowing and still shallow, permanent and temporary freshwater wetlands, drains, streams, and creeks. | Kraft, Tarrone | No | | Endangered | |
| GTL | Fish | <i>Macquaria australasica</i> | Macquarie Perch | Larger upland rivers and streams | Runnymede | No | Endangered | Endangered | |
| GTL | Mammal | <i>Phascogale tapoatafa</i> | Brush-tailed Phascogale | Grassland / Woodland | | No | | Vulnerable | Endangered |
| GTL | Mammal | <i>Sminthopsis murina murina</i> | Common Dunnart | Grassland / Woodland | Sproal | No | | Vulnerable | |
| GTL | Mammal | <i>Perameles gunnii</i> | Eastern Barred Bandicoot | Grassland / Woodland | Sheehan | No | Endangered | Endangered | Endangered |
| GTL | Mammal | <i>Pteropus poliocephalus</i> | Grey-headed Flying-Fox | Not in known foraging area - may have transient presence in remnant native woodland and plantation | May be transient in all properties | No | Vulnerable | Vulnerable | Rare |
| GTL | Mammal | <i>Pseudomys shortridgei</i> | Heath Mouse | Frequently found in species-rich dry heathland that has been burnt 5-15 years prior. Also occurs in dry Brown Stringybark and Desert Stringybark open forest with health understorey. | Bulloch Swamp, Castine, Greenwald | No | Endangered | Endangered | Endangered |
| GTL | Mammal | <i>Pseudomys fumeus</i> | Smokey Mouse | Occurs in a variety of vegetation communities. | Bulloch Swamp, Castine | No | Endangered | Endangered | |

| FMU | Lifeform | Scientific Name | Common Name | Habitat requirements | Potential properties based on habitat requirements | Identified in FMU? | EPBC Act | Vic FFG Threatened List | SA NPW Act |
|-----|----------|-------------------------------------|------------------------------------|--|--|--------------------|-----------------------|-------------------------|------------|
| | | | | Ground cover is important. | | | | | |
| GTL | Mammal | <i>Miniopterus orianae bassanii</i> | Southern Bent-wing Bat | Not in known foraging area - may have transient presence in remnant native woodland and plantation | May be transient in all properties | No | Critically Endangered | Critically Endangered | Endangered |
| GTL | Mammal | <i>Isodon obesulus obesulus</i> | Southern Brown Bandicoot (eastern) | Heathy woodland with dense heath or shrub understorey | Brinkworth, Bulloch Swamp, Greenwald, Purcell, Runnymede, Kraft, Tarrone | No | Endangered | Endangered | Vulnerable |

| FMU | Lifeform | Scientific Name | Common Name | Habitat requirements | Potential properties based on habitat requirements | Identified in FMU? | EPBC Act | Vic FFG Threatened List | SA NPW Act |
|-----|------------------------|-------------------------------------|----------------------|---|--|--------------------|-----------------------------|-------------------------|------------|
| GTL | Mammal | <i>Dasyurus maculatus maculatus</i> | Spot-tailed Quoll | Native remnant vegetation | Purcell, Sproal, Basil | No | Endangered | Endangered | Endangered |
| GTL | Mammal | <i>Antechinus minimus maritimus</i> | Swamp Antechinus | Heathly woodland with dense understorey | Brinkworth, Bulloch Swamp, Castine, Greenwald. | No | Vulnerable | Vulnerable | Endangered |
| GTL | Migratory Marine Birds | <i>Bubulcus ibis coromandus</i> | Eastern Cattle Egret | Not known | | | | | Rare |
| GTL | Migratory Marine Birds | <i>Bubulus ibis</i> | Cattle Egret | Large expanding range. Can be found in wetlands, dams, river, creeks, drains | Brinkworth, Bulloch Swamp, Castine, Greenwald, The Gums, Tomich North, Miltana, Vandriel | No | | | |
| GTL | Migratory Marine Birds | <i>Ardea alba modesta</i> | Eastern Great Egret | Water body | Baloo, Dyer, Jewell, McCaskill, Riordan, Sobey, Kalambra, Sproal, Kraft, Manly, Shalders | No | | Vulnerable | |
| GTL | Migratory Marine Birds | <i>Apus pacificus</i> | Fork-tailed Swift | Wide range of habitats. Forests, open areas, wetlands. | Brinkworth, Bulloch Swamp, Castine, Greenwald, Hennings, The Gums, Tomich North, Miltana, Sim | No | Protected Migratory Species | | |
| GTL | Migratory Marine Birds | <i>Ardea alba</i> | Great Egret | Large expanding range. Can be found in wetlands, dams, river, creeks, drains including the Eumeralla River and Glenelg River. | Brinkworth, Bulloch Swamp, Castine, Greenwald, The Gums, Tomich North, Miltana, Baloo, Dyer, McCaskill, Purcel, Runnymede, Sobey, Waverly West | No | | | |
| GTL | Migratory Marine Birds | <i>Aythya australis</i> | Hardhead | Water body | Dyer, Kalambra, Kruger, Sutherland, Shider, Sproal, Sproal, Shalders | No | | Vulnerable | |
| GTL | Migratory Marine Birds | <i>Ardea intermedia plumifera</i> | Plumed Egret | Not known | | | | Critically Endangered | Rare |
| GTL | Migratory Marine Birds | <i>Ardea intermedia</i> | Intermediate Egret | Water body | Sobey, Sutherland, Sproal | No | | | |
| GTL | Migratory Marine Birds | <i>Egretta garzetta nigripes</i> | Little Egret | Wetland | Shalders | No | | Endangered | Rare |
| GTL | Migratory Marine Birds | <i>Anseranas semipalmata</i> | Magpie Goose | Wetlands | Bulloch Swamp, Castine, Shider, Shalders | No | | Vulnerable | Endangered |
| GTL | Migratory Marine Birds | <i>Biziura lobata menziesi</i> | Musk Duck | Not known | | | | | Rare |
| GTL | Migratory Marine Birds | <i>Biziura lobata</i> | Musk Duck | Water body | Dyer, Kalambra, Kruger, Sutherland, Shider, Sproal, Manly, Shalders | No | | Vulnerable | |

| FMU | Lifeform | Scientific Name | Common Name | Habitat requirements | Potential properties based on habitat requirements | Identified in FMU? | EPBC Act | Vic FFG Threatened List | SA NPW Act |
|-----|-------------------------------|---|-----------------------------------|--|---|--------------------|--|-------------------------|------------|
| GTL | Migratory Marine Birds | <i>Rostratula benghalensis</i> | Painted Snipe | Reedy swamps/wetlands, usually in lowlands. | Bulloch Swamp, Castine, | No | | | |
| GTL | Migratory Marine Birds | <i>Merops ornatus</i> | Rainbow Bee-eater | Sub-optimal foraging and transient, plantation not suitable for breeding. May be present in remnant native woodland and plantation near water. | Brinkworth, Bulloch Swamp, Castine, Hennings, The Gums, Tomich North, Miltana, Sim, Dyer, McCaskill, Phoinies, Purcell, Runnymede, Waverly West | No | | | |
| GTL | Migratory Marine Birds | <i>Calidris alba alba</i> | Sanderling | Not known | | | | | Rare |
| GTL | Migratory Marine Birds | <i>Calidris alba</i> | Sanderling | Coastal, wetlands | Shalders | No | Protected Migratory Species | | |
| GTL | Migratory Terrestrial Species | <i>Myiagra cyanoleuca</i> | Satin Flycatcher | Tall forests and wetter habitats | Brinkworth, Bulloch Swamp, Castine, Greenwald, Hennings, The Gums, Tomich North, Miltana, Sim, Purcell | No | Protected Migratory Species | | Endangered |
| GTL | Migratory Terrestrial Species | <i>Hirundapus caudacutus caudacutus</i> | Eastern White-throated needletail | Not known | | | | | Vulnerable |
| GTL | Migratory Terrestrial Species | <i>Hirundapus caudacutus</i> | White-throated Needletail | Wide range of habitats. Forests, open areas, wetlands. | All properties | No | Protected Migratory Species (Vulnerable) | Vulnerable | |
| GTL | Migratory Terrestrial Species | <i>Motacilla flava</i> | Yellow Wagtail | Marshes, meadows, riverbanks, forests. Wide range. | All properties | No | Protected Migratory Species | | |
| GTL | Migratory Wetland Birds | <i>Tringa nebularia</i> | Common Greenshank | Wetland habitats / marshy areas | Tomich North, Miltana, Sutherland, Shalders | No | Protected Migratory Species | Endangered | |
| GTL | Migratory Wetland Birds | <i>Actitis hypoleucos</i> | Common Sandpiper | Wetlands, shallow rivers, creeks, drains | Brinkworth, Bulloch Swamp, Greenwald, Castine, The Gums, Tomich North, Miltana, Shalders | No | Protected Migratory Species | Vulnerable | Rare |
| GTL | Migratory Wetland Birds | <i>Numenius madagascariensis</i> | (Far) Eastern Curlew | Wetlands | Bulloch Swamp, Castine, Greenwald, Tomich North, Miltana | No | Critically Endangered, Protected Migratory Species | | Vulnerable |

| FMU | Lifform | Scientific Name | Common Name | Habitat requirements | Potential properties based on habitat requirements | Identified in FMU? | EPBC Act | Vic FFG Threatened List | SA NPW Act |
|-----|-------------------------|--|-----------------------------|---|---|---------------------|-----------------------------|-------------------------|------------|
| GTL | Migratory Wetland Birds | <i>Gallinago hardwickii</i> | Latham's Snipe | Wetlands, dams, rivers | Bulloch Swamp, Castine, Greenwald, The Gums, Tomich North, Miltana, Sim, Baloo, Dyer, McCaskill, Purcell, Riordan, Sobey, Kruger, Sutherland, Sproal, Manly, Shalders | No | Protected Migratory Species | | Rare |
| GTL | Migratory Wetland Birds | <i>Pandion haliaetus</i> | Osprey | Can be found in a variety of habitats. | The Gums, Tomich North, Miltana, Greenwald, Sim | No | Protected Migratory Species | | |
| GTL | Migratory Wetland Birds | <i>Calidris melanotos</i> | Pectoral Sandpiper | Wetlands & dams | Bulloch Swamp, Castine, Greenwald, Hennings, Tomich North, Miltana, Sim | No | Protected Migratory Species | | Rare |
| GTL | Migratory Wetland Birds | <i>Calidris acuminata</i> | Sharp-tailed Sandpiper | Grassy edges of shallow wetlands | Bulloch Swamp, Greenwald, Castine | No | Protected Migratory Species | | |
| GTL | Migratory Wetland Birds | <i>Tringa glareola</i> | Wood Sandpiper | Wetland areas | Sobey, Sutherland | No | Protected Migratory Species | Endangered | Rare |
| GTL | Plant | <i>Lachnagrostis adamsonii</i> | Adamson's Blown-grass | Widespread across the Victorian Volcanic Plan. Usually in swamps and depressions. | Bulloch Swamp, Castine, Hennings, Sim | No | Endangered | Endangered | |
| GTL | Plant | <i>Cassinia tegulata</i> | Avenue Cassinia | Remnant vegetation | Tomich North | No | Critically Endangered | Critically Endangered | Endangered |
| GTL | Plant | <i>Dianella sp. aff. revoluta (Minjah)</i> | Basalt Flax-lily | Grassland / Woodland | Shider | No | | | |
| GTL | Plant | <i>Lepidium hyssopifolium</i> | Basalt Peppercross | Grassland / Woodland | Shider | No | Endangered | Endangered | |
| GTL | Plant | <i>Dipodium campanulatum</i> | Bell Flower Hyacinth Orchid | Native remnant vegetation | Tomich North | No | Endangered | Endangered | Vulnerable |
| GTL | Plant | <i>Thelymitra benthamiana</i> | Blotched Sun-orchid | Grassland / Woodland | Sheehan | No | | Endangered | |
| GTL | Plant | <i>Lomandra glauca s.s.</i> | Blue Mat-rush | Grassland / Woodland | Kraft, Sheehan, Tarrone | No | | | |
| GTL | Plant | <i>Acacia exudans</i> | Casterton Wattle | Heathland / Woodland | Bulloch Swamp | Yes (Bulloch Swamp) | | Critically Endangered | |
| GTL | Plant | <i>Glycine latrobeana</i> | Clover Glycine | Mostly found in grassy woodland habitats, less often in dry forests, and rarely in heathland. | Brinkworth, Bulloch Swamp, Castine, Greenwald, Hennings, Tomich North, Miltana, Vandriel, Shider, Kraft, Tarrone | No | Vulnerable | Vulnerable | Vulnerable |

| FMU | Lifeform | Scientific Name | Common Name | Habitat requirements | Potential properties based on habitat requirements | Identified in FMU? | EPBC Act | Vic FFG Threatened List | SA NPW Act |
|-----|----------|------------------------------|------------------------|---|--|--------------------|------------|-------------------------|------------|
| GTL | Plant | <i>Caladenia colorata</i> | Coloured Spider-orchid | Found in sand or sandy loams in woodland and mallee habitats (pink gum, bluegum, golden wattle) | Brinkworth, Tomich North, Miltana | No | Endangered | Critically Endangered | Endangered |
| GTL | Plant | <i>Carex tasmanica</i> | Curly Sedge | Grassland / Woodland | Kruger, Sutherland, Terrence, Harrip, Sproal | No | | Endangered | |
| GTL | Plant | <i>Prasophyllum spicatum</i> | Dense Leek-orchid | Coastland, Hinterland heath, and heathy woodland | Shider, Kraft, Tarrone | No | Vulnerable | Critically Endangered | Endangered |
| GTL | Plant | <i>Austrostipa puberula</i> | Fine-hairy Spear-grass | Grassland / Woodland | Shider | No | | Endangered | |

| FMU | Lifeform | Scientific Name | Common Name | Habitat requirements | Potential properties based on habitat requirements | Identified in FMU? | EPBC Act | Vic FFG Threatened List | SA NPW Act |
|-----|----------|---|---|---|---|--------------------|------------|-------------------------|------------|
| GTL | Plant | <i>Prasophyllum diversiflorum</i> | Gorae Leek-orchid | Along watercourses and around swamps on heavy black soils that are seasonally inundated. | The Gums, Sim, Sheehan | No | Endangered | Critically Endangered | |
| GTL | Plant | EPBC & Vic FFG Act: <i>Caladenia tensa</i> SA NPW Act: <i>Caladenia dilatata</i> | Greencomb Spider-orchid | Found in sand or sandy loams | Brinkworth, Bulloch Swamp, Castine, Hennings, Tomich North, Miltana | Yes (Brinkworth) | Endangered | Endangered | |
| GTL | Plant | <i>Pterostylis chlorogramma</i> | Green-striped Greenhood | Heathy and shrubby forests | Brinkworth, Bulloch Swamp, Greenwald, Castine | No | Vulnerable | Endangered | Endangered |
| GTL | Plant | <i>Microlepidium pilosulum</i> | Hairy Shepherd's Purse | Grassland / Woodland | Shalders | No | | Critically Endangered | Rare |
| GTL | Plant | <i>Platylobium triangulare</i> | Ivy Flat-pea | Grassland / Woodland | Sheehan | No | | | |
| GTL | Plant | <i>Lemna trisulca</i> | Ivy-leaf Duckweed | Wetlands | | No | | | |
| GTL | Plant | <i>Leptorhynchos elongatus</i> | Lanky Buttons | Grassland / Woodland | Shider | No | | Endangered | Endangered |
| GTL | Plant | <i>Pterostylis cucullata</i> | Leafy Greenhood | Tea-tree vegetation communities. | | No | Vulnerable | | |
| GTL | Plant | <i>Pterostylis cucullata cucullata</i> | Leafy Greenhood | Not known | | No | | Endangered | Endangered |
| GTL | Plant | <i>Prasophyllum frenchii</i> | Maroon Leek-orchid | Grassland and grassy woodlands on sandy to black clay loams that are damp but well drained. | Shider | No | Endangered | Endangered | Endangered |
| GTL | Plant | <i>Thelymitra epipactoides</i> | Metallic Sun-orchid | Open woodland or mallee habitats dominated by heath species in the understorey. | Brinkworth, Bulloch Swamp, Greenwald, Castine | No | Endangered | Endangered | Endangered |
| GTL | Plant | <i>Coronidium gunnianum</i> | Pale Swamp Everlasting | Wetlands including sedge swamps and shallow freshwater marshes | Carroll | No | | Critically Endangered | Endangered |
| GTL | Plant | <i>Xanthosia leiophylla</i> | Parsley Xanthosia | Grassland / Woodland | Sheehan | No | | Critically Endangered | |
| GTL | Plant | <i>Lachnagrostis punicea</i> subsp. <i>Filifolia</i> | Purple Blown-grass, Narrow leaf Blown Grass | Wet marshes, saline swamps and depressions | Shider, Shalders | No | | Endangered | Rare |
| GTL | Plant | <i>Bossiaea riparia</i> | River Leafless Bossiaea | Grassland / Riparian | Kalambra | No | | Endangered | |

| FMU | Lifeform | Scientific Name | Common Name | Habitat requirements | Potential properties based on habitat requirements | Identified in FMU? | EPBC Act | Vic FFG Threatened List | SA NPW Act |
|-----|----------|---|---------------------------|--|---|---------------------|------------|-------------------------|------------|
| GTL | Plant | <i>Amphibromus fluitans</i> | River Swamp Wallaby-grass | Natural and man made water-bodies including swamps, lagoon, billabongs and dams. | Greenwald | No | Vulnerable | | |
| GTL | Plant | <i>Ixodia achillaeoides</i> subsp. <i>Arenicola</i> | Sand Ixodia | Sand Ixodia occurs on windswept, exposed limestone headlands in low coastal shrublands, often on steep slopes. | Greenwald | No | Vulnerable | | Endangered |
| GTL | Plant | <i>Poa fax</i> | Scaly Poa | Grassland / Woodland | Shalders | No | | Endangered | Rare |
| GTL | Plant | <i>Cardamine tenuifolia</i> | Slender Bitter-cress | Grassland / Woodland | Kraft, Tarrone, Sheehan | No | | | Rare |
| GTL | Plant | <i>Chorizandra australis</i> | Southern Bristle-sedge | Wet areas | Shider | No | | | Endangered |
| GTL | Plant | <i>Thelymitra matthewsii</i> | Spiral Sun-orchid | Heathly open woodlands and forests, on well-drained sand, gravel and clay loam soils. Favours areas that have been disturbed (road verges, tracks) | Brinkworth, Bulloch Swamp, Castine, Hennings, Tomich North, Miltana | No | Vulnerable | Endangered | Endangered |
| GTL | Plant | <i>Diuris palustris</i> | Swamp Diuris | Coastal areas, open eucalyptus forest, sedge grassland and healthland with tea-tree and paperpark | Shider | No | | Endangered | |
| GTL | Plant | <i>Xerochrysum palustre</i> | Swamp Everlasting | Wetlands including sedge swamps and shallow freshwater marshes | Bulloch Swamp, Castine | No | Vulnerable | Critically Endangered | |
| GTL | Plant | <i>Senecio psilocarpus</i> | Swamp Fireweed | High quality herb-rich woodlands | Bulloch Swamp, Castine | No | Vulnerable | | |
| GTL | Plant | <i>Dianella callicarpa</i> | Swamp Flax-lily | Grassland / Woodland | Shider, Kraft, Pettit, Manly, Sheehan, Carroll, Basil, Tarrone | No | | Endangered | Endangered |
| GTL | Plant | <i>Galium curvihirtum</i> | Tight Bedstraw | Woodland | Brinkworth | Yes (Brinkworth) | | Vulnerable | Rare |
| GTL | Plant | <i>Dodonea procumbens</i> | Trailing Hop-bush | Native remnant vegetation | Brinkworth, Bulloch Swamp, Castine, Hennings, Tomich North, Miltana | Yes (Bulloch Swamp) | Vulnerable | | Vulnerable |

| FMU | Lifeform | Scientific Name | Common Name | Habitat requirements | Potential properties based on habitat requirements | Identified in FMU? | EPBC Act | Vic FFG Threatened List | SA NPW Act |
|-----|----------|---|------------------------|---|--|--------------------|------------|-------------------------|------------|
| GTL | Plant | <i>Eucalyptus falciformis</i> | Western Peppermint | Areas of remnant vegetation | Runnymede, Sheehan | No | | Vulnerable | |
| GTL | Plant | <i>Leucochrysum albicans</i> subsp. <i>tricolor</i> | White Sunray | Grassland / Woodland | Sproal | No | Endangered | Endangered | |
| GTL | Reptile | <i>Pseudemoia rawlinsoni</i> | Glossy Grass Skink | Grassland | | No | | Critically Endangered | Vulnerable |
| GTL | Reptile | <i>Varanus varius</i> | Lace Monitor | Woodlands | Sheehan | No | | Endangered | Rare |
| GTL | Reptile | <i>Delma impar</i> | Striped Legless Lizard | Areas of remnant vegetation with good cover at ground level | Brinkworth, Bulloch Swamp, Greenwald, Castine, Runnymede, Kalambra | No | Vulnerable | Endangered | Endangered |
| GTL | Reptile | <i>Pseudemoia pagenstecheri</i> (Volcanic Plains) | Tussock Skink | Grassland | Sheehan | No | | Endangered | Rare |

Appendix 2b: Rare, threatened and endangered flora and fauna species likely to use properties in the WAL FMU

| FMU | Lifeform | Scientific Name | Common Name | Habitat requirements | Potential properties based on habitat requirements | Identified in FMU? | EPBC Act | WA BC Act Threatened and Priority List | WA Rare Flora/Fauna Notice |
|-----|----------|-------------------------------------|----------------------------------|--|--|--------------------|-----------------------|--|----------------------------|
| WA | Bird | <i>Calidris ferruginea</i> | Curlew Sandpiper | Wetlands & dams. | Bramwell, Cheynes, Davidson, Lucknow, Maringa West | No | Critically Endangered | Critically Endangered | Critically Endangered |
| WA | Bird | <i>Calyptorhynchus banksii naso</i> | Forest Red-tailed Black-Cockatoo | Eucalypt forests. Feeds on seding Marri, Jarrah, Blackbutt, Karri, Sheoak and Snottygobble. It nests in hollows of Marri, Jarrah, Wandoo, Karri and Bullich trees. | Bramwell, Cheynes, Davidson, Lucknow, Maringa West | No | Vulnerable | Vulnerable | Vulnerable |
| WA | Bird | <i>Calyptorhynchus baudinii</i> | Baudin's Cockatoo | Feeds in eucalypt forests of Jarrah, Marri, and Karri, and in Banksia and Hakea. It breeds in hollows of Karri, Marri, and Wandoo trees. | Bramwell, Cheynes, Davidson, Lucknow, Maringa West | No | Endangered | Endangered | Endangered |
| WA | Bird | <i>Calyptorhynchus latirostris</i> | Carnaby's Cockatoo | Feeds in kwongan heath plants such as Banksias, Dryandra, Hakea, Grevillea, and Marri seeds. Breeds in eucalypt woodland comprising Salmon Gum or Wandoo. | Bramwell, Cheynes, Davidson, Lucknow, Maringa West | No | Endangered | Endangered | Endangered |

| FMU | Lifeform | Scientific Name | Common Name | Habitat requirements | Potential properties based on habitat requirements | Identified in FMU? | EPBC Act | WA BC Act Threatened and Priority List | WA Rare Flora/Fauna Notice |
|-----|----------|-------------------------------|---------------------|--|--|--------------------|------------|--|----------------------------|
| WA | Bird | <i>Dasyornis longirostris</i> | Western Bristlebird | Coastal heathlands with diverse range of dense low growing shrubs. | Bramwell, Cheynes, Davidson, Maringa West | No | Vulnerable | Listed | Vulnerable |

| FMU | Lifeform | Scientific Name | Common Name | Habitat requirements | Potential properties based on habitat requirements | Identified in FMU? | EPBC Act | WA BC Act Threatened and Priority List | WA Rare Flora/Fauna Notice |
|-----|------------------------|-----------------------------------|--|---|--|--------------------|-----------------------------|--|-----------------------------|
| WA | Bird | <i>Atrichornis clamosus</i> | Noisy Scrub-bird | Dense, long-unburnt vegetation of low forest and scrub but rarely in heath. This vegetation community commonly occurs in gullies and drainage lines of hills, granite mountains, lowland areas, overgrown swamps, lake margins, and beside streams. | Cheyne | No | Vulnerable | Listed | Endangered |
| WA | Ecological community | | Proteaceae Dominated Kwongan Shrublands of the Southeast Coastal Floristic Province of Western Australia | NA | Bramwell, Cheynes, Davidson | No | Endangered | Poorly known ecological community | |
| WA | Mammal | <i>Dasyurus geoffroii</i> | Western Quoll | Most abundant in areas of contiguous Jarrah forest. | Bramwell, Cheynes, Davidson, Lucknow, Maringa West | No | Vulnerable | Vulnerable | Vulnerable |
| WA | Mammal | <i>Parantechinus apicalis</i> | Dibbler | Occurs in mallee-heath with some Banksias or Dryandras present. Vegetation needs to be at least 10 years since fire, and 50%-100% cover at less than 1m height. | Bramwell, Cheynes, Davidson, Maringa West | No | Endangered | Endangered | Endangered |
| WA | Mammal | <i>Pseudocheirus occidentalis</i> | Western Ringtail Possum | Arboreal habitats of peppermint woodlands and eucalypt forests. | Bramwell, Cheynes, Davidson, Lucknow, Maringa West | No | Critically Endangered | Critically Endangered | Critically Endangered |
| WA | Mammal | <i>Setonix brachyurus</i> | Quokka | Dense vegetation near swamps. Shade and moist environments. | Cheyne | No | Vulnerable | Vulnerable | Vulnerable |
| WA | Migratory Marine Birds | <i>Apus pacificus</i> | Fork-tailed Swift | Wide range of habitats. Forests, open areas, wetlands. | Bramwell, Cheynes, Davidson, Lucknow, Maringa West | No | Protected Migratory Species | Protected Migratory Species | Protected Migratory Species |

| FMU | Lifeform | Scientific Name | Common Name | Habitat requirements | Potential properties based on habitat requirements | Identified in FMU? | EPBC Act | WA BC Act Threatened and Priority List | WA Rare Flora/Fauna Notice |
|-----|-------------------------------|---|--------------------------------|--|--|--------------------|---|--|---|
| WA | Migratory Terrestrial Species | <i>Motacilla cinerea</i> | Grey Wagtail | Usually found near fast-flowing streams in forested areas as well as lowland watercourses such as canals and rivers. Can be found in plantations, farmland, and even town centres. | Bramwell, Cheynes, Davidson, Lucknow, Maringa West | No | Protected Migratory Species | Protected Migratory Species | Protected Migratory Species |
| WA | Migratory Marine Birds | <i>Thinornis cucullatus cucullatus</i> | Hooded Plover | Near beaches and inland salt lakes. | Bramwell, Cheynes, Davidson, | No | Vulnerable | Priority (4) Near Threatened | |
| WA | Migratory Wetland Birds | <i>Tringa nebularia</i> | Common Greenshank | Wetland habitats / marshy areas. | Bramwell, Cheynes, Davidson, Maringa West | No | Protected Migratory Species | Protected Migratory Species | Protected Migratory Species |
| WA | Migratory Wetland Birds | <i>Actitis hypoleucos</i> | Common Sandpiper | Wetlands, shallow rivers, creeks, drains. | Bramwell, Cheynes, Davidson, Lucknow, Maringa West | No | Protected Migratory Species | Protected Migratory Species | Protected Migratory Species |
| WA | Bird | <i>Numenius madagascariensis</i> | Eastern Curlew | Wetlands. | Bramwell, Cheynes, Davidson, Lucknow, Maringa West | No | Critically Endangered | Listed | Vulnerable |
| WA | Bird | <i>Pezoporus flaviventris</i> | Western Ground Parrot | Wetlands. | Cheynes | No | Critically Endangered & Protected Migratory Species | Critically Endangered | Critically Endangered & Protected Migratory Species |
| WA | Bird | <i>Psophodes nigrogularis nigrogularis</i> | Western Heath Western Whipbird | Wetlands. | Cheynes | No | Endangered | Endangered | Endangered |
| WA | Migratory Wetland Birds | EPBC Act: <i>Pandion haliaetus</i> WA BC Act: <i>Pandion cristatus</i> | Osprey Eastern Osprey | Can be found in a variety of habitats. | Bramwell, Cheynes, Davidson, Lucknow, Maringa West | No | Protected Migratory Species | Protected Migratory Species | Protected Migratory Species |
| WA | Migratory Wetland Birds | <i>Calidris melanotos</i> | Pectoral Sandpiper | Wetlands & dams. | Bramwell, Cheynes, Davidson, Lucknow, Maringa West | No | Protected Migratory Species | Protected Migratory Species | Protected Migratory Species |
| WA | Migratory Wetland Birds | <i>Calidris acuminata</i> | Sharp-tailed Sandpiper | Grassy edges of shallow wetlands. | Bramwell, Cheynes, Davidson, | No | Protected Migratory Species | Protected Migratory Species | Protected Migratory Species |

| FMU | Lifeform | Scientific Name | Common Name | Habitat requirements | Potential properties based on habitat requirements | Identified in FMU? | EPBC Act | WA BC Act Threatened and Priority List | WA Rare Flora/Fauna Notice |
|-----|----------|-----------------------------|-------------------------|--|--|--------------------|------------|--|----------------------------|
| | | | | | Lucknow, Maringa West | | | | |
| WA | Plant | <i>Banksia brownii</i> | Brown's Banksia | Southern populations occur among low woodland of <i>E. marginata</i> (Jarrah) in shallow, nutrient-poor white or grey sand over laterite soils. | Bramwell, Cheynes, Davidson, Maringa West | No | Endangered | Critically Endangered | Critically Endangered |
| WA | Plant | <i>Banksia goodii</i> | Good's Banksia | Understorey species in Jarrah, Wandoo, and Karri forests. | Maringa West | No | Vulnerable | Vulnerable | Vulnerable |
| WA | Plant | <i>Banksia verticillata</i> | Granite Banksia | Grows on granite outcrops. | Cheyne | No | Vulnerable | Critically Endangered | Critically Endangered |
| WA | Plant | <i>Chordifex abortivus</i> | Manypeaks Rush | Known to occur mostly east of Albany in sand gravelly clay in heath or scrub with a sedge understorey. Associated with <i>Hakea cucullata</i> , <i>Banksia brownii</i> , <i>B. baxteri</i> , <i>B. coccinea</i> , <i>Melaleuca striata</i> , <i>Pericalymma ellipticum</i> , and <i>Dasypogon bromeliifolius</i> . | Bramwell, Cheynes, Davidson, | No | Endangered | Vulnerable | Vulnerable |
| WA | Plant | <i>Conostylis misera</i> | Grass Conostylis | North of Stirling Range to Narrikup and across to the South Stirling Area. Favours seasonally waterlogged flats of brown or grey sandy loam over clay duplex soils where it inhabits low woodland over heath or sedge, mallee heath and heath. | Bramwell, Cheynes, Davidson, Maringa West | No | Endangered | Vulnerable | Vulnerable |
| WA | Plant | <i>Darwinia collina</i> | Yellow Mountain Bell | Endemic to mountain summit areas of the Stirling Range where it grows on shallow siliceous soils over sandstone and shale, in dense heath and thicket. | Cheyne | No | Endangered | Critically Endangered | Critically Endangered |
| WA | Plant | <i>Darwinia oxylepis</i> | Gillam's Bell | Confined to gullies near the lower slopes of mountains in the Stirling Range National Park. The species grows in mallee heathland on acid, sandy, clay soil on rough, rocky ground in seasonally moist gullies. | Cheyne, Davidson | No | Endangered | Endangered | Endangered |
| WA | Plant | <i>Darwinia wittwerorum</i> | Wittwer's Mountain Bell | The habitat consists of open mallee over scrub in sandy clays | Davidson | No | Endangered | Endangered | Endangered |

| FMU | Lifeform | Scientific Name | Common Name | Habitat requirements | Potential properties based on habitat requirements | Identified in FMU? | EPBC Act | WA BC Act Threatened and Priority List | WA Rare Flora/Fauna Notice |
|-----|----------|--------------------------------|-------------------------|---|--|--------------------|-----------------------|--|----------------------------|
| | | | | over schist. It occurs in drainage lines from approximately 320 to 480 metres altitude. | | | | | |
| WA | Plant | <i>Daviesia obovata</i> | Paddle-leaf Daviesia | Mallee scrub in sandy clays. | Davidson | No | Endangered | Endangered | Endangered |
| WA | Plant | <i>Drakaea micrantha</i> | Dwarf Hammer-orchid | Grows in bare sand in woodlands. | Bramwell, Cheynes, Davidson, Maringa West | No | Vulnerable | Endangered | Endangered |
| WA | Plant | <i>Isopogon uncinatus</i> | Albany Cone Bush | Seasonally damp soil, shallow sandy-clay over granite, or gravelly soil from decomposed laterite over granite, in saddles between summit rocks. Associated vegetation is heath. | Bramwell, Cheynes, Davidson, Maringa West | No | Endangered | Critically Endangered | Critically Endangered |
| WA | Plant | <i>Sphenotoma drummondii</i> | Mountain Paper-heath | Mountain peaks. Shallow soil over granite, quartzite, or schist. Commonly located on sheer cliff faces or over-hangs. Associated with heath vegetation. | Bramwell, Cheynes, Davidson, Maringa West | No | Endangered | Endangered | Endangered |
| WA | Plant | <i>Kennedia glabrata</i> | Northcliffe Kennedia | Soil pockets, sandy soils. Granite outcrops. | Cheynes | No | Vulnerable | Vulnerable | Vulnerable |
| WA | Plant | <i>Commersonia erythrogyna</i> | Trigwell's Rulingia | Only occurs in WA in the IBRA Bioregion Jarrah Forest. | Lucknow | No | Endangered | Critically Endangered | Critically Endangered |
| WA | Plant | <i>Diuris micrantha</i> | Dwarf Bee-orchid | Dark, grey to blackish, sandy clay-loam substrates in winter wet depressions or swamps. The bases of the flowering plants are often covered with shallow water. | Lucknow | No | Vulnerable | Vulnerable | Vulnerable |
| WA | Plant | <i>Verticordia apecta</i> | Hay River Featherflower | Grows in sandy clay with loam and broken granite on a west-facing slope in Eucalyptus wandoo low open woodland and low open shrub land. | Lucknow | No | Critically Endangered | Critically Endangered | Critically Endangered |