



# Submission to SCS Global regarding Sustainable Timber Tasmania's application for Forest Stewardship Council forest management certification

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# **Executive Summary**

This submission has been prepared on behalf of the Bob Brown Foundation and The Wilderness Society. The submission is to inform SCS Global auditors of elements of Sustainable Timber Tasmania's (STT's) forest management practices that we believe are critically non-conformant with The FSC National Forest Stewardship Standard of Australia FSC-STD-AUS-01-2018 EN.

This submission compliments our previous submission dated April 30<sup>th</sup> that identified a number of high level concerns our organisations share about fundamental issues with STT's HCV assessment and management that we believe will make it hard for SCS to make a credible assessment.

The submission provides detailed analysis of STT's assessment and management of HCV 1.1, 1.4 and 3.3 and concludes that management of these values is inconsistent with Principle 9 and 6 and several of their associated indicators.

STT's approach to stakeholder engagement and the requirements to provide relevant elements of their management plan is assessed and non conformance to indicators under principle 7 is discussed.

Extensive field work and desktop analysis was undertaken to inform this submission and provide SCS with a large body of examples of logging operations that are impacting on HCVs and failing to meet the maintain and enhance requirements of the FSC standard. Several coupe level examples are provided within the report itself and others are listed in appendices.

This submission largely focusses on the management of habitat for the Critically Endangered swift parrot (HCV 1.1 and 1.4) and logging of old growth forests (HCV 3.3). Based on analysis of STT HCV assessment and management plan and extensive desktop analysis and field visits this submission concludes that STT are not ready to demonstrate conformance to the standards the FSC system requires.

An introduction that outlines the major problems with STT's management of HCVs is given at the beginning of each of the major sections (detailing HCVs 1 and 3), these summaries list the relevant indicators that we urge SCS Global to asses STT for compliance to.

#### 1 -Introduction

Our organisations have a long history of advocating for the protection of high conservation values in Tasmania's forests.

The Wilderness Society (TWS) has 40,000 members and 250,000 supporters across Australia, was founded in Tasmania in 1976, and has advocated for the protection of Tasmania's forests for four decades. TWS has been a key participant in FSC in Australia, including as a stakeholder in significant certification assessments and representation on the development group for the Australian FSC National Standard.

Bob Brown Foundation is a non-profit environmental organisation working to protect nature in Australia. The foundation was established by former Tasmanian Senator and leader of the Australian Greens, Bob Brown.

This submission contains our organisations' views on the compliance of Forestry Tasmania's forest management activities with the requirements of The FSC National Forest Stewardship Standard of Australia FSC-STD-AUS-01-2018 EN. These views are based Sustainable Timber Tasmania's publically available Forest Management Plan, High Conservation Value (HCV) Assessment Management Plan, and associated documentation.

# 2 – Threatened and migratory species (HCV 1.1 & 1.4)

HCV 1.1	Areas that contain significant concentrations* of rare and threatened species* or that contain habitat* critical* to the survival and long-term viability of these species.
HCV 1.4	Areas with mapped significant seasonal concentrations* of species.

### 2.1 – STT assessment and management of HCV 1

Several fundamental flaws exist in STT's assessment and proposed management for HCV 1.1 and 1.4.

- Failure to manage for HCVs at the coupe level and demonstrate adherence to maintain and enhance requirements (9.2.2) and failure to implement required protection measures proportionate to the scale, intensity and risk of management activities and to the conservation status and ecological requirements of the rare and threatened species (6.4.3) (6.4.4)
- Failure to adapt management to rectify insufficient strategies and actions to ensure maintenance and enhancement of HCVs, specifically exemplified by continued recent logging of high quality nesting and foraging habitat for swift parrot (9.4.4) (6.4.3) (6.2.1)
- Failure to release a swift parrot management plan. Until STT's modelled habitat mapping
  and associated management policies (that are currently still under development) are
  developed and implemented there are no clear management actions to assess for
  compliance to the FSC standard (9.3.2) (6.4.3) (6.4.4) (6.4.2)
- Failure to assess recent impacts of fire on HCV 1.1, particularly impacts on swift parrot
  habitat (9.4.3), (8.2.2 with criterion 10.9 from Annex F), (5.2.1) and incorporate assessment
  into management plan with revised management strategies and actions appropriate to scale
  and intensity of assessed fire impacts.
- Failure of management planning to identify habitat features and specific prescriptions and guidelines for maintaining habitat features (6.6.2) (6.6.1)
- Failure to apply a precautionary approach to operations through implementation of systematic procedures at the coupe level, to identify nesting habitat for swift parrot and masked owl (9.3.2) (6.2.1)

#### 2.2 – Swift parrot

The swift parrot (*Lathamus discolor*) is listed as Critically Endangered<sup>1</sup> and faces a high risk of extinction in the wild. Swift parrot habitat falls into HCV 1.1 and HCV 1.4 categories. The Threatened Species Scientific Committee established under the Commonwealth Environment Protection and Biodiversity Conservation Act (EPBC Act) has produced guidelines for assessing native species according to the EPBC Act, see Table 1.

#### 2.2.1 STT assessment and management

There are several major issues with STT's assessment and proposed management for HCV 1.1.

The swift parrot is an obligate migrant breeding only in Tasmania<sup>2</sup>. It is estimated that less than 2000 birds remain in the wild<sup>3</sup>. Breeding success of swift parrots depends on the availability of both suitable foraging and breeding habitat<sup>45</sup>. The specific location of breeding habitat changes each year depending on the configuration on of Eucalyptus flowering<sup>6</sup>. Flowering trees create foraging habitat, but to breed successfully, swift parrots must find flowering trees in close proximity (within 10kms)<sup>7</sup> to suitable breeding habitat (i.e. hollow bearing forest. Native forest logging has been identified as a major threatening process for swift parrots because it reduces land cover of both nesting and foraging habitat<sup>8</sup>. Management of swift parrot habitat is highly contentious<sup>9</sup>.

<sup>&</sup>lt;sup>1</sup> Threatened Species Scientific Committee established under the Environment Protection and Biodiversity Conservation Act 1999, *Lathamus discolor* (swift parrot) Conservation Advice, 2016 http://www.environment.gov.au/biodiversity/threatened/species/pubs/744-conservation-advice-05052016.pdf

<sup>&</sup>lt;sup>2</sup> Saunders, D, 2008. Ecology and conservation of the swift parrot – an endangered austral migrant, A thesis submitted for the degree of Doctor of Philosophy at The Australian National University, The Fenner School of Environment and Society

<sup>&</sup>lt;sup>3</sup> Difficult Bird Research Group, Swift Parrot page on website, accessed May 12<sup>th</sup> 2019 https://www.difficultbirds.com/swift-parrot

<sup>&</sup>lt;sup>4</sup> Stojanovic, D., Webb, M.H., Koch, A.J., Cunningham, D.R., Henison, R., 2014, Validation of a landscape-scale planning tool for cavity-dependent wildlife, Fenner School of Environment and Society, Australian National University, Canberra, ACT 0200, Australia

<sup>&</sup>lt;sup>5</sup> Webb, M. H. *et al.* 2014. Location matters: Using spatially explicit occupancy models to predict the distribution of the highly mobile, endangered swift parrot. *Biological Conservation* 176: 99-108.

<sup>&</sup>lt;sup>6</sup> ibid.

<sup>&</sup>lt;sup>7</sup> ibic

<sup>&</sup>lt;sup>8</sup> Forest Practices Authority, 2010 Interim Species Habitat Planning Guideline for the conservation management of *Lathamus discolor* (Swift Parrot) in areas regulated under the Tasmanian Forest Practices System. Internal report to the Forest Practices Authority, Hobart, Tasmania

<sup>&</sup>lt;sup>9</sup> Allchin, R., Kirkpatrick, J., Kriwoken, L., 2013, On Not Protecting the Parrot: Impact of Conservation and Planning Legislation on an Endangered Species in Tasmania, *Journal of International Wildlife Law & Policy*, 16:1, 81-104

TABLE 1. EPBC CRITERIA FOR LISTING THREATENED SPECIES.

Criterion		Critically Endangered	Endangered	Vulnerable		
1.	It has undergone, is suspected to have undergone or is likely to undergo in the immediate future:	a <u>very severe</u> reduction in numbers	a <u>severe</u> reduction in numbers	a <u>substantial</u> reduction in numbers		
2.	Its geographic distribution is precarious for the survival of the species and is:	very restricted	restricted	limited		
3.	The estimated total number of mature individuals is:	very low	tow	limited		
	and either of (a) or (b) is true:					
	(a) evidence suggests that the number will continue to decline at:	a <u>very high</u> rate	a <u>high</u> rate	a <u>substantial</u> rate		
	(b) the number is likely to continue to decline and its geographic distribution is	precarious for its survival	precarious for its survival	precarious for its survival		
4.	The estimated total number of mature individuals is:	extremely low	very low	low		
5.	The probability of its extinction in the wild is at least	50% in the Immediate future	20% in the near future	10% in the medium- term future		

#### 2.2.2 Significant and seasonal concentrations of swift parrots

The Critically Endangered status of the swift parrot makes any suitable habitat (foraging habitat in close enough proximity to nesting habitat) critical to the survival and long-term viability of the species. Given the swift parrot is Critically Endangered and faces a 50% chance of extinction in the immediate future, any forest that is used by the species is an area that contains a significant concentration.

The swift parrot has particularly specific habitat requirements that determine where it occurs in the landscape in any given year. These are the availability of nesting habitat in close proximity to foraging habitat (flowering blue gum and black gum). Several areas of PTPZ land within STT's FMU support significant seasonal concentrations of swift parrots in any given year.

It is important to note that relative availability of foraging and nesting habitats varies each year depending on flowering patterns and conditions. In many years in areas where flowering conditions are optimal and nesting habitat is present, all available habitat is occupied<sup>10</sup>.

<sup>&</sup>lt;sup>10</sup> Webb,M.H.,Holdsworth,M.C.,and Webb,J.(2012).Nesting requirements of the endangered swift parrot (Lathamus discolor). Emu 112, 181–188. doi:10.1071/MU11014

This is particularly important to consider for management of swift parrot as all potential nesting and foraging habitat is potentially habitat that is critical to the survival of the species.

Depending on where flowering occurs each year little nesting or foraging habitat occurs on reserved land<sup>11</sup>, this means in some years the majority of the global population may be nesting and feeding within forests on PTPZ land that are threatened by STT logging operations.

#### 2.2.3 Sugar glider predation

Predation by invasive sugar gliders (*Petaurus breviceps*) has recently been identified as a major threatening process for swift parrots in their Tasmanian breeding range<sup>12</sup>. Stojanovic *et al.* (2014) found that sugar gliders are the principle cause of swift parrot breeding failure on mainland Tasmania. That study monitored swift parrot nest survival over three consecutive breeding seasons at seven sites across the species range, including several nests in the Southern Forests<sup>13</sup>. Only 17% of nesting attempts on mainland Tasmania were successful and most cases (83.3%) of glider predation resulted in the death of the adult female parrot<sup>14</sup>.

Management strategies need to consider this newly discovered threatening process. Particularly how the rate of sugar glider predation on nests decreases with increased mature forest<sup>15</sup>. Intact, undisturbed and continuous forest cover reduces the risk of glider predation on swift parrot nests<sup>16</sup>. At swift parrot nesting sites where mature forest cover was low at the landscape scale, 100% of nesting attempts failed due to glider predation<sup>17</sup>. Given the relationship between loss of mature forest and sugar glider predation, partial logging of mature forest in one area will degrade the quality of nearby habitat in retained areas.

This has very important implications for STT's partial harvesting systems it proposes to employ in old growth forests. The use of aggregated retention, retention of streamside reserves and wildlife habitat strips/clumps is unlikely to effectively maintain swift parrot habitat, and may in fact create areas of habitat where predation risk is exacerbated. When forest cover within 5 km of nesting sites is reduced, swift parrot breeding success and survival are substantially reduced.

<sup>&</sup>lt;sup>11</sup> Webb M. H., Stojanovic D. & Heinsohn R. 2018. Policy failure and conservation paralysis for the Critically Endangered swift parrot. *Pacific Conservation Biology*.

<sup>&</sup>lt;sup>12</sup> Stojanovic D., Webb M., Alderman R., Porfirio L. & Heinsohn R. (2014) Discovery of a novel predator reveals extreme but highly variable mortality for an endangered bird. *Diversity and Distributions* 20, 1200-7

<sup>13</sup> ibid.

<sup>&</sup>lt;sup>14</sup> ibid.

<sup>15</sup> ibid.

<sup>16</sup> ibid.

<sup>&</sup>lt;sup>17</sup> ibid.

<sup>18</sup> ibid.

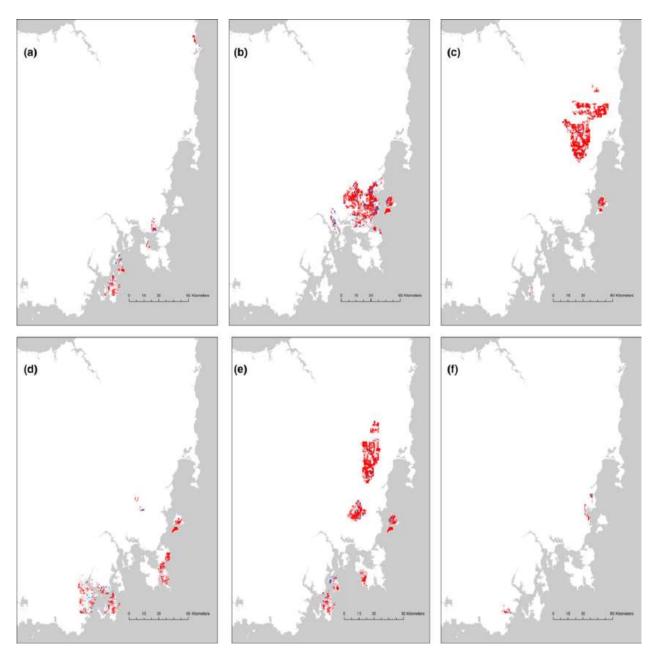


FIGURE 1: LOCATION AND AREA OF HABITAT OCCUPIED BY BREEDING SWIFT PARROTS BASED ON OCCUPANCY MODELS (RED = NESTING HABITAT, BLUE = FORAGING HABITAT) IN EASTERN TASMANIA, AUSTRALIA IN (A) 2009, (B) 2010, (C) 2011, (D) 2012, (E) 2013 AND (F) 2014. THE LOCATION OF NESTING BY THE SWIFT PARROT POPULATION VARIES ANNUALLY DEPENDING ON WHERE FOOD IS AVAILABLE, AND <30% OF THE SWIFT PARROT POPULATION SETTLES TO BREED ON PREDATOR-FREE ISLANDS IN ANY GIVEN YEAR. REPRODUCED WITH PERMISSION FROM WEBB ET AL. (2017).

Refer to Map 6 for percentage of mature habitat within 5kms of case study coupe BB025A.

#### 2.2.4 Policy failure and the Swift Parrot

Management of Swift Parrot habitat is highly contested. In 2013 Allchin et al. highlighted counterproductive regulatory performance in the management of swift parrot habitat and a 'deep-seated reluctance, at all levels of government, to prevent habitat loss, even when there are obvious alternatives to destroying it.' <sup>19</sup>

In 2018 Webb et al. published the paper 'Policy failure and conservation paralysis for the Critically Endangered swift parrot' summarising the policy and management failings that allow swift parrot breeding habitat to continue to be logged in the context of extensive evidence that the cessation of logging in swift parrot breeding habitat in Tasmania is urgently required to secure the species.20

An excerpt from that paper specifically addressing management and policy failure in the context of STT's application for FSC certification is presented in Box 1. We strongly encourage SCS Global read the paper in full. The paper can be accessed here.

2.2.5 Failure to manage for HCVs at coupe / stand level and adhere to maintain and enhance requirements

STT provides no specific detail of any changed management regimes within HCV 1 areas or additional protection zones to better protect, maintain and enhance HCV 1. STT's proposed management is vague and non-specific, relying on protected areas outside the FMU to contribute to maintenance of habitat and populations.

<sup>&</sup>lt;sup>19</sup> Robyn Allchin , Jamie Kirkpatrick & Lorne Kriwoken (2013): On Not Protecting the Parrot: Impact of Conservation and Planning Legislation on an Endangered Species in Tasmania, *Journal of International Wildlife Law & Policy*, 16:1, 81-104

<sup>&</sup>lt;sup>20</sup> Webb M. H., Stojanovic D. & Heinsohn R. 2018. Policy failure and conservation paralysis for the Critically Endangered swift parrot. *Pacific Conservation Biology*.

# Box 1. Excerpt from 'Policy failure and conservation paralysis for the Critically Endangered swift parrot' (Webb *et al.* 2018).

Significant areas of swift parrot breeding habitat are earmarked for logging in the near future (see Sustainable Timber Tasmania's (2017) [Forestry Tasmania] three-year wood production plan), yet at the same time Sustainable Timber Tasmania is seeking to attain Forest Stewardship Council (FSC) certification. Failures to protect swift parrot breeding habitat in approved logging operations have been repeatedly exposed by public access to documents outlining decision-making processes (e.g. Blakers and Crawford 2008; Blakers 2009; Pullinger 2015). The information in these reports show that expert advice is routinely ignored, and that known breeding habitat and nest trees are knowingly logged.

These documented failures are not consistent with the objectives of the National Recovery Plan, draft conservation plans, the Threatened Fauna Advisor or scientific evidence of the species' requirements, let alone the guidelines of the FSC certification. These failings demonstrate the lack of strategic planning in place for swift parrot conservation across public and private land. At best, the evidence points towards strategic planning to ensure wood supply regardless of the conservation implications. In 'conservation' advice from DPIPWE, operations involving clear-cutting of known swift parrot breeding habitat have been described as having made 'y a reasonable contribution to the conservation of the species' (Pullinger 2015, pp. 12–14) but fail to reconcile what is considered reasonable with the evidence of ongoing habitat loss.

A failure to create clear, transparent and adequate conservation policies for the swift parrot is likely to have consequences for Sustainable Timber Tasmania's attempt to gain FSC certification given the FSC's stated principles that the organisation 'shall maintain, conserve and/or restore ecosystem services and environmental values of the Management Unit, and shall avoid, repair or mitigate negative environmental impacts' (Principle 6) and, 'shall maintain and/or enhance the High Conservation Values in the Management Unit through applying the precautionary approach' (Principle 9) (https://ic.fsc.org/en/what-is-fsc-certification/principles-criteria/fscs-10-principles). This is likely to have consequences for marketing Tasmanian timber. The first application for certification (Forestry Tasmania 2014a, 2014b) largely ignored swift parrot management. In over 250 pages of the application, the words 'swift parrot' appeared only three times (in tables) without any details of future management intentions, and the Threatened Fauna Advisor was not mentioned at all. The lack of adequate swift parrot management was a major reason for Forestry Tasmania's failure to achieve certification (Forestry Tasmania, January 2017).

More recently, Sustainable Timber Tasmania's recent draft High Conservation Values Assessment and Management Plan for the FSC (Forestry Tasmania, January 2017) claimed improvements to the previous plan. Some of these sound encouraging such as 'Implementing expert aggregated retentioneed protection or management measures for threatened species habitat' and 'The objective of Forestry Tasmania's swift parrot management is to maintain the integrity of breeding habitat by ensuring that sufficient levels and spatial arrangement of important nesting habitat and foraging-habitat are retained to support breeding in any given year' (Forestry Tasmania 2017, p. 21). However, since January (2017) the authors have personally observed several logging operations that contradict these statements, where expert advice and scientific evidence was ignored, and known breeding habitat has been destroyed. Without clear unambiguous statements by the forest industry and government that conservation advice and recommendations will, or will not, be implemented, including outlining the scientific evidence (or other factors) used in the decision-making process and making these processes available for scrutiny, it is hard to see why the FSC should certify operations that knowingly increase extinction risk of a Critically Endangered species.

Despite extensive areas of PTPZ land containing significant concentrations of rare threatened and endangered species (RTEs), no specific coupe level prescriptions, altered management regimes or reservation zones that go beyond existing regulatory obligations are detailed by STT. Instead STT use vague language about how species will 'generally' be protected.

#### Page 14 of STT HCV assessment:

Generally, threatened species are managed with the aim of contributing to the maintenance of habitat and populations of threatened species throughout their ranges and over time. This will generally be achieved through the maintenance of the Tasmanian Comprehensive, Adequate and Representative (CAR) Reserve System (which includes reserves on PTPZ land), and through off-reserve management of production areas where appropriate.

STT's proposed management for HCV is essentially no different from management over the last decade which has demonstrably failed the maintain and enhance requirements of FSC and resulted in a significant loss of and damage to HCV 1 forests.

STT rely on existing weak, inadequate and non-mandatory species management procedures detailed in the Forest Practices Authority Threatened Fauna Advisor (the Advisor) system. These prescriptions are often not implemented<sup>21</sup>. As the April 2015 Environment Tasmania report 'Pulling a Swiftie'

<sup>&</sup>lt;sup>21</sup> Pullinger, P (2015) Pulling a Swiftie, <a href="http://www.et.org.au/swiftie">http://www.et.org.au/swiftie</a>

documented, DPIPWE civil servants often ignore both the the Advisor and expert recommendations and approve logging in swift parrot habitat when the Advisor recommendations cannot be met by STT without impacting on wood supply obligations.

The Threatened Fauna Advisor User Manual Version 0.2 notes:

The recommended actions for individual species are to be applied unless alternative management actions are accepted by the FPA in consultation with DPIPWE as a way of meeting the management objective for the species.<sup>22</sup>

The current non-mandatory prescriptions have failed to protect swift parrot as evidenced by the continual decline of the species, continued loss of habitat and up-listing to Critically Endangered. STT's historic and recent logging operations have unambiguously contributed to a reduction of swift parrot nesting and foraging habitat. Commonwealth government conservation advice for swift parrot concludes that native forest silviculture has dramatically reduced landscape cover of nesting and foraging habitat for swift parrots<sup>23</sup>.

Since the last SCS audit in Tasmania in 2014, areas of critical habitat for the swift parrot have continued to be logged by STT, including coupe S034A, an important monitoring site utilized by swift parrot researchers at Tyler's Hill in the southern forests that was logged in 2017. Coupe HP010C was logged in 2016, even after specialist scientific advice requested by the FPA described the coupe as 'an outstanding example of remaining habitat for the species...(the coupe) contains important breeding habitat with high density blue gum foraging habitat and numerous nesting sites.'<sup>24</sup>. This advice was ignored and this coupe along with several others that expert advice had been sought for, was logged. Refer to the 'Pulling a swiftie' report by Environment Tasmania for more information<sup>25</sup>.

In 2017 more RTI documents were released to Tasmanian Conservation Trust (TCT). The documents again highlighted logging in important swift parrot habitat was occurring against the advice of leading experts. Threatened Fauna Advisor recommendations could not be met in a number of logging coupes without impacting on STT wood supply. The FPA asked leading swift parrot expert Matt Webb for an expert opinion with regard swift parrot and logging in a number of coupes. Webb's advice was unequivocal that nesting and foraging habitat would be lost to logging and recommended logging not take place. Logging went ahead in 2017 after DPIPWE granted a special approval despite STT's inability to meet the Threatened Fauna Adviser prescriptions. Refer to appendix xxx to view the relevant pages of the RTI documents.

<sup>&</sup>lt;sup>22</sup> Forest Practices Authority (2014) Threatened Fauna Advisor User Manual Version 0.2

<sup>&</sup>lt;sup>23</sup> Threatened Species Scientific Committee established under the Environment Protection and Biodiversity Conservation Act 1999, Lathamus discolor (swift parrot) Conservation Advice, 2016 <a href="http://www.environment.gov.au/biodiversity/threatened/species/pubs/744-conservation-advice-05052016.pdf">http://www.environment.gov.au/biodiversity/threatened/species/pubs/744-conservation-advice-05052016.pdf</a>

<sup>&</sup>lt;sup>24</sup> Pullinger, P (2015) Pulling a Swiftie, http://www.et.org.au/swiftie

<sup>&</sup>lt;sup>25</sup> ibid.

Recent logging carried out in 2018 has also severely negatively impacted important swift parrot nesting and foraging habitat in coupes BB025A and BB028E, these are detailed in case studies in Appendix 1.

It would appear that STT's repeated failure to manage swift parrot habitat at the coupe level is non-conformant with indicators 9.2.2 and 9.3.2, as detailed below.

9.2.2 Management strategies and actions are developed to maintain and/or enhance the identified High Conservation Values\* and to maintain associated High Conservation Value Areas\* prior to implementing potentially harmful management activities.

#### Verifiers:

• Documentation of Management Plans\* including management strategies and actions to maintain and/or enhance HCVs\*, including strategies in response to identified threats.

STT's failure to modify management activities to avoid negative impacts on swift parrot habitat appear critically non-conformant with indicator 6.4.3

6.4.3 Potential impacts of management activities on rare and threatened species\* and their conservation\* status and habitats\* are identified and management activities are modified to avoid negative impacts.

#### Verifiers:

• Documentation of potential impacts and modifications to management activities.

Indicator 6.4.4 requires swift parrot habitat to be protected at the operational (coupe) level and landscape level. STT's continued logging in documented high quality swift parrot habitat (particularly recent logging in documented important nesting and foraging habitat as detailed in the case studies below) suggests non conformance with this indicator.

6.4.4 The rare and threatened species\* and their habitats\* in the Management Unit\* are protected\*, at operational and landscape\* level, including through the provision of conservation zones\*, protection areas\*, connectivity\*, and other direct means for their survival and/or viability, such as species recovery programs.

#### Verifiers:

• Documentation of management strategies and actions in protecting rare and threatened species\* and their habitats\* is with relevant information on species populations, habitat\* protections, and/or other information.

Indicator 6.2.1 specifically requires the identification of potential impacts on HCVs at a stand level.

6.2.1 An environmental impact assessment\* identifies potential impacts, both direct and cumulative, of management activities on environmental values\* at a stand\* level.

#### Verifiers:

• Documentation of the environmental impact assessment\* methodology used that identifies appropriate baselines and likely impacts and considers cumulative impacts.

6.2.1 An environmental impact assessment\* identifies potential impacts of management activities on environmental values\* at a stand\* level.

STT could make progress towards meeting the requirements of 6.2.1 by conducting pre-logging targeted species and habitat surveys and assessments of impacts, however as the examples detailed in Appendix 1 demonstrate no specific system exists that adequately assesses impacts and identifies impacts on HCVs at a stand level. In particular, see case study on coupe BB025A.

2.2.6 Failure to adapt management to rectify insufficient strategies and actions to ensure maintenance and enhancement of swift parrot habitat

A large body of scientific evidence has clearly demonstrated STT's management of swift parrot habitat is directly resulting in a loss of critical habitat and contributing to swift parrot decline<sup>26 27 28</sup>.

Leading swift parrot researchers have consistently advocated for better management that takes into consideration the spatio-temporal variation in habitat availability and protects swift parrot habitat at the stand level, rather than focusing on protection of individual nest trees<sup>29</sup>.

Logging in documented high quality swift parrot has continued against the advice of scientific experts provided to the Tasmanian government.

It is clear that current management of swift parrot by STT is insufficient yet they have failed to rectify management to ensure maintenance and/ or enhancement of swift parrot habitat. Therefore, it appears STT are critically non-conformant with indicator (9.4.4) (6.4.3)

<sup>&</sup>lt;sup>26</sup> Stojanovic, D. et al. 2014. Validation of a landscape-scale planning tool for cavity dependent wildlife. Austral Ecology 39: 579–586.

<sup>&</sup>lt;sup>27</sup> Webb, M. H. *et al.* 2014. Location matters: Using spatially explicit occupancy models to predict the distribution of the highly mobile, endangered swift parrot. *Biological Conservation* 176: 99-108.

<sup>&</sup>lt;sup>28</sup> Webb M. H., Stojanovic D. & Heinsohn R. 2018. Policy failure and conservation paralysis for the Critically Endangered swift parrot. *Pacific Conservation Biology*.

<sup>&</sup>lt;sup>29</sup> Webb, Matthew H., Mark C. Holdsworth, and Janneke Webb. "Nesting requirements of the endangered Swift Parrot (*Lathamus discolor*)." *Emu* 112.3 (2012): 181-188.

9.4.4 Management strategies and actions are adapted when monitoring or other new information show these strategies and actions are insufficient to ensure the maintenance and/or enhancement of High Conservation Values\*.

6.4.3 Potential impacts of management activities on rare and threatened species\* and their conservation\* status and habitats\* are identified and management activities are modified to avoid negative impacts.

#### 2.2.7 No swift parrot management plan

As articulated in our previous submission to SCS (sent April 30, 2019) the absence of a swift parrot management plan creates a fundamental problem for assessing STT's proposed management, particularly in assessing the maintain and enhance requirements of principles 9 and 6.

Following the failure of previous approaches to reduce swift parrot population declines through landscape planning and management prescriptions for forestry operations, STT has vaguely announced a new landscape-level strategic approach to swift parrot habitat. Given that this system is still in development (p. 10 of STT HCV report)<sup>30</sup>, it is not possible to assess the adequacy of this approach to meet the requirements to maintain and enhance HCVs. Until the modelled habitat mapping and associated management policies are developed and implemented there is no clear management action to assess for compliance to the FSC standard. Refer to our previous submission for more details.

#### 2.2.8 STT assessment and management of swift parrot (HCV 1.4)

Refer to our previous submission (dated April 30th 2019) for problematic issues associated with STT assessment and management of swift parrot (HCV 1.4) habitat.

In addition to the lack of any formalized and publicly released swift parrot management plan (referred to by STT as a PAMA in the HCV assessment) it is hard to see how SCS Global will be able to conduct a credible assessment of STT management of HCV 1.4 and the maintain and enhance requirements of the standard (9.3.1 and 9.3.2).

STT's HCV management plan (p. 19) estimates there is 24,000 hectares of swift parrot breeding habitat in PTPZ land within the FMU and that 9,300 hectares in the southern forests will be excluded from production; this indicates that STT has identified 14,700 hectares of swift parrot habitat where logging may occur. No map of the 9,300 hectares excluded from production for swift parrot habitat is provided in the HCV assessment and management plan.

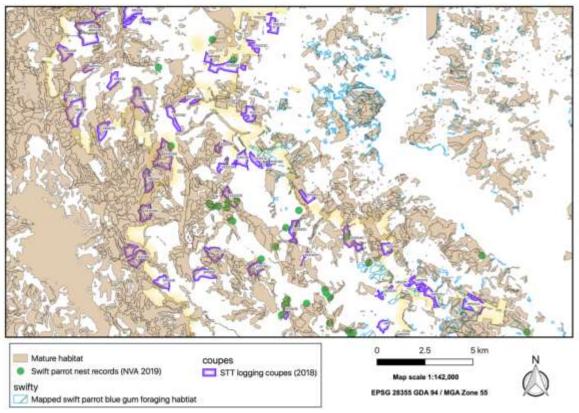
<sup>&</sup>lt;sup>30</sup> Sustainable Timber Tasmania, High Conservation Values Assessment and Management Plan, Assessment and management of Forest Stewardship Council defined High Conservation Values on Permanent Timber Production Zone land managed by Sustainable Timber Tasmania, April 2019

Our organisations have made requests to STT for information, data and maps that describe specifically where in the landscape the 9,300 hectares of forest that STT has been removed from production is located. These requests have so far been ignored and no information about the figures quoted in the HCV assessment regarding swift parrot has been provided. STT's failure to provide this specific information fails to meet the requirements of indicators 7.5.2 and 7.5.3.

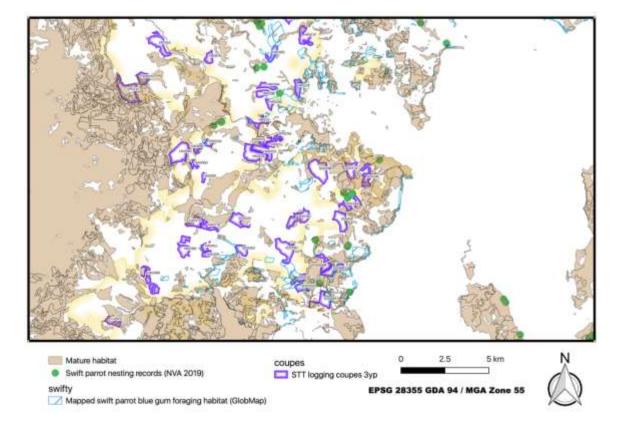
- 7.5.2 Relevant components of the Management Plan\*, including relevant supporting information, excluding confidential information\*, are available to affected stakeholders\* on request at the actual costs of reproduction and handling.
- 7.5.3 Relevant components of the Management Plan\*, excluding confidential information\*, are available to interested stakeholders\* where specific concerns are identified and where requests are reasonable\* and practicable. At its discretion The Organisation\* may charge for reproduction and handling.

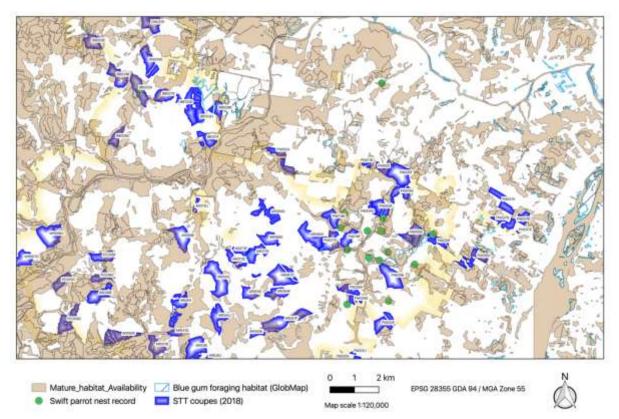
Desktop analysis of swift parrot nesting records from the Tasmanian Government's biodiversity database, the Natural Values Atlas (NVA), found dozens of coupes in the southern forests within close proximity to known swift parrot nesting sites (Map 1, 2, 3, ).

MAP 1 – LOGGING COUPES FROM STT'S 2018 THREE YEAR PLAN, SWIFT PARROT NESTING RECORDS AND GLOBMAP IN THE KERMANDIE AND ESPERANCE FOREST BLOCKS



MAP 2. - LOGGING COUPES FROM STT'S 2018 THREE YEAR PLAN, SWIFT PARROT NESTING RECORDS AND GLOBMAP IN THE SOUTHPORT, ESPERANCE AND HOPETOUN FOREST BLOCKS.





MAP 3 - LOGGING COUPES FROM STT'S 2018 THREE YEAR PLAN, SWIFT PARROT NESTING RECORDS AND GLOBMAP IN THE FRANKLIN AND BARNBACK FOREST BLOCKS.

It is important to consider that recorded nest locations on the NVA largely reflect site accessibility (i.e. most are near roads). The presence of suitable nesting habitat within coupes adjacent to recorded nesting sites indicates that areas of potential nesting habitat do exist within STT coupes.

STT's HCV assessment and management plan states that their approach to swift parrot protection involves 'identifying and protecting foraging habitat during operational planning'. There is uncertainty about what 'protecting' actually means. Field observations by our organisations documented several cases of known foraging and nesting habitat that have recently been impacted by logging, contrary to the claim by STT that their approach involves 'protecting foraging habitat'.

#### 2.2.8 Case study coupe BB025A

Barnback coupe BB025A contained high quality swift parrot nesting and foraging habitat. Cable logging was undertaken in 2015 in a section of the northern part of the coupe, followed by ground-based clearfelling in 2018 when the majority of the coupe was cleared.

BB025A contained approximately 15 hectares of mapped blue gum foraging habitat (GlobMap) that was part of a patch of mapped blue gum forest approximately 28 hectares in size. The GlobMap dataset describes this 28 hectare stand as 'globulus dominant' and 'mature' indicating that it is high quality foraging habitat for swift parrot. All mapped Eucalyptus globulus forest within the boundaries of BB025A has been cleared. Field inspections within the mapped globulus forest areas observed many large stumps with diameters of 1.5-2m. Given the size of the stumps in this part of the coupe and the description of this stand as 'mature' (GlobMap) it is highly likely this forest was providing high quality nesting and foraging habitat for swift parrot.

A swift parrot nesting record is present in the coupe. This known nesting site was excluded from the coupe with a 50 m buffer. Several large stumps 2-3 m in diameter (a significantly larger size class than the nesting tree) are located within 50 m of the known nesting tree. Based on the size of stumps in this area and within the mapped GlobMap forest and in other locations in the coupe, it appears the entire coupe once supported large old hollow bearing trees and was high quality swift parrot breeding habitat.

MAP 4: COUPE BB025A (BOUNDARIES AS PINK LINES), SWIFT PARROT NEST SITE (PURPLE & BLACK DOT), MAPPED BLUE GUM FORAGING HABITAT "GLOBMAP" (BLUE SHADING), MAPPED OLD GROWTH (RED SHADING)

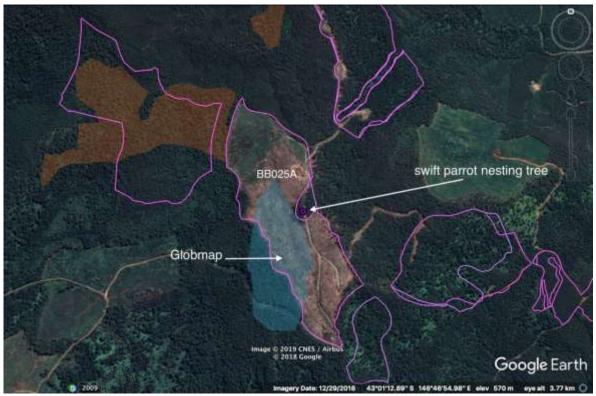




PHOTO: SWIFT PARROT NSETING TREE MARKED "SP TREE" IN LOGGED COPUE BB025A

BB025A is not mapped old growth forest, highlighting the inadequacies of the old growth mapping data that STT rely on for identifying 'coupes containing old growth' (refer to old growth section of this submission). The forest within BB025A supported high numbers of large old trees in excess of 150 years of age. STT has used the Forest Practices Authority's mature habitat mapping layer to identify areas of mature habitat in its assessment of HCV 3.4 (mature forests in degraded landscapes), as shown as the map on page 68 of STT's HCV assessment and management plan. This layer depicts coupe BB025A as mature habitat.

MAP 5: COUPE BB025A WITH MATURE HABITAT, GLOBMAP, SWIFT PARROT RECORDS AND SWIFT PARROT NESTING RECORDS FROM THE NATURAL VALUES ATLAS

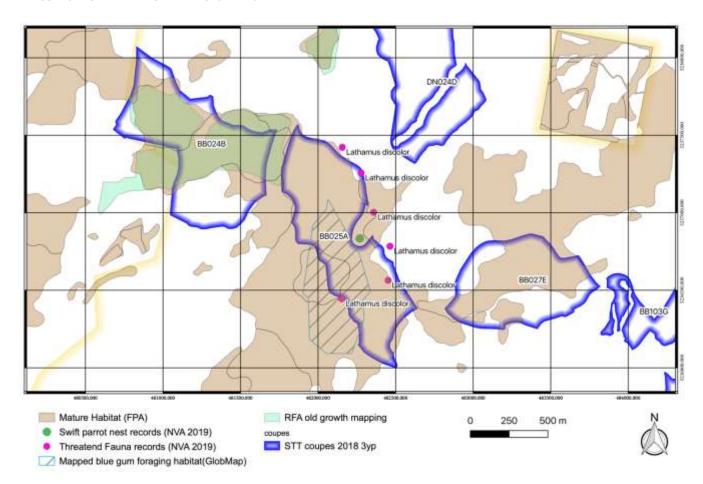




PHOTO: STUMP 3M IN DIAMETER WITHIN 50M OF SWIFT PARROT NESTING TREE

Coupe BB024B is adjacent to BB025A and does contain mapped old growth forest. It was added to the three year plan by STT in 2018. Given the recent addition of this mapped old growth coupe that is within a known area of high quality swift parrot nesting and foraging habitat, STTs management and planning appears to be inconsistent with the maintain and enhance requirements and do not appear to be progressing towards meeting the requirements.

#### 2.2.9 Logging in BB025A non-conformant to FSC standards:

Logging in coupe BB025A is critically non-conformant with indicators 9.3.1 and 9.3.2

9.3.1 requires HCVs are maintained and/or enhanced. Clearfelling known nesting and foraging habitat of a Critically Endangered species (HCV1) cannot be consistent with maintain and/or enhance HCVs.

9.3.2 requires strategies and actions to maintain and/or enhance and avoid risks to High Conservation Values are implemented, even when the scientific information is incomplete or inconclusive, and when the vulnerability and sensitivity of High Conservation Values are uncertain.

Swift Parrots were observed nesting in this coupe in 2016. Given the quality of foraging habitat within the coupe and the abundance of hollow bearing trees throughout the coupe it is likely that had a thorough survey of the coupe been conducted more nesting sites may have been recorded. No evidence exists that any thorough or detailed surveys to identify nesting habitat took place between the time that the nesting site was recorded (2016) and the time that logging operations within the nesting and foraging habitat commenced (2018).

Given the interannual variability in swift parrot nesting locations, the precautionary approach would dictate that BB025A is considered suitable nesting habitat on the basis of a known nest, which indicates that other nesting sites are likely to occur. STT appears to not have any systematic procedure, at the coupe level, for identifying nesting habitat for swift parrot and excluding it from production before logging commences.

This is inconsistent with the precautionary approach and therefore non-conformant to indicator 9.3.2.

Logging in BB025A also appears to be non-conformant with principle 6.4

The Organisation\* shall\* protect rare species\* and threatened species\* and their habitats\* in the Management Unit\* through conservation zones\*, protection areas\*, connectivity\* and/or (where necessary) other direct measures for their survival and viability. These measures shall\* be proportionate to the scale, intensity and risk\* of management activities and to the conservation\* status and ecological requirements of the rare and threatened species\*. The Organisation\* shall\* take into account the geographic range and ecological requirements of rare and threatened species\* beyond the boundary of the Management Unit\*, when determining the measures to be taken inside the Management Unit\*.

#### Specifically, indicator 6.4.3

6.4.3 Potential impacts of management activities on rare and threatened species\* and their conservation\* status and habitats\* are identified and management activities are modified to avoid negative impacts.

#### Verifiers:

• Documentation of potential impacts and modifications to management activities.

STT's Forest Practices Plan fails to mention the presence of approximately 15 hectares of mapped mature swift parrot foraging habitat (GlobMap) within BB025A. This foraging habitat has now been cleared resulting in negative impacts for a Critically Endangered species. A swift parrot nest was identified in December 2016, after the publication of the Forest Practices Plan in October 2015, however this did not result in modification of the plan that was sufficient enough to avoid negative impacts. There is no evidence that STT conducted further surveys in the coupe to determine if other nest sites were present in the coupe. The one identified nest site was afforded a 50 m buffer whilst high quality nesting and foraging habitat was clearfell logged around it.

Coupe BB025A contained many old trees whose age noticeably exceeds the average age of the main canopy, it also contained many hollow bearing trees suitable for swift parrot nesting, the 15 hectares of mapped (GlobMap) high density foraging habitat was also a valuable habitat feature.

The FPA Fauna Technical Note No. 3: Identifying swift parrot breeding habitat describes high density foraging habitat as forest where >50% of the stems are over 40 cm d.b.h. in any one hectare patch of Eucalyptus ovata or E. globulus. The mapped swift parrot foraging habitat (GlobMap) within BB025A appears to have satisfied this definition as it is mapped as E. globulus dominant (i.e. E. globulus is the dominant canopy species in the stand). It is also mapped as mature forest which indicates that most trees would have been greater than 40 cm d.b.h.

Fauna Technical Note No. 3: Identifying swift parrot breeding habitat also provides guidance on identification of nesting habitat<sup>31</sup>, see Table 2.

Based on a field observations of high densities of large stumps in BB025A ranging in size from approximately 100-300 cm diameter it is likely the forest in BB025A would have met the criteria for high density potential nesting habitat in wet forest (at least 15 trees per hectare over 100 cm d.b.h. or 8 trees over 150 cm d.b.h.). Stump heights in BB025 are shorter than breast height, so whilst

www.fpa.tas.gov.au/ .../Fauna Tech Note 03 Swift parrot breeding habitat.pdf

<sup>&</sup>lt;sup>31</sup> Forest Practices Authority, 2014, Fauna Technical Note 03, Swift parrot breeding habitat,

measuring stump size cannot provide an accurate figure for d.b.h. it can provide a fairly good indication of the quality of habitat.

TABLE 2. FPA FAUNA TECHNICAL NOTE 03 ADVICE ON SWIFT PARROT NESTING HABITAT.

Potential nesting- habitat density class	Mapping layer categories for desktop assessment <sup>a</sup>		Field-based assessment criteria <sup>c</sup>		
	PI-type 'E' class (mature eucalypt crown cover)	SenCode mapping layer <sup>b</sup>	Dry forest	Wet forest	
High	a and b (>40%)	All except nil	At least 8 trees/ha are over 100 cm dbh.	At least 15 trees/ha are over 100 cm dbh or 8 trees /ha over 150 cm dbh	
Medium	c (20-40%)	All except nil	At least 8 trees/ha are greater than 70 cm dbh.	At least 8 trees/ha are greater than 100 cm dbh.	
Low	d and f (1-20%)  OR  a, b and c (>20%)	All categories	Trees over 70 cm dbh are present, but comprise less than 8 trees/ha.	Trees over 100 cm dbh are present, but comprise less than 8 trees/ha.	
Negligible	PI-types with no E class density	All categories	There are no eucalypt trees over 70cm dbh	There are no eucalypt trees over 100 cm dbh	

These are the mapping categories used to construct the Mature Habitat Availability Map (www.fpa.tas.gov.au). Both crown cover and senescence assessments are based on aerial photo interpretation of the forest canopy and are depicted in the PI-type and SenCode mapping layers respectively.

Based on desktop and field assessments it is likely the forest within BB025A contained both high quality nesting and foraging habitat for swift parrot. Regardless of the quality of habitat there is no doubt that the forest was providing habitat for swift parrot prior to logging, as evidenced by the presence of a swift parrot nest in the coupe.

Indicator 6.2.1 requires the identification of potential impacts on HCVs specifically at a stand level. Logging in coupe BB025A has been carried out without an appropriate environmental assessment of the quality of swift parrot nesting and foraging habitat that has now been impacted by logging.

6.2.1 An environmental impact assessment\* identifies potential impacts, both direct and cumulative, of management activities on environmental values\* at a stand\* level.

#### Verifiers:

- Documentation of the environmental impact assessment\* methodology used that identifies appropriate baselines and likely impacts and considers cumulative impacts.
- 6.2.1 An environmental impact assessment\* identifies potential impacts of management activities on environmental values\* at a stand\* level.

b Senescence categories are the proportion of mature crowns that show visible signs of senescence.

If thorough pre-logging target species and habitat surveys had taken place in BB025A it is likely that high quality nesting and foraging habitat would have been identified. It is unclear what surveys have taken place in BB025A and what specific values (nesting and foraging habitat) may have been identified, however it is clear that significant nesting and foraging habitat or swift parrot has been logged. Therefore, if an environmental impact statement was conducted in accordance with indicator 6.2.1 it has not resulted in protection of that habitat that would be consistent with the maintain and enhance requirements of principle 9.2 and 9.3 and their associated indicators.

2.2.10 Failure of management planning to identify specific prescriptions and guidelines for maintaining habitat features (6.6.2)

The failure of existing regulatory prescriptions to protect swift parrot habitat has been well documented. The 'Pulling a Swiftie' report published by Environment Tasmania in 2015 outlines the findings of a Right To Information (RTI) request32. It found that the FPA referred a number of proposed logging coupes to Department of Primary Industries Parks Water and Environment (DPIPWE) for further advice in the 2013-14 financial year, as recognised guidelines (Threatened Fauna Adviser) for protection of the Swift Parrot could not be met.

Expert advice received by DPIPWE was damning of the potential impact of logging of the Swift Parrot's breeding habitat. It variously stated that it would not support the conservation objectives for the species, was against the principle of ecologically sustainable forest management, would occur within critical sites in critical breeding areas, would occur where there were known nearby nesting sites, and that there was no science that could justify the ongoing logging of the parrot's breeding habitat33.

This expert advice was unambiguous and heavily critical, but senior decision-makers within DPIPWE approved the logging anyway. Despite this revelation and the negative press this generated for the

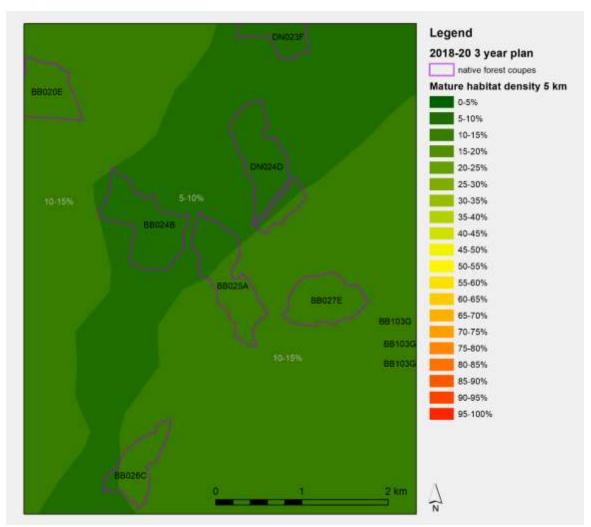
Tasmanian Government and Sustainable Timber Tasmania, several years later it appears that the non-mandatory prescriptions generated by the Threatened Fauna Adviser are still not being met.

Our organisations used the Threatened Fauna Adviser tool to access prescriptions for swift parrot for logging in the BB025A coupe that was logged in 2018. The advice (see Appendix 3) requires all high density foraging habitat and all high density nesting habitat (both of which were likely to be present in the coupe) to be retained. The advice requires 100% of high density foraging habitat to be retained. Within low-medium density foraging habitat the advice recommends retention of 50% of foraging trees (this can be achieved by retaining half the area in patches or by retaining half of the foraging trees during an operation). Refer to Appendix 3 for Threatened Fauna Advisor recommendation accessed via the FPA website.

<sup>&</sup>lt;sup>32</sup> Pullinger, P (2015) Pulling a Swiftie, <a href="http://www.et.org.au/swiftie">http://www.et.org.au/swiftie</a>

<sup>33</sup> ibid

Based on mapping of the area of blue gum forest in BB025A as mature and dominant blue gum as well as field observations we are confident this area was high density foraging habitat and TFA recommendations required 100% retention, however even if STT had defined this area as low-medium density foraging habitat they have still failed to adhere to the Threatened Fauna Adviser non mandatory prescriptions by clearing over half of the areas of mapped blue gum forest (GlobMap), refer to Map 4 that shows over half (15 ha) of the 28 ha mapped GlobMap patch has been cleared.



MAP 6: COUPE BB025A SHOWING MATURE HABITAT AVAILABILITY WITHIN 5KM RADIUS OF COUPE

It also appears that the Threatened Fauna Adviser prescriptions have not been followed for nesting habitat as high density nesting habitat in the immediate vicinity of the identified nest tree has been cleared.

The apparent failure of STT to implement prescriptions from the Threatened Fauna Adviser in BB025A is reflective of a systemic failure to implement these prescriptions, even when expert advice is sought that unambiguously recommends logging not to go ahead.

Management planning has not identified specific prescriptions or guidelines for maintaining habitat features (nesting and foraging habitat) aside from a single nest tree. It would therefore appear that STT are critically non-conformant with indicator 6.6.1 and 6.6.2

6.6.1 - Best Available Information\* is used to identify habitat features\* including hollow bearing trees to support the diversity of naturally occurring native fauna species.

6.6.2 Management planning identifies specific prescriptions and guidelines for maintaining habitat features\*

Habitat features: Naturally occurring forest stand attributes and structures, including but not limited to:

Old trees whose age noticeably exceeds the average age of the main canopy

Hollow-bearing trees

Dead standing trees

At the stand level, coupe BB025A had many valuable habitat features that have now been removed from the landscape due to the absence of mandatory specific prescriptions and guidelines for their retention.

#### **RECOMMENDATION:**

We recommend SCS Global request STT provide information relating to whether the Threatened Fauna Adviser prescriptions could have been implemented in coupe BB025A and whether any expert advice was requested and specifically what did that advice contain. It would appear that logging in BB025A that occurred in 2018 is analogous with logging in other high quality swift parrot habitat (that occurred in 2015, 2016 and 2017) against the advice of scientific experts as revealed through the RTI requests detailed in the 'Pulling a swiftie' report and a subsequent RTI by the Tasmanian Conservation Trust d.b.h.. STT's failure to comply with various indicators from principle 6 and 9 in relation to swift parrot habitat over several years highlight the systemic nature of poor management and non conformance to FSC standards.





PHOTOS: LOGGED GLOBMAP (LEFT) AND LOGGED POTENTIAL NESTING TREE (RIGHT) IN BB025A

#### 2.2.11 Case study coupe BB028B

This coupe is approximately 3km to the east of the BB025A. Within the coupe 21 hectares of forest, including 4 hectares of mapped blue gum foraging habitat (GlobMap) has been logged. Several stumps within the logged GlobMap forest were measured at >200 cm diameter, an indication that the hollow bearing trees were present within the logged patch of GlobMap and the areas may have been nesting habitat as well as foraging habitat. Research into the nesting requirements of swift parrot found the mean DBH of nesting trees was 105cm<sup>34</sup>.

STT's HCV management approach for swift parrot purports to involve: "identifying and protecting foraging habitat during operational planning" (p. 19).

Whilst it is unclear whether this means protecting all foraging habitat, or some foraging habitat it is clear that logging in coupe BB028B has resulted in a loss of foraging habitat within a known nesting and foraging area for a Critically Endangered species. Given the Critically Endangered status of the swift parrot and the unpredictable nature of where nesting will occur each year, all nesting and foraging habitat is critically important to the survival of this species. In order to meet the maintain and enhance requirements of 9.3.1 and 9.3.2 it is the view of our organisation's that all potential nesting and foraging habitat should be excluded from timber production. Furthermore, the IUCN recommended: "Place all areas of public land that support Swift Parrots under secure conservation management, particularly those in timber reserves, transport corridors and local government land" <sup>35</sup>.

9.3.1 The High Conservation Values\* are maintained and/or enhanced, including by implementing the strategies developed. [52]

Removing mapped foraging habitat (GlobMap) from the landscape cannot be consistent with the requirement to maintain and / or enhance.

9.3.2 The strategies and actions to maintain and/or enhance and avoid risks to High Conservation Values\* are implemented, even when the scientific information is incomplete or inconclusive, and when the vulnerability and sensitivity of High Conservation Values\* are uncertain.

Verifiers:

• Documentation of the implementation of strategies and actions to maintain and/or enhance HCVs\*, including the level of scientific uncertainty.

<sup>&</sup>lt;sup>34</sup> Webb, M. H. et al. 2012. Nesting requirements of the endangered swift parrot (Lathamus discolor). — Emu 112: 181-188.

<sup>&</sup>lt;sup>35</sup> BirdLife International 2018. Lathamus discolor. The IUCN Red List of Threatened Species 2018:

e.T22685219A130886700. http://dx.doi.org/10.2305/IUCN.UK.2018-2.RLTS.T22685219A130886700.en. Downloaded on 13 May 2019.

This indicator requires STT to take a precautionary approach. This would require all mapped foraging habitat to be retained as a precaution despite the fact there are no known nesting records in coupe BB028B. Webb *et al.* has identified a number of conservation actions required to protect the swift parrot that would be consistent with the precautionary approach:

To protect the species, conservation actions need to account for the spatiotemporal variation in the availability of Swift Parrot breeding habitat and recognise there may be several years between the use of a particular site. Given the number of nests found at individual sites this will require the management or reservation of suitable forest stands with old-growth characteristics across the landscape, rather than focussing on individual trees or historical nesting sites. <sup>36</sup>

STT do not take a precautionary approach by taking in consideration the spatiotemporal variation in the availability of Swift Parrot. Instead their management involves only protecting known nest sites with 50m buffers, failing to conduct appropriate pre logging surveys to identify potential nesting and foraging habitat and continuing to log in mapped foraging and known potential nesting habitat. This appears to be critically non-conformant with indicator 9.3.2.





PHOTOS: LOGGED SWIFT PARRIT FORAGING HABITAT (GLOBMAP) IN BB028B

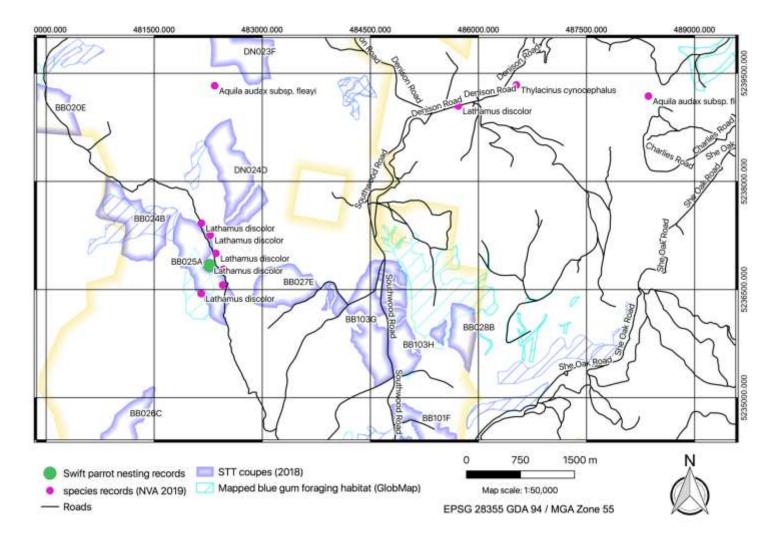
<sup>&</sup>lt;sup>36</sup> Webb, M. H. et al. 2012. Nesting requirements of the endangered swift parrot (Lathamus discolor). — Emu 112: 181-188.

#### 2.2.12 – Logging in BB028B non-conformant with FSC standards

Logging in BB028B appears critically non-conformant with 6.3.1 and 6.3.2:

- 6.3.1 Management activities are planned and implemented to protect\* environmental values\*
- 6.3.2 Management activities protect environmental values\*.

If logging in BB028B was planned and implemented in accordance with 6.3.1 and 6.3.1, STT would have excluded mapped blue gum foraging habitat (GlobMap) from the harvest area.





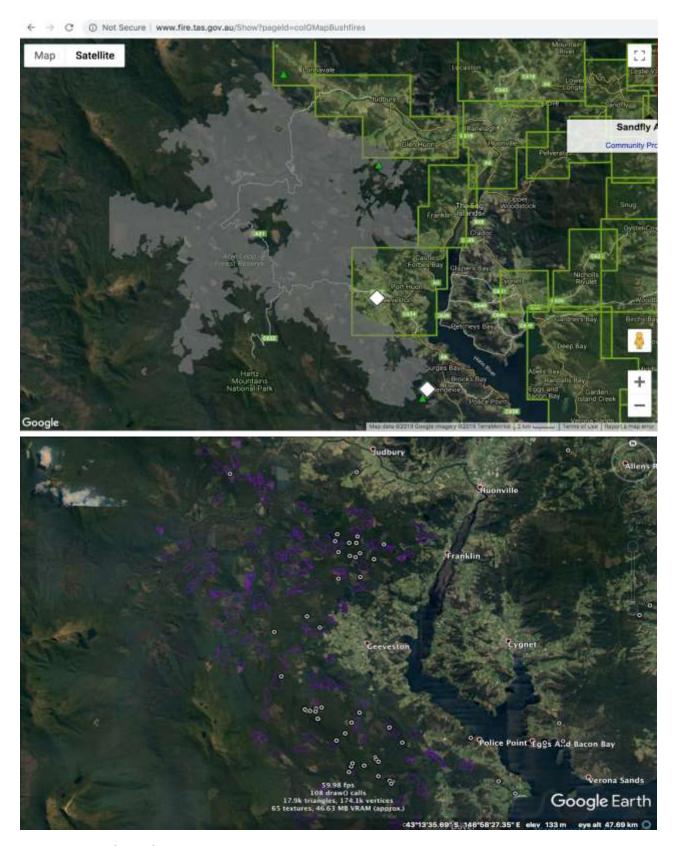
#### MAP 7: COUPES BB025A AND BB028B WITH MAPPED BLUE GUM FORAGING HABITAT (GLOBMAP)

Map 8: Satellite imagery (2018) from Google Earth showing recent logging in BB028B, including in areas mapped as GlobMap.

#### 2.2.13 Fire impacts on HCV 1 – swift parrot habitat

As conveyed in our previous submission, STT has failed to assess the impacts of the 2019 'Riveaux Fire' in the southern forests region (Huon Valley) on HCVs and have not incorporated any assessment of fire impacts into the management plan.

Recent fires that occurred in early 2019 have impacted on important areas of swift parrot nesting and foraging habitat. The extent of the Huon Valley fire (shown on the map above) is entirely within the core range for the swift parrot and has impacted on identified Swift Parrot Important Breeding Areas (SPIBAs) including the Leithbridge Hill Scotts Divide SPIBA and Kermandie Divide / Storm Hill SPIBA. Impacts on nesting habitat range from direct loss of hollow bearing trees from fire through to indirect loss of hollow bearing trees through post fire dangerous tree removal along roadsides in burnt areas. Significant areas of foraging habitat (blue gum forest) have also been impacted by fires which may lead to changes in flowering patterns and place further pressure on swift parrot.



Map 9 &10: (above) Google Earth image showing extent of the Jauary . February 2019 fire in the southern forests; (below) Google Earth image showing STT planned logging coupe (purple ploygons), Swift parrot nesting recrods (blakc and white dots)

2.3 Lack of assessment of fire impacts non-conformant with FSC standards STT's failure to asses impacts of fire on HCVs appears to be non-conformant with indicators 9.4.1 and 9.4.3.

#### 9.4.1

A program of periodic monitoring\* assesses the following, consistent with Annex G:

- 1) Implementation of strategies; [SEP]
- 2) The status of High Conservation Values\*, including High Conservation Value Areas\* on which they depend; and
- 3) The effectiveness of the management strategies and actions for the protection\* of High Conservation Values\*, to maintain and/or enhance the High Conservation Values\*

#### 9.4.3

The monitoring program has sufficient scope, detail and frequency to detect changes in High Conservation Values\*, relative to the initial assessment and status identified for each High Conservation Value\*

Until a full re-assessment of HCVs that takes into consideration the impacts of recent fires and the possible increased value of habitat and other HCVs in unburnt areas is undertaken, it is hard to see how STT will be able to progress towards meeting the requirements of indicators 9.4.1 and 9.4.3

As detailed in our previous submission, STT's lack of consideration of the impacts of fire is also inconsistent with the requirements of indicator 5.2.1

Indicator 5.2.1 requires timber harvesting levels to be based on Best Available Information, including (12) "Impact from climate change, pests, diseases and natural hazards"

#### 2.4. Masked Owl

The Tasmanian Masked Owl (*Tyto novaehollandiae castanops*) is listed as Vulnerable to extinction under the federal EPBC Act, however the Australian Government has not released a recovery plan or a threat abatement plan. The Masked Owl is a hollow dependent species requiring large hollows in Eucalyptus trees more than 100 years old for breeding.

STT's management for Masked Owl lacks a precautionary approach as there are no adequate systems in place to routinely identify and protect habitat, such as pre-logging searches for nest and roost sites in coupes falling with the core range of the species.

A Masked Owl was recorded within coupe LU040F in November 2016. The sighting was reported to STT and the FPA by a member of the community who had undertaken a call playback survey, which involves broadcasting the call of the Masked Owl through a megaphone to illicit a response from any Masked Owls that may be present in the area. The survey report provided to STT and the FPA reported that a Masked Owl was observed within 3 minutes of the commencement of the call playback broadcast commencing. This suggest the Masked Owl observed within LU040F was using this area of forest and was in close proximity to the survey location prior to the commencement of the call playback. This indicates that Masked owl roosts or nests could be present with LU040F. Despite a reasonable probability that a Masked Owl may have been roosting or nesting within LU040F, STT has not detailed any specific actions to survey for roost or nest sites within this coupe.

The Forest Practices Plan for LU040F gives weak and vague guidance on Masked Owl habitat that seems to rely on logging contractors to identify any roost or nest sites during the operation (Figure 2).

#### Masked owl

If suspected nesting activity (e.g. displaying male birds) is observed or a nest is found, operations must cease within 100 m of the suspected nest site and notify the Sustainable Timber Tasmania Officer in charge of the operation as soon as practical.

FIGURE 2: MASKED OWL MANAGEMENT ADVICE FROM STT FOREST PRACTICES PLAN FOR LU40F IS THE STANDARD GENERIC ADVICE FOR THE SPECIES.

This is inconsistent with a precautionary approach that would target pre-harvest surveys to specific values, such as Masked Owl, and thoroughly search coupes for nest and roost sites prior to the commencement of logging.

Coupe LU040F was logged in 2019. Suitable roosting and nesting habitat for Masked Owl has been impacted on, including hollow bearing trees. Without any efforts to conduct a systematic program of

pre-logging surveys for threatened fauna, such as the Masked Owl, STT's operations in LU040F appear inconsistent with the precautionary approach required under principle 9.3 and specifically non-conformant with indicator 9.3.2

9.3.2 The strategies and actions to maintain and/or enhance and avoid risks to High Conservation Values\* are implemented, even when the scientific information is incomplete or inconclusive, and when the vulnerability and sensitivity of High Conservation Values\* are uncertain.

## Verifiers:

• Documentation of the implementation of strategies and actions to maintain and/or enhance HCVs\*, including the level of scientific uncertainty.

Logging in coupe LU040F was carried out with the clearfell system. Habitat features within the harvest area, such as hollow bearing trees, that have little or no commercial value have been felled for no apparent reason.



PHOTO: LU040F (POTENTIAL MASKED OWL ROOSTING AND NESTING HABITAT) LOGGED IN 2019



PHOTO: BROAD SCALE CLEARING OF POTENTIAL NESTING AND ROOSTING HABITAT FOR MASKED OWL IN LU040F

A number of other threatened species that fall into the HCV 1 category are present within the FMU and threatened by STT's operations. Like the swift parrot and masked owl, the Tasmanian wedge-tailed eagle and grey goshawk need old forests for nesting.

Impacts on mature habitat, old growth forests and habitat features that have been demonstrated through the examples given in this submission are also relevant for wedge tailed eagle and grey goshawk.

# 3 – Old growth forests (HCV 3.3)

# 3.1 – STT assessment and management

There are three fundamental flaws in STT's assessment and management for HCV 3.3 old growth forest. These are detailed below along with the relevant indicator from the FSC National Standard FSC-STD-AUS-01-2018 EN:

- Misinterpretation of HCV identification framework and conflation of HCV 3.1 with HCV 3.3 (9.1.1)
- Failure to recognize and rectify the inadequacies of the RFA old growth mapping data (9.1.1) (6.1.1) (6.1.2)
- Lack of meaningful and effective coupe-level protection for old growth that is consistent with the maintain and enhance requirement (9.3.1), (6.3.1) (6.3.2)

## 3.1.1 Misinterpretation of HCV identification framework

STT has misinterpreted the HCV identification framework in relation to HCV 3.3 (old growth) and conflated HCV 3.1 (depleted and poorly reserve ecosystems) with HCV 3.3 (old growth).

Sub Value Category	Sub Value
HCV 3.1	Ecosystems* (including rainforests) that are threatened, depleted or poorly reserved at the IBRA* bioregion scale, or are subject to threatening processes predicted to substantially reduce their extent and function.
HCV 3.2	Areas for conservation* of important genes or genetically distinct populations.
HCV 3.3	Old-growth forest*.
HCV 3.4	Remnant vegetation in heavily cleared landscapes and mature forest in degraded landscapes.

The normative definition of old growth forest in the FSC National Standard of Australia FSC-STD-AUS-01-2018 EN is:

Ecologically mature forest where the effects of disturbances are now negligible.

The defining characteristics of an old growth forest based on the normative definition are: mature forest and lack of disturbance. As HCV 3.3 (old growth) is characterised by a lack of disturbance it is impossible to 'maintain and enhance' this HCV using a management regime that disturbs the forest and consequently changes it status from old growth forest to disturbed (non-old growth) forest.

Annex G: (FRAMEWORK FOR ASSESSMENT, MANAGEMENT AND MONITORING\* OF HIGH CONSERVATION VALUES) of the FSC National Standard of Australia FSC-STD-AUS-01-2018 EN provides guidance on values that are to be assessed for HCV 3.

Annex G separately identifies old growth forest (3.3) and Ecosystems that are threatened, depleted or poorly reserved at the IBRA scale (3.1). STT has assessed HCV 3.3 as it if is HCV 3.1 by using a bioregionally determined target-based approach. There is no suggestion provided in the guidance within Annex G that this approach is appropriate for HCV 3.3 (old growth) which is clearly identified as a separate HCV category.

Annex G does provide the following guidance on old growth forest:

Guidance on old-growth forest\*: Identification and assessment of HCV 3.3 should include consideration of:

The degree to which it is rare and/or threatened at a global, national or regional level

Its distinctiveness in terms of size and quality (including stand\* structural characteristics and ecological functions) in a landscape\* level context [3].

Geographic range. [SEP]

Determining these shall\* be based on assessments by government agencies, peer reviewed literature, or assessments by recognised experts, and be considered at the landscape\* level. It is important to note that the presence of HCV 3.3 old-growth forest\* in the management unit does not necessarily exclude harvesting. It is the responsibility of The Organisation\* to demonstrate that its status at a landscape\* level will be maintained and not threatened as a result of management activities.

The guidance in Annex 3 clarifies that the presence of old growth forest does not necessarily preclude harvesting in the management unit, but that STT must demonstrate that old growth forest is being maintained in the landscape, including within the management unit. Therefore, harvesting can occur within the management unit and comply with the maintain and enhance requirements if harvesting is not disturbing old growth forest and management prescriptions that protect old growth forest, such as buffers, reserves and exclusion zones are implemented. Without management actions that maintain the extent of old growth in the FMU and maintain the non-disturbed integrity of old growth stands, logging will likely result in a net loss of old growth forest at the landscape level.

Annex G clearly places old growth forest in a stand-alone category: HCV 3.3 that requires protection measures and management actions in that maintain it in the landscape. As old growth is a standalone HCV that STT must demonstrate it is maintaining in the landscape, the guidance in Annex 3 is useful in determining what management actions the presence of old growth requires.

Management actions such as their inclusion in Protection Zones (PTI) under the Management Decision Classification zoning, or the application of appropriate operational prescriptions around old growth stands, may be appropriate for a particular area of old growth and could be be determined using the guidance in Annex 3.

It is important to note the old growth forest guidance box in Annex G is also non-normative and therefore subservient to normative definitions detailed in the National Standard that clearly defines old growth as forest that is characterised by a lack of disturbance. A forest that is defined by its lack of disturbance cannot be 'maintained' by implementing a management regime that involves disturbing that HCV through logging.

The Annex 3 guidance to consider 'Its [old growth forest stand] distinctiveness in terms of size and quality (including stand\* structural characteristics and ecological functions) in a landscape\* level context' should require full retention of old growth with appropriate management that will protect and maintain the value into the future. Additional management, in addition to full retention, could be achieved through a range of measures. For example, , prescriptions preventing tree falling into old growth areas (with appropriate exemptions for safety considerations), protection zone designation under the MDC, snigging and fire safety prescriptions, by applying buffer zones of non-old growth forest to protect old growth stands from edge effects, and other measures to protect the integrity of particularly vulnerable stands.

Furthermore, guidance to consider 'the degree to which it [old growth] is rare and/or threatened at a global, national or regional level' should necessitate a management response of reservation (i.e. permanent removal from production forest) of such old growth forest in order to maintain it in the landscape. However, it seems that STT may be relying on the guidance in Annex 3 to justify its regionally based reservation targets as a management strategy that maintains old growth forest at the landscape scale, which ignores the requirement to ensure old growth forest is protected and maintained and enhanced as a standalone HCV category (HCV 3.3). The emphasis on HCV 3.1 for old growth assessment and management is incommensurate with HCV 3.3 and highlights STT's inadequate approach to maintaining old growth in the landscape.

Indicator 9.2.2 requires management strategies and actions to maintain and/ or enhance HCVs:

9.2.2 - Management strategies and actions are developed to maintain and/or enhance the identified High Conservation Values\* and to maintain associated High Conservation Value Areas\* prior to implementing potentially harmful management activities.

#### Verifiers:

Documentation of Management Plans\* including management strategies and actions to maintain and/or enhance HCVs\*, including strategies in response to identified threats.

Our organisations hold the view that the only appropriate management from STT would be to exclude all old growth areas from harvesting and apply management prescriptions such as buffers, reserves and exclusion areas, using the guidance in Annex 3 to determine appropriate actions.

STT's HCV assessment and management plan states that more than 1/3 of mapped old growth forest occurring within the FMU on PTPZ land is available for logging (i.e. in production areas). STT identify 98,100 hectares of mapped old growth forest on PTPZ land and 34,800 hectares within production areas, refer to Figure 3.

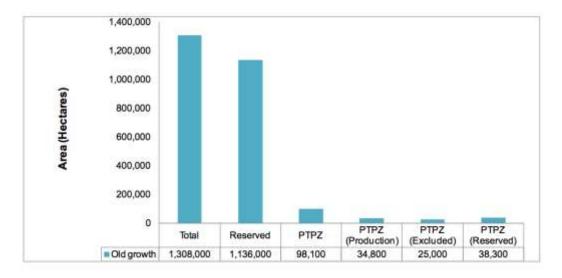


FIGURE 3: FIGURE 3.5 FROM STT HCV ASSESMENT AND MANAGEMENT PLAN

STT has effectively flagged that logging will occur in 35% of all old growth forest within their FMU (PTPZ land), this is the equivalent to 34,800 hectares of old growth forest that could no longer be considered old growth forest if subject to logging. Therefore, STT's management is proposing to potentially reduce the area of old growth forest currently within its FMU by 35%. This is inconsistent with the requirement to maintain and enhance HCVs and critically non-conformant with indicators 9.2.2.1 and 9.2.2.2

It is important to note that in addition to the 34,00 hectares of mapped old growth forest that STT has acknowledged can be logged within production areas, the figures for old growth protection outside the FMU in non-PTPZ land are unreliable. STT's claim that 1,136,000 hectares of mapped old growth forest is 'reserved' and therefore counts towards their landscape scale reservation targets is misleading as forests that STT has counted as 'reserved' fall within Future Potential Production

Forest (FPPF). As highlighted in our previous submission, these areas had their status changed from 'future reserves' to 'future potential production forests' when the Tasmanian Government abandoned the Tasmanian Forest Aggregated retentioneement and proposed opening up the future reserves to logging by the private sector.

# 3.1.2 Inappropriate and vague proposed coupe level management of HCV 3.3

STT's HCV assessment and management plan articulates some management strategies for HCV3.3 that will be employed at the coupe level. However, these strategies and actions are vague and lack prescriptiveness.

STT's management of old growth forest in production areas states (p. 63):

Old growth forest on PTPZ land, regardless of conservation or reservation status, will be managed with the objective of maintaining old growth forest within the Tasmanian forest landscape. This will be achieved through:

Partial harvesting of Coupes Containing Old Growth to minimise disturbance and retain old growth elements within the forest landscape. The term Coupe Containing Old Growth (CCOG) refers to coupes that have greater than 25% component. This threshold is used to distinguish significant patches of old growth forest from smaller patches scattered throughout non-old growth forest.

It is unclear what partial harvesting means. There is also no detail provided on the methods used to develop the arbitrary threshold for determining CCOG.

## 3.1.3 Management of old growth fails to maintain and/or enhance

STT has set an arbitrary threshold that requires coupes to contain >25% mapped old growth forest before any new management practices are triggered. For coupes that do not meet this threshold, where less than 25% of the area is mapped as old growth forest, logging will occur with no change in management using the clearfell method.

This is inconsistent with the FSC requirement to maintain and enhance old growth forest as it will result in a net loss of old growth forest, since old growth may be clearfelled if it does not meet the arbitrary coupe level threshold. STT's proposed partial harvesting systems also results in a net loss of old growth, refer to section 2.1.5.

Coupe TN067B is 90 hectares in size and contains 13 hectares of mapped old growth forest that occupies approximately 14% of the total coupe area. Under STT's proposed management the 13 hectares of old growth forest can be clearfelled. Indeed, STT's Forest Practices Plan for coupe

TN067B confirms that 90 ha of forest (including 13 ha of mapped old growth forest is to be clearfelled).

STT's management for old growth using the 'Coupe Containing Old Growth' (CCOG) threshold states that the '(25%) threshold is used to distinguish significant patches of old growth forest from smaller patches scattered throughout non-old growth forest.'

In making this distinction between 'significant patches of old growth forest' and 'smaller patches scattered throughout non-old growth forest' STT is arbitrarily defining what it deems to be significant or not, and in doing so has failed to provide any evidence that so called 'smaller patches scattered throughout non-old growth forest' are not significant. As the example of TN067B shows, significant areas (up to 13ha in the case of TN067B) of mapped old growth forest can be clear-felled under STT's management.

Furthermore, the arbitrary threshold for CCOG (>25% area mapped old growth) cannot be implemented in a way that is consistent with the maintain and enhance requirements if >25% of the extent of old growth within a coupe is logged. For example, case study coupe TN065A (see below) contained 25 hectares of mapped old growth forest covering 62.5% of the total area of the coupe. STT retained just 4 hectares of old growth forest using their 'partial harvesting' strategy, in total 84% of the mapped old growth within the coupe was logged and can no longer be considered old growth forest. This leaves 16% of the original extent of mapped old growth forest which is below the threshold of 25% for a coupe to be considered a CCOG. In the future STT could conduct a second cut in the same area and because large areas of mapped old growth forest have already been removed from the landscape and very small areas retained in aggregates, those retained areas will not be large enough to meet the threshold of >25% and could therefore be logged resulting in a net loss of 100% of the mapped old growth in a coupe that formerly qualified as a CCOG.

Another example is coupe SX038E in the Styx Valley. This coupe contains 12.7 hectares of mapped old growth forest (68% of the total coupe area), therefore meeting the threshold for a CCOG. However, unless more than 25% of the 12.7 hectares of mapped old growth is retained the coupe will fail to meet the threshold in the future and under STT's management the remaining old growth in the coupe could be clearfelled and permanently lost. Old growth forest in this coupe is isolated as an island within an area subject to intensive clearfell logging.

A Forest Practices Plan (FPP) for SX038E was not available on the STT website in the lead up to the audit so it is not possible to conclusively tell what percentage of the mapped old growth forest within this coupe is planned to be logged, however based on recently logged coupes in the surrounding area (SX and TN coupes), STT has demonstrated that standard practice does not retain more than 25% of the original area of mapped old growth. See Table 3.



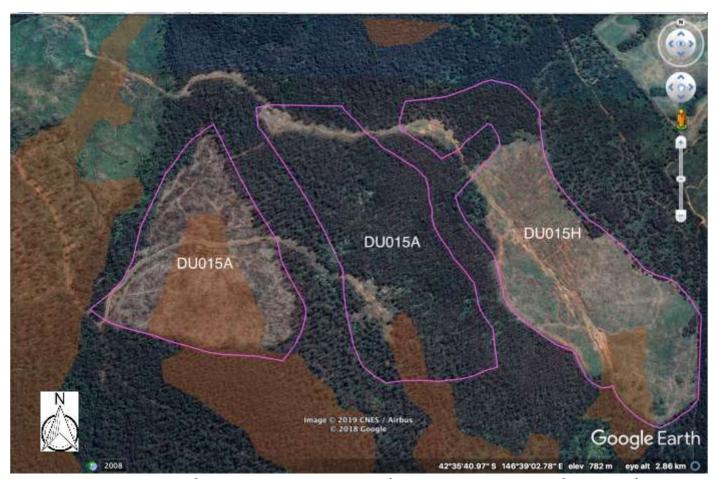
MAP 11: COUPE SX038E IS AN ISLAND OF OLD GROWTH WITHIN AN INTENSIVELY LOGGED LANDSCAPE, NOTE PLANTATION TO THE EAST AND YOUNG REGRWOTH FOREST TO THE WEST

TABLE 3: LOSS OF OLD GROWTH FOREST IN SELECTED COUPES IN TYENNA, STYX AND WENTWORTH FOREST BLOCKS

Coupe	Mapped old growth (hectares)	Mapped old growth (% of coupe)	Year logged	Logged mapped old growth (hectares)	% of original extent of mapped old growth remaining	Mapped old growth (% of coupe) post- logging
TN065A	40	81.6	2018	32	20	9.8
TN065L	25	62.5	2017	21	16	6.4
SX030B	11.5	39.5	2018	9	22	6.3
WW051A	36	82	2017	33	8.5	3.7

# 3.1.4 Coupe design facilitates permanent loss of old growth forest

STT's 'partial harvesting' management is further complicated by coupe design. STT's logging coupes often combine two separate non-contiguous polygons. For example, coupe DU015A (Map xx) has two distinct sections. One section is 33 hectares in size and contains 11 hectares of mapped old growth forest (30% of the total area of that section of the coupe). The second section has 1.8 hectares of mapped old growth forest within a total area of approximately 42 hectares. When both sections are combined 18% of the total area is mapped old growth. This fails to meet STT's threshold for CCOG and has resulted in clearfelling of approximately 11 hectares of mapped old growth forest within the first section of the coupe. Logging in coupe DU015A has therefore removed at least 11 hectares of mapped old growth forest using the clearfell method and no additional or new management for old growth has been implemented by STT. Each distinct section of this coupe falls within the typical size range of STT logging coupes, so it would be entirely possible that they could be designated as separate coupes, in which case the clearfelled polygon would have qualified as a CCOG and therefore clearfelling would not have been permissible.



MAP 12: COUPE DU015A (BOUNDARIES DEPICTED AS PINK LINES), MAPPED OLD GROWTH FOREST (RED SHADING)

Similarly, coupe UR037H in north-east Tasmania falls below the CCOG threshold due to previous logging of half of the coupe area as outlined in Appendix 1 (Section 1.5).

A further problem with the arbitrary 25% threshold is that it is relative to coupe size so that the a much larger area of old growth is required to qualify as a CCOG for large coupes (e.g. over 100 ha) than small coupes (e.g. under 50 ha). This is illustrated in Table 4, where coupes with a similar amount of mapped old growth may or may not qualify as a CCOG depending on the size of the coupe.

TABLE 4 - SELECTED PAIRS OF COUPES CONTAINING SIMILAR EXTENT OF MAPPED OLD GROWTH FOREST FROM THE CURRENT THREE-YEAR WOOD PRODUCTION PLAN.

Coupe	Coupe size (ha)	Old growth (ha)	Old growth (%)	CCOG?	Harvest method
DU015A	76.9	14.3	18.5	NO	CLEARFELL
KA004B	15.5	14.5	93.5	YES	ARN
TN067B	90.2	13.2	14.6	NO	CLEARFELL
RS113R	16.0	13.2	82.2	YES	SHELTERWOOD RETENTION
TN069C	59.1	11.2	18.9	NO	CLEARFELL
TO030C	18.9	10.9	57.6	YES	ARN
MZ138V	43.2	8.8	20.3	NO	CLEARFELL
IR029A	11.4	8.9	78.3	YES	ARN
FN005C	58.3	7.6	13.1	NO	CLEARFELL
SHELTERWOOD RETENTION25B	24.3	7.8	31.9	YES	SED

It is the view of our organisations that the only way STT can meaningfully meet the requirement to maintain and/ or enhance old growth forest is to remove all mapped old growth forest from production, while taking steps to address inadequacies with the RFA old growth mapping as outlined in Section 3.4.

# 3.2 Partial harvesting fails to maintain and/or enhance old growth

STT's proposed partial harvesting of old growth cannot maintain HCV 3.3 as any harvesting will result in a net loss of old growth.

'Partial harvesting' as defined on page 88 of STT's Forest Management Plan (April 2019) is:

Harvesting systems which include the retention of some trees, for example, seed tree, shelterwood, thinning and variable retention.

STT has failed to provide any evidence of how partial harvesting is consistent with the requirement to maintain and enhance HCVs. It is important to note that partial harvesting does not explicitly involve retention of old growth.

We undertook desktop and field research in STT coupes identified as CCOG to determine what impacts logging under this new management regime is having on old growth forest and whether it meets the requirement to maintain and enhance HCVs.

STT's Forest Management Plan (April 2019) states:

In July 2015, Sustainable Timber Tasmania made the decision to phase out clearfelling of Coupes Containing Old Growth (defined as coupes with greater than 25% by area of mapped old growth forest). Since 2016/17, no Coupes Containing Old Growth have been harvested by clearfelling.

Whilst STT has changed harvesting methods from clearfell to other harvesting methods it remains unclear as to how these revised harvest methods will be carried out in a manner that meets the requirement to maintain and enhance old growth.

Field research and desktop analysis undertaken by our organisations revealed a number of different harvesting methods are being employed by STT in CCOG. Site visits and analysis of satellite imagery clearly demonstrated that these harvest methods are entirely inconsistent the the requirement to maintain and enhance old growth, as demonstrated in the following examples.

### 3.2.1 Example harvest technique: shelterwood retention

Shelterwood logging is defined by STT as:

A silvicultural system of securing natural tree regeneration under a partially harvested overstorey, which is subsequently removed by successive harvests to allow seedlings and young regeneration to occupy the site.<sup>37</sup>

<sup>&</sup>lt;sup>37</sup> Sustainable Timber Tasmania (2019). Forest Management Plan. Sustainable Timber Tasmania, Hobart. P. 91

STT's definition of shelterwood logging specifically states that the shelterwood system 'allow(s) seedlings and young regeneration to occupy the site.' The purpose of the shelterwood system is to create a younger forest by partially harvesting the overstorey and then fully removing the overstorey during successive harvests to allow for young regeneration. Where this method is conducted in old growth forest it cannot maintain and/or enhance the old growth value as it based on converting a mature forest to a younger forest through successive harvests.

Field visits to shelterwood coupes in mapped old growth forest in the Wentworth Hills and Butlers Gorge area observed that vast majority of old growth trees were removed in the first harvest and younger trees were retained so they could be removed by successive harvests. In the first treatment the old growth elements are removed. Since this silviculture system is designed for successive treatments and harvests, the old growth values will not be recovered.

This harvest technique disturbs old growth forest and subsequently changes the old growth forest to a non-old growth forest. Old growth forest (under the FSC National Standard of Australia) definition is characterized by a lack of disturbance, however shelter wood harvesting involves disturbance including roads, snig tracks, soil disturbance, extensive damage to understorey vegetation and removal of a substantial biomass and canopy cover of trees (particularly mature and senescent trees in old growth forests). Once an old growth forest has been subject to shelter wood harvesting it ceases to be an old growth forest. Therefore, shelterwood harvesting in old growth forests fails to maintain and enhance old growth.

Moreover, shelterwood coupes tend to be larger than clearfell or variable retention coupes and therefore their disturbance impacts are generally more extensive. Where they occur in old growth forests they are often in excess of 100 hectares and can therefore result in the loss of large areas of mapped old growth forest.

#### Case study coupe WW051A – Butlers Rd

The shelterwood harvest system employed in coupe WW051A has resulted in removal of almost all large old growth trees, leaving behind a younger age class that will be harvested in the future. The first treatment has changed the forest from old growth to non-old growth forest. Old growth structural elements such as large old growth trees have been removed and signs of disturbance are no longer negligible. This is inconsistent with the requirement to maintain and enhance HCV 3.3.

PHOTO: MAPPED OLD GROWTH FOREST SUBJECT TO SHELTERWOOD LOGGING IN WW051A



Map 13: Coupe WW051A (boundaries depicted as pink lines), Mapped old growth (red shading) Imagery date January  $8^{\text{th}}$ , 2019, note extensive disturbance old growth forest within WW051A and coupes to the east no longer on the current plan.

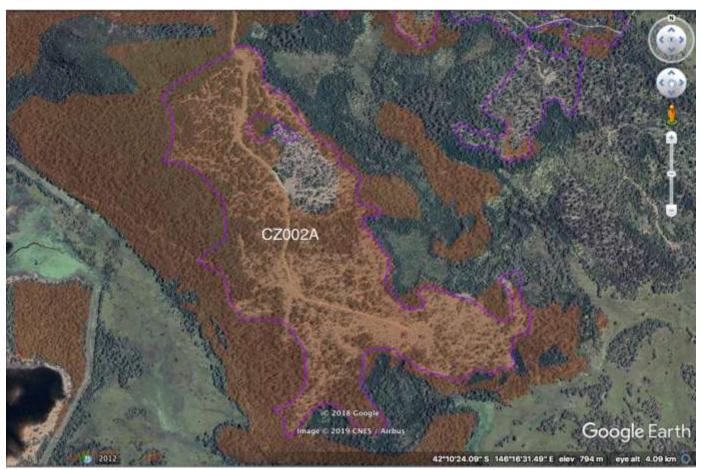


PHOTO: LOGGED OLD GROWTH FOREST IN SHELTERWOOD COUPE WW051A



## Case study coupe: CZ002A – Wentworth Hills

Coupe CZ002A contains 146 hectares of mapped old growth forest. It was logged in 2017/2018 using shelterwood retention, resulting in considerable disturbance. The forest within CZ002A can no longer be defined as old growth forest as the effects of disturbance will not become negligible for hundreds of years. Based on recent satellite imagery available on Google Earth and use of Google Earth's area calculation tool approximately 136 hectares of mapped old growth forest has been subject to logging disturbance in coupe CZ002A and can no longer meet the normative definition of old growth forest. Logging in coupe CZ002A with the shelterwood method has resulted in a reduction of 136 ha of mapped old growth forest. See coupe case studies section for further details on CZ002A.



Map 14: Coupe CZ002A (Boundaries Pik Lines), Mapped old Growth Forest (RED SHADING), IMAGE DATE 14<sup>TH</sup> DECEMBER, 2018

# 3.2.2 - Example harvest technique – Aggregated / variable retention

The aggregated or variable retention method is widely used by STT in CCOG. This method retains small clumps or strips of trees in some areas of a coupe whilst clearfelling other areas of the coupe. In some cases, STT aggregated retention coupes retain clumps in the centre of the coupe and in other cases aggregates are left on the periphery of the coupe.

Variable retention is defined by STT as:

A harvest system where structural elements or biological legacies (e.g., old trees, stags, logs, treeferns) from the harvested stand are retained for the new stand to achieve various ecological objectives. The system typically requires the majority of the felled area to be within one tree height of forest that is retained for at least a full rotation.<sup>38</sup>

Site visits to logged coupes listed by STT as aggregated/variable retention coupes and desktop analysis of satellite imagery revealed STT practices in aggregated/variable retention coupes differs from what is described in the definition above.

Large areas of these coupes have been subject to clearfelling practices, whilst retained vegetation is isolated in small clumps or strips. In many cases the distance between retained forest (both clumps and surrounding forest) is much more than one tree height and the majority of the felled area is considerably further away from retained forest than one tree height, as the definition describes. Leaving isolated clumps of old growth trees within a heavily cleared area fragments and reduces the overall area of old growth forest and is therefore inconsistent with maintain and/or enhance. Aggregated retention methods often result in net loss of old growth and consequently do not meet the requirement to maintain and enhance HCVs.

<sup>&</sup>lt;sup>38</sup> Sustainable Timber Tasmania (2019). Forest Management Plan. Sustainable Timber Tasmania, Hobart. P. 79

# Case study: TN065A and TN065L – Lower Styx Valley





PHOTOS: LOGGED OLD GROWTH FOREST IN TN065A AGGREGATED RETENTION COUPE



MAP 15: AGGREGATED RETENTION COUPE TN065A AND TN065L (BOUNDARIES DEPICTED AS PINK LINES), MAPPED OLD GROWTH FOREST (RED SHADED AREAS), BLUE LINES WITH LABELS MEASURE DISTANCE BETWEEN RETAINED VEGETATION, BLACK AND WHITE DOTS ARE PHOTOGRAPHED STUMPS. SATELLITE IMAGERY DATE 27th March, 2019.

PHOTO: GIANT STUMP ON EDGE OF MAPPED OLD GROWTH AREA IN COUPE TN065A



PHOTO: LOGGED OLD GROWTH FOREST IN TN065A



Coupe TN065A contained 40 hectares of mapped old growth forest (depicted as the red shaded area on map 15). The aggregated retention system used in this coupe retained 8 hectares of mapped old growth forest and felled 32 hectares of mapped old forests. This resulted in a significant loss in the area of mapped old growth forest. This is not consistent with the requirement to maintain and enhance old growth forest (HVC 3.3). Large cleared gaps between small retained clumps (as shown at map 15) have impacted old growth forest that is significant in stand age, size and structural attributes, in an almost identical manner to the clearfelling method.

TN065A contained high numbers of very large old trees. Stumps between 3-4m diameter were recorded. Trees of this size are likely to be hundreds of years old. In 2009 conservation organisations sent a sample of wood form a Eucalyptus stump in the Styx Valley (approximately 5 km from TN065A) and sent it to a radio carbon dating laboratory to determine its age. This stump was 3m in diameter, the results of the dating revealed a likely age of 600 years or an 82 per cent chance that the tree first began growing between 1420 and 1510 AD39. TN065A is approximately 700m above sea level, about 400m higher than where previous dating took place in the Styx valley. Stumps in TN065A are likely to record similar ages or even older ages. Growth rates in TN065A may have been slower than where previous dating work occurred as a result of the difference in altitude. Due to it's high elevation TN065A also contained a number of slower growing sub alpine species such as the endemic Yellow Gum (*Eucalyptus johnstonii*).

The black and white dots at Map 15 show locations where very large stumps were photographed. These photos are produced in Appendix 1.1.





<sup>39</sup> https://www.abc.net.au/news/2009-12-18/claims-forest-giants-600-years-old/1183186





PHOTOS: LOGGED OLD GROWTH FOREST IN AGGREGATED RETENTION COUPE TN065A

## Case Study: TN065L - Lower Styx Valley

Coupe TN065L contained 25 hectares of mapped old growth forest (62.5% of the total area of the coupe). This qualified the coupe as a CCOG that STT has logged using 'partial harvesting'. The aggregated retention method was used to 'partially harvest' this old growth forest.

Map 15 demonstrates that the majority of retained forest in coupe TN065L after logging was not mapped old growth forest. STT has retained approximately 4 hectares of mapped old growth forest and logged approximately 21 hectares. In total 84% of the mapped old growth forest within coupe TN065L has been clearfelled and is no longer old growth forest. Refer to the case study section of this report for detailed information and photos for coupes TN065L and TN065A.

## Case study: WW041B – Wentworth Hills

WW041B is 85.5 hectares in size and contained 52.8 hectares of mapped old growth forest. Using aggregated retention STT has logged 31.5 hectares of mapped old growth forest, logging has therefore removed 59% of mapped old growth within the coupe. Removal of more than half of the

mapped old growth forest from the coupe cannot be consistent with the requirement to maintain and/or enhance HCV 3.3 (old growth).

The only way that STT could log this area in a manner that is consistent with the requirements to maintain and/or enhance old growth would be to retain all mapped old growth forest in aggregates. The north-west and south-west corners of the coupe contained mapped old growth forest, these areas have been heavily logged with a method that is essentially the same as clearfelling.

The coupe is listed on the 2018 three year plan as an aggregated retention coupe. According to the Forest Practices Plan (FPP) this coupe is listed for clearfell. This was confirmed by STT signage that was observed in the coupe. Whilst some areas of forest have been retained, significant areas mapped old growth forest (>10ha in size) have been clearfelled. The clearfell status of the coupe on the FPP and the sign in the coupe suggests that STT may not be finished in the coupe and may return to log the retained areas with the clearfell method.

Several class 4 streams are present within mapped old growth forest in the coupe. No buffers of retained old growth forest have been implemented along these watercourses. The FPP confirms the presence of 10 class four streams in the coupe and does not propose any increased retention of old growth forest along these watercourses.

Further details on coupe WW041B and photos are provided in Appendix 1.2.



PHOTO: CLEARFELLED OLD GROWTH FOREST IN SOUTH WEST CORNER OF COUPE WW041B



PHOTOS: CLASS 4 STREAM WITH NO BUFFER AND DEBRIS PUSHED OVER DEFINED STREAM CHANNEL (LEFT). STUMP IN MAPPED OLD GROWTH FOREST ON BANK OF CLASS 4 STREAM THAT HAS BEEN CLEARED (RIGHT)





## Case study Coupe WW017B

This coupe is divided into two separate non contiguous polygons. In total these two polygons contain approximately 25 hectares of mapped old growth forest that occupies 77% of the total area of the two polygons.

The southern section of the coupe is approximately 15 ha and contains approximately 12 hectares of mapped old growth forest. The vast majority of the mapped old growth forest in this 15 ha area has been cleared. A site visit revealed heavy logging had taken place that is essentially no different from clearfell harvesting.

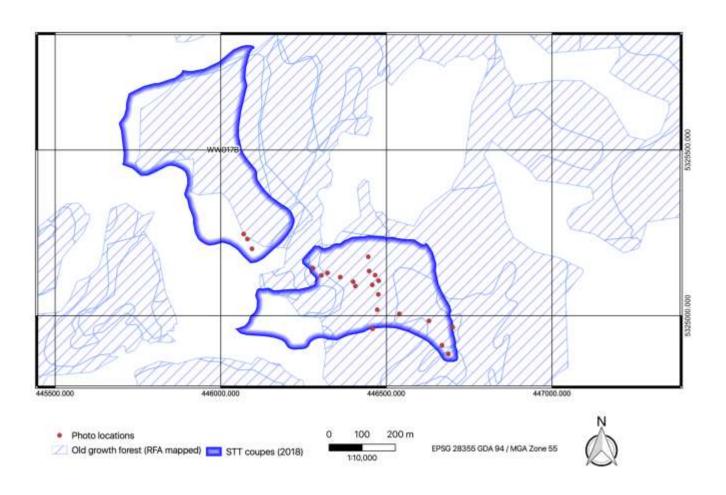
STT may argue that this coupe has been partially harvested, however by clearfell logging 12 hectares of old growth forest in one section of the coupe and retaining the forest in the northern section the end result is still clearfell harvesting that has removed approximately 12 ha of old growth forest from the landscape. This is inconsistent with the maintain and enhance requirements of the FSC standard.

Map xx displays the locations of photographs taken within the logged old growth area. These are displayed below. Further details on this coupe are provided in Appendix 1.2.



MAP 17: GOOGLE EARTH IMAGERY OF RECENT LOGGING OF OLD GROWTH FOREST IN WW017B

MAP 17: COUPE WW017B, MAPPED OLD GROWTH FOREST AND LOCATIONS OF PHOTOGRAPHS PRESENTED BELOW AND ON FOLLOWING PAGE













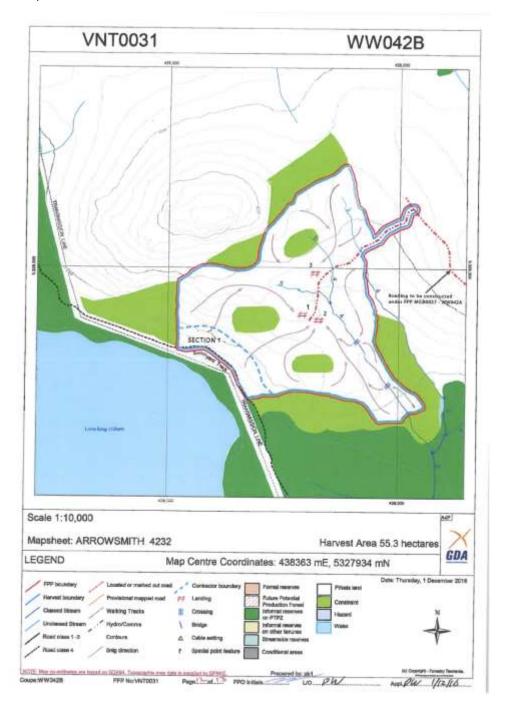






# 3.3 Active old growth logging at the time of writing

During the month to April and May logging was active in several areas of old growth forest within the Wentworth forest block. Coupe WW042B has mapped old growth forest within 100% of its total area. The coupe is currently being logged using the aggregated retention system. The FPP for this coupe shows that the majority of old growth forest in this coupe will be cleared. The FPP states the net harvest area is 55.3 hectares. Logging in this coupe will permanently remove 55 ha of old growth forest from the Wentworth hills landscape. This cannot be considered consistent with the maintain and enhance requirements.



# 3.3.1 Active logging in coupe WW038B

Logging is also currently taking place in WW038B with the aggregated retention system. This coupe has approximately 43 hectares of mapped old growth forest within its boundaries occupying 91% of the coupe area.

Logging here is resulting in a net loss of old growth forest and consequently inconsistent with the maintain and enhance requirements. The forest in WW038B is characterized by large mature Eucalytus delegatensis and a dense understory of various cool temperate rainforest species.

PHOTO: ACTIVE LOGGING IN OLD GROWTH FOREST COUPE WW038B



# 3.4 - Failure to recognize and rectify the inadequacies of the RFA old growth mapping data

STT's assessment of old growth (HCV 3.3) relies on mapping that was developed over 20 years ago during the Regional Forest Aggregated retentioneement process. STT has kept this layer up to date to incorporate logging and loss of old growth forest. The layer used for the purposes of this submission is an old layer that has not been kept updated. Multiple requests for the layer STT use were made but refused, this is appears to be non-conformant with indicator 7.5.2 and 7.5.3

7.5.2 Relevant components of the Management Plan\*, including relevant supporting information, excluding confidential information\*, are available to affected stakeholders\* on request at the actual costs of reproduction and handling.

7.5.3 Relevant components of the Management Plan\*, excluding confidential information\*, are available to interested stakeholders\* where specific concerns are identified and where requests are reasonable\* and practicable. At its discretion The Organisation\* may charge for reproduction and handling.

Where this layer maps old growth forest spatially old growth forest is present on the ground, however the layer is incomplete. Significant old growth forests that meet the normative FSC definition of old growth forest that are not mapped as old growth by the data set. ENGOs documented the inadequacies of the Tasmanian old growth mapping in the 2010 report 'The destruction of Tasmania's ancient "regrowth" forests'<sup>40</sup>

The tallest tree in Australia 'Centurion' is growing in an area not mapped as old growth by the RFA old growth mapping as are several other areas that are within proposed and logged STT coupes.

STT define a 'coupe containing old growth' (CCOG) as a coupe that has more than 25% of its area mapped as old growth forest, if a coupe meets this threshold it will be logged using partial harvesting as opposed to clearfell. Several logging coupes on STT's current three-year plan are not mapped as old growth but meet the definition of old growth. Due to the inadequacies of the old growth mapping these coupes will be logged using the clearfell system.

STT has not detailed any systems for field checking and identifying old growth on the ground, this is inconsistent with the precautionary approach. A precautionary approach would conduct field assessments to verify any old growth values on the ground that may no t be captured by the RFA old growth mapping layer.

<sup>&</sup>lt;sup>40</sup> Still Wild Still Threatened (2010) The destruction of Tasmania's ancient 'regrowth' forests.



MAP 18: COUPE EP021G STT COUPES DEPICTED AS PINK LINES, MAPPED OLD GROWTH FOREST AS RED SHADING

Forest within coupe EP021G is old growth forest but it is not mapped as old growth forest. It contains very large Eucalyptus trees with high levels of senescence above an established mid storey of rainforest species. The forest in EP021G satisfies the normative definition of old growth in the FSC standard but under STT's management it is scheduled for clearfelling.

STT's failure to rectify inadequacies with the RFA old growth mapping layer appears non-conformant with indicator 9.1.1 and 6.1.2

9.1.1 - An assessment is completed consistent with Annex G that records the location and status of High Conservation Value\* Categories 1-6, as defined in Criterion\* 9.1; the High Conservation Value\* Areas\* they rely upon, and their condition.

#### Verifiers:

• Documentation of the assessment methodology.

As significant stands of old growth forest (HCV 3.3) exist in areas that are not captured by the RFA old growth mapping layer, STT has failed to record the location and status of the true extent of HCV 3.3 and has therefore not complied with indictor 9.1.1

PHOTOS: OLD GROWTH FOREST IN COUPE **EP021G** NOT MAPPED AS OLD GROWTH FOREST, NOTE HIGH NUMBERS OF OLD GROWTH HOLLOW TREES, SIGNS OF SENESCENCE AND ESTABLISHED RAINFOREST SPECIES IN MID STOREY





#### 6.1.2

Assessments of environmental values\* are conducted with a level of detail and frequency so that:

Impacts of management activities on the identified environmental values\* can be assessed as per Criterion\* 6.2;

Risks\* to environmental values\* can be identified as per Criterion\* 6.2;

Necessary conservation\* measures to protect\* values can be identified as per Criterion\* 6.3; and

Monitoring of impacts or environmental changes can be conducted as per Principle\* 8.

STT's failure to asses and identify the true extent of old growth forest within the FMU highlights that their use of the RFA mapped old growth layer has not been completed with a level of detail and frequency so that impacts of management activities can be assessed, risks identified and conservation measures to protect values identified. It is the view of our organization's that progress towards meeting this indicator could be made if a new assessment of the extent of old growth forest was undertaken that appropriately captured areas of forest that are ecologically old growth but are not not currently captured by the RFA old growth mapping. STT's reliance on an old data set that was developed over 20 years ago does not demonstrate environmental values have been assessed with a level od details and frequency that indicator 6.1.2 requires.

# 3.5 – STT's management of HCV 3.3 and the FSC Standard

As the above examples illustrate, STT's logging operations in mapped old growth forest are inconsistent with the requirement to maintain and/or enhance HCV 3.3 and are resulting in a net loss of old growth forest across the FMU. For these reasons our organizations are of the view that STT's management of HCV 3.3 is critically non-conformant to Principles 9 and 6 and their associated indicators.

- 6.3 The Organisation\* shall\* identify and implement effective actions to prevent negative impacts of management activities on the environmental values\*, and to mitigate and repair those that occur, proportionate to the scale, intensity and risk\* of these impacts.
- 6.3.1 Management activities are planned and implemented to protect\* environmental values\*.
- 6.3.2 Management activities protect environmental values\*.
- 6.3.3 Where damage\* to environmental values\* occurs, measures are adopted to prevent further damage\*, and the damage\* is mitigated\* and/or repaired\*.

Indicator 6.3.1 and 6.3.2 appear to have not been adhered to by STT in relation to their current and proposed management for HCV 3.3.

The arbitrary threshold of >25% coupe area mapped as old growth that has been set to trigger management actions does not protect environmental values as it allows for logging of HCV 3.3 old growth forest, in all coupes regardless of their status as a CCOG or not. STT's management results in a net loss of old growth forest and has therefore not been planned and implemented to protect environmental values (6.3.1) and does not protect this environmental value (6.3.2). Whilst areas of mapped old growth remain in production it is hard to see how STT will meet the requirements of these indicators.

- 9.2 The Organisation\* shall\* develop effective strategies that maintain and/or enhance the identified High Conservation Values\*, through engagement\* with affected stakeholders\*, interested stakeholders\* and experts.
- 9.2.1 Threats to High Conservation Values\* are identified as required by Annex G.

Verifiers:

Documentation of specific threats to the maintenance and enhancement of identified HCVs\*.

STT's HCV Assessment and Management Plan fails to appropriately identify threats to HCVs in sufficient detail that relates to their management activities (i.e. logging). Page 7 and 8 of STT's HCV Assessment and Management Plan relies on a generic list of of threatening processes developed by DPIPWE in 2013; this list fails to mention logging or timber harvesting as a threat. Very little detail is given on specific threats to the maintenance and enhancement of HCVs as required by indicator 9.2.1 and its verifier. Without a detailed identification of specific threats (such as loss of hollow bearing trees (HCV 1), loss of biodiversity (HCV 1), impacts on hollow dependent fauna (HCV 1), loss of old growth forest (HCV 3), impacts on landscape level forests (HCV 2), etc.) STT's management of HCVs cannot be considered reliable, particularly in relation to the maintain and/or enhance requirements. STT's failure to appropriately identify and specifically detail threats to the maintenance and enhancement of HCVs is non-conformant with indicator 9.2.1 and its verifier.

9.2.2 Management strategies and actions are developed to maintain and/or enhance the identified High Conservation Values\* and to maintain associated High Conservation Value Areas\* prior to implementing potentially harmful management activities.

#### Verifiers:

• Documentation of Management Plans\* including management strategies and actions to maintain and/or enhance HCVs\*, including strategies in response to identified threats.

In relation to HCV 3.3 (old growth) STT is non-conformant with this indicator due to:

Logging of mapped old growth forest with silvicultural systems that fail to maintain and enhance HCVs at the coupe level (as detailed in section 3.2).

The arbitrary threshold used to identify CCOG (>25% mapped old growth) which allows for significant areas of old growth to still be logged using the clearfell method (as detailed in Section 3.1.4).

The arbitrary threshold to identify CCOG (>25% of areas mapped old growth) allowing for future logging to remove 100% of remaining old growth during a second treatment or cut following an initial reduction in old growth below the 25% threshold due to logging (as detailed above on P. xxx)

Logging operations resulting in a net loss of extant intact mapped old growth forest (as detailed in sections 3.1 and 3.2).

9.3 The Organisation\* shall\* implement strategies and actions that maintain and/or enhance the identified High Conservation Values\*. These strategies and actions shall\* implement the precautionary approach\* and be proportionate to the scale, intensity and risk\* of management activities.

9.3.1 The High Conservation Values\* are maintained and/or enhanced, including by implementing the strategies developed.

STT have failed to meet the requirements of indicator 9.3.1 and 9.3.2. Logging of old growth forest that results in a net loss of that value cannot be considered consistent with the maintain and enhance requirements in 9.3.1. Given that old growth forest is defined by forest where the effects of disturbance are now negligible, it is impossible to demonstrate maintenance of that value under a management regime that disturbs that value through logging. It is the view of our organisations that STT could make progress towards meeting this indicator if it excluded all mapped old growth forest from production, implemented management prescriptions to maintain old growth in the landscape whilst also undertaking a detailed reassessment of old growth forest to capture any additional areas old growth forest that may not be represented by the RFA old growth mapping.

### 4 – Stakeholder consultation

# 4.1 Performance of STT with regard to stakeholder engagement, specifically FSC Australian Standard 7.5

STT's HCV Management Plan contains a number of maps and analyses which identify the locations of HCVs and the management approach to them. Maps in the Plan are at a statewide scale which does not provide enough detail for landscape or operational scale interpretation. In order to properly understand and engage with the Plan as stakeholders we require the original data to examine the detail of these maps and to utilize them in a GIS environment.

Indicator 7.5.2 requires STT to make available "Relevant components of the *Management Plan\**, including relevant supporting information".

The spatial data and mapping are highly relevant components of the Plan to us as stakeholders. We see no reason why the mapping of HCVs should be confidential and therefore exempt from 7.5.2. For example, old growth forest logging is an area of considerable concern for us as stakeholders. Mapping of old growth forest originally produced by the Australian and Tasmanian governments during the RFA process and since updated by FT/STT is critical to STT's assessment and management of HCVs 3.1 and 3.3. Our efforts to review the plan in relation to these HCVs, particularly at the coupe level, is restricted by lack of access to the data which STT are using to make their management decisions.

Similarly, the habitat model for swift parrots which is central to STT's management of this Critically Endangered species under HCV 1.1 is not available to stakeholders and has not even been published in the HCV Management Plan. The mature habitat map, derived from STT's PI mapping, is shown in Figure 3.6 of the HCV Management Plan and, therefore is presumably not confidential, yet is not available to stakeholders.

Our organisations have repeatedly requested data directly relevant to STT's HCV Management Plan. E-mail requests for several HCV spatial datasets were made on 16 April and 18 April. While one dataset was provided promptly, others have taken several weeks or not been provided at all. A further request was made on 30 April for information on sustainable yield calculations and swift parrot habitat mapping.

The above examples demonstrate non-conformance with indicators 7.5.2 and 7.5.3, as described in the Australian Standard:

7.5 The Organisation\* shall\* make publicly available\* a summary of the Management Plan\* free of charge. Excluding confidential information\*, other relevant components of the Management Plan\* shall\* be made available to affected stakeholders\* on request, and at cost of reproduction and handling.

- 7.5.1 A summary of the Management Plan\*, listing its components, in a format comprehensible to stakeholders\* including maps and excluding confidential information\* is made publicly available\* at no cost.
- 7.5.2 Relevant components of the Management Plan\*, including relevant supporting

information, excluding confidential information\*, are available to affected stakeholders\* on request at the actual costs of reproduction and handling.

7.5.3 Relevant components of the Management Plan\*, excluding confidential information\*, are available to interested stakeholders\* where specific concerns are identified and where requests are reasonable\* and practicable. At its discretion The Organisation\* may charge for reproduction and handling.

We note that spatial datasets can be readily transferred by file sharing services, made available for download from a website or presented online using an interactive web map service. For example, STT's *Interactive map viewer*<sup>41</sup>, which currently displays planned logging coupes and some other features, could also include layers for all of the HCV mapping.

# 4.2 Selected correspondence with STT

Emailed STT engagement team 16 April 2019 requesting data relevant to the HCV Management Plan, including:

Could you please send me spatial data shapefiles for the current three

year plan and also the shapefile for the RFA old growth mapping that STT are using to identify coupes containing old growth.

- Three year plan shapefile
- The old growth mapping that STT is using to identify 'coupes containing old growth'
- All HCV mapping used in the STT HCV assessment and management plan,

this means shapefiles for all categories of HCV forests (1-6) as identified by STT in the document, including mapping that is not mapped in the report (for example HCV 2.3(a) wildlife habitat strips).

- Permanent Timber Production Zone shapefile
- Production forest shapefile
- Non production forest shapefile

<sup>41</sup> https://www.sttas.com.au/forest-operations-management/interactive-map-viewer

#### Reply from STT on 18 April 2019

Included the Three Year Plan (coupe boundaries) spatial data but no other data requested.

#### Excerpts:

- •The old growth assessment is based upon a shared old growth mapping layer that has been maintained by Sustainable Timber Tasmania and Private Forest Tasmania in order to maintain currency with any harvesting that has occurred post the RFA. Supplying this data will require it to be restricted to PTPZ land which we can look to do.
- The HCVs identified by Sustainable Timber Tasmania have been identified via overlay and analysis from a variety of data sources many of which are publicly available as described in the HCV Assessment and Management Plan. We are currently still going through the process of compiling the resultant analysis into consolidated HCV layers.

----- Forwarded message ------

From: **Ed Hill** <<u>ed.hill.83@gmail.com</u>>

Date: Tue, Apr 30, 2019 at 6:01 PM

Subject: Request for information and data

To: STT Engagement Team < stakeholder@sttas.com.au >

Hi Dion,

I'm writing to request STT provide information in relation STT's HCV assessment and management plan.

STTs HCV assessment states that 9,300 hectares of swift parrot breeding habitat is now excluded from production in the southern forests. Are you able to supply maps or spatial data that show what areas the 9,300 hectares covers in the southern forests?

Could you also supply data or any information you have about STT's sustainable yield calculations that specifically addresses how STT has incorporated fire impacts into sustainable yield calculations and the HCV assessment.

Lastly could you please provide an update on the moratorium on logging on Bruny Island.

Regards,

Ed Hill on behalf of The Wilderness Society and Bob Brown Foundation.

NO REPLY AS AT 14 May 2019

# 5 – Conclusion

We conclude that STT are non-conformant to a number of principles and indicators in The FSC National Forest Stewardship Standard of Australia FSC-STD-AUS-01-2018 EN, particularly indicators associated with Principle 9 and 6 that relate environmental protection and HCVs.

The central issues we have identified focus around inadequate protection of old growth forests (HCV 3.3), and threatened species (HCV 1.1. 1.4) and STT's failure to meet the maintain and enhance requirements.

For the reasons detailed above we conclude that STT are not yet ready to meet the requirements of the FSC standard and will need to fundamentally change their management practices in order to progress towards the achievement of FSC certification.

# Appendix 1 – Logging coupe case studies

This Appendix present case studies of recently logged or currently planned coupes within the FMU (listed in the table below). This is not a comprehensive list of all coupes with potential HCV issues but rather a sample of coupes from across the FMU to demonstrate the ongoing, widespread and systemic failure to meet the FSC standard for maintaining and/or enhancing HCVs.

Coupe	Status	Verified HCV forest (HCV 2.2)	Relevant FSC HCVs
BB028B	Logged		1.1, 1.4
BB025A	Logged	HCV	1.1, 1.4, 3.3
BB024B	Planned	HCV	1.1, 1.4, 3.3
EP061B	Planned		1.1, 1.4, 3.3
KD045B	Logged		1.1, 1.4, 3.3
EP021G	Planned	partly HCV	1.1, 1.4, 3.3
EP021C	Planned	HCV	1.1, 1.4, 3.3
TN065A	Logged	HCV	1.1, 1.4, 3.3
WW005D	Current logging	HCV	3.3
WW012C	Logged	HCV	3.3
WW017B	Logged	HCV	3.3
WW018B	Planned	HCV	3.3
unknown name	Logged	HCV	3.3
WW035A	Planned	HCV	3.3
WW036C	Partially logged	HCV	3.3
WW036D	Logged	HCV	3.3
WW038B	Current logging	HCV	3.3
WW039B	Planned	HCV	3.3
WW041B	Logged	HCV	3.3
WW042B	Current logging	HCV	3.3
WW050D	Logged		3.3
WW051A	Logged		3.3
DU011F	Logged		3.3
DU012B	Planned	HCV	3.3
DU012C	unknown	HCV	3.3
DU019H	Partially logged		3.3
BO102A	Planned	HCV	3.3
BO109A	Planned	HCV	3.3
CC118C	Planned	partly HCV	1.1
UR037H	Planned	, ,	3.3
SH045D	Planned	HCV	1.1, 3.3
TO053B	Planned		1.1, 1.4, 3.3
SH041G	Planned	partly HCV	1.1, 1.4, 3.3

# 1.1 Southern Forests (BB, EP, KD and SO coupes)

**BB028B** 

HCVs: 1.1, 1.4

Status: Logged (2018)

Silvicultural method: Clearfell

Three-year wood production plan (latest): 2018

Mapped old growth (total hectares/per cent of coupe area): 0

This coupe is 30 hectares in size it was logged in 2018. BB028B falls within the mapped core range for the swift parrot. The coupe contained approximately 10 hectares of mapped blue gum swift parrot foraging habitat (GlobMap).

Approximately 6 hectares foraging habitat (GlobMap) has been logged.

A field visit identified large old hollow bearing trees that had been cut within an area mapped as GlobMap. Refer to case study in HCV 1 section of submission.



PHOTO: STUMP WITHIN GLOBMAP AREA OF BB028B MEASURED AT >2M DIAMETER

#### BB025A

HCVs: 1.1, 1.4. 3.3

Status: Logged (2018)

Silvicultural method: Clearfell / Cable

Three-year wood production plan (latest): 2018

Mapped old growth (total hectares/per cent of coupe area): 0

This coupe was logged in the latter half of 2018. The Huon valley wildfire burnt the logged area, and the small retained area where the known swift parrot nesting tree is located in February 2019.

This coupe contained highly significant foraging and nesting habitat for swift parrot, refer to case study in HCV 1 section of this submission.



PHOTO: SWIFT PARROT NESTING TREE IN BB025A SURROUNDED BY CLEAR-FELLED NESTING AND FORAGING HABITAT



PHOTO: STUMP MEASURED AT 3M DIAMETER WITHIN 40M OF SWIFT PARROT NEST TREE



PHOTO: CLEARFELLED MATURE HABITAT IN BB025A

#### BB024B

HCVs: 1.1, 1.4, 3.3

Status: Unlogged

Silvicultural method: Aggregated Retention

Three-year wood production plan (latest): 2018

Mapped old growth (total hectares/per cent of coupe area): 29.5 ha / 50%

Large areas of forest surrounding this coupe were burnt by the 2019 fire. Forest within this coupe remains unburnt and is therefore of very high environmental value as a refuge of unburnt tall wet forest and swift parrot habitat in a heavily burnt landscape.

This coupe was added to STT three year plan in 2018. The addition of this coupe to the most recent plan indicates STT continues to target old growth forest. Old growth trees in BB024B provide important nesting habitat for swift parrot and wedge tailed eagle. Refer to map on page xx.



PHOTO: LOOKING TOWARDS THE UNBURNT OLD GROWTH FOREST OF BB024B FROM ADJACENT LOGGED COUPE BB025A

#### **EP061B**

HCVs: 1.1, 1.4, 3.3

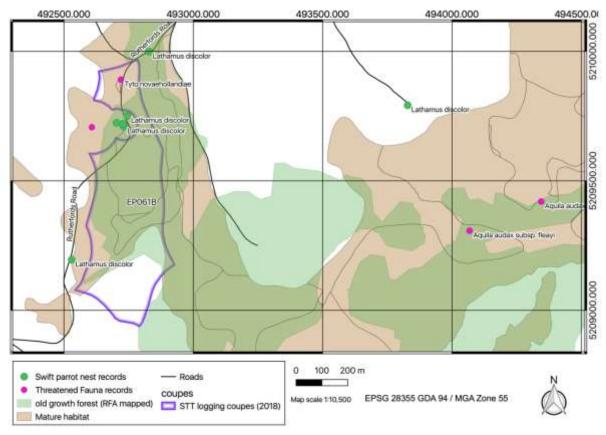
Status: Unlogged

Silvicultural method: Aggregated Retention

Three-year wood production plan (latest): 2018

Mapped old growth (total hectares/per cent of coupe area): 13.7 ha / 60.9%

This is old growth forest with many very large old Eucalypt trees. The mid storey is, dominated by rainforest species. There are six swift parrot nesting records directly adjacent to the cope boundary indicating that the old growth forest within the coupe is suitable nesting habitat for swift parrot. The abundance of old growth hollow bearing trees provides high quality nesting habitat in this coupe. A Masked Owl (Tyto novaehollandiae) nesting record is present in the coupe and another is directly adjacent to the western boundary. Two wedge tailed eagle nesting records are also present approximately 1500m to the east of the coupe. These records indicate the importance of this area for threatened nesting birds that depend on hollow bearing trees and old forest.



Map: Coupe EP061B, RFA mapped old growth forest, mature habitat, swift parrot (*Lathamus discolor*) records, Masked Owl (*Tyto novaehollandiae*) records and Wedge tailed eagle (*Aquilla audax subsp. fleayi*) records.

#### KD045B

HCVs: 1.1, 1.4, 3.3

Status: Unlogged

Silvicultural method: Clearfell

Three-year wood production plan (latest): 2017

Mapped old growth (total hectares/per cent of coupe area): 0

This coupe is split into two aggregates. The north eastern aggregate contained approximately 8 hectares of mapped swift parrot foraging habitat (GlobMap). Logging took place in this aggregate in 2016 and removed 7 hectares of mapped swift parrot foraging habitat (GlobMap).

The second aggregate of the coupe is on Hopetoun rd and is approximately 5 hectares in size. It was clearfell logged in 2018/19 and burnt in April 2019. This area contained hollow bearing trees and is surrounded by significant swift parrot foraging habitat (GlobMap). A field visit to this site revealed STT's high intensity regeneration burn had escaped into the surrounding streamside reserve and was burning unlogged forest outside of the coupe boundary.



#### **EP021G**

HCVs: 1.1, 1.4, 3.3

Status: Unlogged

Silvicultural method: Clearfell

Three-year wood production plan (latest): 2018

Mapped old growth (total hectares/per cent of coupe area): 0

This coupe is not mapped as old growth forest, however field inspections confirmed the presence of old growth forest. Very large and tall emergent old growth Eucalypts above an established old growth rainforest mid storey were encountered within the coupe boundaries

This coupe exemplifies why STT's reliance on the old growth mapping that was created over 20 years ago through the Regional Forest Aggregated retentioneement Process is deeply flawed in relation to their management of old growth. Refer to the old growth forest section on page xxx for more detail.

The presence of many very large old growth trees containing hollows and the proximity to mapped swift parrot foraging habitat (GlobMap) and swift parrot nesting records indicates this coupe is high quality swift parrot breeding habitat and meets the criteria for HCV 1.1 and 1.4





EP021C

**HCVs:** 1.1, 1.4, 3.3

Status: Unlogged

Silvicultural method: Aggregated Retention

Three-year wood production plan (latest): 2018

Mapped old growth (total hectares/per cent of coupe area): 90 ha / 77%

The vast majority of this coupe is mapped as old growth forest. A field visit confirmed this area is very high value old growth forest. Emergent *Eucalyptus* trees hundreds of years in age were observed above a well established rainforest canopy characterised by a variety of Tasmanian cool temperate rainforest species.

A road has been constructed into the coupe in preparation for logging. Any logging in this forest at all would impact on old growth forest and be inconsistent with the requirement to maintain and enhance old growth. Refer to the old growth section on pages.



TN065A

**HCVs:** 1.1, 1.4, 3.3

Status: Logged

Silvicultural method: Aggregated Retention

Three-year wood production plan (latest): 2017

Mapped old growth (total hectares/per cent of coupe area): 40ha / 81.5%

Approximately 32 hectares of mapped old growth forest was logged in 2018 and burnt in April/May 2019. Many very large old growth stumps were observed in large clearfelled areas on either side of two small retained aggregates. The google earth image at Fig xx on page shows photo locations as black and white dots, RFA mapped old growth forest in red shading and STT coupe boundaries as

pink lines.

























## 1.2 Wentworth Hills (CZ and WW coupes)

The Wentworth Hills region is mostly verified High Conservation Value forest. It is predominantly vegetated with native forest dominated by gum-topped stringybark (Eucalyptus delegatensis), frequently with a subcanopy of rainforest trees, reflecting the high rainfall of the region. Twenty-two native forest logging coupes are on the current STT three year plan in the Wentworth Hills. Besides the coupes featured below there are several others with mapped old growth in the region (i.e. WW018A, WW022A, WW034C, WW034E, WW036B, WW039A).

WW005D

HCVs: 3.3

Status: current

Silvicultural method: SHELTERWOOD RETENTION

Three-year wood production plan (latest): 2018/19

Size: 85.96 ha

Mapped old growth (total hectares/per cent of coupe area): 72.19 ha (84%)

North-eastern part of coupe harvested in late 2018, based on Google Earth. Current operations in southern part of coupe.

No FPP on STT website despite being an active coupe in this harvest year.

WW012C

HCVs: 3.3

Status: logged

Silvicultural method: SHELTERWOOD RETENTION

Three-year wood production plan (latest): 2018/19

Size: 79.71 ha

Mapped old growth (total hectares/per cent of coupe area): 36.33 ha (46%)

Multi-aged tall Eucalyptus delegatensis with mostly open understorey. Rocky steep site. Lots of forest retained. Some big stumps indicate loss of old growth elements.



WW017B

HCVs: 3.3

Status: logged

Silvicultural method: ARN

Three-year wood production plan (latest): 2018/19

Size: 31.86 ha

Mapped old growth (total hectares/per cent of coupe area): 24.6 ha (77%)

Multi-aged tall Eucalyptus delegatensis with variable understorey from dense rainforest subcanopy to more open subalpine shrubs. Coupe in two parts, lower (southern) part logged. Large clearfelled areas with many large stumps of old growth size class. Senescent tree crowns with hollows on ground following removal of trunks. Retained patches in logged part are dense rainforest with very few emergent eucalypts (evident on site and on Google Earth). Significant soil disturbance — muddy clay.





#### WW018B

HCVs: 3.3

Status: not logged

Silvicultural method: SHELTERWOOD RETENTION

Three-year wood production plan (latest): 2018/19

Size: 41.76 ha

Mapped old growth (total hectares/per cent of coupe area): 28.17 ha (67%)

No FPP yet. Not visited on ground.

unknown coupe (directly S of 35A)

HCVs: 3.3

Status: logged

Silvicultural method: unknown

Three-year wood production plan (latest): unknown

Mapped old growth (total hectares/per cent of coupe area): unknown

Mostly clearfelled with some small stands of retained trees, mostly understorey species or smaller age class eucalypts. Numerous large eucalypt stumps.



#### WW035A

HCVs: 3.3

Status: roaded

Silvicultural method: ARN

Three-year wood production plan (latest): 2018/19

Size: 59.26 ha

Mapped old growth (total hectares/per cent of coupe area): 58.07 ha (98%)

Mostly even-aged tall old-growth Eucalyptus delegatensis with a very dense subcanopy of rainforest trees, principally myrtle beech.





#### WW036C

HCVs: 3.3

Status: logged partially

Silvicultural method: AGGREGATED RETENTION

Three-year wood production plan (latest): 2018/19

Size: 92.23 ha

Mapped old growth (total hectares/per cent of coupe area): 80.77 ha (88%)

Partially clearfelled previously with subsequent young regeneration.



WW036D

HCVs: 3.3

Status: logged

Silvicultural method: shelterwood?

Three-year wood production plan (latest): 2016/17

Size: 24.11 ha

Mapped old growth (total hectares/per cent of coupe area): unknown

Multi-aged *E. delegatensis* forest with old-growth trees. Some retained patches of forest. Old-growth size class stumps.



WW038B

HCVs: 3.3

Status: current

Silvicultural method: ARN

Three-year wood production plan (latest): 2018/19

Size: 47.05 ha

Mapped old growth (total hectares/per cent of coupe area): 43.1 ha (92%)

Old-growth *E. delegatensis* with relatively sparse emergent eucalypt crown cover over a dense rainforest canopy. Lots of large special species (myrtle beech) logs in slash heaps. Patches of clearfell. Lots of soil disturbance – muddy clay.







#### WW039B

HCVs: 3.3

Status: not logged

Silvicultural method: SHELTERWOOD RETENTION

Three-year wood production plan (latest): 2018/19

Size: 66.56 ha

Mapped old growth (total hectares/per cent of coupe area): 3.28 ha (5%)

Lots of old growth trees despite low amount of mapped old growth. Previously in 2016 plan but coupe has approximately doubled in size in current plan.



#### WW041B

HCVs: 3.3

Status: logged

Silvicultural method: ARN

Three-year wood production plan (latest): 2018/19

Size: 85.51 ha

Mapped old growth (total hectares/per cent of coupe area): 52.86 ha (62%)

Multi-aged *E. delegatensis* with dense rainforest subcanopy of myrtle beech or *Leptospermum*. Old growth stumps present. Large clearfelled patches. Drainage issues – small watercourses throughout coupe with no buffers and subject to soil disturbance, running water following machinery tracks. Larger watercourses have partial buffers but in places logging has occurred within 5 m of watercourse or all vegetation including understorey has been flattened. For example, the watercourse in the northern part of the coupe, which is a Class 4 or possibly Class 3 stream, has been subject to extensive tree removal and machinery use within 10 metres of the streambanks.













WW042B

HCVs: 3.3

Status: current

Silvicultural method: ARN

Three-year wood production plan (latest): 2018/19

Size: 81.0 ha

Mapped old growth (total hectares/per cent of coupe area): 80.9 ha (100%)

Coupe not ground-truthed due to active logging.

WW050D

HCVs: 3.3

Status: logged

Silvicultural method: SW?

Three-year wood production plan (latest): 2017/18

Size: 47.14 ha

Mapped old growth (total hectares/per cent of coupe area): 21.12 ha (45%)

Multi-aged *E. delegatensis* with dense rainforest or Leptospermum subcanopy. Almost all old growth trees removed from coupe. Many large stumps. Some smaller size class trees retained. Large debris piles.

WW051A

HCVs: 3.3

Status: logged

Silvicultural method: shelterwood?

Three-year wood production plan (latest): 2017/18

Size: 43.77 ha

Mapped old growth (total hectares/per cent of coupe area): unknown

Multi-aged *E. delegatensis* with dense rainforest or *Leptospermum* subcanopy. Almost all old growth trees removed from coupe. Many large stumps. Some smaller size class trees retained. Large debris piles.







# 1.3 Brown Mountain (DU coupes)

The Brown Mountain region in the Derwent Valley, adjoining Mt Field National Park, is mostly verified High Conservation Value forest. It is predominantly vegetated with native forest dominated by gum-topped stringybark (*Eucalyptus delegatensis*). Six native forest logging coupes are on the current STT three year plan in this northern part of the Dunrobin (DU) forest block, plus several coupes from previous plans which have been logged in recent years.

#### **DU011F**

HCVs: 3.3

Status: logged

Silvicultural method: CLEARFELL

Three-year wood production plan (latest): 2015/16

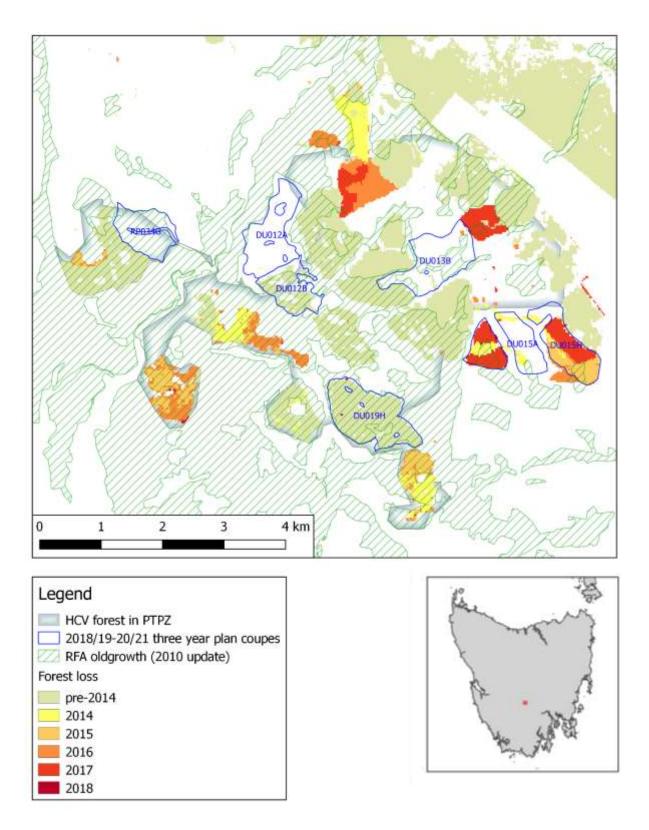
Size: approx. 26 ha

Mapped old growth (total hectares/per cent of coupe area): approx. 24 ha (~92%)

This coupe has been logged and burnt. Numerous large stumps indicate the former presence of old growth eucalypt forest. This coupe was clearfelled despite being almost entirely old growth forest.







MAP OF CURRENT THREE YEAR PLAN COUPES AT BROWN MOUNTAIN.

#### **DU012B**

HCVs: 3.3

Status: planned

Silvicultural method: SHELTERWOOD REMOVAL

Three-year wood production plan (latest): 2018/19

Size: 54.9 ha

Mapped old growth (total hectares/per cent of coupe area): 38.8 ha (71%)

This coupe has been partially logged several years prior, with large trees removed. It is a multi-aged forest in which the larger size class of trees has been removed, as evidenced by cut stumps. The next phase of logging will remove the next largest size class, resulting in a shift from formerly old growth forest to young regrowth.



**DU012C** 

HCVs: 3.3

Status: unknown

Silvicultural method: presumably SHELTERWOOD REMOVAL

Three-year wood production plan (latest): 2017/18

Size: 50.5 ha

Mapped old growth (total hectares/per cent of coupe area): 48.6 ha (96%)

This coupe has been partially logged several years prior, with large trees removed. It is a multi-aged forest in which the larger size class of trees has been removed, as evidenced by cut stumps. The next phase of logging will remove the next largest size class, resulting in a shift from formerly old growth forest to young regrowth.



#### **DU019H**

HCVs: 3.3

Status: partly logged

Silvicultural method: SHELTERWOOD REMOVAL

Three-year wood production plan (latest): 2018/19

Size: 108.7 ha

Mapped old growth (total hectares/per cent of coupe area): 100.1 ha (92%)

This coupe has been partially logged several years prior, with large trees removed, resulting in a shift from old growth forest to non-old growth. The western portion of this coupe has recently been logged for a second time, with most trees removed. This current phase of logging, using the shelterwood removal method as described in the FPP, involves removal of all trees >40 cm d.b.h., resulting in a shift from mixed age to young regrowth. Five small wildlife habitat clumps are to be retained according to the FPP.





# 1.4 Tarkine (BO and SU coupes)

## BO12A

HCVs: 1.1, 1.4, 3.3, 3.1

Status: unlogged

Silvicultural method: selective

Three-year wood production plan (latest): 2018

Mapped old growth (total hectares/per cent of coupe area): 24ha / 61.5%

This coupe is mapped almost entirely as cool temperate rainforest. The entire coupe is old growth forest despite 61% of its area being mapped as old growth (RFA mapping). The forest in BO019A exhibits very late stage successional characteristics, including senescent Eucalyptus trees and a very established old growth rainforest canopy.

Where logging disturbance has occurred along the road that has been pushed into the coupe dense Eucalyptus delegatensis regeneration is present. This regeneration is an example of the how the forest in BB019A would regenerate if logging were to occur. The old growth rainforest elements would be removed and replaced with dense regeneration of pioneer species such as Eucalyptus. The rainforest in BB019A has developed in the absence of disturbance for at least 300 years, the forest

has now reached its successional climax. Logging would disturb the forest and consequently fail the maintain and enhance requirements of FSC.

PHOTOS: MYRTLE BEECH TREES IN COOL TEMPERATE RAINFOREST IN COUPE BO12A





PHOTO: EUCALYPT REGENERATION AFTER LOGGING DISTURBANCE FROM ROAD CONSTRUCTION IN BO12A



### BO19A

HCVs: 1.1, 1.4, 3.3, 3.1

Status: unlogged

Silvicultural method: selective

Three-year wood production plan (latest): 2018

Mapped old growth (total hectares/per cent of coupe area): 39ha / 79%

Coupe BO019A is very similar to BO012A. It is old growth cool temperate rainforest. Large sections of the coupe are primary rainforest with no Eucalypts, other areas have very large old growth Eucalypts emerging from a close rainforest canopy.

A significant section of B019A (as well as BO012A) is not mapped as old growth forest. Field visits revealed the forest not mapped as old growth is in fact old growth. This highlights the inadequecies of the RFA old growth mapping and STT's reliance on this to asses the presence of old growth.

Photos below labelled A-E were taken within areas not mapped as old growth but clearly document old growth values. Locations of photos A-E are displayed on the map below.

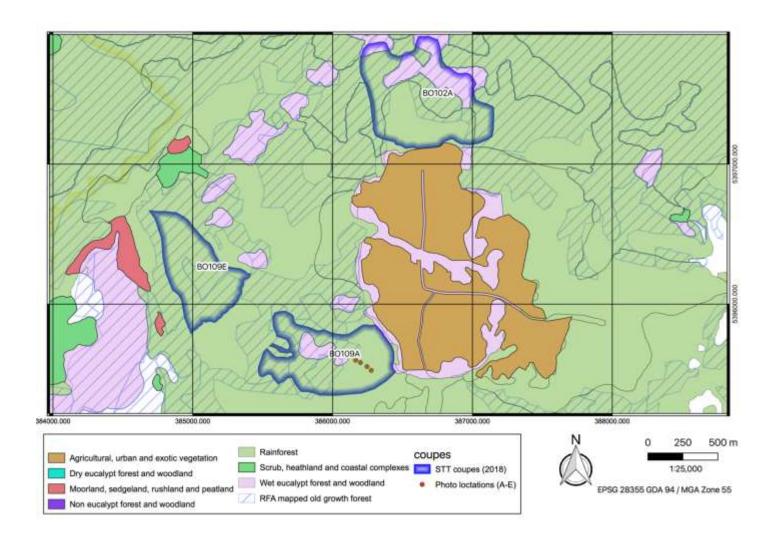








PHOTOS FROM COUPE BO019A:



# 1.5 North-east (CC and UR coupes)

As in other regions of Tasmania, logging in the north-east impacts HCVs 1.1 and 3.3. Time limitations precluded a more thorough examination of logging coupes in this region.

## CC118C

HCVs: 1.1

Status: planned

Silvicultural method: CLEARFELL

Three-year wood production plan (latest): 2018/19

Size: 26.4 ha

Mapped old growth (total hectares/per cent of coupe area): 0 ha (0%)

This coupe contains no mapped old growth but is almost entirely mapped mature habitat. Very old cut stumps indicate that the area was selectively logged in the pre-industrial logging era. Numerous mature trees are present, including some with old growth features, indicating that this forest would be classified as old growth if it had not been subject to historic low-intensity logging. Retaining this age of forest is important for recruitment in a landscape in which there is relatively little old growth remaining. As such it is important for habitat since it contains old growth elements.







UR037H

HCVs: 3.3

Status: planned

Silvicultural method: CLEARFELL

Three-year wood production plan (latest): 2018/19

Size: 59.4 ha (harvest area 33 ha)

Mapped old growth (total hectares/per cent of coupe area): 28.2 ha (47%)

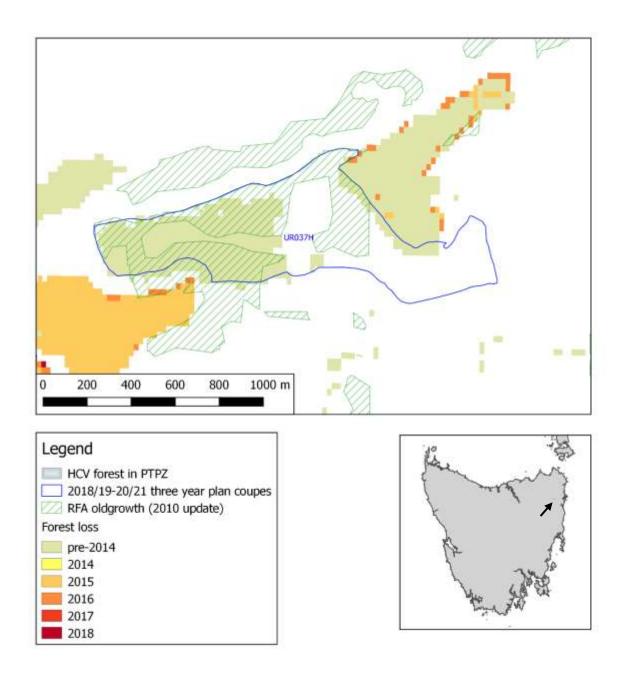
The above figures are for the coupe as it is mapped. However, around half of the coupe was clearfelled in 2011/12 and the current FPP proposes to clearfell the remaining 33 ha of the coupe. Of this 33 ha, approximately 11.6 ha (35%) is mapped old growth. It is apparent from the straight edge of the old growth polygon and other old growth polygons nearby that the edge of a mapsheet used for old growth mapping bisects this coupe. It is clear from satellite imagery (CNES 29/9/2018 on Google Earth) the easternmost part of the coupe which is not mapped old growth has tree crowns of equivalent size to the mapped old growth within the coupe. Therefore it appears there is a substantial area of unmapped old growth within the coupe due to the inadequacy of the RFA old growth mapping program.

Given the STT policy of not clearfelling "coupes containing old growth" (i.e. coupes with >25% mapped old growth) it appears that STT are being disingenuous by using the extent of old growth left after the 2011-12 clearfelling as a proportion of the total coupe area to fall below the 25%

threshold when any other measure (i.e. the 47% mapped old growth prior to 2012 or the c. 35% of the harvest area, which may be much higher if unmapped old growth is included) is well above the 25% threshold. Furthermore, while the coupe is listed under the three-year plan as 'ground' harvesting, the FPP reveals that the proposed harvesting method is predominantly cable logging.



UR037H SHOWING UNLOGGED EASTERN PORTION OF COUPE. IMAGE DATE 29/9/2018.



# 1.6 Eastern Tiers

STT proposed logging in the Eastern Tiers area will impact on swift parrot habitat. The area contains known nesting and foraging sites within close proximity to proposed coupes. Swift parrot habitat in the Eastern Tiers is not within the scope of the proposed PAMA.

SH045D

HCVs: 1.1, 3.3

Status: logged

Silvicultural method: SHELTERWOOD RETENTION, AGGREGATED RETENTION

Three-year wood production plan (latest): 2017/18

Size: 29 ha

Mapped old growth (total hectares/per cent of coupe area): 28.2 ha (100%)

The original FPP from 2009 planned to clearfell 37 ha. Revised in 2011 to "a mosaic of Shelterwood Retention and Advance Growth Retention" to harvest 29 ha. Revised in 2016 following discovery of wedge-tailed eagle nest. Logged, commencing c. 2015 and completed 2018. Larger trees have ben removed, effectively removing old growth habitat to promote growth of younger trees. The conversion of this coupe from old growth forest to non-old growth continues the systematic elimination of old growth forest in this region by logging.



TO053B

**HCVs:** 1.1, 1.4, 3.3

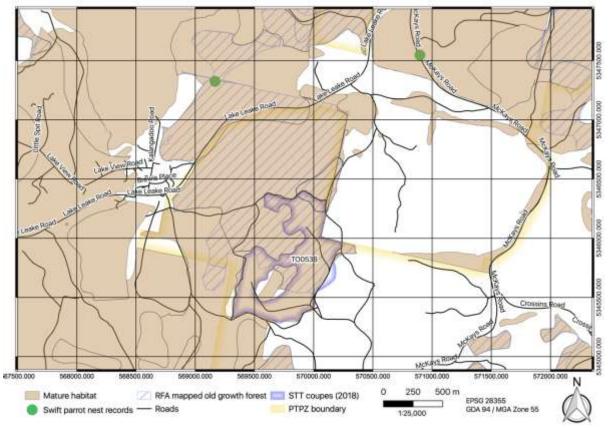
Status: unlogged (2018)

Silvicultural method: Aggregated retention

### Three-year wood production plan (latest): 2018

#### Mapped old growth (total hectares/per cent of coupe area): 29 ha / 59%

This coupe falls within approximately 1.3 km of a known swift parrot nesting site. It is mapped old growth forest with hollow bearing trees that provide important habitat for swift parrot nesting. Mapped blue gum foraging habitat (GlobMap) is present within approximately 2km of the coupe. Given the presence of old growth forest, mapped foraging habitat nearby and known nesting records with 1km forest within coupe TO053B is important swift parrot breeding habitat.



MAP: COUPE TO053B AND OTHER NEIGHBOURING COUPES SHOWS WITH MATURE HABITAT, OLD GROWTH FOREST, SWIFT PARROT NESTING RECORDS.

#### SH041G

**HCVs:** 1.1, 1.4, 3.3

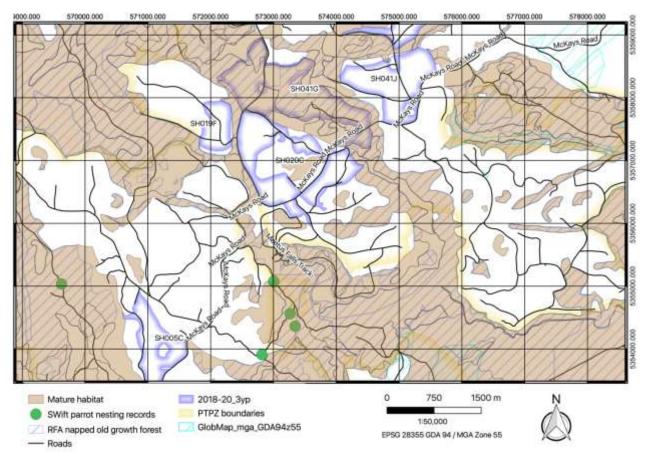
Status: unlogged (2018)

Silvicultural method: Aggregated retention

Three-year wood production plan (latest): 2018

Mapped old growth (total hectares/per cent of coupe area): 117ha / 74%

Coupe SH041G is very large, covering an area of 158 hectares of which 117ha are mapped as old growth forest. Several swift parrot nesting records fall within 5km of the coupe with the closest being 2.3 km away. This indicates the general area is used by swift parrot for nesting. Mapped blue gum foraging habitat is located 1.3km away. Given the close proximity of mapped foraging habitat and the old growth forest within this coupe it is likely that logging here would remove important swift parrot nesting habitat.



MAP: COUPE SH041G AND OTHER NEIGHBOURING COUPES SHOWS WITH MATURE HABITAT, OLD GROWTH FOREST, SWIFT PARROT NESTING RECORDS.

# Appendix 2 – Logging of old growth forest in the Wentworth Hills HCV forests

#### Introduction

The Wentworth Hills area on the Tasmanian Central Plateau is within the FMU and is largely comprised of Eucalyptus delegatensis forest. The Wentworth Hills is almost entirely comprised of mapped HCV forest. This 11,430 ha of mapped HCV forest on PTPZ land (i.e. within the FMU) is the subject of this case study. There are 22 native forest logging coupes wholly or partly within the Wentworth Hills HCV area on the current STT three-year wood production plan. Mapped old-growth forest occurs on all 22 of these coupes, with 21 coupes qualifying as 'Coupes Containing Old Growth' (i.e. >25% mapped old growth) under STT's Forest Management Plan. This case study investigates the impacts of logging over the past five years on old growth in the Wentworth Hills region in addition to current and projected logging in the area.

#### Methods

We examined loss of old growth due to logging using a 2010 update of the RFA old growth mapping (derived by removing forest loss from the 2010 Forest Extent and Change dataset) and the Global Forest Change 2000-2018 dataset. Visual inspection of the Global Forest Change data indicated that it detected both shelterwood and clearfell logging in the area of interest with reasonable accuracy and that forest change in the Wentworth Hills area between 2014 and 2018 was almost exclusively due to forestry operations (e.g. no wildfires occurred). We calculated the area of mapped old growth which coincides with each area of annual forest loss for the years 2014-2018, inclusive.

Current three-year plan coupe boundaries were used to identify mapped old growth within current and planned logging coupes in the Wentworth Hills.

#### Results

The 2010 updated old growth layer identifies 4485 ha of old growth forest within the Wentworth Hills HCV forests. Between 2014 and 2018 around 400 ha of old growth, or 9% of the 2010 old growth extent, was lost due to logging (Table A2.1). This equates to an annual average loss of 80 ha (1.8%) old growth in this area over the five years since STT released their 2014 HCV Management Plan.

Based on the STT wood production plan, there is currently 991 ha of mapped 2010 old growth within logging coupes in the Wentworth Hills HCV forests. This is almost as much old growth as STT has protected within informal reserves in the area (1060 ha). Some of this 991 ha of old growth within coupes on the current three year plan has already been logged, based on the Global Forest Change

dataset to 2018 and so is already counted within the 400 ha logged but we do not know exactly how much.

TABLE A2.1. ANNUAL LOGGING OF OLD GROWTH FOREST IN THE WENTWORTH HILLS HCV FORESTS.

Year	Logged old growth (ha)	% of 2010 old growth
2014	154.33	3.44
2015	29.02	0.65
2016	45.05	1.00
2017	111.47	2.49
2018	61.94	1.38
Total old growth logged 2014-18	401.81	8.96

#### Conclusion

If recent rates of old growth logging continue over the 2018/19 to 2020/21 plan we would expect 240 ha of old growth to be logged over the three years. This would leave a balance of 750 ha of old growth within coupes which would need to be retained (i.e. not harvested) to maintain this rate of old growth loss. This means that unless at least 75% of the old growth within planned coupes is retained the rate of old growth logging within the Wentworth Hills HCV forests will increase during the current logging plan. Even if we assume that the only contingency (non-scheduled) coupe on the plan (WW022A) is not logged this will only reduce the total old growth on the plan in this area to 917 ha.

This level of old growth loss appears to be inconsistent with maintenance of HCVs 2.2 and 3.3, since the concentration of old growth forests in this area contributes to the recognised HCV status of these forests and the rate of old growth loss is unlikely to be justifiable under a management regime with the "objective of maintaining old growth forest within the Tasmanian forest landscape" (STT HCV plan p. 63). Notably, under FSC Standard 6.8, the requirement to maintain and/or restore ages and regeneration cycles consistent with native forest types and disturbance patterns cannot be achieved with this level of old growth depletion. Natural incidence of wildfire and, indeed, the likely increased risk of high intensity fires following disturbance by logging, further impacts upon the ability to meet indicator 6.8.1 and 6.8.2.

6.8.1 The landscape\* in a native forest\* component of the Management Unit\* (i.e., that within the control of The Organisation\*) is managed to maintain and/or restore\* habitat\* connectivity\* and a

varying mosaic of species, sizes, ages, spatial scales\* and regeneration\* cycles consistent with native forest\* types and disturbance patterns.

#### Verifiers:

Documentation of management strategies and actions to maintain a mosaic of age classes, species mix, and disturbance patterns on the Management Unit\*.

Documentation of management strategies and actions to maintain and/or restore\* connectivity\* between habitats.

6.8.2 For native forest\* components within the Management Unit\*, where the current mosaic of species, sizes, ages, spatial scales\* and regeneration\* cycles lacks natural levels of diversity, management activities and measures are implemented that enhance and/or restore\* spatial diversity.

Furthermore, it is unclear how the present rate of logging of both old growth and non-old growth forest in this identified HCV area can possibly meet FSC Standard 9.2.2, which requires STT to maintain and/or enhance HCVs (e.g. HCV 3.3) and HCV Areas:

9.2.2 - Management strategies and actions are developed to maintain and/or enhance the identified High Conservation Values\* and to maintain associated High Conservation Value Areas\* prior to implementing potentially harmful management activities.

There are some uncertainties and potential inaccuracies in this analysis which could be improved if more accurate and up to date data were available from STT. Nonetheless, the figures presented here are representative of the scale of old growth loss in the Wentworth Hills HCV forests.

This kind of spatial analysis for areas subject to intensive logging and/or containing HCVs at risk of impacts from logging, such as the Wentworth Hills area, is consistent with FSC Standard section 9.4.:

9.4 The Organisation\* shall\* demonstrate that periodic monitoring is carried out to assess changes in the status of High Conservation Values\*, and shall\* adapt its management strategies to ensure their effective protection\*. The monitoring shall\* be proportionate to the scale, intensity and risk\* of management activities, and shall\* include engagement\* with affected stakeholders\*, interested stakeholders\* and experts.

# Appendix 3 – Threatened Fauna Advisor advice for coupe BB025A

09/05/2019 XpertRule: ThFA2014

#### Swift Parrot (Recommendation 11)

Within southeast part of potential range; within core range; less than 30% of the area within a 5 km radius of the central coordinates of the planned operation comprised of potential nesting-habitat (high- or medium-density mature habitat availability); native forest silviculture

The proposed planning unit is in an area where there is a strong probability of Swift Parrot breeding if suitable habitat is present.

The primary management objective for this species is to maintain the integrity of potential habitat by ensuring that sufficient levels and arrangement of important nesting habitat and foraging habitat are retained to support breeding in any given year.

Disturbance to potential nesting and/or foraging habitat within the potential breeding range must be minimised to help meet this objective. To achieve this, the following actions are recommended.

#### Genera

 Ensure that the locality database information (e.g. known localities on the Biodiversity Values Database) for this species is current for the planned operational commencement date (within 6 months or less). This is particularly important for new nesting localities.

#### For areas covered by a certified FPP:

- The swift parrot has recently been identified as requiring additional protection. In accordance with the
  procedures agreed between FPA and DPIPWE, altered management recommendations are currently being
  finalised for this species. The Board of the FPA and the CFPO have therefore released an interim instruction
  for managing swift parrot sightings, as follows;
  - Report immediately to the FPA any evidence of a Swift Parrot nesting site and/or Swift Parrots being present (heard or seen) inside or within 500 m of the FPP area during September to February. For swift parrot sightings within the FPP area, immediately cease felling operations within 500m of the sighting until evidence of a Swift Parrot nesting site and/or Swift Parrots being present (heard or seen) has been assessed. Specialist advice may be necessary to confirm the presence of Swift Parrots, nesting sites and breeding behaviour. Surveys will be co-ordinated by the FPA and Threatened Species Section (OPIPWE) specialists. If the importance of an area for breeding birds is confirmed continue to cease all felling operations within 100m of that area. The Forest Practices Authority will provide advice on appropriate actions to protect any areas identified as important for breeding. A variation to the FPP may be required to exclude and protect areas identified as important for breeding (i.e., to meet the management objective for the swift parrot).

#### During FPP planning:

• Report immediately to the FPA any evidence of a Swlft Parrot nest site and/or Swlft Parrots being present (heard or seen) inside or within 500 m of an planning unit during September to February. Specialist advice may be necessary to confirm the presence of Swlft Parrots, nesting sites and/or breeding behaviour. Surveys will be co-ordinated by the FPA and Threatened Species Section (DPIPWE) specialists. If the importance of the area for breeding birds is confirmed the Forest Practices Authority will provide advice on appropriate actions to protect any areas identified as important for breeding. FPP prescriptions may be required to exclude and protect areas identified as important for breeding (ie., to meet the management objective for the swift parrot).

#### Nesting habitat

- Retain all confirmed/known nesting trees within a 50 m exclusion zone. Contact the FPA if assistance is needed in confirming nest sites.
- · Retain all areas of high-density nesting habitat that exceed 1 ha.
- If the proposed planning unit is in a SPIBA, retain all patches of high- and medium-density nesting habitat that
  are at least 1 ha in size, and retain ALL potential nesting trees in areas of low-density nesting habitat. In
  exceptional circumstances (e.g. safety reasons, for road and landing locations) up to 10% of these potential
  nesting trees may be harvested. Where this cannot be achieved, the Forest Practices Authority must be
  contacted for advice.

#### Foraging habitat

09/05/2019

#### XpertRule: ThFA2014

- Outside of SPIBAs, retain all patches of high-density foraging habitat that are at least 1 ha in size. Retain 50% of foraging trees in areas of medium- and low-density foraging habitat that are at least 1 ha in size (this can be achieved by retaining half the area in patches or by retaining half of the foraging trees during an operation).
- Within SPIBAs, retain all high-/medium-density foraging habitat patches that are at least 1 ha in size. In addition, retain 50% of foraging trees in areas of low-density foraging habitat (this can be acheived by retaining half the area in patches or by retaining half of the foraging trees during an operation).
- For operations in the Southern Forest SPIBA or the South Bruny SPIBA (where a large proportion of foraging-habitat is low-density foraging habitat), retain ALL Eucalyptus globulus and/or Eucalyptus ovata >80 cm dbh in areas where 1-20% of stems (>40 cm dbh) are E. globulus or E. ovata. In exceptional circumstances (e.g. safety reasons, for road and landing locations) up to 10% of these foraging trees may be harvested. Where this cannot be achieved, the Forest Practices Authority must be contacted for advice.
- If the planned planning unit has high densities (e.g. clearly greater than approximately 30% of all stems) of regrowth (e.g. most stems clearly less than approximately 40 cm dbh) Eucalyptus globulus and/or Eucalyptus ovata, the Forest Practices Authority must be contacted for advice because site-specific actions may be required (note: detailed habitat mapping is not required at this stage - it is sufficient to identify that the planned planning unit meets the broad thresholds).

In accordance with the procedures for the management of threatened species agreed between DPIPWE and FPA under section 03.3 of the Forest Practices Code the above is recommended in order to meet objectives for the management of threatened fauna in areas covered by the Tasmanian forest practices system. The recommended management actions must be applied to the relevant operation/situation^, unless:

- 1. alternative management actions are accepted by the FPA as a way of meeting the management objective for the species; or
- 2. the actions recommended above together with the actions recommended by other relevant FPA planning tools individually or collectively exceed the duty of care thresholds in the Code. In such cases, unless the actions are to be achieved on a voluntary basis with the landowner the FPO must seek further advice from the FPA to determine whether modified actions can be formulated to achieve the management objective for the species within the duty of care thresholds, or whether the matter may need to be addressed through other legislative mechanisms.

Whole that clause 2, does not apply to any actions recommended to mitigate the impact on swift parrot nesting and foraging habitat. (Forest Practices Board resolution 16th February 2018)

Further advice must be sought from the Forest Practices Authority:

- If endorsed or recommended actions cannot be implemented (for any reason);
- . If a variation is made to the Forest Practices Plan that affects threatened species not covered by the actions in the FPP; or
- . If additional threatened species values are identified in the FPP area.

If agreement on management prescriptions cannot be reached by the FPO and FPA specialists the FPO must refer the case to the CFPO for a determination. If the applicant for the FPP is aggreed by a decision to amend or refuse the FPP the applicant may lodge an appeal with the Forest Practices Tribunal pursuant to s.25 of the Forest Practices Act.

"Note: Forest Practices Officers must ensure that the certified Forest Practices Plan includes all actions required for threatened fauna. Appropriate wording must be included in the certified Forest Practices Plan. The recommended management action must be worked such that the action is clear to landowners and those responsible for implementing the FPP (e.g. contractor and supervisors). The recommendations delivered vist the Threatened Fauna Adviser should be used to develop management prescriptions appropriate to the operation and incorporated into the FPP. Note that simply transferning all of the wording from the Threatened Fauna Adviser into an FPP will usually be inappropriate; selection and/or modification of phrasing is acceptable provided that the desired outcome is net.

Recommendation accessed at: Thu May 09 2019 20:06:16 GMT+1000 (Australian Eastern Standard Time)

TFA version: 28th February 2019

By: EdHill Coupe:BB025A

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Appendix 4 – Selected correspondence related to swift parrot habitat management