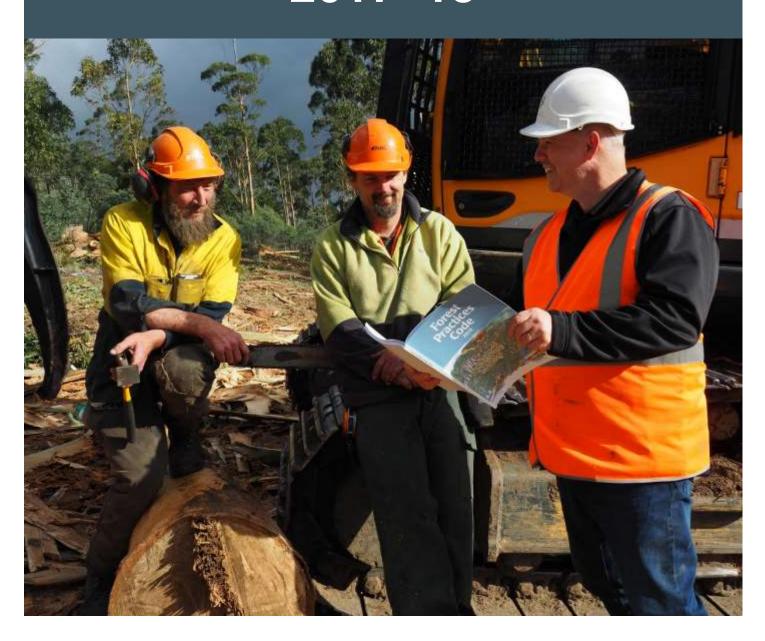


Forest Practices Authority Annual Report 2017–18



Forest Practices Authority Annual Report 2017–18



A report on the operations of the Forest Practices Authority to the Minister for Resources, to be laid before each house of parliament as required under s.4C, 4E, 4X and 4ZA of the *Forest Practices Act 1985*

The Annual Report of the Forest Practices Authority

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Cover photo: FPO Jason Bolch of SFM Environmental Solutions discusses the Forest Practices Code with harvesting contractors Craig Poole (left) and Alan Castle (centre) on a private timber reserve at Colebrook.

Abbreviations and acronyms

ARC Australian Research Council

DPIPWE Department of Primary Industries, Parks, Water and Environment

DSG Department of State Growth (created in 2014, incorporating the

Department of Infrastructure, Energy and Resources and the Department of Economic Development, Tourism and the Arts)

FIAT Forest Industries Association of Tasmania

FPA Forest Practices Authority

FPAC Forest Practices Advisory Council

FPO Forest Practices Officer

FPP forest practices plan

FT Forestry Tasmania (on 1 July 2017 FT became Sustainable Timber

Tasmania)

IBRA Interim Biogeographic Region for Australia

NRM Natural Resource Management organisations

PTPZ land Permanent Timber Production Zone Land

PTR private timber reserve

RFA Regional Forest Agreement

STT Sustainable Timber Tasmania (formerly Forestry Tasmania)

TFA Threatened Fauna Advisor

TFGA Tasmanian Farmers and Graziers Association

TGD Tasmanian Geoconservation Database

TPA Threatened Plant Advisor

The Act The Forest Practices Act 1985

The Code The Forest Practices Code

TSS Threatened Species Section, DPIPWE

UTas University of Tasmania

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The Tasmanian forest practices system

The Forest Practices Authority (FPA) is the independent statutory body established by the Parliament of Tasmania under the *Forest Practices Act 1985* to regulate forest practices in Tasmania. The forest practices system applies to forest practices that are undertaken on both public (mainly Permanent Timber Production Zone land) and private land.

The Tasmanian forest practices system operates primarily through the Forest Practices Act and the associated *Forest Practices Code*. The system also takes account of other legislation and policies, including the Tasmanian Regional Forest Agreement 1997 and the Permanent Native Forest Estate Policy.

The system is based on a co-regulatory approach, combining self-management by the industry and independent monitoring and enforcement by the FPA. Forest Practices Officers (FPOs) are employed within the industry and trained and authorised by the FPA to plan, supervise, monitor and report on forest practices.

FPA staff provide advice on regulatory and technical matters, including requirements to manage natural and cultural values. The FPA also monitors forest practices to ensure that standards are being met. Corrective action is taken where required and penalties are imposed for serious breaches.

The forest practices system aims to foster cooperation amongst all stakeholders, including the government, landowners, the forest industry and the broader community. There is an emphasis on planning, training, education and continuous improvement.

Forest practices, defined by the <u>Forest</u> <u>Practices Act</u>, are:

- harvesting native forests and plantations
- establishing native forests and plantations
- clearing and converting forests and threatened non-forest native vegetation communities
- constructing roads and quarries for the above purposes
- harvesting treeferns.



Training plays an important role in the forest practices system, enabling Forest Practices Officers and others to plan and implement forest practices plans in accordance with legislated standards. The FPA ran a four-day Biodiversity Course (pictured) in September 2017 on species identification skills and planning processes.

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The objective of the Tasmanian forest practices system is set down in Schedule 7 of the Forest Practices Act:

The objective of the State's forest practices system is to achieve sustainable management of Crown and private forests with due care for the environment and taking into account social, economic and environmental outcomes while delivering, in a way that is as far as possible self-funding—

- (a) an emphasis on self-regulation; and
- (b) planning before forest operations; and
- (c) delegated and decentralized approvals for forest practices plans and other forest practices matters; and
- (d) a forest practices code which provides practical standards for forest management,

timber harvesting and other forest operations; and

- (e) an emphasis on consultation and education; and
- (ea) an emphasis on research, review and continuing improvement; and
- (eb) the conservation of threatened native vegetation communities; and
- (f) provision for the rehabilitation of land in cases where the forest practices code is contravened; and
- (g) an independent appeal process; and
- (h) through the declaration of private timber reserves a means by which private land holders are able to ensure the security of their forest resources.



Self-regulation by Forest
Practices Officers takes
place at every stage of the
forest practices plan cycle:
preparation; certification;
monitoring and inspection;
and compliance reporting.
The FPA's Compliance
Program ran a session on
compliance on the Forest
Practices Officer Training
Course which focussed on
compliance reporting.

The year in brief 2017–18

- The level of forestry activities for 2017–18, as reported through the forest practices system, has continued the recovery that emerged in 2016–17. The marked increase in eucalypt plantation harvesting operations was maintained this year.
- FPA specialists provided advice on natural and cultural values in response to 352
 notifications (365 last year) lodged by FPOs. The FPA's specialists collaborated with
 other experts from government agencies and universities to develop advice, and
 carry out research and monitoring and other activities.
- 607 forest practices plans (FPPs) were certified by the FPA (543 plans last year), totalling 32,936 ha (30,636 ha last year) on public and private land. The number of plans certified were 111 for native forest harvesting and reforestation, 368 for plantation operations, 22 for afforestation on cleared land, 5 quarries and 101 roads constructed.
- FPPs were certified for the following:
 - 173 hectares of new plantations on previously cleared land. This year 72 hectares of new plantations were established on cleared native forest sites (26 hectares last year)
 - the conversion of 2856 hectares (2982 hectares last year) of plantations to non-forest use, primarily agriculture
 - the conversion of 524 hectares (514 hectares last year) of native forest to other uses, resulted in a decrease of 0.02 per cent in the area of Tasmania's native forest during 2017–18 (not including clearance for dams).
- The cumulative decrease (including clearance for dams) in the area of Tasmania's native forest between 1996 and June 2018 is 158 425 hectares or 4.9 per cent of the estimated 1996 native forest estate.
- The net effect of FPPs for clearing and new plantings of forest in Tasmania in 2017–18 was an overall decrease in the total area of forest by 3135 hectares during the year (last year there was a decrease of 3404 hectares).
- The annual assessment of 78 FPPs conducted by the FPA found that the implementation and effectiveness of FPPs across assessment categories, applicant groups and all land tenures continues to be effective.
- Four (three last year) prescribed fines totalling \$23 000 (\$14 000 last year) were paid for offences under the Forest Practices Act.
- There were no new prosecutions (none last year) under the Forest Practices Act.
- The FPA raised \$915 000 from transactions (\$904 000 last year) which met its statutory requirement for self-funding.



Report of the Chair, Forest Practices Authority

On behalf of the Board of the Forest Practices Authority (FPA), I am pleased as Chair to present the Annual Report for 2017–18.

To be effective, regulatory systems and regulatory boards must be informed by highly knowledgeable specialist and operational staff, and the views of those who are affected by, or benefit from, regulatory decisions. The Board of the FPA is fortunate to be able to access that advice, and to be regularly informed about how the forest practices system is being administered in practice on a day-to-day basis throughout the state.

The Board acknowledges the significant expertise, commitment and decision making demonstrated by operational Forest Practices Officers (FPOs) and the ongoing essential advice in all aspects of forest practices provided by specialist FPA staff in the fields of soil and water, biodiversity and heritage. The commitment of key forest sector stakeholders to the ongoing stewardship of the system through membership and advice from the Forest Practices Advisory Council is also acknowledged.

The Board thanks the Chief Forest Practices Officer, Peter Volker, for his leadership of FPOs and the FPA's specialist staff. We also thank Hans Drielsma for his leadership of the Forest Practices Advisory Council.

At the same time as these positive contributions underpin the effective operation of the state's forest practices system, there are some members of the community who breach the regulatory requirements of the forest practices system – either deliberately, through ignorance, or inadvertently. This is by no means widespread but the Board's Compliance Sub-committee and, in particular, the FPA's committed and highly professional compliance staff, investigate all alleged breaches of the *Forest Practices Act 1985* or Forest Practices Regulations. These investigations are resolved in many cases by the acceptance of fines, but in some cases by prosecution before the courts.



John Ramsay, the Chair of the Board of the FPA, (left) handing out awards to Forest Practices Officers at the Looking Back -**Looking Forward** Conference in November 2017. This FPO, Robin Dickson, is Chair of the FPO Reference Group which acts as a communication channel between the FPA and FPOs.

In last year's <u>report</u>, I mentioned the need for the FPA to adapt its focus in light of contemporary developments.

A significant event sponsored by the FPA in the past year was a special two-day conference to reflect on the achievements of 30 years of the forest practices system in Tasmania and, importantly, to consider what changes are required for the future.

It is a reasonable conclusion to draw from the conference that the Tasmanian forest practices system was considered to be robust, effective and well-recognised. However that conclusion has not led to any complacency on the part of the FPA, and a review of the *Forest Practices Code*, the key operational instrument in the regulatory system, was commenced in 2018.

The Board continues to grapple with difficult problems, especially where the regulation of forest practices interacts with regulatory responsibilities of other state and Commonwealth jurisdictions. The Board spent considerable time discussing threatened species matters, particularly in relation to swift parrot protection. The development of a whole of government response to protection and a recovery plan is welcome.

Directors also took opportunities to participate in FPA field training activities, which leads to better understanding of key issues and provides opportunity to interact with stakeholders.



Craig Patmore (STT)
(left) and FPA
Directors; David
Gatenby (centre) and
Cheryl Arnol (right),
discussing swift
parrots on the Swift
Parrot Field Day.

Another development of note is a commitment of greater resources to support the Board taking into account the social, economic and environmental outcomes of its decision making process. This heralds a new era for the FPA and I thank the government for significant financial support over four years to enable the FPA to fulfil its responsibilities. I welcome Dr Elena Tinch to the FPA as our Resource and Environmental Economist. The FPA will also be working closely with the ARC Centre for Forest Value to build capacity in this area.

The Board held a joint meeting and field trip with the Board and management of Sustainable Timber Tasmania (STT). I thank the contributions of STT staff in making excellent presentations in the office and the field to inform the Board of current developments in

forest management at STT. The Board was also hosted by Forico senior staff to discuss aspects of private plantation management and native forest conservation on private land. Once again the open communication informs the Board of the issues and opportunities for further development of the forest practices system and I thank Forico staff for this.

Membership of the Board

The Board remained unchanged throughout the year.

Directors are again to be thanked for the diligence and commitment that they have shown to the work of the Board and their approach to the sometimes complex matters that the Board must address in its regulatory role. Directors bring invaluable contributions to Board deliberations from their considerable professional expertise and experience. (See section 3.1 for more details on the Board.)

Staff of the FPA

The Board greatly appreciates the professional advice and dedication of the FPA's expert staff to both the immediate work of the Board and for the specialist advice that they provide to those professionals practising in the Tasmanian forest sector.

While the Board interaction with FPA staff is principally at the FPA's offices in Hobart, the Board acknowledges and appreciates the major contribution that FPOs make to undertaking the planning and regulation of forest practices in Tasmania.

The Board has supported the recruitment of additional staff to meet the increasing demand on FPA services as the forest industry recovers. Three staff members were recruited on a two-year fixed term basis pending further review of the FPA's budget position. These were Michael Bridge (Business Support Officer), Julie Walters (GIS and Systems Support) and Michael Rawlings (Forest Practices Adviser). Angela Gardner (Executive Assistant to the Chief Forest Practices Officer) was recruited to a permanent part-time position.

Forest practices plans

Under s. 4E(1)(b) of the Forest Practices Act, the FPA reports that the implementation and effectiveness of FPPs across assessment categories, applicant groups and all land tenures continues to be effective.

During 2018–19 the FPA will ensure continual improvement in performance outcomes by maintaining a focus on areas requiring improvement, including procedural issues, independent applicants and tenures and archaeological site surveys. During this assessment period the FPA will ensure that an adequate sample of quarrying and clearance and conversion FPPs is included in the assessment program as well as areas containing swift parrot habitat, to enable an effective assessment of these operations.

Permanent native forest estate

The FPA reports, under s. 4C(fa) of the Forest Practices Act, that Tasmania's native forest estate has been maintained in accordance with the Tasmanian Government Policy on the Maintenance of a Permanent Native Forest Estate. The area of native forest as at 30 June 2018 was equivalent to 95.1 per cent of the native forest area that existed in 1996.



Conversion of 524 hectares of native forest to other uses, resulted in a decrease of 0.02 per cent in the area of Tasmania's native forest during 2017-18 (not including clearance for dams).

Self-regulation

The FPA reports that, in accordance with s. 4E(1)(a) of the Forest Practices Act, a high level of self-regulation has been achieved on public and private land that is subject to operations. The independent private forestry sector generally has a reduced capacity for self-regulation compared with larger forestry companies. The FPA is working towards better training and education for non-industrial private forest owners and the harvesting contractors that service them.

The FPA is pleased to report that high levels of compliance with FPPs have been sustained. The FPA will continue to pursue applicants who have not lodged certificates by the due date based on assessment of risk. In 2018–19 this will be aided by an automatically generated email reminder sent to applicants 30 days prior to expiry.

Funding

In accordance with s. 4E(1)(a) of the Forest Practices Act, the FPA reports that the forest practices system satisfied the principle of self-funding in 2017–18.

The independent regulatory functions of the FPA were funded by the income received under s. 44 of the Forest Practices Act in 2017–18.

John Ramsay

Chair, Board of the Forest Practices Authority



Report of the Chief Forest Practices Officer

The FPA celebrated the thirtieth anniversary of the publication of the first *Forest Practices Code* and the appointment of the first FPOs by

holding a conference in November 2017 titled 'Looking Back, Looking Forward: 30 years of Tasmania's forest practices system'. The presentations are available on the <u>FPA website</u> and summaries of presentations have been published in <u>Forest Practices News</u>.

Workplace health and safety is given the highest priority in daily operations. FPA staff are exposed to dangerous situations working in remote environments and travelling long distance by road. The FPA operates a safety management system to address these risks. Staff are required to complete Field Activity Forms for approval by their manager prior to field work which includes emergency management procedures. I am pleased to report there were no lost time injuries or serious incidents throughout the year.

The Tasmanian Government Policy on the Maintenance of a Permanent Native Forest Estate was revised by the government and came into force on 1 July 2017. The revised policy has brought an end to broadscale clearing and conversion of native forests and removed regional thresholds for Regional Forest Agreement (RFA) vegetation communities. An exemption which allows clearing and conversion of up to 40 hectares per property per year for agricultural purposes was retained in the policy. While this exemption is in place, land owners are still obliged to apply for an FPP to undertake clearing works. Some land owners appear to have received poor advice in this regard and the FPA has had to deal with a number of cases of land clearing without necessary approvals.

During the year the Tasmanian Regional Forest Agreement (RFA) was extended for a further 20 years. The forest practices system plays an even more important role in the RFA process as a result of the linking of the *State of the forests report* with quinquennial reviews and the inclusion of clauses on matters of national environmental significance (MNES), as defined by the Commonwealth *Environment Protection and Biodiversity Protection Act 1999*. In essence, clearing and conversion of forests to other land uses is not covered by RFA environmental approval processes, so any MNES will require Commonwealth assessment before operations can be approved through an FPP.

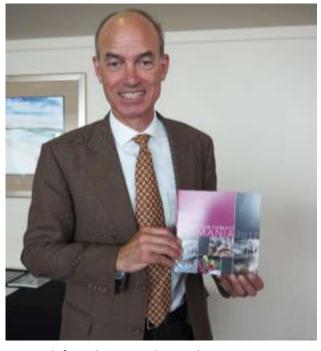
Consultation with stakeholders is an important part of my job. Regular meetings with representative bodies such as the Forest Industry Association of Tasmania, Tasmanian Farmers and Graziers Association, Australian Forest Growers, Institute of Foresters of Australia and Tasmanian Conservation Trust have been held. I also meet with senior managers in forest companies and land owners as opportunities arise.

Despite an offer to meet with local government, there was little response. I was invited to make a presentation to Burnie Council. Glamorgan and Spring Bay Council is actively involved in the forest practices system. It is a concern that some Councils appear to be indifferent to active involvement in the forest practices system. As a result some Councils

have not been supplying accurate information to land owners about their responsibilities in relation to forest practices.

The government has provided funding for the FPA to undertake socio-economic evaluation of its decisions as part of the Forest Industry Growth Plan. A steering committee was established in September 2017 and Dr Elena Tinch was appointed to the FPA staff as a Resource and Environmental Economist in May 2018. The FPA joined the Centre for Forest Value which is based at University of Tasmania. The Centre has started a forestry socio-economic program led by the School of Business and Economics. This will assist with capacity building in this increasingly important area of evaluation of triple bottom line effects of environmental decisions.

Pursuant to s. 4Z of the Forest Practices Act, the quinquennial *State* of the Forests Report Tasmania 2017 was tabled in both houses of Parliament in November.



The Minister for Resources, Guy Barnett MP, launched the colour booklet summarising the State of the forests Tasmania 2017 report at the Looking Back – Looking Forward Conference in November 2017.

A review of the *Forest Practices Code 2000* was deferred in 2009 due to the Tasmanian Forest Agreement processes. A revised version of the Code was issued in 2015, which included a *'Guiding Policy for the Operation of the* Forest Practices Code' but no other changes were made. The FPA commenced a thorough review of the Code this year. A steering committee was established consisting of FPA Board Chair (John Ramsay), Forest Practices Advisory Council Chair (Dr Hans Drielsma), Chief Forest Practices Officer (Dr Peter Volker) and Code Review Co-ordinator (Ann La Sala). Working Groups were established to review each section of the Code. Statutory consultation processes will be undertaken with stakeholders and the public with the aim to have a revised Code published in 2019.

The FPA commenced a review of the Forest Practices Act with a view to recommending some amendments in the coming year. The Forest Practices Advisory Council and stakeholders were consulted on proposed changes. High priority was given to machinery type changes, while policy changes require further discussion and negotiation.

The FPO Reference Group provided input to a revision of the disciplinary procedures for FPOs as part of a review of the Investigation and Enforcement Protocols. Other items

discussed included a Code of Conduct and a continuing professional development program for FPOs. I thank Robin Dickson for taking on the role of Chair and members Adrian Walls, Greg Williams, Katie Edwards and Darren Herd for their contribution to the efficient functioning of the group.

The 'Treefern management plan for the sustainable harvesting, transporting or trading of Dicksonia antarctica in Tasmania 2017' was approved by the Commonwealth Department of Environment and Energy, Assistant Secretary, Wildlife and Biosecurity Branch as an Approved Wildlife Trade Management Plan under subsection 303FO(2) of the Environment Protection and Biodiversity Conservation Act 1999 in October. The approval permits the export of Tasmanian tree ferns to overseas markets.

The Research and Advisory Program staff led by Drs Sarah Munks (Biodiversity) and Peter McIntosh (Earth Sciences and Cultural Heritage) continue to provide a high standard of advice to FPOs and stakeholders on development of prescriptions for FPPs and addressing matters as they arise during forest practices operations. The annual research update once again demonstrated the co-operation of industry, universities and other research organisations in producing high standard research and monitoring programs which inform forest practices. An increased focus on effectiveness monitoring has been implemented by staff in the program. This work also relies on collaboration with external researchers and support of external funding bodies (see section 2 of this report for more details).



FPA staff members Dr Sarah Munks (Biodiversity Program Manager) and Dr Adrian Slee (Scientific Officer, Earth Sciences and Cultural Heritage) explain how the forest practices system operates on a study tour for international visitors.

Management of threatened species where forest practices are planned or are occurring provides ongoing challenges for the FPA and stakeholders. Issues are mostly dealt with through the 'Procedures for the management of threatened species under the forest practices system' which have been agreed between the Secretary of the Department of Primary Industries, Parks, Water and Environment (DPIPWE) and the FPA. An annual report is published and available on the FPA's website. The Threatened Fauna Adviser is the online tool which assists in development of prescriptions for FPPs. A similar system is being developed for threatened flora and is anticipated to be ready for use next year. Where planned operations cannot be covered by these procedures, matters are referred to the DPIPWE Secretary for advice.

During the year the Commonwealth changed the listing status of the swift parrot to 'critically endangered'. The FPA responded by suggesting a number of changes to the *Threatened Fauna Adviser* to increase its protection. These changes will have impacts on the ability to harvest trees in breeding habitat for the species. Some stakeholders expressed concern about increased restrictions on the ability to undertake forest practices so further work on the socio-economic impact of these changes is being undertaken. The changes are yet to be endorsed by the DPIPWE Secretary. FPA staff provided advice on STT's draft management plan for swift parrots in the southern forests which is to form part of a Public Authority Management Agreement with DPIPWE.

The FPA is fortunate to have recruited Stephen Walker as the new Manager of the Compliance Program. He has a background in public forestry administration in Queensland as well as experience in the private sector developing programs for compliance with voluntary certification schemes throughout Australia and has formal training as a lead auditor. The compliance team have had a busy year and have completed a number of complex investigations as well as providing advice to land owners and FPOs. The outcomes of investigations and monitoring of forest practices are provided in this report. The focus of compliance is on training and education of stakeholders. Michael Rawlings was recruited to the Compliance Program to focus on training of forest contractors, particularly machine operators. The Compliance Committee of the Board provide oversight and advice to the compliance team and have audited a sample of investigations to ensure high standards are maintained.

Chris Grove has a busy program as Publications and Training Officer. She played a key role in organising the conference and its success was largely due to her skills in keeping the organising committee on track and coordinating logistics. The FPO Training Course was completed during the year and participants are finishing assignments in readiness for seeking authorisation as FPOs. Chris also assisted with a number of workshops and training days, including forest geology workshops and field days for frogs, masked owls and swift parrot. The FPA appreciates the support of the Training Skills and Development Service which provided funding for the training events. *The State of the Forests Report* brochure was published as were two editions of *Forest Practices News*.



The organising committee for the Looking Back – Looking Forward Conference to mark 30 years of the forest practices system: from left Peter Volker, Amy Robertson, Fred Duncan, Chris Grove and John Hickey.

Angus MacNeil leads a high quality team in Business Administration. Michael Bridge (Business Support Officer) and Julie Walters (GIS and Systems Support Officer) joined the team through the year. There is a high level of discipline in business planning and budget management throughout the organisation which is reflected in the financial report. While the FPA has significant financial reserves at present it is planned to use these for high priority programs. One area of focus is to improve support systems for FPOs and stakeholders such as email reminders for forest practices reports and compliance reports, online tools to support forest practices planning including map drawing and further improvements to web based information and tools.

FPOs are an essential component of the forest practices system. My interaction with them on a daily basis is important to keep track of emerging trends and issues in the forestry sector. In my experience, FPOs work to a very high standard and take their roles seriously in a co-regulatory environment. I have been emphasising the need to continue to have a high standard of planning and supervision of forest practices and this is reflected in the compliance monitoring results. I thank all FPOs for their commitment to the forest practices system.



Geology for Foresters
Course in Gowrie Park:
investigating the
benefits of using LiDAR
images to identify
geomorphological
features. From left:
forest practices officers
Jay Fowler, Kerry Spicer,
Peter Volker (CFPO),
Robin Dickson and Chris
Ringk.

I thank all FPA personnel including staff and contractors for their commitment and support throughout the year. We have achieved a safe and supportive workplace. Staff have embraced various People and Culture programs coordinated by the Department of State Growth throughout the year including adopting the values and behaviours, participation in the White Ribbon program and attending various workshops.

The Department of State Growth provides high quality support in administration, IT and records management, policy, people and culture management.

The Board has provided excellent governance and is well supported by the Forest Practices Advisory Council. I thank individual Directors and Forest Practices Advisory Council members for ongoing guidance in their areas of expertise.

Peter Volker Chief Forest Practices Officer

1 Independent regulation functions report

1.1 Forest Practices Act 1985

There were no changes to the *Forest Practices Act 1985* (the Act) or the Forest Practices Regulations 2017.

1.2 Forest Practices Code

The issue, purpose, amendment and objection to amendment of the *Forest Practices Code* (the Code) is dealt with in Part IV of the Act.

The Code is designed to provide practical prescriptions that can be implemented in the field when people are conducting forest practices including: building roads and bridges; operating quarries associated with forest practices; harvesting timber; conservation of natural and cultural values; and establishing and maintaining forests.

Previous versions of the Code have been issued in 1987, 1993 and 2000. The Code is legally enforceable under the Act for both public and private forests. The current version of the Code took effect from 1 July 2015, when the *Forest Practices Code 2015* was issued. That version incorporated a *'Guiding Policy for the Operation of the* Forest Practices Code', but no changes were made to operational prescriptions within the body of the Code.

The Code can be downloaded from the FPA website.

At the 30 year conference in November 2017, there was discussion about review of the Code. The conference delegates were of the view that the Code is fit for purpose and only minor updates were needed to reflect changes in technology that had occurred in the past 20 years.

A review of the Code commenced in 2018. A Code Review Coordinator has been engaged to implement the review process. A steering committee was established consisting of the FPA and Forest Practices Advisory Council Chairs, Chief Forest Practices Officer and Code Review Co-ordinator. Working groups were established to review each section of the Code with a view to making the Code more contemporary. Statutory comment public comment requirements are scheduled to be undertaken in early 2019.



Delegates at the Looking
Back – Looking Forward
Conference to mark 30
years of the forest practices
system participated in
concurrent small group
discussions, including 'What
should a new Forest
Practices Code look like?'
See Forest Practices News
for the discussion outcomes.

1.3 Forest practices plans

Forest practices plans (FPPs) are required for all forest practices on public and private land, other than for exemptions prescribed in the Forest Practices Regulations which are available from the <u>Tasmanian Legislation website</u>. The publication, 'A guide to planning approvals for forestry in Tasmania' (available on the <u>FPA website</u>) provides further information on the regulations and the process of preparing an FPP.

FPPs provide a definition and summary of the operation. They also include prescriptions for the management of natural and cultural values, planned harvest systems and reforestation.

Most forest owners engage a planner to prepare their FPP, identifying the natural and cultural values that may require management in the forest operation. The FPA's planning tools and specialists provide advice which sometimes involves field visits and liaison with other experts. The application for a FPP is made to the FPA, and may be certified, amended or refused where the proposed operations do not comply with the Code. The FPA has delegated powers to some FPOs to consider applications for certification of FPPs.

Forestry operations may also need approval from local government, if required under the relevant planning scheme if the land is not a private timber reserve (PTR) or Permanent Timber Production Zone Land (PTPZ land).

1.3.1 Details of forest practices plans certified in 2017-18

Table 1.3.1 Number of FPPs certified in 2017–18 by type and certifying FPO for public land¹ and private property

Applicant	Quarr	y plans	Roadir	ng plans		vesting place station wh		_	Afforestation plans on		Total %	
					Native	forest	Plant	ations	cleare	ed land		
	Public	Private	Public	Private	Public	Private	Public	Private	Public	Private		
Govt (local, state, federal), schools,												
GBEs etc	0	0	2	0	3	3	0	2	0	3	13	2.14
Independent	0	0	0	11	0	27	1	78	0	1	118	19.44
Industrial	4	0	3	32	0	15	69	165	13	5	306	50.41
Sustainable Timber Tasmania	1	0	53	0	63	0	53	0	0	0	170	28.01
Total	5	0	58	43	66	45	123	245	13	9	607	
%	0.82	0.00	9.56	7.08	10.87	7.41	20.26	40.36	2.14	1.48		

 $^{^{\}rm 1}$ Public land includes PTPZ land (known as State forest up to November 2013)

Table 1.3.2 Native forests: area (hectares) of operations covered by FPPs certified in 2017–18 by harvesting method, future land use and tenure

Tenure	Partial logging ¹	Clea	Clearfelling followed by:			
		Regeneration by	Plantatio	n	Non-forest	Total ³
		seeding	Eucalypt	Pine	landuse ²	
Public land ⁴	4624	2143			92	6859
Private property	2638	53	72		360	3122
Total	7262	2196	72		452	9982

¹ Thinning, retention of advanced growth, aggregated retention, seed trees, or shelterwood, group or single tree selection

Table 1.3.3 Plantations: area (hectares) of operations covered by FPPs certified in 2017–18 by harvesting method, future land use and tenure

Tenure		Existing p	lantations		New plantations	Total ²
	Thinning	Clearfo	elling followed b	oy:	on cleared land	
	Plantation Native Non-forest forest ¹ use ²					
Public land ³	4 462	2 860	3	155		7 480
Private property	2 044	10 493	63	2 701	173	15 474
Total	6 506	13 353	65	2 856	173	22 954

¹ Largely from the rehabilitation of streamside reserves in pine plantations which were established prior to the *Forest Practices Code*

³ Public land includes PTPZ land (known as State forest up to November 2013)



The private industrial sector, which primarily operates in plantations, continued to grow. In 2017–18 this sector accounted for 50 per cent of the FPPs certified in Tasmania. Photo by FPO Darryn Braithwaite

² Clearing on public land included clearing for irrigation pipeline infrastructure 26.9 ha, quarries 4.6 ha, road construction 60.5 ha. Clearing on private land included conversion to agriculture and irrigation infrastructure 352.8 ha and road construction 7.4 ha

³ Losses resulting from dam works permits issued under the *Water Management Act 1999* (41.17 hectares of native forest in 2017–18) are not covered by FPPs and are not therefore included in this table, but are included under the data for the Permanent Forest Estate in section 2.8 and Appendix 4 of this report

⁴ Public land includes PTPZ land (known as State forest up to November 2013)

² Losses resulting from dam works permits issued under the *Water Management Act 1999* (29.3 hectares of plantation in 2017–18) are not covered by FPPs and are not therefore included in this table.

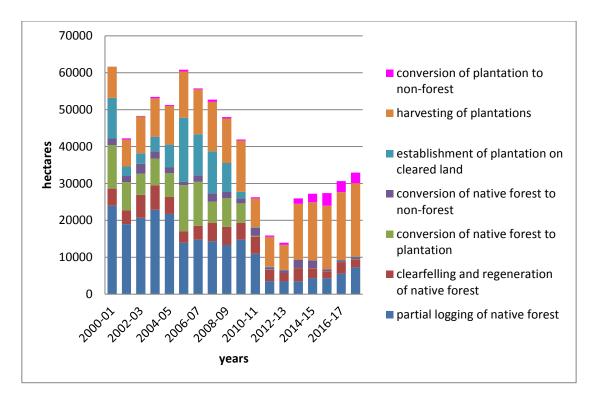


Figure 1.3.1 Area of forest by various treatments from 2001–2018

1.3.2 Treefern harvesting

The harvesting of treeferns (*Dicksonia antarctica*) is regulated under the Act. Treefern harvesting for export must be conducted in accordance with the Treefern Management Plan which has been approved by the Commonwealth (see CFPO Report above).

Under the Act, all treeferns must have tags issued by the FPA affixed to their stems prior to removal from a harvesting area. These tags must remain on the stems at all times to ensure that the origin of treeferns can be tracked to approved harvesting areas. Table 1.3.4 provides details on the harvesting of treeferns in 2016–17 and 2017–18. Revenue from the sale of treefern tags (see section 4 of this report) is used to fund regulatory activities and research into the long term sustainability of treefern harvesting.

Table 1.3.4 The number of certified FPPs which included treefern harvesting prescriptions and the number of treefern tags issued

	Number of certific treefern harvest	_	Number of treef	ern tags issued
Financial year	2016–17	2017–18	2016–17¹	2017–18²
Total	19	12	14 390	26 100

 $^{^{1}}$ Made up of 6095 tags issued for stems less than 30 cm length and 8295 issued for stems greater than 30 cm length

^{2.} Made up of 9700 tags issued for stems less than 30 cm length and 16400 issued for stems greater than 30 cm length

1.4 Three-year plans

The Act (Part III, Division 2) provides for lodgement with the FPA of three-year plans for operations showing the location of each operation, the volume to be harvested, the carting routes to be used and reforestation measures that are proposed. Such plans are required from companies that have harvested, or caused to be harvested, more than 100 000 tonnes of timber in the preceding year. Summaries of the plans are sent to relevant local government authorities as a basis for consultation on the location of planned harvesting.

Industry representatives convene regional meetings with representatives of local government each autumn to facilitate discussion regarding cartage routes and expected tonnages, and any other matters of concern to local government.

The FPA reports that the requirement to lodge three-year plans was met in 2017–18. Three-year plans have been lodged with the FPA by Sustainable Timber Tasmania, Forico, Norske Skog (Australia) and Timberlands Pacific.

1.5 Statutory reports

1.5.1 State of the forests Tasmania report

The FPA is required under s. 4Z of the Act to produce a report every five years on the state of the forests. The FPA, in collaboration with other governmental agencies, compiles a report on the sustainability indicators that have been agreed between the Tasmanian and Australian governments under the Montreal Process Criteria and Indicators Framework. This report forms the basis of the *State of the forests Tasmania report*. The latest report was completed in 2017 and covers the period 2011–16. It was tabled in both houses of the Tasmanian parliament in November 2017. The report and the illustrated booklet are available from the FPA website. The next report is due in 2022.

1.5.2 Forest practices report

The FPA is required under s. 4ZA of the Forest Practices Act to review the operation of the forest practices system, including the provisions and operation of the *Forest Practices Code*, and to provide a report every five years. The last report was published in the <u>FPA's annual report for 2016–17</u> which was tabled in both houses of the Tasmanian parliament in November 2017. The next report is due in 2022.

1.6 Private timber reserves

Private timber reserves (PTRs) were created by the Tasmanian Parliament in 1985 to enable landowners to have their land dedicated for long-term forest management. The legislation provides that forestry activities on the land are subject to a single, consistent, state-wide system of planning and regulation through the Act. PTR applications during 2017–18 are summarised below.

Table 1.6.1 Number of private timber reserves, 2017–18 and progressive total

	1 July 2017– 30 June 2018	Progressive total to 30 June 2018 ¹
Applications approved by FPA	14 ²	2062
Private timber reserves revoked	58	421

¹The progressive total contains adjustments to figures in previous periods. Progressive totals are adjusted primarily because original applications to declare areas as PTRs have in some cases been followed in later years by an application to revoke part or all of the area declared as a PTR.

Revocations of private timber reserves exceeded the number of new approvals, continuing the trend that first emerged in 2012, due to landowners deciding to convert plantation land back to agricultural use and place some areas of native forest under conservation covenants. The area of private timber reserves in the progressive total for 2017–18 was 437 434 hectares, a decrease of 6695 hectares from 2016–17.

1.7 Monitoring of compliance

Monitoring of compliance is carried out at three levels under the forest practices system:

- 1. Routine monitoring of operations by FPOs trained and appointed by the FPA and employed by forest managers. This level of monitoring is often undertaken as part of formal environmental management systems and forest certification, which also involve third-party audits.
- 2. Formal reporting on compliance under s. 25A of the Act (see section 1.7.1 below). This is required for all FPPs and is usually done by qualified FPOs.
- 3. Independent monitoring of a representative sample of FPPs in accordance with s. 4E(1)(b) of the Forest Practices Act (see section 1.7.2 below). This is performed annually by the FPA.

The FPA's monitoring and assessment protocols and investigation and enforcement protocols can be found on the FPA website.

1.7.1 Compliance reports

The Act requires a compliance report to be lodged with the FPA within 30 days of the completion of each discrete phase of operation prescribed within an FPP and a final compliance report to be lodged with the FPA within 30 days of the expiry of the plan. These reports must be lodged by the person who applied for the plan (i.e. the Applicant). The FPA requires these reports to be verified by an FPO and to provide statements within one of the following categories:

- FPP fully complied with:
 - Fully complied with this means that all provisions of the plan were fully complied with.

²Whilst there were 14 applications approved by the Board in 2017–18, most were not gazetted in 2017–18 as they were approved in May & June 2018.

- FPP not fully complied with:
 - No further action recommended generally the operation was changed in a manner that did not result in any long-term environmental harm; e.g. the stocking standard in a plantation was below the target specified in the FPP, but still adequate to meet stocking standards.
 - Matter resolved through corrective action generally the FPO undertaking the compliance check has detected non-compliance and has issued a notice under the Act to require corrective action to ensure compliance with the plan, e.g. improved regeneration treatments or stabilising disused access tracks. Follow-up monitoring is undertaken by the FPO and a final report provided to the FPA.
 - Further investigation required generally a non-compliance issue has occurred that requires further investigation and action by the FPA, e.g. environmental harm has occurred or a required corrective action has not been undertaken.
- FPP operations did not commence.

Where compliance reports are not lodged on time, the FPA may issue the applicant of the plan with a notice under s. 41 of the Act to require the lodgement of the report. Failure to comply with a notice under the Act can result in the FPA undertaking compliance checks at a cost to the applicant, or legal proceedings, consistent with the FPA's *Investigation and enforcement protocols*, which can be downloaded from the <u>FPA website</u>.

Table 1.7.1 below includes the reports on each final compliance report within each FPP. For the period of reporting, 454 reports from 607 FPPs were lodged, of which 36 FPPs had one or more non-compliant phases, with only six FPPs requiring corrective action or further investigation.



FPA Compliance staff in yellow helmets -James Fergusson (L), Stephen Walker (Centre) and Michael Rawlings (R) discuss an audit of an FPP in the field.

Table 1.7.1 Final compliance reports due for lodgement with the FPA as at 30 June 2018 ¹

Applicant	Reports due			ity	Complia	Compliance (for reports lodged where activity commenced)			
		Not		No activity	Fully	Not fully complied with			
	Lodged	Lodged	Total	No	complied with	No further action	Corrective action	Further investigation	
Industrial	176	57	233	1	165	7	0	3	
Sustainable Timbers Tasmania ^{2,3}	210	0	210	13	187	9	0	1	
Independent	55	89	144	3	38	12	1	1	
Government (local, state, federal), schools, other GBEs etc.	13	7	20	0	11	2	0	0	
Total	454	153	607	17	401	30	1	5	

¹Reported as at 30 June 2018 for FPPs expired between 1 June 2017 and 31 May 2018 to allow for 30-day notification period allowed by the Act.

The FPA is pleased to report that high levels of compliance with FPPs have been sustained across all applicant groups. The FPA will continue to pursue applicants who have not lodged final certificates by the due date based on assessment of risk. In 2018–19 this will be aided by an automatically generated email reminder sent to applicants 30 days prior to expiry.

1.7.2 Independent assessment of forest practices plans

The annual assessment program is the means by which the FPA meets its statutory obligations under s. 4E(1)(b) of the Act which states that the FPA must, at least once each financial year, 'assess the implementation and effectiveness of a representative sample of forest practices plans'.

To this end, the FPA conducts systematic assessments of FPPs to evaluate performance against the requirements of the Act and the Code.

The FPA's Monitoring and assessment protocols can be viewed on the <u>FPA website</u>. The protocols been developed in line with the Australian Standard AS/NZS ISO 19011:2003: Guidelines for quality and/or environmental management systems auditing. In line with ISO 19011, the protocols are periodically reviewed to identify areas of improvement. A review initiated by the FPA in 2017–18 will inform the design of the 2018–19 assessment program.

² From 1 July 2017 (formerly Forestry Tasmania)

³ Includes plantations sold to Reliance Forest Fibre Pty Ltd on 99-year lease (now managed by AKS Forest Solutions). In 2018-19 reporting for these plantations will be included in the Industrial applicant category.

The formal assessment process is based on a random sample of certified FPPs selected from the FPA's FPP database. The 2017–18 assessment program selected certified FPPs at various stages of completion in the three years prior to 1 July 2017.

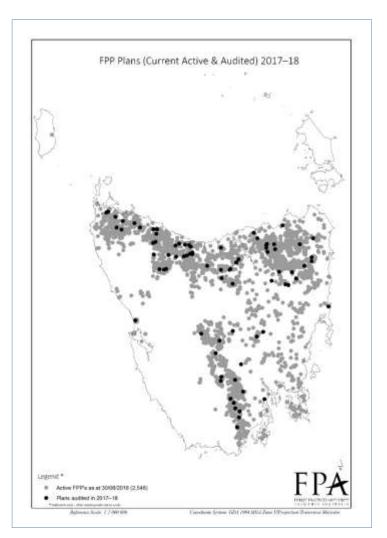
The assessment program assessed 78 current FPPs covering:

- all aspects of forest planning and operational practices under the Forest Practices
 Act, including roading, harvesting, reforestation and quarries
- a representative sample of FPPs undertaken by companies and agencies, and individual forest owners or managers
- FPPs prepared by a range of FPOs who had certified plans during the nominated period; a total of 46 certifying FPOs were assessed during the program.

Assessments determine the quality of planning, implementation and reporting against prescriptions within each FPP and the Code.

The 2017–18 assessments were based on questions concerning 11 categories covering 87 standards defined in the Code.
Assessment was based on a performance rating which included the percentage of FPP questions rated as sound, below sound and not acceptable (Appendix 3). This performance rating provides a measure of performance against the standards set by the FPA.

Potential breaches of the Act and/or the Code identified through the assessment program are independently investigated by the FPA and subject to enforcement actions as detailed in section 1.9 of this report.



Map 1.7.1 Distribution of sampled FPPs against FPPs current as at 1 July 2018 (note that the dots are indicative of FPP location rather than the area covered by the FPP)

Four assessors were used during the 2017–18 program:

- Mr Stephen Walker, the FPA's Manager Compliance, is a warranted FPO, a certified Lead Environmental Auditor and Registered Professional Forester, with over 30 years' experience in forest management in the Asia-Pacific region. Mr Walker had primary responsibility for ensuring the efficient and effective conduct and conclusion of the annual program, in accordance with the assessment scope and plan as developed under the FPA's Monitoring and assessment protocols.
- Dr Peter Volker, the FPA's Chief Forest Practices Officer, is a warranted FPO, has training and experience as an auditor and a Registered Professional Forester, with 40 years' experience in forest management in Tasmania.
- Mr James Fergusson, FPA Forest Practices Advisor, is a warranted FPO with over 30 years' experience in forestry in Tasmania, including significant expertise in the planning and certification of FPPs.
- Mr Michael Rawlings, FPA Forest Practices Advisor, is a warranted FPO with over 30
 years' experience in forestry in Tasmania, including significant expertise in contract
 harvesting and training and assessment.
- Mr David Tucker, independent forestry consultant, is a warranted FPO with over 40 years' experience in forestry and forest assessment in Tasmania.

1.7.2.1 Summary of the results

A total of 4201 individual forest planning and operations questions were assessed across 78 FPPs. The coverage of the various facets of forest operations assessed across tenures is provided in Table 1.7.2.

Assessment was based on a performance rating which included the percentage of FPP questions rated as (3) sound, (2) below sound and (1) unacceptable (Appendix 3). The percentage of questions rated 'sound' or above provides an effective measure of performance against the standards set by the FPA.

The performance ratings achieved in 2017–18, broken up by each assessment category, are shown in Table 1.7.3. The overall performance rating for 2017–18 compared with that achieved in the previous five assessment periods is shown in Figure 1.7.1. The performance ratings by tenure and applicant groups are shown in Tables 1.7.4 and 1.7.5 respectively.

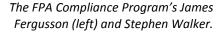




Table 1.7.2 Coverage of the 78 assessments across tenures (2017–18)

	Tenure						
	PTPZ land	Industrial freehold land	Independent freehold land and Crown land other than PTPZ land	Total			
No. of assessments	38	13	27	78			
No. of certifying FPOs assessed ¹	23	11	18	47			
Discrete operationa	al phases (DOPs) ²						
Roading	6	3	3	12			
Quarrying	1	0	0	1			
Harvesting	38	9	22	69			
Reforestation ²	21	9	10	54			
Non-commercial clearing	2	0	3	5			
Forest type							
Softwood plantation	14	3	6	23			
Hardwood plantation	11	10	11	32			
Native forest – clearfelled	4	0	4	8			
Native forest – partial logging	9	0	5	14			
Non-forest	0	0	1	1			
Reforestation ³							
Softwood plantation	13	2	5	20			
Hardwood plantation	11	10	7	28			
Native forest ³	13	0	6	19			
Conversion – non-forest	1	1	9	11			

 $^{^{\}rm 1}$ One FPO was assessed in more than one tenure category (total of 46 FPOs assessed)

² Multiple DOPs may occur in any FPP

 $^{^{\}rm 3}$ Reforestation includes thinning operations.

Performance rating by assessment category

Table 1.7.3 Percentage of performance rating recorded for all individual questions scored for each operation by assessment category in 2017–18

Assessment	Performance rating (%)					
Categories	Unacceptable	Below sound	Sound	Grand total		
Procedural issues	2.8	7.2	89.9	100		
Roading (including quarrying)	1.5	2.9	95.6	100		
Harvesting	1.5	2.9	95.6	100		
Reforestation	1.6	2.8	95.6	100		
Soils	0.3	1.7	98.0	100		
Water quality and flows	0.7	1.4	97.9	100		
Biodiversity	0.3	3.3	96.3	100		
Landscape	0.3	1.7	97.9	100		
Cultural heritage	0.0	3.7	96.3	100		
Geoscience	0.3	0.7	99.0	100		
Fuels, rubbish and emissions	0.0	0.0	100.0	100		
Overall	1.1	3.4	95.5	100		

Overall performance trend 2011-12 to 2017-18

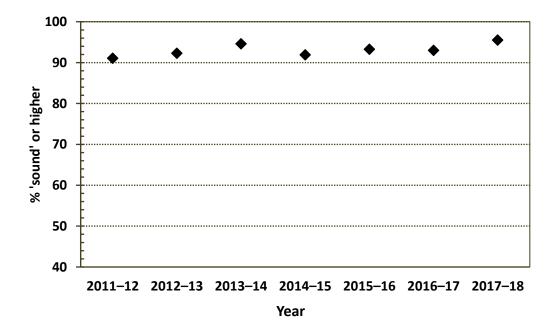


Figure 1.7.1 Percentage of performance rating sound or higher (2011–12 to 2017–18)

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Performance rating by tenure

Table 1.7.4 provides a summary of results by the various tenures that were included in the random sample of FPPs in 2017–18.

Table 1.7.4 Percentage of performance rating recorded for all individual questions scored for each operation by tenure in 2017–18

Tenure	Performance rating (%)				
	Unacceptable	Below Sound	Sound	Grand Total	
PTPZ land	0.7	2.9	96.4	100	
Industrial freehold land	0.4	2.3	97.3	100	
Independent freehold land and Crown land other than PTPZ land	2.1	4.7	93.2	100	
Overall	1.1	3.4	95.5	100	

Performance rating by applicant group

Table 1.7.5 provides a summary of results by the various applicant groups that were included in the random sample of FPPs in 2017–18.

Table 1.7.5 Percentage of performance rating recorded for all individual questions scored for each operation by applicant group in 2017–18

Applicant group	Performance rating (%)					
	Unacceptable	Below Sound	Sound	Grand Total		
Industrial	0.5	2.1	97.4	100		
Sustainable Timbers Tasmania	0.5	3.2	96.3	100		
Independent	2.6	5.6	91.8	100		
Government (local, state, federal), schools, other GBEs etc.	1.7	2.6	95.7	100		
Overall	1.1	3.4	95.5	100		

1.7.2.2 Comments on standards achieved

Under s. 4E(1)(b) of the Forest Practices Act, the FPA reports that the implementation and effectiveness of FPPs across assessment categories, applicant groups and all land tenures continues to be effective.

During 2018–19 the FPA will ensure continual improvement in performance outcomes by maintaining a focus on areas requiring improvement, including procedural issues, independent applicants and tenures and archaeological site surveys. During this assessment period the FPA will ensure that an adequate sample of quarrying and clearance and conversion FPPs are included in the assessment program as well as areas containing swift parrot habitat, to enable an effective assessment of these operations.

1.8 Monitoring of the permanent native forest estate

The FPA is required to implement and report on the maintenance of the permanent native forest estate under s. 4C of the Forest Practices Act and following the <u>Policy for Maintenance of a Permanent Native Forest Estate</u> (also known as the Permanent Native Forest Estate (PNFE) Policy) current at the time. The most recent version of the PNFE Policy came into force on 1 July 2017. The following comments relate to the implementation of this, the 2017 policy.

Appendix 4 provides details of the policy and the data for all of the forest communities within Tasmania's bioregions.

- The rate of conversion of native forest in 2017–18 was comparable to the previous year (see Figure 1.8.1), but about 130 hectares less than 2016–17. A total of approximately 565 hectares of native forest was converted to other land use (mainly for agriculture). This figure includes clearance of native forest for dams. The areas of highest native forest conversion were in the Ben Lomond (318 ha) and Woolnorth (108 ha) bioregions.
- Overall, the state-wide reduction in the native forest estate over the period 1996–2017 amounts to approximately 158 425 hectares (4.9 per cent of the estimated 1996 native forest estate) as a result of conversion, mainly for plantations or agriculture – see Table 1.8.1.
- The proportion of native forest conversion by bioregion varies from 11.9 per cent (Woolnorth Bioregion) to 0.2 per cent (Furneaux Bioregion).
- Approximately 12 hectares of threatened forest communities were cleared and converted in 2017–18. The main reason for conversion of threatened forest communities was road construction, sometimes associated with construction of mountain bike trails, dam works, and the clearing of degraded vegetation.
- The PNFE Policy originally set a bioregional threshold for all communities to be maintained at no less than 50 per cent retention of the 1996 area. Concern raised by the FPA about a concentration of conversion in a small number of communities resulted in the government amending the policy to increase the bioregional threshold for all communities to 75 per cent in December 2009. The community and the state-wide thresholds were removed in the 2017 revision of the policy.
- The 2017 policy states that broadscale clearance and conversion of native forest is not permitted, except for a number of defined activities including (but not limited to): agricultural clearing, construction of new significant infrastructure and to facilities development demonstrating a substantial public benefit.
- Although the community thresholds were removed from the 2017 revision of the
 policy, the FPA continues to report on forest cover loss through FPPs. Table 1.8.2
 shows that 12 communities are below the 75 per cent threshold as a result of
 clearance and conversion activity.
- Two communities currently have less than 2000 hectares within a bioregion <u>as a result of clearance and conversion since 1996</u>. These are *Eucalyptus regnans* forest in Woolnorth (down to 1705 hectares from 2632 hectares) and *E. viminalis / E. ovata*

- / E. amygdalina / E. obliqua damp sclerophyll forest in Ben Lomond (down to 1168 hectares from 2091 hectares). This does not include communities that were rare with less than 2000 hectares mapped in 1996.
- Since 2011 most clearance and conversion of native forest has been for agriculture and other non-forest use and very little is for plantation establishment. The certification of FPPs for conversion of native forest to plantations virtually ceased on PTPZ land in 2007 – see table 1.8.1.

The 2017 PNFE Policy has removed the requirement to maintain bioregional thresholds. In addition a moratorium on clearing and conversion of native vegetation on King Island was also removed.

Proposals for clearance and conversion of threatened native vegetation communities (forest and non-forest) must satisfy one of four requirements in s. 19(1AA) of the Act.

Threatened native non-forest vegetation communities do not form part of the permanent native forest estate but any clearance or conversion of them has been subject to regulation under the Act since 2007.

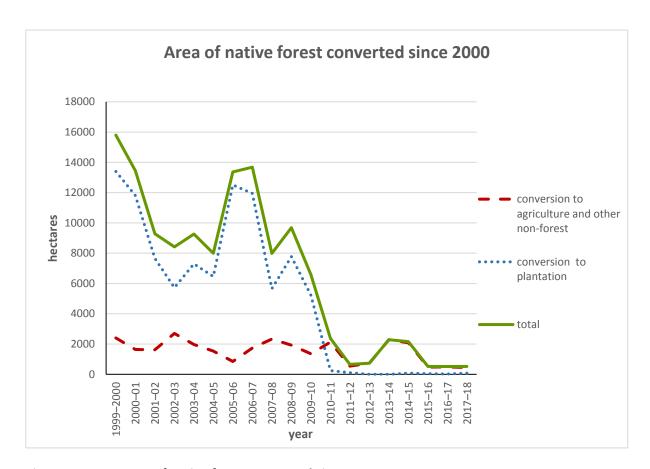


Figure 1.8.1 Area of native forest converted since 2000

Table 1.8.1 Loss of native forest in Tasmania and Tasmanian bioregions, relative to the 1996 estimated extent (as revised in the 2002 State of the forests Tasmania report dataset)

Bioregion	2016–17 Total % decrease of native forest since 1996 (at 30/06/17)	2017–18 Total % decrease of native forest since 1996 (at 30/06/18)
Woolnorth	11.9	11.9
Ben Lomond	9.4	9.5
D'Entrecasteaux	5.3	5.3
Central Highlands	4.5	4.6
Midlands	3.5	3.5
Freycinet	2.6	2.6
West and South- west	0.7	0.7
Furneaux	0.2	0.2
State total	4.9	4.9



Eucalyptus rodwayi forest in Patersonia, north-eastern Tasmania. Only 39 ha of E. rodwayi forest was mapped in the Ben Lomond bioregion in 1996. It is likely to be more extensive than the 1996 mapping suggests, however E. rodwayi forest is still considered to be rare in north-eastern Tasmania.

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Table 1.8.2 The number of forest communities with a reduction in bioregional area of more than 10 per cent and 25 per cent relative to their 1996 estimated extent (based on the 2002 State of the forests Tasmania report dataset)

Bioregion	Number of communities	Number of communities with substantial reduction in area since 1996			
		Total >10%	Total >25%		
Woolnorth	35	13	2		
Ben Lomond	28	11	9		
D'Entrecasteaux	28	2	0		
Central Highlands	34	6	3		
Midlands	30	6	1		
Freycinet	33	2	1		
West and South- west	23	1	0		
Furneaux	6	0	0		
State total		38	12		

(Some communities identified in Appendix 4 as having losses of unrealistic magnitudes, because of significant inaccuracies in the 1996 mapping, have been excluded from this table.)

1.9 Enforcement

1.9.1 Investigations

The FPA investigates all complaints relating to alleged breaches of the Act and the Code. Investigations are undertaken directly by FPA compliance staff, with assistance of FPA specialists when required, or by FPOs. Reports and recommendations are reviewed by the Chief Forest Practices Officer, and when appropriate by the Board of the FPA against the FPA's <u>Investigation and enforcement protocols</u>. Investigations may also be undertaken in cooperation with other government agencies and Tasmania Police.

Formal legal actions arising as a consequence of serious breaches identified during investigations are undertaken in consultation with Tasmania Police.

The FPA dealt with 34 investigations in 2017–18. Of the investigations, three were conducted on PTPZ land, seven on industrial private property, two on Crown land, and 22 on independent private property. Outcomes of 10 finalised investigations are detailed in Table 1.9.1. Of the 24 investigations current at 30 June 2018, nine of these were finalised in the first quarter of the 2018–19 reporting period.

Table 1.9.1 Outcomes of completed investigations

Outcome	2016–17*		2017–18*	
No breach	7	29%	2	6%
Minor breach, no serious environmental harm	8	33%	0	0%
Notice issued to require corrective action or formal warning given	5	21%	2	6%
Penalty imposed	3	13%	4	12%
Matters resolved by the courts	0	0%	0	0%
Apparent breach but insufficient evidence or out of time to proceed with legal action	1	4%	2	6%
Total completed investigations	24	100%	10	29%
Investigations in progress at 30 June 2018	15		24	
Total investigations (completed and in progress)	39		34	

^{*}includes matters carried over from previous years

1.9.2 Notices and prosecutions

The forest practices system is designed to achieve high environmental standards, with an emphasis on planning, training and education. Where issues arise, the FPA prefers that they are dealt with through early detection and corrective action. Corrective action may involve remedial action, as well as reviewing and improving systems to ensure that similar issues do not arise in the future.

Education is considered critical in ensuring that individuals, companies and agencies understand their responsibilities under the Forest Practices Act. Consequently, where issues arise through a lack of knowledge, the FPA prefers to address the issue by educating the responsible person to prevent similar issues arising in the future.

Where issues arise that generally reflect inadequate systems or insufficient care, or in cases of repeat offences, penalties are appropriate to reinforce the due diligence that all parties must apply when undertaking activities identified under the Forest Practices Act.

Legal enforcement may be undertaken in several ways:

FPOs may give verbal or written notification (under s. 41(1)) in order to request the
responsible person to comply with the Act, Code or an FPP. Where this notice is not
complied with, an FPO may issue a second notice in writing (under s. 41(2)) to direct
the person to cease operations and carry out any work required to ameliorate any

- damage incurred as a result of the breach. Failure to comply with an s. 41(2) notice is a breach under the Act and can lead to prosecution.
- The FPA may prosecute (lay a complaint) for failure to have operations covered by a certified FPP (s. 17), trading in treeferns without approval (s. 18B), failing to comply with a certified FPP (s. 21) or for failing to lodge a compliance report (s. 25A).
- The FPA may offer a prescribed fine as an alternative to prosecution (s. 47B).

Table 1.9.2 Legal enforcement 2012–13 to 2017–18

	2012–13	2013–14	2014–15	2015–16	2016–17	2017–18
Formal notices issued by FPOs*	9	5	2	0	10	9
Fines imposed	5	7	3	6	3	4
Complaints laid	1	0	0	0	1	0

^{*} Refers to written notices and does not include verbal notices given by a FPO under s. 41 of the Forest Practices Act.

The figures reported do not include notices issued with respect to overdue compliance reports or notices issued by FPA compliance staff conducting investigations.

Under s. 47B of the Act if the FPA is satisfied that an offence has been committed, it may, on payment of a prescribed fine by the alleged offender, cause any proceedings in respect of the alleged offence to be waived or discontinued. In 2017–18 a total of \$23 000 of s. 47B fines under four actions were settled as follows:

- Landowner A Smith paid a fine of \$8000 for causing the clearing of trees and harvesting of timber on approximately 4.8 hectares of *Eucalyptus ovata* forest and woodland, without a certified FPP near Huonville.
- Landowners D Williams and J Blyth paid a fine of \$6000 for causing the clearing of trees and harvesting of timber on approximately 5.6 hectares without a certified FPP near Aberdeen.
- Landowner R Ferrar paid a fine of \$6000 for causing the clearing of trees and harvesting of timber without a certified FPP near Geeveston.
- Landowner A Von Bibra paid a fine of \$3000 for causing the clearing of trees without a certified FPP on Crown land and private property near St Helens.

Additional actions:

 During the period an FPO (Planning) was suspended for two months for certifying a substantially flawed FPP. The plan is in the process of being amended with cooperation of the applicant.

Prosecution

- One complaint scheduled for hearing in the Launceston Magistrates Court remained ongoing through 2017–18.
- No new complaints were laid in 2017–18.

1.10 Self-regulation

The Tasmanian forest practices system is based on a co-regulatory approach, involving self-regulation by the industry with independent monitoring and enforcement carried out by the FPA. The objectives of the forest practices system are outlined in Schedule 7 of the Act (listed in the section on the forest practices system at the beginning of this report). Self-regulation is implemented through the following processes within the forest practices system:

- Preparation of FPPs: Section 18 of the Act provides that any person may prepare an
 FPP. The larger companies and Sustainable Timber Tasmania generally employ staff
 to meet their own requirements for the preparation of plans. Consultants generally
 service smaller companies and private landowners. In practice most FPPs are
 prepared by trained FPOs or people under the supervision of a trained FPO.
- Certification of FPPs: FPP applications are considered for certification, refusal or amendment by accredited FPOs who hold delegated powers from the FPA according to s. 43 of the Act, known as FPO (Planning). FPOs (Planning) are required to have pre-requisite knowledge, training and experience and are appointed by the FPA after passing the FPO Training Course. Certification of FPPs is the process whereby an FPO must consider if the FPP has been prepared in accordance with the requirements of the Act, the Code and other relevant legislation, policies and FPA administrative instructions.
- Monitoring and inspection of forest practices: Forest practices are supervised by
 FPOs. FPOs (Inspecting) and (Planning) have the power to issue notices under s. 41
 of Act in order to ensure that operations comply with the Act or with the provisions
 of a certified FPP.
- Reporting on compliance under s. 25A of the Forest Practices Act: The responsible person for a certified FPP must lodge an interim compliance report with the FPA within 30 days of the completion of each discrete operational phases of the forest practices authorised to be carried out under the plan. A final compliance report is due within 30 days after the expiration of the plan. Compliance reports must be signed by an FPO. The FPA may also request progress reports under s. 25B of the Act.

The FPA reports that, in accordance with s. 4E(1)(a) of the Forest Practices Act, a high level of self-regulation has been achieved on public and private land that is subject to operations. The independent private forestry sector generally has a reduced capacity for self-regulation compared with larger forestry companies. The FPA is working towards better training and education for non-industrial private forest owners and the contractors that service them.

2 Research and Advisory Program report

2.1 Biodiversity Program

Advice

Table 2.1.1 Biodiversity Program notifications in 2017–18

	Permanent Timber Production Zone land	Private forest	Total
Office assessment and advice provided (approx.)	32 (56)	60 (54)	92 (110)
Field assessment and advice provided (approx.)	17 (21)	45 (38)	62 (59)
Total notifications	49 (77)	105 (92)	154 (169)

This data is derived from the notification system database. The figures in brackets are the number of notifications received in 2016–17.

The Biodiversity Program staff responded to approximately 154 requests for advice on biodiversity issues from FPOs and other forest planners as part of FPP development, received through the online notification system between 1 July 2017 and 30 June 2018. Of these, the majority (105 notifications) were for private land (including large freehold estates), with the remainder for Permanent Timber Production Zone land (PTPZ land) (Table 2.1.1). The number of notifications in 2017–18 decreased by approximately 9 per cent from those received in 2016–17 (169).

Field assessments were undertaken for just over 40 per cent of notifications. The proportion of notifications that required a field assessment has remained about the same for the past couple of years with the vast majority of surveys being undertaken for notifications on private land. Notifications for clearance and conversion of native forest for agricultural developments took up a substantial amount of FPA ecologist time and constituted more than half of the field assessments. The purpose of these field assessments was primarily to assist planners with native vegetation mapping, identification of threatened species sites and habitat, and provide specialist input into the highest priority values. A large amount of the program manager's time was involved in the application of section 19(1AA) of the Act, the Permanent Native Forest Estate Policy and the duty of care requirement of the Code for these private land notifications.

For native forestry operations, predominantly on PTPZ land, complex issues arose where the threatened species management approach agreed with DPIPWE and delivered through the Threatened Fauna Adviser (TFA) was difficult to implement, or where there was no agreed management approach. In particular, FPA Ecologists spent considerable time working on habitat identification and management advice for proposed plans in swift parrot habitat.



FPO Jason Smith and FPA Ecologist Dydee Mann discuss the boundaries of an area proposed for clearance and conversion in the north-west of Tasmania.

These often involved consulting with the species specialists and DPIPWE on a case-by-case basis. This financial year FPA staff dealt with many requests for advice for swift parrot habitat, wedge-tailed eagle, and native forest remnants in both hardwood and softwood plantations on private land. Time was also spent on the development of property-scale plans, involving multiple coupes, for particular threatened species.

Other forest management issues relating to biodiversity values included the identification of habitat for Lake Fenton trapdoor spider, identification of nesting and roosting habitat for masked owl, and threatened flora surveys. As well as coupe notifications, FPA ecologists responded to advice requests on a wide range of biodiversity-related issues from planners, other agencies (in particular DPIPWE), consultants, students and members of the general public.

Biodiversity Program staff provided specialist input to FPA compliance investigations in 2017–18 on mainland Tasmania and Flinders Island, mainly in relation to threatened species and threatened vegetation communities.

2.1.1 Planning tools and guideline development

Development and maintenance activities in 2017–18 for planning tools available for use by FPOs, delivered through the <u>FPA services</u> section of the FPA website, included:

- <u>Biodiversity landscape planning guideline</u>: The guideline is designed to assist in meeting landscape objectives for biodiversity during strategic planning. In 2017–18 the biodiversity landscape planning guideline was used to assist with the development of landscape planning approaches on PTPZ land.
- <u>Biodiversity evaluation sheets</u>: The biodiversity evaluation sheets are designed to
 help assess the risk of a forest practice to a particular biodiversity value. They enable
 documentation of information and decisions made in the development of

- management prescriptions to be included in an FPP. Feedback from planners was used to review the style of the sheets in order to streamline and simplify them for ease of use. This review/update will be completed in late 2018.
- Biodiversity Values Database: Species range boundaries and habitat descriptions continued to be updated by DPIPWE in 2017–18 as new information became available. Any updates made were recorded in a database for compliance purposes. Edits were approved for the habitat description for Skemps snail but have not yet been implemented due to staff shortages in DPIPWE.
- Threatened Plant Adviser (TPA): FPA ecologists continued work on the development of the TPA in 2017–18. The TPA is a planning tool that will provide advice on the management of threatened flora species within areas covered by the forest practices system. It is intended for use by FPOs, forest planners and others conducting biodiversity evaluations as part of the process of developing an FPP. Like the Threatened Fauna Adviser, the TPA will be a web-based decision support system to help planners determine areas or species that are a priority for conservation management and deliver consistent management advice. In 2017–18 the project team completed the process of prioritising threatened flora based on the ecological requirements of the species, and the response of the species to forestry related disturbances. This prioritisation process included reviewing published and unpublished literature, completing research projects, and seeking advice from species experts where required. Draft recommended actions for all threatened flora species were developed, using the information from the prioritisation process. These recommended actions have been programmed into the online draft TPA, and are ready for review by a practitioner reference group and stakeholders in late 2018. The aim is to complete the TPA in 2019. The project is governed by an FPA and DPIPWE project steering committee and the information produced by the project team will be reviewed by a Scientific Reference Group and a Stakeholder Reference Group.
- Threatened Flora Predictive Occurrence Models: The FPA have initiated a project to develop predictive habitat maps for threatened flora species. The maps will be made available as a spatial layer, and will highlight potential 'hot-spots' for a species, and will assist to determine survey requirements and recommended management actions. This project will be completed in 2019.
- Threatened Fauna Adviser (TFA): work on maintaining this decision support tool for threatened fauna management continued during 2017–18. As in previous years feedback from planners or suggestions for improvements were considered by the Project Steering Committee before changes were made, to ensure that any changes were consistent with the endorsement procedures agreed between DPIPWE and FPA. Any updates made were recorded in a database for compliance purposes. Minor pathway and recommended edits were made for eagles, masked owl and swift parrot.
- Mature Habitat Availability Map and Mature Habitat Context Tool: Work continued
 on developing a map (and tool) that is updated using PI-data twice a year, with
 additional changes made fortnightly using the FPP database.

<u>Eagle Nesting Habitat Map</u>: a project was initiated to make the WTE potential
nesting habitat map available in a format that can be viewed on Google Earth and
used in the field on tablets and other devices. This is to reduce the need for
expensive GIS software to view the model.

2.1.2 Policy, reviews and input to strategic planning

Staff were involved in the following strategic planning and review activities:

Landscape-scale planning

Staff provided input to the development of a strategic property-scale plan by SFM Environmental Solutions for managing swift parrot habitat on a private property. This involved applying the swift parrot management approach to multiple coupes and applying the goals of the *Biodiversity landscape planning guideline*.



In 2017–18 the FPA's Biodiversity Program continued to work on landscape-scale planning for biodiversity values, including threatened species, such as on this private property at Colebrook.

 Annual review of the <u>Agreed procedures</u> between FPA and DPIPWE for the management of threatened species under the forest practices system

A review of the implementation of the procedures agreed between the Board of the FPA and the Secretary of DPIPWE for the management of threatened species and communities under the forest practices system (section D3.3 of the Code) found that the procedures were followed in 2017–18. See report *Procedures for the management of threatened species under the forest practices system: report on implementation during 2017–18.*

Eagle nest prioritisation project

This project provides a method for identifying 'used' and 'not-used' wedge-tailed eagle nests and supports the development of a new management pathway for eagle nests that are structurally compromised and no longer used for the purposes of nesting. An online form and web-based tool is being developed to allow trained planners to accurately categorise nests. A final report will be available in the coming months. Some further work is proposed in 2019 to increase the sample size to 'test' the usefulness of the key factors found to be important in prioritising nests.

Threatened species and vegetation community recovery:

- Staff members sat on the scientific reference group for <u>TASVEG</u>, a comprehensive digital map of Tasmania's vegetation.
- Biodiversity staff provided expert input into the development of DPIPWE's threatened non-forest vegetation note sheets.

• Monitoring changes in Tasmania's permanent native forest estate

Biodiversity Program staff monitored and reported (quarterly) on the changes to the forest estate and extent of forest vegetation communities in 2017–18. The area designated for conversion to other land uses (mainly for agricultural use) in FPPs certified in 2017–18 (565 hectares) was less than 2016–17 (693.4 hectares). Most conversion occurred in the Ben Lomond and Woolnorth bioregions. (See section 1.8 and appendix 4 for more details.)

• Information sheets for threatened non-forest communities

DPIPWE have updated information note sheets for threatened non-forest communities. These note sheets were developed in collaboration with FPA ecologists and are available via the FPA website.

• <u>Treefern management plan for the sustainable harvesting, transporting or trading</u> of Dicksonia antarctica in Tasmania, 2017

Several research projects are currently being undertaken in relation to managing and sustainably harvesting treeferns. These projects will continue to provide important information to improve the effectiveness and sustainability of treefern management in Tasmanian forests, and to integrate such information and procedures into future revisions of the *Tasmanian treefern management plan*.

• Guidelines for the interpretation of s. 19 (1AA) clause (c)

The FPA received a number of notifications for advice on FPPs involving clearance and conversion of threatened native vegetation communities in 2017–18. Any decisions relating to FPPs for operations which involve the clearance and conversion of threatened vegetation communities need to take into account the requirements of s. 19(1AA) of the Act. Biodiversity program staff developed an internal guideline to assist the Board of the FPA when making determinations under clause (c) of this section of the Act.



FPA's Research Biologist Amy Koch discussing the identification and management of mature forest.

2.1.3 Research and monitoring

The Biodiversity Program's staff contributed to 15 FPA research and monitoring projects in 2017–18 and eight FPA-supported student projects (Table 2.1.2). A more detailed update on these projects is provided in *Monitoring the effectiveness of the biodiversity provisions of the Tasmanian* Forest Practices Code 2017–18 summary report (see reference list).

The Biodiversity Manager, Research Biologist and A/Research Biologist coordinated the research and monitoring activities in 2017–18. Any new projects initiated in 2017–18 were consistent with the priorities for effectiveness monitoring identified in the 2012 review (FPA 2012)¹. The business plan for these projects was reviewed and updated to assist with project planning and budgeting (FPA 2016). Funding for these projects came from a variety of external funding sources including industry stakeholders. Forico, Timberlands, Sustainable Timbers Tasmania, Private Forests Tasmania, Norske Skog and SFM Environmental Solutions all contributed to a successful application to the Forest and Wood Products Australia Ltd for funding for the project 'Demonstrating stewardship of the environment and ecologically sustainable forestry: Monitoring the effectiveness of the Tasmanian Forest Practices Code for biodiversity'. This multifaceted project involves collaboration with external researchers, students and research institutions.

Co-supervision of higher degree students by FPA staff affiliated with the School of Natural Sciences and the Centre for Forest Value, UTas, continued in 2017–18 (Table 1.3). The students included James Pay (eagle breeding behaviour, PhD, UTas), Joanna Lyall (use of plantations by spotted-tailed quolls and devils, MSc, UTas) and new students, Tim Garvey (threatened frogs, PhD, Deakin University), Alyce Hennesey (bats and remnants, honours, UTas) and Adam Cisterne (masked owls, PhD, ANU).

The research work was communicated to different audiences at a number of events throughout the year. The Biodiversity Manager and an FPA Ecologist (Dydee Mann) presented some of the work of the FPA at the International Mammalogical Conference in Perth, WA, in July 2017 and the Biodiversity Manager and A/Research Biologist presented work on effectiveness monitoring at the Ecological Society of Australia conference in December 2017 (see conference presentations). The annual FPA Research Update event was delivered for stakeholders in August 2017. The key outcomes relating to management were communicated to practitioners through *Forest Practices News* articles, presentations and field days (see training section 2.3 in this report). The Biodiversity Manager also gave a presentation to third-year UTas students on forest vertebrates and their conservation management.

Some staff time was allocated to drafting and reviewing scientific papers from completed projects in 2017–18. Staff were co-authors or supervisors on seven publications in scientific

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¹ Forest Practices Authority 2012, Developing a framework for the conservation of habitat of RFA priority species – Developing a biodiversity effectiveness monitoring program for the forest practices system: identifying priority projects, report to the Federal Government and the Forest Practices Authority, 20 December 2012, Forest Practices Authority Scientific Report 17.

journals. Other publications included three newsletter articles, five presentations at two conferences and two MSc theses.

Other research and monitoring activities by FPA staff included obtaining and renewing data licence permits, renewing scientific collection permits and animal ethics applications.

Table 2.1.2 Biodiversity research projects that were current in the 2017–18 reporting period, with summary of activities undertaken (further information is provided in *Monitoring the effectiveness of the biodiversity provisions of the Tasmanian* Forest Practices Code 2017–18 summary report)

Project title	Activities during 2017–18
Monitoring the timing of the wedge-tailed eagle breeding season	Annual nest monitoring surveys were completed in November 2017. Thirty-one nests were surveyed. The data gathered was used to determine the timing of the breeding season for management purposes.
Eagle nest prioritisation project	This project was initiated in 2015–16. Data analysis was completed and a draft report produced for review in 2017–18.
Testing the effectiveness of selected actions to mitigate the impact of forest practices on the wedge-tailed eagle	The aim of this project, initiated in 2017–18, is to assess whether the exclusion zones are effective in reducing disturbance to breeding eagles and their young at the end of the season. Project design, camera testing and site selection began in late 2017–18. Initial field data collection will begin in the 2018–19 breeding season.
Testing the accuracy of the Mature Habitat Availability Map (MHAmap) for predicting hollow availability in wet forest	The scientific paper was accepted for publication in Ecological Management and Restoration in 2017–18 (see reference list). The FPA Research Biologist worked with STT scientists on the development of a predictive map that refines the low density categories of the MHAmap using LIDAR data.
How effective are management actions for the Skemps snail?	The FPA A/Research Biologist completed the data analysis. The FPA A/Research Biologist presented the results of this project at the Ecological Society of Australia conference in Dec 2017.
How effective are management actions for the keeled snail?	The FPA A/Research Biologist completed the data analysis and drafted a scientific publication. The FPA A/Research Biologist presented the results of this project at the Ecological Society of Australia conference in Dec 2017.
Survival of trees in wildlife habitat clumps	The scientific paper was accepted for publication in Forest Ecology and Management in 2017–18.
Impact of fire and habitat disturbance on the threatened chaostola skipper and Tasmanian hairstreak butterfly	The annual 2017–18 survey was conducted to assess the re-establishment or re-colonisation of the burnt areas by chaostola skipper and the Tasmanian hairstreak butterfly.
Assessing the efficacy of management prescriptions for the protection of masked owl nest and roost sites	Nest and roost sites associated with past FPPs and covenants were surveyed in 2017–18 to establish baseline environmental data on general habitat and critical habitat features, local land uses and disturbance, and evidence of use of sites by masked owls.
Systematic survey for chaostola skipper in Tasmania	Report completed and published on FPA web-site. Results from this study were used to review the potential range boundary, potential habitat description and management prescriptions for chaostola skipper delivered through the FPA's Threatened Fauna Adviser.

Systematic survey for Marrawah skipper in Tasmania	Report completed and published on FPA web-site. Results from this study were used to review the potential range boundary, potential habitat description and management prescriptions for Marrawah skipper delivered through the FPA's Threatened Fauna Adviser.
Headwater stream management and water quality	This study started in 2017–18. The aim is to test the effectiveness of the Class 4 Stream guidelines in reducing sediment input to sub-catchments that support the giant freshwater crayfish. Work was carried out on project design and site selection.
Managing devil dens	The aim of this study which started in 2014 is to identify and determine long-term use of den sites in plantations. Post-harvesting camera monitoring of the dens continued in 2017–18. The results so far were presented at the International Mammalogical Conference in July 2017 by FPA Ecologist Dydee Mann.
Monitoring effects of long-term forest management on the Vulnerable shrub <i>Hibbertia calycina</i> .	This project which started in 2016 aims to evaluate the degree to which past implemented management strategies e.g. reservation and <i>Phytophthora cinnamomi</i> management zones, have been effective for the management of the species. Surveys were carried out in 2017–18 and results analysed.
Response of <i>Pterostylis atriola</i> (snug greenhood) to forestry disturbance in Tasmania	This project looked at the response of <i>Pterostylis atriola</i> to forestry-related disturbance events. Surveys were completed in 2017–18 and the results written up for publication.



FPA's Acting Research Biologist Pep Turner diving into fieldwork to investigate the effectiveness of the Class 4 Stream guidelines in reducing sediment input to sub-catchments that support giant freshwater crayfish.

Student projects supported by FPA

These projects contribute to the work of the FPA and were either formally co-supervised in 2017–18 by the FPA Biodiversity Manager, Research Biologist or A/Research Biologist through their adjunct positions with UTas or receive other FPA support. Some have also received advice and support from the FPA's ecologists.

Project title	Activities during 2017–18
Behaviour of breeding eagles and the impact of disturbance	Fieldwork for this PhD project by James Pay (UTas) was completed in 2017–18. Data analysis and thesis writing is underway. The FPA Research biologist co-supervised this project and the FPA raptor specialist provided expert advice.
Swift parrot ecology	This FPA-supported ARC project was completed in 2017–18. ANU PhD student, Mathew Webb, completed his thesis in 2017–18. Data collected on habitat use, distribution, and threats to swift parrots as part of this project, and the associated postdoctoral work by Dejan Stojanovic, was published in 2017–18. These projects were not supervised by FPA staff, although the Research Biologist provides expert advice as required. The results of this work were taken into account in the revision of the Recovery Plan for this species in 2017–18.
Factors in plantations in north-west Tasmania influencing usage by spotted- tailed quolls, devils and cats	MSc student Joanna Lyall (UTas) completed her thesis in 2017–18 and two scientific papers have been drafted for publication. The FPA Biodiversity Manager co-supervised this project.
Devising commercial forest practices that support metapopulations of threatened frogs	Deakin University PhD student Tim Garvey completed the first season of fieldwork in 2017–18 with co-supervision by the FPA Research Biologist.
Bird acoustic study	This PhD project by Scott Whitemore at the ARC Centre for Forest Value (UTas) is supported by the FPA. Using data provided by STT Scott has been able to train and test a multi-species recogniser, in collaboration with Andrew Hingston, which is showing quite promising performance.
Epiphytic diversity on treeferns in relation to silvicultural practices	MSc student, Clare Duck (University of Melbourne) completed her thesis in 2017–18. The FPA A/Research biologist co-supervised this project. Data collected in Tasmania will be used to inform the possible effects of variable retention harvesting in Victoria where aggregated retention is in its infancy. This knowledge will be useful for determining the best silvicultural approach for managing tree fern populations and maintaining their ecological function in the forests of Victoria and Tasmania.
Distribution and abundance of aquatic fauna in relation to habitat condition in the Midlands	This honours project by Ana Zepeda De Alda (UTas) aims to look at the occurrence of platypus, Tasmanian water rat (rakali), bats and riparian insects in relation to stream and catchment condition in the Midlands. Fieldwork began in 2017–18.

Ecology of the endangered Tasmanian Masked Owl

This PhD project by Adam Cisterne (ANU) is co-supervised by the FPA Research Biologist. The project aims to use radio-tracking to determine home ranges and habitat use by breeding pairs. Data will be assessed in relation to landscape scale features in order to estimate resource availability, including used and potential nest sites, and how these are affected by habitat disturbance.



FPA supervised students. Left: The threatened green and gold frog, Litoria raniformis, found in protected habitat in a plantation close to Bridport (Photo by Tim Garvey). Centre: James Pay with a radio-tagged wedge-tailed eagle. Right: Clare Duck investigating how treeferns and their associated plant biodiversity fare over time after harvesting and wildfire.

2.1.4 Consultancies and special projects

Some staff time was spent on consultancies and special projects. The income from consultancies contributed to the maintenance of specialist staff members within the FPA who are available to provide advice and support for FPOs. The consultancies and special projects included:

- Completion of an Environmental and Heritage Tree Assessment Framework and Guidelines for the Department of State Growth. This project commenced in April and was completed by July 2017. It included the preparation of project-specific spatial information and analysis, background documentation, report and mapping preparation, and workshop attendance.
- The FPA Biodiversity Manager and an FPA Ecologist (Dydee Mann) undertook a brief study tour to look at the approach taken to reduce the impacts of forestry practices on biodiversity in production forests in WA in July 2017 (Munks and Mann, 2017).
- The FPA Biodiversity Manager, in collaboration with Jason Bolch (SFM), Adrian Slee and Chris Grove (FPA) and Graham Wilkinson (Consultant) ran a field trip for visiting Pacific Islander Forest Managers at a private property in south-eastern Tasmania.

2.2 Earth Sciences and Cultural Heritage Program

2.2.1 Advice

Table 2.2.1 Notifications received for public and private forest, 2017–18

	Permanent Timber Production Zone land	Private forest	Total
Office assessment	59 (67)	102 (100)	161 (167)
Field assessment	14 (16)	22 (14)	36 (30)
Total notifications	73 (83)	124 (114)	198 (197)

Figures in brackets are the number of notifications responded to in 2016–17; significant enquiries are included in totals.

About the same number of notifications were received in 2017–18 and 2016–17, but the emphasis continues to shift to private forests (mainly plantations). Fifty notifications were received for issues concerning cultural heritage sites alone and 148 notifications were received for earth science issues, or earth sciences and cultural heritage issues on the same coupe. Forty-five 'new' historic sites were added to the Conserve database accessible to FPOs. Nine 'new' Aboriginal heritage sites were added to the Aboriginal Heritage Register and to the Conserve database. A field investigation was conducted into the success of the native revegetation program alongside streams and on low-producing sites within pine plantations of northeast Tasmania. The catchment management guide for the area is being revised to take into account the observations made.

2.2.2 Research and monitoring

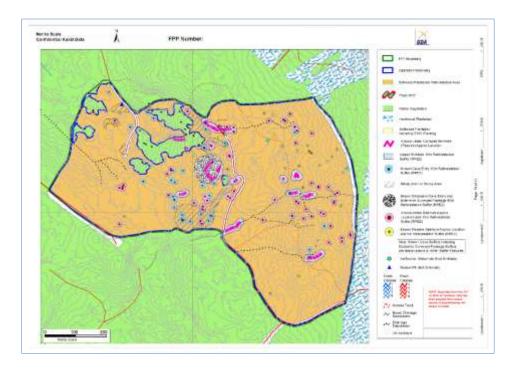
Karst landforms, caused by the dissolution of carbonates by slightly acidic water, are extensive in limestone and dolomite terrain. Forest operations in karst terrain need to be conducted with great care because of the risk of polluting subsurface streams as well as the risk of damaging caves and disturbing important scientific sites and rare fauna. The Florentine Valley north of Maydena has valuable pine forests but also contains extensive areas of soils underlain by limestone at shallow depths. Monitoring supported by the FPA has established that at least three streams flow under the pine plantations and that sinkholes in the sediments overlying the limestone are active but slow moving. The maximum rate of collapse is a few centimetres per year. There was no detectable effect of pine harvest on rate of sinkhole development.

Further investigations and monitoring are being done in areas of poorly-described karst in north-western Tasmania, together with stream monitoring with the help of University of Queensland researchers.

Tasmanian scientists and foresters are recognised as leaders in karst management in forests. The FPA Earth Science Manager and foresters from a plantation company contributed to a chapter detailing how geoconservation principles are applied in Tasmania. The book entitled Geoheritage: Assessment, Protection, and Management was published by Elsevier, Amsterdam in 2018. The figure below shows the great care taken during planning to identify sensitive karst features and ensure their protection.



The Earth Sciences Scientific Officer Adrian Slee stream monitoring in karst terrain, north-western Tasmania.



Karst areas require careful planning. This map (from which location features have been removed to ensure protection of caves) shows numerous reserves around small cave entrances (blue circles), larger reserves around known large caves (black stippling) and buffers and machinery exclusion zones around sinkholes (pink circles and lines), as well as protected areas of native vegetation on shallow soils on limestone rock (green) within the plantation boundary (dark blue line).

Both earth scientists working at the FPA are members of the Tasmanian Geoconservation Database (TGD) working group which once a year assesses whether newly-described sites should be registered on the state geoconservation database. This year the TGD field trip examined cold-climate deposits in forests of the Styx and Tyenna valleys near Maydena.



Deep fine screes in the Styx forests are deduced to have formed during cold dry conditions. They have been dated to around 35 000 years ago when the climate was cold and dry and are recognised as a site of special interest in the Tasmanian Geoconservation Database.

The issue of the potential of Tasmania's eucalypt forests to store carbon that could mitigate greenhouse gas effects continues to be debated. Because, in the absence of fires, tall wet eucalypt forests naturally transition into low-stature rainforests which store less aboveground carbon than the eucalypt forests which preceded them, an important question to ask is 'is the loss of above-ground carbon during this transition made up for by an increase in soil carbon under rainforests?'. To answer this question a University of Queensland student has sampled soils to 1 m depth at five pairs of sites under the two forest types.



James Hardcastle (left) of the University of Queensland preparing a soil pit for sampling subsoils for carbon content, with the assistance of Elizabeth Brewer (right) with a soil corer used for sampling topsoils.



(Above) The open eucalypt woodlands of Surrey Hills such as these at Thompsons Park suggest that burning of vegetation by Aboriginal populations (in order to attract game and keep the rainforest at bay) may have been practised over millennia, essentially as a type of farming without fences. The research at Yellow Marsh on Surrey Hills aims to find out how long human-induced burning has been used as a form of vegetation control, as this may have implications for present-day management of the Surrey hills grasslands and eucalypt forest remnants, as well as informing historians of the time humans first colonised the area.

Research has also been conducted on Surrey Hills in north-western Tasmania with the aim of finding out how long the extensive grasslands and open eucalypts forests, first mapped by the European explorer Henry Hellyer in 1831, have existed in an area which, in its natural state 'should' be rainforest. A core was extracted at this site from a peat bog and the vegetation changes over time will be determined by examining the preserved pollen in the core. A second site in a



FPA and University of Queensland researchers obtaining a peat core from Yellow Marsh, Surrey Hills.

basin immediately north of the Nicholas Range in north-eastern Tasmania was also cored. The results from the second site showed that open eucalypt forests dominated in the area from about 50 000 years before present, with rainforest pollen becoming dominant in the upper part of the core, probably about 12 000 years ago. Especially interesting was the presence of spores from the dung fungus *Sporormiella* in the lower part of the core as high spore numbers have been associated with the presence of mega-herbivores (now extinct) at other sites.

At Oldina south of Wynyard the earth science staff in collaboration with foresters from a plantation company are undertaking research on the multiple landslides that occurred on a plantation coupe during the June 2016 flood event in northern Tasmania. The FPA aquired high resolution drone imagery for this site and the coupe to the south that was harvested in early 2017; this imagery will help to describe the landslides that occurred, their volumes and their modes of formation. A class 4 stream in the southern coupe is being monitored for signs of soil erosion and / or changes in stream morphology post the 2017 harvest.



Earth Sciences and Cultural Heritage Program Manager Peter McIntosh surveying the extent of a large complex landslide formed during the June 2016 flood event at Oldina.

2.2.3 Consultancies

Together with scientists from the Forest Research Institute in Papua New Guinea, the Earth Sciences Manager completed a progress report on the soil carbon content of lowland forests in Papua New Guinea, and assisted with presenting results at the PNG **National Forest Inventory** Workshop held in Lae, Papua New Guinea in February 2018. In general about half the carbon in lowland forest is found in the soil, which contains moderate amounts of carbon (90-180 tonnes of carbon per hectare). Although many soils in Tasmania contain similar amounts of carbon, eucalypt forests approaching maturity in Tasmania are much taller than the Papua New Guinea rainforests and contain much more of their carbon in vegetation.



Soil survey in Papua New Guinea is a communal activity.

2.3 Socio-Economic Program

The FPA Socio-Economic Program is overseen by the intra-government Steering Committee and funded as part of the Forest Industry Growth Strategy. The broad functions of the program are:

- To improve the collection, analysis and consideration of forestry economic and related social data to facilitate greater cost-benefit analysis in environmental decision making within the forest practices system, consistent with the objectives of the Act and the roles and functions of the FPA.
- To develop strategic economic and related social advice to the FPA to augment
 existing environmental advisory services and, in this context, manage the planning,
 resourcing and delivery of strategic initiatives relevant to the provision and
 consideration of economic and related social data.

The FPA is working closely with the University of Tasmania, School of Business and Economics to establish a forestry socio-economic program associated with the ARC Centre for Forest Value. As part of this programme, three PhD scholarships are co-funded in the area of resource and environmental economics, focussed on forestry, to further strengthen FPA capability around the socio-economic decision making and regulatory policy advice.

The program started its operation in May 2018 when Dr Elena Tinch commenced employment with the FPA as a Resource and Environmental Economist. The key focus areas of the program to June 2018 were: stakeholder and industry engagement; projects scoping and prioritisation; and commencement of work aimed at evaluating socio-economic impacts of increased swift parrot management actions.

2.4 Training and education carried out by the FPA

2.4.1 Forest Practices News

Two editions of *Forest Practices News* were published by the FPA in 2017–18, and can be found on the <u>FPA website</u>. The newsletter provides a channel for communicating new ideas and developments among those interested in the management of Tasmania's forests. Emphasis is placed on practical and applied information, particularly on articles supplied by practising FPOs. FPA staff and the Chief Forest Practices Officer contributed 18 articles to *Forest Practices News*. The Publications Officer and the Earth Sciences and Cultural Heritage Manager edit the newsletter.

2.4.2 Forest practices system training

FPA staff ran or contributed to the educational events, courses and symposia listed below. The Tasmanian Government's Training and Skills Development Service (TSDS), delivered by ForestWorks, provided \$123 504 of funding to cover 80 per cent of the cost of providing training to forest industry workers.

Biodiversity Program

• Biodiversity Course The four-day Biodiversity Course in September 2017 on the east coast was attended by the FPO Training Course participants and other forest workers as well as people from other agencies. A total of 35 people attended at least one day of the course. Participants gained an understanding of the legislation, policy (including objectives and goals), processes and planning tools relating to the management of biodiversity in areas covered by the forest practices system. This course received TSDS funding.



Participants on the Biodiversity Course improving their plant identification skills.

- Swift Parrot Field Days In January 2018 FPA held two swift parrot training days in
 the Wielangta forest. With expert guidance from Australian National University's Dr
 Matt Webb and the FPA specialists, the 40 participants learnt how to identify swift
 parrot nesting trees, and trees with the potential to develop hollows in the future.
 They also honed their ID skills in recognising swift parrot foraging habitat, and
 learned how to classify each habitat type and quality using the FPA Fauna Technical
 Note 3: Swift parrot breeding habitat. This course received TSDS funding.
- Research Update The A/Research Biologist and Biodiversity Manager ran the annual FPA Research Update event in 2017 during which researchers presented information about their projects. The purpose of this annual event is to update stakeholders, industry personnel and other researchers on research that has been conducted in the last financial year that considers the effectiveness of provisions implemented through the forest practices system for the conservation of natural and cultural values. 2017-18 Monitoring the effectiveness of the biodiversity provisions of the Tasmanian Forest Practices Code

Earth Sciences and Cultural Heritage Program

learners to familiarise foresters with geological processes, reading geological maps, identifying rock types and geological features including hazards and sites of special scientific interest in coupes being planned. Identifying landforms, often formed under previous colder climates, helps foresters to correctly characterise soils and soil erodibility, and to identify hazards and sites of special scientific interest on coupes. The courses were held in Hobart and at Gowrie Park in northern Tasmania and involved both indoor sessions (including talks, discussions, mapping exercises and rock identification) as well as field excursions. These courses received TSDS funding.



FPA Geoscientist Adrian Slee (right) explains sinkhole processes during one of the north-western Tasmania Geology for Foresters Courses.

• The Forest Supervisors Course, jointly run by STT and the FPA, was attended by 13 supervisors from both STT and the private sector. The course was conducted in the Tyenna area near Maydena in May 2018 and covered the following subjects: assessing soil erodibility; managing stream erosion in coupes; and building road cuttings in highly erodible silts and sands. The Earth Sciences Manager presented the session on soil and water issues likely to be encountered on coupes. This course received TSDS funding.



Foresters attending the soil and water component of the Forest Supervisors Course at Maydena in May 2018.

Study tour for Pacific Islander foresters

Tasmania hosted a study tour by 14 forestry officers from Pacific Island countries during May to provide training in sustainable forest management, with a focus on forest regulation, including harvest planning and the conservation of non-wood values. Biodiversity and earth sciences specialists from the FPA provided an overview of the FPA's research and advisory functions, including the development of planning tools, training and advice to FPOs and monitoring and enforcement of FPPs.



FPA Biodiversity Manager, Sarah Munks, points out an eagle's nest to Pacific Islander Forest Managers.

2.4.3 Forest Practices Officer training

FPOs act as authorised officers of the FPA in the execution of certain sections of the Forest Practices Act and in the interpretation of the Forest Practices Regulations 2007. An important function of the FPA is to train FPOs to ensure that they have the required skills and knowledge to carry out their role prior to appointment as an FPO.

FPOs must successfully complete the FPO Training Course run by the FPA, which is generally run every two years. The latest course involved two days per month between June and November 2017. The course had 20 participants, roughly half of whom were from Sustainable Timber Tasmania and the others were from forestry companies or were self-employed. All participants successfully completed the course and provided positive feedback.

Although this course is no longer run as a nationally accredited course due to the associated expenses, it is run according to the standards of the nationally accredited course. The Training Coordinator has completed a Certificate IV in Training and Assessment in order to achieve this.

The next FPO Training Course will be in 2019.

3 Administration of forest practices

3.1 The Board of the Forest Practices Authority

The FPA has the statutory responsibility for advancing the state's forest practices system and fostering a cooperative approach in developing policy and management in forest practices matters. The forest practices system is based upon a co-regulatory approach involving a balance between self-management by industry and independent monitoring by the FPA. The Board of the FPA provides independent advice and statutory reports to the Minister for Resources.

The statutory functions of the Board of the FPA as laid down in s. 4C of the Act are to:

- advise the Minister on forest practices policy in respect of both Crown land and private land
- regularly advise and inform the Minister on its work and activities under the Forest Practices Act
- advise the Minister on the operation and review of the Forest Practices Act
- issue and maintain the Forest Practices Code
- oversee standards for FPPs (FPPs)
- oversee the administration of private timber reserves (PTRs) by Private Forests
 Tasmania
- monitor and report to the Minister on harvesting, the clearing of trees and reafforestation activity in relation to the maintenance of a permanent forest estate
- implement the state's Permanent Native Forest Estate Policy
- oversee the training of FPOs
- make a recommendation on the appointment of the Chief Forest Practices Officer and to appoint FPOs
- perform such other functions as are imposed on it by or under this or any other Act
- perform any prescribed functions.



One of the Board's functions is to oversee FPO training. Here the FPA's Compliance Manager Stephen Walker trains a participant on the FPO Training Course in how to complete compliance reports.

3.1.1 The directors of the Board of the Forest Practices Authority

The directors of the Board in 2017–18 were as follows:

- Independent Chair, with expertise in public administration, environmental or natural resource management and governance: John Ramsay (appointed 1 July 2015)
- a person with applied knowledge and expertise in environmental or natural resource management: Alex Schaap (appointed 1 July 2015)
- a person with applied knowledge and expertise in sustainable forest management on private land: David Gatenby (appointed 15 December 2015)
- a person with applied knowledge and expertise in sustainable forest management on public land: Amy Robertson (appointed 13 August 2016)
- a person with applied knowledge and expertise in community liaison and local government, from an area in which forestry is a major land use: Cheryl Arnol (appointed 1 July 2015)
- a person with independent expertise in biological science/nature conservation: John Hickey (appointed 1 July 2015)
- the Chief Forest Practices Officer: Peter Volker (appointed as Chief Forest Practices Officer and Director 5 April 2016).



The Board of the FPA: (from left), Alex Schaap, John Hickey, Amy Robertson, John Ramsay (Chair), Cheryl Arnol, David Gatenby, Peter Volker (Chief Forest Practices Officer)

3.1.2 Qualifications, other relevant positions held and declaration of interest by directors

John Ramsay: LLB

Member – Tasmanian Planning Commission

Alex Schaap: BSc (Hons)

- Member Resource Management and Planning Appeals Tribunal
- Member Inland Fisheries Advisory Council

David Gatenby

- Director –Tasmanian Heritage Council
- Member Tasmanian Farmers and Graziers Association
- Landowner including private forests (native forest and plantation)

Cheryl Arnol MAICD

- Councillor and Deputy Mayor Glamorgan Spring Bay Council
- Member Australian Institute of Company Directors
- Chair Glamorgan Spring Bay Council NRM committee

John Hickey: BForSci(Hons), MSc, MIFA

- Member Standards Reference Committee, Australian Forestry Standard
- Member Committee of the Tasmanian Division, Institute of Foresters (Australia)

Amy Robertson: BEnvSc(Biodiversity Conservation), DipNatResMgt, MIFA, GAICD

- Member Institute of Foresters of Australia
- Owner of land with native forest
- Contract work on FPPs for FSA Pty Ltd
- Husband undertakes forest practices work for Sustainable Timber Tasmania
- Provides training services to FPA as part of FPO training course

Peter Volker: BSc(Forestry), GradDipSc(Forestry), MBAP(EnvMgt), PhD, MAICD, FIFA, RPF

- Chief Forest Practices Officer (see section 3.3)
- Director Rowing Tasmania Incorporated
- Owner of land with plantation and native forest
- Fellow Institute of Foresters Australia
- Honorary Research Associate University of Tasmania

3.1.3 Remuneration

Total remuneration paid to non-executive directors of the FPA falls within the following bands: \$20 000 to \$29 999 (5) and \$30 000 to \$39 999 (1).

The Chief Forest Practices Officer is appointed within the Senior Executive Service at remuneration level SES2.

3.1.4 Activities of the Board of the Forest Practices Authority

The Board had 12 meetings during the year. Major actions of the Board, which are not discussed elsewhere in this report, during the year included:

- refunded FPP application fees for 2016–17 where applicants paid in excess of the fees notified to Parliament due to an administration error in the tabling of the fee schedule
- developed a risk register for governance matters
- discussed the Tasmanian Special Species Management Plan
- discussed the process for listing of threatened native vegetation communities
- instructed FPOs to refer clearance and conversion applications that will result in 'loss
 of significant nature conservation values in an IBRA bioregion' and non-threatened
 communities that may become threatened, to the Chief Forest Practices Officer for
 discussion and advice prior to certification of an FPP
- continued quarterly reporting on the extent of native vegetation cover and the extent of native forest communities in bioregions
- commissioned a report on the state of native vegetation on King Island
- approved a Vegetation Management Agreement for Timberlands Pacific Pty Ltd to control pine wildlings in native forest
- endorsed the environmental management system of Grinkin Pty Ltd for mini-hydro power stations
- endorsed the construction environmental management plan for the Cattle Hill Windfarm
- held an internal strategic planning workshop
- recommended an audit of financial management systems to be conducted by an external specialist
- commenced review of the Investigation and Enforcement Protocol
- amended the Compliance Committee's terms of reference.

The Board had three standing committees in 2017–18 as follows:

- Audit and Risk Committee this committee assists the Board in fulfilling its responsibilities in relation to proper financial, compliance and performance management of the FPA. It comprised David Gatenby (Chair), Cheryl Arnol and John Ramsay.
- Work Health and Safety Committee this committee implements responsibilities in relation to oversight of work health and safety management within the FPA. It comprised all Board members.
- Compliance Committee this committee engages regularly with the Chief Forest
 Practices Officer and Compliance Manager to identify and pursue opportunities for
 improving compliance with sustainable forestry practices in Tasmania both through
 the actions of the FPA and other agencies. It also reviews investigations conducted
 by the FPA into alleged breaches to ensure that the required standards of rigour,
 fairness and consistency are maintained. The committee comprised John Hickey
 (Chair), Amy Robertson and Alex Schaap.

Table 3.1.1 Attendance of directors of the FPA at meetings and committees

Director	Board meetings attended (12 meetings held in 2017–18)	Other meetings attended/services rendered
John Ramsay (Chair)	12	Meetings of the Forest Practices Advisory Council
Alex Schaap	12	Compliance Committee
David Gatenby	10	Audit and Risk Committee
Amy Robertson	12	Compliance Committee
Cheryl Arnol	11	Audit and Risk Committee
John Hickey	11	Compliance Committee
Peter Volker	12	Day-to-day administration of the forest practices system (see section 3.3 below)



Board member Amy Robertson presenting at the Looking Back – Looking Forward Conference to mark 30 years of the forest practices system.

3.2 Forest Practices Advisory Council

The functions of the Forest Practices Advisory Council are to advise the Board of the FPA on reviews of the Act and the Code, financial matters including self-funding and the effectiveness of forest practices administration, operations; and research.

Members of the Forest Practices Advisory Council in 2017–18 were:

- a person with knowledge or expertise in sustainable forest management (Chair):
 Dr Hans Drielsma (re-appointed 11 June 2018)
- a person with knowledge of the state's resource management and planning system in relation to municipal areas in which forestry is a major land use, nominated by the Local Government Association of Tasmania: Shane Wells (appointed 3 April 2017)
- a person with expertise in, and operational experience of, forest harvesting or forest contracting: Neil McCarthy (appointed 1 February 2015)
- a person with knowledge of the state's resource management and planning system, nominated by the Secretary of the responsible department in relation to the Environmental Management and Pollution Control Act 1994: Wes Ford (appointed 4 September 2015)
- a person with knowledge of administration and legislation in relation to private forests, nominated by Private Forests Tasmania: Tom Fisk (until 20 May 2018)
- a person with knowledge of administration and legislation in relation to multiple use forests, nominated by the forestry corporation: Suzette Weeding (re-appointed 11 June 2018)
- a person with expertise in, and experience of, forest issues in relation to harvesting and processing, jointly nominated by the Forest Industries Association of Tasmania and the Tasmanian Country Sawmillers Federation: Terry Edwards (re-appointed 10 February 2015)
- a person with expertise in, and experience of, forest issues in relation to forest conservation: Fred Duncan (re-appointed 11 June 2018)
- a person with expertise in, and experience of, tree growing on private land, jointly nominated by the Tasmanian Farmers and Graziers Association and the Forest Industries Association of Tasmania: Andrew Morgan (appointed 1 February 2015).

The FPA Board Chair and Chief Forest Practices Officer are invited to attend all Forest Practices Advisory Council meetings and executive support is provided by the FPA. Four meetings were held during the year. The major issues addressed by the Forest Practices Advisory Council during the year included:

- proposed amendments to the Forest Practices Act
- Forest Practices Code review
- socio-economic factors in the forest practices system and the use of new Government funding
- critically endangered swift parrot
- the FPA's financial status.

3.3 Chief Forest Practices Officer

The Chief Forest Practices Officer is responsible for overseeing the day-to-day administration of the forest practices system and is appointed under s. 4J of the Act as a person who must have:

- extensive expertise in forestry
- extensive experience in forest operations
- knowledge of the sustainable management of forests
- management skills.

Peter Volker has been the Chief Forest Practices Officer since April 2016.

Chief Forest Practices Officer qualifications, other relevant positions held and declaration of interests:

- Bachelor of Science (Forestry) Australian National University 1981
- Graduate Diploma of Science (Forestry) Australian National University 1989
- Doctor of Philosophy University of Tasmania 2002
- Master of Business Administration (Professional) in Environmental Management University of Tasmania 2012 (Dean's Honour Roll)
- Certificate IV Trainer and Assessor
- Environmental Lead Auditor (accreditation has lapsed)
- Registered Professional Forester (with specialist expertise in silviculture and forest genetics)
- Fellow of the Institute of Foresters of Australia
- Member of the Commonwealth Forestry Association
- Member of the Australian Institute of Company Directors
- Honorary Research Associate University of Tasmania

Peter Volker has joint ownership of a private property in Tasmania which includes natural forest and plantations.



The Chief Forest
Practices Officer Peter
Volker in November 2017
presenting a history of
the forest practices
system at the Looking
Back – Looking Forward
Conference to mark 30
years of the forest
practices system

3.4 Forest Practices Officers

The FPA appoints FPOs under s. 39 of the Act. An appointed FPO holds a warrant which authorises them as an FPO (Inspecting), but an additional power to certify FPPs may be delegated to FPOs authorised as FPO (Planning).

FPOs are employed by forest companies, STT and Private Forests Tasmania or are engaged as independent consultants to plan, supervise, monitor and report on forest practices and ensure that operations comply with the Act and the Code.

The prerequisite qualification for appointment as an FPO is being deemed competent under the FPO Training Course in addition to relevant forestry experience. More information is available in the *Forest Practice Officer training resource manual* on the FPA website.

A person who wishes to be appointed as an FPO must successfully complete a training course conducted by the FPA (section 2.3.3), which consists of a number of teaching sessions, field trips, and practical exercises in various parts of the state, and a formal examination. The training course covers legislation and implementation of the *Forest Practices Code* with an emphasis on harvesting, roading and reforestation. Specialist subjects include biodiversity, soils and water, geomorphology, cultural heritage, fire management, compliance and visual landscape. Attendance at periodic refresher courses is compulsory.

During 2017–18, 10 FPOs were appointed by the Board of the FPA. Of these, one was delegated authority to function as FPO (Planning). In addition two FPO (Inspecting) changed status to FPO (Planning).

There were 161 active or recently active FPOs, an increase of 11 since last year (Table 3.4.1). This reflects the recent appointments after the last two large FPO Training Courses and also includes FPOs recently active but under review as no longer active.





Forest Practices Officers, such as Forico's Jay Fowler (left, photo by Forico) and Sustainable Timber Tasmania's Dion Robertson, require a broad range of skills to carry out their roles.

Table 3.4.1 Forest Practices Officers¹

FPO (Planning)

	As at 30/6/17	As at 30/6/18
Industry	37	40
Independent consultants	23	25
Sustainable Timber Tasmania	27	24
FPA	2	2
Private Forests Tasmania	3	3
Other government	1	2
Other (currently inactive)	4	0
Total FPO (Planning)	97	96

FPO (Inspecting)

	As at 30/6/17	As at 30/6/18
Industry	14	18
Independent consultants	6	7
Sustainable Timber Tasmania	26	31
FPA	2	3
Private Forests Tasmania	0	0
Other government	4	5
Other (currently inactive)	1	1
Total FPO (Inspecting)	53	65
Total (Planning and Inspecting)	150	161

¹These numbers are for active or recently active FPOs.

Forest Practices Officer Reference Group

The Chief Forest Practices Officer established a Forest Practices Officers Reference Group (FPORG) to facilitate direct communication between FPOs and the FPA. The group is be independent from the FPA and is a forum for issues that FPOs feel need addressing by the FPA. The group meets quarterly and includes representatives from PF Olsen, Norske Skog, STT, Forico and independent consultants. FPA staff also attend if required.

FPORG's objectives are to:

- discuss and exchange ideas on matters relating to the role of FPOs and the operational aspects of the forest practices system (inspecting, planning and implementation)
- review and provide feedback on proposed new FPA initiatives relevant to the work of FPOs (e.g. proposed new planning tools, technical notes, training courses and field days, research and advisory work, monitoring and assessment).

During the year FPORG provided comment on disciplinary procedures for FPOs, a draft Code of Conduct, continuing professional development, exercising compliance powers, review of

the *Forest Practices Code*, operational issues with biodiversity monitoring and training needs.



Clockwise from top left. FPA Ecologist Steve Casey advises Sustainable Timber Tasmania's (STT) Hafwen Pearce about the location of a goshawk nest;

STT's Rob Crellin collecting seed for reforestation in accordance with Forest Practice Code standards which state that seed should be from the stand to be felled or the nearest similar ecological zone;

STT's Sean Boucher inspects a culvert on the FPO Training Course; and FPA James Fergusson (right) discusses compliance issues with STT's Craig Jaffray on the FPO Training Course.

Disciplinary action

FPOs are a key part of the forest practices system and the FPA expects FPOs to maintain high standards. The FPA has a disciplinary policy for dealing with alleged instances of unsatisfactory performance by FPOs (see Appendix 10 of the <u>FPA Investigation and enforcement protocols</u>). During the year there was disciplinary action against one FPO for substandard planning.

3.5 Forest Practices Authority staff

FPA staff are highly qualified and recognised as leaders in their fields of expertise. All specialist staff have higher degree qualifications including eight PhDs. Operational staff are well-qualified with technical training on forestry related disciplines. There is diversity in personnel including gender, age and previous experience.

In accordance with Department of State Growth policies FPA staff are encouraged to have appropriate work-life balance and to adopt the values of teamwork, excellence, integrity and respect. During the year all FPA staff participated in training on these values and White Ribbon workshops.

FPA employees are encouraged to undertake further training appropriate to their work and are also supported to attend and present at conferences and workshops to publicise FPA's work and as part of their continuing professional development.

Table 3.5.1 Staff attached to the FPA in 2017–18

Name	Qualifications	Position
Dr Peter Volker	BSc(Forestry), GradDipSc(Forestry), MBA(Professional) (Env. Mgt.), PhD	Chief Forest Practices Officer and Director
Angela Gardner	BSc, MSc (Env. Mgt.)	Executive Assistant (commenced 18/12/18), Scientific Officer with Biodiversity Program (one day per week)
Ann La Sala (Casual, consultant)	BA (Geography and Environmental Studies)	Coordinator for State of the forests Tasmania 2017 report and Forest Practices Code review
Christine Grove	BA (Hons), MSc (Forestry)	Publications Officer and Training Coordinator
Dr Elena Tinch	BSc, MSc, PhD	Environmental Economist (commenced 24/5/18)
	Compliance Program	
Tim Leaman	BSc (Hons)	Manager Compliance (resigned 4/8/17)
Stephen Walker	ADipAppSc (Forestry), BAppSc (Comp), GDipBA, Lead Auditor Certificate	Manager Compliance (commenced 16/10/17)
James Fergusson	Diploma (Forest growing and forest products)	Forest Practices Advisor
Michael Rawlings	Dip. OHS, Cert. IV (Assessment & Workplace Training), Lead Auditor Certificate	Forest Practices Advisor (commenced 25/9/17)

Name	Qualifications	Position	
Earth Sciences and Cultural Heritage Program			
Dr Peter McIntosh	BSc (Hons), PhD	Manager Earth Sciences and Cultural Heritage	
Dr Adrian Slee	BSc (Hons), PhD	Scientific Officer (Earth Sciences)	
	Biodiversity Program		
Dr Sarah Munks	BSc (Hons), PhD, FAICD	Manager, Biodiversity Program	
Anne Chuter	BSc (Hons)	Scientific Officer (Ecologist) and Acting Manager Biodiversity Program	
Dr Amy Koch	BSc (Hons), PhD	Research Biologist	
Dydee Mann	BSc (Hons)	Scientific Officer (Ecologist)	
Jason Wiersma	BSc (Hons)	Scientific Officer (Biodiversity)	
Kirsty Kay	BSc	Scientific Officer (Ecologist)	
Dr Phil Bell (part-time contractor)	BSc (Hons), PhD	Ecologist	
Dr Perpetua Turner (Contractor)	BSc (Hons), PhD	Acting Research Biologist	
Stephen Casey (part-time contractor)	BSc (Hons)	Ecologist	
	Business Support Program		
Angus MacNeil	BSc (Hons), GAICD	Acting Chief Forest Practices Officer and Manager, Business Administration	
Adrienne Liddell		Administration Assistant	
Daniel Livingston (Casual, contractor)	BSc (Hons)	IT Consultant	
Julie Walters		GIS Database and Systems Support Officer (commenced 24/7/17)	
Michael Bridge	Adv. Dip. Business Mgt Dip. Business (Human Resources) Dip. Frontline Mgt	Business Support Officer (commenced 7/8/17)	
Naida McIntosh (Casual, contract labour)	BFA and Dip. Languages	Administrative Assistant	
Nell Streets	Dip. Business Administration Dip. Project Management	Business Support Officer (resigned 14/7/17)	

Training was provided to staff on workplace health and safety, first aid and various professional development topics.

3.6 Forest Practices Tribunal

The Forest Practices Tribunal is an independent body established under s. 34 of the Act. The Tribunal's role is to conduct hearings and make determinations with respect to appeals that are lodged under the Forest Practices Act by aggrieved parties. Appeals may be lodged against decisions of the FPA with respect to the following matters:

- An applicant for a private timber reserve (PTR) may appeal against the refusal of the PTR.
- A prescribed person may appeal against the granting of a PTR.
- An applicant for an FPP may appeal against the refusal, amendment or variation of the plan.
- A person served a notice under s. 41 of the Forest Practices Act may appeal against the notice.
- A person who has lodged a three-year plan may appeal if the FPA varies or refuses the three-year plan.

Members of the tribunal are appointed by the Governor of Tasmania in accordance with s. 34(2) of the Act.

During 2017-2018 the Chief Chairperson of the Tribunal was Mr KAM Pitt QC and Deputy Chief Chairperson was Mr Christopher Gunson.

Hearings of individual appeals are conducted by a panel of three, comprising the Chief Chairperson or Deputy Chief Chairperson and one member appointed by the Chairman from each of two categories under s. 34(2) of the Forest Practices Act, depending upon the nature of the appeal.

There were no appeals lodged during 2017–18.

The contact details for the Tribunal are as follows: Forest Practices Tribunal, C/- GPO Box 2036, HOBART 7001, Phone: 61656794 Email: rmpat@justice.tas.gov.au

3.7 Public interest disclosures and right to information requests

The *Public Interest Disclosures Act 2002* commenced on 1 January 2004. The FPA has, in accordance with the Act, prepared procedures for information disclosure which are available on the <u>FPA website</u> or which can be viewed at the FPA's offices during working hours.

There was one public interest disclosure this year. The right to information requests are detailed below.

Table 3.7.1 Right to information requests 2017–18

Source of requests	
Individuals	1
Solicitors for clients	0
Politicians	0
Companies	0
Media	0
Other jurisdictions	0
Total for FPA	1
Request status	
Carried over from previous year	0
Awaiting decision at 30 June 2018	0
Decided	0
Withdrawn	0
Refused	0
Transferred externally	0
Outcome of requests	
Decided – full access	1
Decided – partial access	0
Decided – denied access	0
Of these, how many were requests for	0
personal information about the applicant	
Personal files amended	0
Personal files not amended	0
Information not in possession of agency (s. 22)	0
Info able to be purchased or otherwise available (s. 9)	0
Outside scope of the Act (s. 5)	0
Other (s. 8, s. 10, s. 17, s.19)	0
Decision time (days)	
1–30 days	1
More than 30 days	0
Requests with a negotiated extension s. 15(4)	0
Exemption reasons	
s. 25 Executive Council information	0
s. 26 Cabinet information	0
s. 27 Internal briefing information of a Minister	0
s.28 Information not relating to official business	0
s. 29 Information affecting national or state security, defence or international relations	0
S. 30 Law enforcement information	0
s. 31 Legal professional privilege	0
s. 32 Information related to closed meetings	0

s. 33 Public interest test	0
s. 34 Information communicated by other	0
jurisdictions	
s. 35 Internal deliberative information	0
s. 36 Personal information of person	0
s. 37 Information relating to business affairs of third party	0
s. 38 Information relating to business affairs of public authority	0
s. 39 Information obtained in confidence	0
s. 40 Information on procedures and criteria used in certain negotiations of public authority	0
s. 41 Information likely to affect state economy	0
s. 42 Information likely to affect cultural, heritage and natural resources of the state	0
Reviews	
Internal	
Upheld in full	0
Upheld in part	0
Reversed	0
External	0
Upheld in full	0
Upheld in part	
Reversed	0
Fees and charges	
Total charged	1
Waived or reduced	0
Collected	0
Waiving reasons	
Routine request	0
Personal information	0
General public interest	0
Impecunious applicant	0
Member of parliament	0
Other	0
In lieu of time extension (s. 15 (4))	0

3.8 Funding

The objective of the Tasmanian forest practices system is to deliver sustainable forest management in a way that is as far as possible self-funding (Schedule 7, Forest Practices Act). The Act also provides under s. 44 that certain functions of the FPA will be paid out of money allocated by parliament. Full financial details for 2017–18 are presented in section 4 of this report (financial statements).

3.9 Self-funding of activities conducted by industry

The industry has self-funded the implementation of the Forest Practices Act by providing the following services:

- the employment and training of FPOs and other staff involved in the preparation, certification, monitoring and reporting of FPPs (a conservative estimate of the value is approximately \$10 million per annum)
- training and education of contractors and operators.

A conservative estimate of the value of the industry supporting FPOs in their duties and the training and education of contractors is in the order of \$15 million per annum.

3.9.1 Self-funding of activities conducted by the Forest Practices Authority

The self-funding activities of the FPA are primarily related to the cost of the advice and services provided by FPA staff in relation to the processing of FPP applications (see section 2 of this report and the financial statement). The funding for these activities of the FPA is derived from an application fee for FPPs in accordance with s. 18 of the Forest Practices Act.

In addition to the direct funding of the research and advisory programs, the FPA receives income from research grants and consultancy work.

The FPA also regulates the harvesting of treeferns under a user-pays system. All treeferns must be affixed with a tag issued by the FPA prior to removal from the harvesting area. Revenue collected from the sale of treefern tags is used to cover the cost of regulatory activities and to fund further research into the long-term sustainability of harvesting treeferns. The schedules of fees for FPPs and treefern tags are detailed in the <u>Forest Practices Regulations 2017</u>.

In accordance with s. 4E(1)(a) of the Forest Practices Act, the FPA reports that the forest practices system satisfied the principle of self-funding in 2017–18.

3.9.2 Funding of the Forest Practices Authority from parliament

Section 44 of the Act provides that the costs and expenses incurred for the following activities are to be paid out of monies provided by parliament:

- annual assessment of the forest practices system and FPPs
- preparation of the annual report to parliament under s. 4X
- detection and investigation of breaches of the Forest Practices Act
- laying of complaints and prosecuting offences
- payment of compensation for the refusal of PTRs
- remuneration of the Chief Forest Practices Officer
- administrative support for the Chief Forest Practices Officer
- exercise of the FPA's powers and functions.

The independent regulatory functions of the FPA were funded by the income received under s. 44 of the Forest Practices Act in 2017–18

The 2017 State Budget included new initiative funding by the Tasmanian government to assist in implementing the *Strategic Growth Plan for Tasmania's Forests, Fine Timber and Wood Fibre Industry 2017* (the Growth Plan) developed by the Ministerial Advisory Council on Forestry.

The new initiative funding includes \$500,000 per annum provided to the FPA for four years to improve forestry related socio-economic data and its consideration in decisions related to forest practices regulation.

The funds have been provided to the FPA for two components:

- 1. Concerns from stakeholders that they are not properly informed in relation to potential socio-economic impacts of any proposed new or altered management prescriptions in the forest practices system, when advice is sought through advisory groups such as the Forest Practices Advisory Council; and
- 2. Government and industry desire to understand the cost effectiveness of existing management prescriptions within the forest practices system, with a view to ensuring that good environmental outcomes continue to be delivered in the most cost-effective way.

3.9.3 Register of grants received from industry

There were no industry funds received for new projects in 2017–18.

4 Financial statements for the year ended 30 June 2018

Special Purpose Financial Statements

For the year ended 30 June 2018





CERTIFICATION OF FINANCIAL STATEMENTS

The accompanying Special Purpose Financial Statements of the Forest Practices Authority are in agreement with the relevant accounts and records and have been prepared in compliance with section 4X of the Forest Practices Act 1985 to present fairly the financial transactions for the year ended 30 June 2018 and the financial position as at the end of the year.

The Authority has decided it is appropriate to prepare Special Purpose Financial Statements, on the basis outlined in policy note 8.2, because there are no relevant users dependent on general purpose financial information.

At the date of signing, we are not aware of any circumstances which would render the particulars included in the Financial Statements misleading or inaccurate.

ohn Ramsay

OHAIR - FOREST PRACTICES AUTHORITY

Date: & September 2018

Peter Volker

CHIEF FOREST PRACTICES OFFICER

Forest Practices Authority

Special Purpose Financial Statements 2017-18

Forest Practices Authority

Statement of Comprehensive Income for the year ended 30 June 2018

	40.0	2018	2017
Control of the Contro	Notes	\$'000	\$'000
Continuing operations Revenue and other income from transactions			
Revenue and other income from transactions			
Grants and Industry contributions	1.1	1,973	1,45
Sales of goods and services	1.2	915	904
Fees and fines		39	11
Interest		60	59
Other revenue		24	
Total revenue and other income from transactions		3,011	2,428
Expenses from transactions			
Employee benefits	2.1(a)	1,614	1,454
Superannuation	2.1(b)	180	175
Depreciation and amortisation	2.2	1	999
Supplies and consumables:			
Consultants		239	181
Property services		29	33
Communications		22	23
Information technology		77	56
Travel and transport		142	106
Advertising and Promotion		2	111
Operating lease costs		81	81
Audit fees		3	3
Other supplies and consumables	2.3	298	245
Other expenses		10	6
Total expenses from transactions		2,698	2,363
Net result from transactions (net operating balance)	313	65
Comprehensive result		313	65

This Statement of Comprehensive Income should be read in conjunction with the accompanying notes.

Forest Practices Authority

Special Purpose Financial Statements 2017-18

Forest Practices Authority Statement of Financial Position as at 30 June 2018

		2018	2017
	Notes	\$'000	\$'000
Assets			
Financial assets			
Cash and deposits	6.1	2,374	2,158
Receivables	3.1	41	18
Other financial assets	3.2	83	72
Non-financial assets			
Prepayments		8	11
Plant & equipment	3.3	14	
Total assets		2,520	2,259
Liabilities			
Payables		15	23
Employee benefits	4.1	339	386
Other liabilities		17	14
Total liabilities		371	423
Net assets		2,149	1,836
Equity			
Accumulated funds		2,149	1,836
Total equity		2,149	1,836

This Statement of Financial Position should be read in conjunction with the accompanying notes.

Forest Practices Authority

Special Purpose Financial Statements 2017-18

Forest Practices Authority Statement of Cash Flows for the year ended 30 June 2018

		2018	2017
	Notes	\$'000	\$'000
		Inflows	Inflows
Cash flows from operating activities		(Outflows)	(Outflows)
Cash inflows			
Grants and Industry contributions		1,975	1,452
Other cash receipts		1,083	1,039
Total cash inflows		3,058	2,491
Cash outflows			
Employee benefits		(1,839)	(1,516)
Other cash payments		(988)	(781)
Total cash outflows		(2,827)	(2,297)
Net cash from operating activities	6.2	231	194
Cash flows from investing activities			
Cash outflows			
Payments for acquisition of non-financial assets		(15)	
Total cash outflows		(15)	
Net cash used by investing activities		(15)	***
Net increase in cash held and cash equivalents		216	194
Cash and deposits at the beginning of the reporting period	i.	2,158	1,964
Cash and deposits at the end of the reporting period	6.1	2,374	2,158

This Statement of Cash Flows should be read in conjunction with the accompanying notes.

Forest Practices Authority

Special Purpose Financial Statements 2017-18

Forest Practices Authority Statement of Changes in Equity for the year ended 30 June 2018

Accumulated	Total
funds	equity
\$'000	\$'000
1,836	1,836
313	313
2,149	2,149
Accumulated	Total
funds	Equity
\$'000	\$'000
1,771	1,771
65	65
1,836	1,836
	funds \$'000 1,836 313 2,149 Accumulated funds \$'000 1,771

This Statement of Changes in Equity should be read in conjunction with the accompanying notes.

Forest Practices Authority

Special Purpose Financial Statements 2017-18

Note 1 Income from transactions

Income is recognised in the Statement of Comprehensive Income when an increase in future economic benefits related to an increase in an asset or a decrease of a liability has arisen that can be measured reliably.

1.1 Grants

Grants are recognised as revenue when FPA gains control of the underlying assets. Where grants are reciprocal, revenue is recognised as performance occurs under the grant.

Non-reciprocal grants are recognised as revenue when the grant is received or receivable. Conditional grants may be reciprocal or non-reciprocal depending on the terms of the grant.

	2017
\$'000	\$'000
1,473	1,454
500	-
1,973	1,454
	1,473 500

FPA has received an additional grant of \$500,000 per year for 4 years only, to fund projects associated with socioeconomic review.

1.2 Sales of goods and services

Amounts earned in exchange for the provision of goods are recognised when the significant risks and rewards of ownership have been transferred to the buyer. Revenue from the provision of services is recognised in proportion to the stage of completion of the transaction at the reporting date. The stage of completion is assessed by reference to surveys of work performed.

	2018	2017
	\$'000	\$'000
Fern Tree Tag Sales	32	19
Recovery of Training and publication costs	41	29
Plan Fees	808	757
Consultancy fees	19	99
Sales of Services Other	15	
Total	915	904

Note 2 Expenses from transactions

Expenses are recognised in the Statement of Comprehensive Income when a decrease in future economic benefits related to a decrease in asset or an increase of a liability has arisen that can be measured reliably.

2.1 Employee benefits

Employee benefits include, where applicable, entitlements to wages and salaries, annual leave, sick leave, long service leave, superannuation and any other post-employment benefits.

Forest Practices Authority

Special Purpose Financial Statements 2017-18

	2018	2017
	\$'000	\$'000
(a) Employee benefits		
Wages and salaries	1,464	1,289
Long service leave	14	91
Fringe Benefits Tax	11	
Other Employee Expenses	125	74
Total Employee benefits	1,614	1,454
(b) Superannuation		
Superannuation	180	175

Superannuation expenses relating to defined benefit schemes relate to payments into the Consolidated Fund. The amount of the payment is based on an agency contribution rate determined by the Treasurer, on the advice of the State Actuary. The current agency contribution is 12.95 per cent (2017: 12.85 per cent) of salary.

Superannuation expenses relating to defined contribution schemes are paid directly to superannuation funds at a rate of 9.5 per cent (2017: 9.5 per cent) of salary. In addition, departments are also required to pay into the Consolidated Fund a "gap" payment equivalent to 3.45 per cent (2017: 3.35 per cent) of salary in respect of employees who are members of contribution schemes.

(c) Remuneration of key management personnel

	Short-ter	m benefits	Long-term benefits		Long-term benefits			
2018	Salary	Other Benefits	Super- annuation	Other Benefits & Long-Service Leave	Termination Benefits	Total		
	\$'000	\$'000	\$'000	\$*000	\$'000	\$1000		
Key management personnel	1000000000			12/11/07				
John Ramsay, Chair	39	2550	4	0.000	+++	43		
Cheryl Amol, Board Member	23	44	2	112	***	25		
John Hickey, Board Member	23	177	2	444	***	25		
Alexander Schaap, Board Member	23	144	2	And .	775	25		
David Gatenby, Board Member	23	-111	2	100	111	25		
Amy Robertson, Board Member	23	-000	2	4++	***	25		
Peter Volker, Chief Forest Practices Officer	152	19	14	(7)	***	178		
Total	306	19	28	(7)	8847	346		

Forest Practices Authority

Special Purpose Financial Statements 2017-18

	Short-ter	m benefits	Long-to	erm benefits		
2017	Salary	Other Benefits	Super- annuation	Other Benefits & Long-Service Leave	Termination Benefits	Total
	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000
Key management personnel				10.000		
John Ramsay, Chair	37	100	4	991	1000	41
Steve Luttrell, Board Member (to 12/8/2016)	3	****				3
Cheryl Arnol, Board Member	22	309	2	***		24
John Hickey, Board Member	22		2 2 2	484	100	24
Alexander Schaap, Board Member	22	784		22	***	24
David Gatenby, Board Member	22	3777	2	111	1996	24
Arry Robertson, Board Member (from 13/8/16)	20		2	777	***	22
Peter Volker, Chief Forest Practices Officer	157	1446	15	**	144	172
Total	305	-	29	***	***	334

Key management personnel are those persons having authority and responsibility for planning, directing and controlling the activities of the agency, directly or indirectly, those being the Board of Directors and Chief Executive.

Remuneration during 2017-18 for key personnel is set by the State Service Act 2000. Remuneration and other terms of employment are specified in employment contracts. Remuneration includes salary, motor vehicle and other non-monetary benefits. Long-term employee expenses include long service leave and superannuation obligations.

Acting Arrangements

When members of key management personnel are unable to fulfil their duties, consideration is given to appointing other members of senior staff to their position during their period of absence. Individuals are considered members of key management personnel when acting arrangements are for more than a period of one month.

(d) Related party transactions

AASB 124 Related Party Disclosures requires related party disclosures to ensure that the financial statements contain disclosures necessary to draw attention to the possibility that the Authority's financial results may have been affected by the existence of related parties and by transactions with such parties.

This note is not intended to disclose conflicts of interest for which there are administrative procedures in place.

The extent of information disclosed about related party transactions and balances is subject to the application of professional judgement by the Authority. It is important to understand that the disclosures included in this note will vary depending on factors such as the nature of the transactions, the relationships between the parties to the transaction and the materiality of each transaction. Those transactions which are not materially significant by their nature, impact or value, in relation to the Authority's normal activities, are not included in this note.

The aggregate value of related party transactions and outstanding balances (if any) is as follows:

Forest Practices Authority

Special Purpose Financial Statements 2017-18

	2018	30 June 2018
	Aggregate value of	Total Amount Outstanding or
	transactions	Committed
	\$'000	\$'000
Purchase of services	4	100

2.2 Depreciation and amortisation

All applicable non-financial assets having a limited useful life are systematically depreciated over their useful lives in a manner which reflects the consumption of their service potential.

The following table details the asset lives, and depreciation rates and the methods for the various classes of assets employed in the current and previous reporting periods. Asset useful lives depreciation methods are reviewed annually and adjusted according to the expected rate and/or pattern of consumption, asset condition, and industry best practice. Depreciation methods as detailed below have not changed since the previous reporting period.

Asset	Estimated Useful Life (years)	Depreciation Rate (per annum)	Method
Plant and Equipment	5	20.00%	Straight Line
Computer equipment	3	33.33%	Straight Line

	2018 \$'000	2017 \$*000
Depreciation		- 10
Depreciation Total	1	444

2.3 Other supplies and consumables

	2018	2017
	\$'000	\$'000
Printing, publications and training costs	21	19
Contract labour	56	68
Scientific supplies and services	29	29
Equipment purchases	12	33
Scholarships and grants awarded	117	2.000
Miscellaneous expenses	63	96
Total	298	245

Note 3 Assets

Assets are recognised in the Statement of Financial Position when it is probable that the future economic benefits will flow to the Authority and the asset has a cost or value that can be measured reliably.

3.1 Receivables

Forest Practices Authority Special Purpose Financial Statements 2017-18 10

Receivables are recognised at amortised cost, less any impairment losses, however, due to the short settlement period, receivables are not discounted back to their present value. Impairment losses are recognised when there is an indication that there is a measurable decrease in the collectability of receivables.

	2018 \$'000	2017 \$'000
		7.50
Receivables	41	18
Less: Provision for impairment	344	
Total	41	18
Sales of goods and services (inclusive of GST)	30	13
GST refund receivable	11	5
Total	41	18
Settled within 12 months	41	18
Total	41	18

3.2 Other financial assets

Investments are initially recorded at fair value.

All investments are held to maturity and are measured at amortised cost using the effective interest method less any impairment losses subsequent to initial recognition.

	2018	2017
	\$'000	\$'000
Accrued revenue	68	55
Accrued interest	15	17
Total	83	72
Settled within 12 months	83	72
Total	83	72

3.3 Plant and equipment

(a) Carrying amount

	2018	2017
	\$'000	\$'000
Plant and equipment		
At cost	15	668
Less: Accumulated depreciation	(1)	122
Total	14	100

(b) Reconciliation of movements

Reconciliations of the carrying amounts of each class of plant and equipment at the beginning and end of the current and previous financial year are set out below.

Forest Practices Authority Special Purpose Financial Statements 2017-18 1

	2018 \$'000	2017 \$'000
Carrying amount at 1 July		
Additions	15	
Less: Annual Depreciation	(1)	4+4
Carrying amount at 30 June	14	444

Note 4 Liabilities

Liabilities are recognised in the Statement of Financial Position when it is probable that an outflow of resources embodying economic benefits will result from the settlement of a present obligation and the amount at which the settlement will take place can be measured reliably.

4.1 Employee benefits

Liabilities for wages and salaries and annual leave are recognised when an employee becomes entitled to receive a benefit. Those liabilities expected to be realised within 12 months are measured as the amount expected to be paid. Other employee entitlements are measured as the present value of the benefit at 30 June 2018, where the impact of discounting is material, and at the amount expected to be paid if discounting is not material.

A liability for long service leave is recognised, and is measured as the present value of expected future payments to be made in respect of services provided by employees up to the reporting date. Expected future payments are discounted using interest rates attaching, as at the reporting date, to Commonwealth Government guaranteed securities with terms to maturity that match, as closely as possible, the estimated future cash outflows.

A liability for on-costs (workers compensation premiums) is recognised and disclosed as part of Other Liabilities. On-costs are not classified as an employee benefit.

	2018 \$*000	2017 \$'000
Accrued salaries	15	13
Annual leave	107	92
Long service leave	217	281
Total	339	386
Settled within 12 months	144	133
Settled in more than 12 months	195	253
Total	339	386

Note 5 Commitments and Contingencies

5.1 Schedule of Commitments

Forest Practices Authority

Special Purpose Financial Statements 2017-18

	2018	2017
	\$'000	\$'000
By type		
ease Commitments		
Operating leases	145	243
Total lease commitments	145	243
By maturity		
Operating lease commitments		
One year or less	128	128
rom one to five years	17	115
flore than five years		100
Fotal operating lease commitments	145	243
Total	145	243

NB: Commitments are shown as GST exclusive.

The Authority has entered into a number of operating lease agreements for property, plant and equipment, where the lessors effectively retain all the risks and benefits incidental to ownership of the items leased. Equal instalments of lease payments are charged to the Statement of Comprehensive Income over the lease term, as this is representative of the pattern of benefits to be derived from the leased property.

The Authority is prohibited by Treasurer's Instruction 502 Leases from holding finance leases.

The majority of the Authority's leases are represented by building rental costs and vehicle lease costs. The total lease commitment excludes local government and other executory costs where they are paid directly to a party other than the lessor. These costs are included elsewhere in the Authority's expenditures.

The Authority also has entered into contingent rental arrangements. Contingent rental costs relate to land and building leases, and in the main comprise local government charges and the periodic escalation of leases by the Consumer Price Index. Since Contingent Rentals cannot be reliably determined, they have been excluded in the calculations of Total Lease Commitments.

The Authority does not have any purchase rights flowing from the lease of the land and buildings. Some buildings have renewal options exercisable by the lessee. There are no building leases that have renewal rights exercisable at the sole discretion of the lessor.

The minimum lease payment for vehicles is based on the average age of the vehicle fleet and a standard lease period of 36 months.

5.2 Contingent Assets and Liabilities

Contingent assets and liabilities are not recognised in the Statement of Financial Position due to uncertainty regarding the amount or timing of the underlying claim or obligation.

(a) Quantifiable contingencies

A quantifiable contingent asset is a possible asset that arises from past events and whose existence will be confirmed only by the occurrence or non-occurrence of one or more uncertain future events not wholly within the control of the entity.

A quantifiable contingent liability is a possible obligation that arises from past events and whose existence will be confirmed only by the occurrence or non-occurrence of one or more uncertain future events not wholly within the control of the entity; or a present obligation that arises from past events but is not recognised because it is not probable that an outflow of resources embodying economic benefits will be required to settle the obligation.

Forest Practices Authority

Special Purpose Financial Statements 2017-18

The Authority has not identified any quantifiable contingent assets or quantifiable contingent liabilities as at 30 June 2018.

(b) Unquantifiable Contingencies

As at 30 June 2018, there were no unquantifiable contingent liabilities.

Note 6 Cash Flow Reconciliation

Cash means notes, coins, any deposits held at call with a bank or financial institution, as well as funds held in the Special Deposits and Trust Fund. Deposits are recognised at amortised cost, being their face value.

6.1 Cash and deposits

Cash and deposits includes the balance of the Special Deposits and Trust Fund Accounts held by the Authority, and other cash held, excluding those accounts which are administered or held in a trustee capacity or agency arrangement.

	2018	2017
	\$'000	\$1000
Special Deposits and Trust Fund balance	189	54
Total Special Deposits and Trust Fund	189	54
Deposits:		
Tascorp	625	344
National Australia Bank term deposits	1,560	1,760
Total Deposits	2,185	2,104
Total Cash and deposits	2,374	2,158

6.2 Reconciliation of Net Result to Net Cash from Operating Activities

2018	2017
\$'000	\$'000
313	64
1	
(23)	(13)
(11)	9
3	(5)
(47)	114
(8)	21
3	3
231	194
	\$'000 313 1 (23) (11) 3 (47) (8) 3

Forest Practices Authority Special Purpose Financial Statements 2017-18 14

Note 7 Events Occurring After Balance Date

There have been no events subsequent to balance date which would have a material effect on the Authority's Financial Statements as at 30 June 2018.

Note 8 Other Significant Accounting Policies and Judgements

8.1 Objectives and Funding

The Forest Practices Authority (the Authority) is a body corporate, established by the Forest Practices Act 1985.

The role of the Forest Practices Authority is to advance the objective of the State's forest practices system and to foster a cooperative approach towards policy development and management. The Authority facilitates self-regulation through the training and oversight of the work done by Forest Practices Officers employed within the forestry sector. This is underpinned by research and advisory services that promote continuing improvement. The Authority also independently monitors, enforces and reports to Parliament on the standards achieved and on the degree of compliance with the Forest Practices Code and Forest Practices Act 1985.

The functions of the Authority can be divided into two main areas, namely:

Self-funding Activities

These activities comprise the Research and Advisory program which is funded by fees for forest practices plans. Other revenue received is primarily for Tree Fern Tag sales, the recovery of training and publication costs, consultancies undertaken and grants.

The Authority reports in accordance with Section 4E(1)(a) of the Forest Practices Act 1985 that the forest practices system in 2017-18 satisfied the principle of self-funding.

Independent Regulation Activities

These activities are primarily supported by State Government funding and relate to administration, independent monitoring and investigations into the standards of planning and implementation of forest practices plans and compliance with the Act. Fines collected by the Authority relate to penalties imposed under s.47B of the Forest Practices Act 1985.

The Authority reports that money provided by Parliament has paid costs and expenses in accordance with s.44(1) of the Forest Practices Act 1985.

8.2 Basis of Accounting

Forest Practices Authority

Special Purpose Financial Statements 2017-18

As there are no users dependent on a general purpose financial report, the financial statements are therefore a special purpose financial report that has been prepared in order to meet the financial reporting obligations of the Authority.

These Special Purpose Financial Statement have been prepared in accordance with the recognition and measurement requirements specified by the Australian Accounting Standards and Interpretations and the disclosure requirements of AASB 101 'Presentation of Financial Statements', AASB 107 'Statement of Cash Flow', AASB 108 'Accounting Policies, Changes in Accounting Estimates and Errors', AASB 1048 'Interpretation and Application of Standards', AASB 13 'Fair Value Measurement' and AASB 116 'Property Plant and Equipment'.

The financial statements have been prepared as a going concern.

8.3 Functional and Presentation Currency

These Financial Statements are presented in Australian dollars, which is the Authority's functional currency.

8.4 Rounding

All amounts in the Financial Statements have been rounded to the nearest thousand dollars, unless otherwise stated

8.5 Taxation

The Authority is exempt from all forms of taxation except Fringe Benefits Tax and the Goods and Services Tax.

8.6 Goods and Services Tax

Revenue, expenses and assets are recognised net of the amount of Goods and Services Tax (GST), except where the GST incurred is not recoverable from the Australian Taxation Office. Receivables and payables are stated inclusive of GST. The net amount recoverable, or payable, to the ATO is recognised as an asset or liability within the Statement of Financial Position.

In the Statement of Cash Flows, the GST component of cash flows arising from operating, investing or financing activities which is recoverable from, or payable to, the Australian Taxation Office is, in accordance with the Australian Accounting Standards, classified as operating cash flows.

Forest Practices Authority

Special Purpose Financial Statements 2017-18



Independent Auditor's Report

To Members of the Forest Practices Authority

Report on the Audit of the Special Purpose Financial Report

Opinion

I have audited the accompanying financial report, being a special purpose financial report of the Forest Practices Authority (the Authority), which comprises the statement of financial position as at 30 June 2018 and the statements of comprehensive income, changes in equity and cash flows for the year then ended, notes to the financial statements including a summary of significant accounting policies and other explanatory information and the certification by the directors.

In my opinion, the financial report presents fairly, in all material respects, the financial position of the Authority as at 30 June 2018, and of its financial performance and cash flows for the year then ended in accordance with the financial reporting requirements of Section 4X of the Forest Practices Act 1985.

Basis for Opinion

I conducted the audit in accordance with Australian Auditing Standards. My responsibilities under those standards are further described in the Auditor's Responsibilities for the Audit of the Financial Report section of my report. I am independent of the Authority in accordance with the ethical requirements of the Accounting Professional and Ethical Standards Board's APES 110 Code of Ethics for Professional Accountants (the Code) that are relevant to my audit of the financial report in Australia. I have also fulfilled my other ethical responsibilities in accordance with the Code.

The Audit Act 2008 further promotes the independence of the Auditor-General. The Auditor-General is the auditor of all Tasmanian public sector entities and can only be removed by Parliament. The Auditor-General may conduct an audit in any way considered appropriate and is not subject to direction by any person about the way in which audit powers are to be exercised. The Auditor-General has for the purposes of conducting an audit, access to all documents and property and can report to Parliament matters which in the Auditor-General's opinion are significant.

I believe that the audit evidence I have obtained is sufficient and appropriate to provide a basis for my opinion.

...1 of 3

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Emphasis of Matter - Basis of Accounting

I draw attention to Note 8.2 to the financial report, which describes the basis of accounting. The financial report has been prepared to assist the Authority to meet the financial reporting requirements of the Forest Practices Act 1985. As a result, the financial report may not be suitable for another purpose. My opinion is not modified in respect of this matter.

Responsibilities of the Directors for the Financial Report

The directors are responsible for the preparation and fair presentation of the financial report in accordance with the financial reporting requirements of the Forest Practices Act 1985 and for such internal control as they determine is necessary to enable the preparation and fair presentation of a financial report that is free from material misstatement, whether due to fraud or error.

In preparing the financial report, the directors are responsible for assessing the Authority's ability to continue as a going concern, disclosing, as applicable, matters relating to going concern and using the going concern basis of accounting unless the Authority is to be dissolved by an Act of Parliament, or directors intend to cease operations, or have no realistic alternative but to do so.

Auditor's Responsibilities for the Audit of the Financial Report

My objectives are to obtain reasonable assurance about whether the financial report as a whole is free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes my opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with the Australian Auditing Standards will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of this financial report.

As part of an audit in accordance with the Australian Auditing Standards, I exercise professional judgement and maintain professional scepticism throughout the audit. I also:

- Identify and assess the risks of material misstatement of the financial report, whether due
 to fraud or error, design and perform audit procedures responsive to those risks, and obtain
 audit evidence that is sufficient and appropriate to provide a basis for my opinion. The risk
 of not detecting a material misstatement resulting from fraud is higher than for one resulting
 from error, as fraud may involve collusion, forgery, intentional omissions,
 misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit
 procedures that are appropriate in the circumstances, but not for the purpose of expressing
 an opinion on the effectiveness of the Authority's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by the directors.
- Conclude on the appropriateness of the directors' use of the going concern basis of
 accounting and, based on the audit evidence obtained, whether a material uncertainty exists
 related to events or conditions that may cast significant doubt on the Authority's ability to
 continue as a going concern. If I conclude that a material uncertainty exists, I am required to

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draw attention in my auditor's report to the related disclosures in the financial report or, if such disclosures are inadequate, to modify my opinion. My conclusion is based on the audit evidence obtained up to the date of my auditor's report. However, future events or conditions may cause the Authority to cease to continue as a going concern.

Evaluate the overall presentation, structure and content of the financial report, including the
disclosures, and whether the financial report represents the underlying transactions and
events in a manner that achieves fair presentation.

I communicate with the directors regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that I identify during my audit.

James Hay

Senior Manager Financial Audit Delegate of the Auditor-General

Tasmanian Audit Office

21 September 2018 Hobart

...3 of 3

To provide independent assurance to the Parliament and Community on the performance and accountability of the Tasmanian Public sector.

Professionalism | Respect | Camaraderie | Continuous Improvement | Customer Focus

Strive | Lead | Excel | To Make a Difference

Appendix 1 Publications, reports and presentations by staff or associates of the FPA

Staff or associates of the FPA are indicated in bold type.

Published journal articles and books

Koch AJ, Chuter A, Barmuta LA, **Turner PAM,** and **Munks SA** 2018,' Long-term survival of trees retained for hollow-using fauna in partially harvested forest in Tasmania, Australia', *Forest Ecology and Management* 422, 263-272.

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Appendix 2 Major reference documents related to forest practices

General					
Forest Practices Act 1985	1985				
Forest Practices Regulations 2017	2017				
Forest Practices Code 2015	2015				
<u>Forest Practices News</u>	Twice yearly since 1998				
A quide to planning approvals for forestry in Tasmania	2006, revised 2007, 2011, 2015, 2016				
State of the forests reports	Every five years, latest in 2017				
Cultural					
<u>Procedures for managing Aboriginal cultural heritage when preparing FPPs</u>	2015				
<u>Procedures for managing historic cultural heritage when preparing FPPs</u>	2015				
<u>Visual management topic papers on skyline and roadside management</u>	2006 onwards				
Earth sciences					
<u>Atlas of Tasmanian Karst</u>	1995				
Basalt talus guidelines and Dolerite talus guidelines	2002				
<u>Forest Sinkhole Manual</u> and <u>Forest operations around sinkholes</u>	2002 and 2014				
Forest soils fact sheet keys	From 2002				
Forest Soils of Tasmania	1996				
Guidelines for the protection of class 4 streams	2004, updated 2011				
<u>The Strahan guidelines</u>	2017				
Biodiversity					
Biodiversity Values Database	1995, 1998, 2000 updated in 2014				
<u>Fauna Technical Note series</u>	1996 onwards				
Flora Technical Note Series	1996 onwards				
Forest Practices Botany Manuals	1991–2005				
Permanent Native Forest Estate Policy	1996, revised 2014, 2015 and 2016, 2017				
<u>Planning quideline (2008/1) – to avoid the clearance of significant habitat for threatened fauna</u>	2008 onwards				
<u>Threatened Fauna Adviser</u>	2014				
Habitat Context Assessment Tool	2012				
Biodiversity landscape planning guideline	2017				
Compliance					
Forest Practices Officer Manual	2015				
Investigation and Enforcement Protocols	2016				
Monitoring and Assessment Protocols	2009				

Appendix 3 Results of the 2017–18 assessment of forest practices plans

The scoring system used for all questions in the assessment of FPPs

Performance Rating	Description	Score
Sound	Addressed all judgment criteria and achieved an acceptable result.	3.0
Below sound	Have not addressed all judgment criteria and/or implemented plan as prescribed, which may result in adverse impact.	2.0
Unacceptable	Non-compliant and has not adequately addressed judgment criteria or achieved an unacceptable result.	1.0
Not assessable	 The condition/situation does not occur e.g. high erodibility Operations have not commenced Insufficient or no objective evidence to make a judgment 	NA

Procedural issues	Scores			Percentages				
	Unacceptable	Below Sound	Sound	Grand Total	Unacceptable	Below Sound	Sound	Grand Total
1. Has a complete copy of the original FPP and variations been made available to the assessor?		1	77	78	0.0%	1.3%	98.7%	100.0%
2. Had the FPP and any variations been uploaded to Coverpage?	2	5	71	78	2.6%	6.4%	91.0%	100.0%
3. Has the FPP, including variations, been fully signed and dated?	2	21	55	78	2.6%	26.9%	70.5%	100.0%
4. Are the FPP and variations in accordance with the Code?	5	10	63	78	6.4%	12.8%	80.8%	100.0%
5. Were State and local governments consulted, as required, and were resulting management conditions incorporated into the FPP or variation?		1	77	78	0.0%	1.3%	98.7%	100.0%
6. Was local government notified of the operational start date?		2	76	78	0.0%	2.6%	97.4%	100.0%
7. Have all adjacent landowners been identified and notified?		1	77	78	0.0%	1.3%	98.7%	100.0%
8. Does the FPP indicate that a fire management plan was prepared where necessary?		5	70	75	0.0%	6.7%	93.3%	100.0%
9. Have compliance reports on Discrete Operational Phases been completed, where required?	13	5	56	74	17.6%	6.8%	75.7%	100.0%
10. Is the FPP map clear?		5	73	78	0.0%	6.4%	93.6%	100.0%
Overall	22	56	695	773	2.8%	7.2%	89.9%	100.0%

Roading		Score	es			Percent	ages	
•	Unacceptable	Below Sound	Sound	Grand Total	Unacceptable	Below Sound	Sound	Grand Total
Planning and location								
11. Have roads been located to minimise soil erosion and stream sedimentation?			18	18			100.0%	100.0%
12. Where roads are located in proximity to streams, has the potential for stream sedimentation been minimised?			14	14			100.0%	100.0%
13. Where roads are located in areas of high or very high soil erodibility, have precautions to reduce erosion been taken?			6	6			100.0%	100.0%
Road standard								
14. Has the road standard proven adequate to the haulage task, and been sufficiently compacted or continuously repaired to avoid environmental problems?	1	1	62	64	1.6%	1.6%	96.9%	100.0%
Drainage								
15. Have road drainage measures been effective?	1	1	45	47	2.1%	2.1%	95.7%	100.0%
Access Tracks								
16. Have access tracks been suitably located, drained, and stabilised after use?	1	4	17	22	4.5%	18.2%	77.3%	100.0%
Earthworks								
17. Are cuts and fills balanced and/or spoil disposed of properly?			8	8			100.0%	100.0%
18. Are batter slopes stable?			11	11			100.0%	100.0%
Steep Country								
19. Have Code statements been followed on steep country roads?			1	1			100.0%	100.0%
Clearing								
20. Has clearing width and topsoil stripping been minimised?			13	13			100.0%	100.0%
Crossings								
21. Have new or upgraded stream crossings been suitably located, designed and constructed?			4	4			100.0%	100.0%
22. Have temporary crossings been confined to class 3 and 4 and dry class 2 watercourses and been properly removed and drained or upgraded?			3	3			100.0%	100.0%
Road upgrading and closure								
23. Have all roads and access tracks that are non-conforming or environmentally hazardous been upgraded or closed?	1	1	5	7	14.3%	14.3%	71.4%	100.0%
Quarries/Borrow Pits								
24. Have quarries and borrow pits been properly located, managed and rehabilitated?		1	1	2		50.0%	50.0%	100.0%
Road Maintenance								
25. If the operation has been completed, is there evidence of			54	54			100.0%	100.0%
ongoing maintenance of the road system?								
Overall	4	8	262	274	1.5%	2.9%	95.6%	100.0%

Harvesting		Score	s		Percentages				
	Unacceptable	Below Sound	Sound	Grand Total	Unacceptable	Below Sound	Sound	Grand Total	
Extraction design and equipment									
26. Is the extraction design and harvesting equipment consistent with the Code?		2	71	73	0.0%	2.7%	97.3%	100.0%	
Harvesting dispersal and design									
27. Is coupe dispersal consistent with the Code?	3		66	69	4.3%		95.7%	100.0%	
Felling									
28. Has the harvesting boundary been clearly marked or defined?	1	5	65	71	1.4%	7.0%	91.5%	100.0%	
29. Has harvesting been confined within the harvest boundary? Wet weather limitations	1	1	64	66	1.5%	1.5%	97.0%	100.0%	
30. Has harvesting complied with wet weather limitations?	1		62	63	1.6%		98.4%	100.0%	
31. Has cartage complied with wet weather limitations?			32	32			100.0%	100.0%	
Snig/Forwarder Tracks									
32. Have snig tracks been located and constructed to minimise environmental harm and enable effective drainage?	1	2	62	65	1.5%	3.1%	95.4%	100.0%	
33. Have snig track location and management effectively minimised damage to retained trees and protected soil and water values?	1	1	62	64	1.6%	1.6%	96.9%	100.0%	
34. Have snig tracks been restored, including the removal of temporary crossings?	2	6	55	63	3.2%	9.5%	87.3%	100.0%	
Landings									
35. Are landings (and continuous roadside landings) appropriately located, sized, and constructed?	1	4	58	63	1.6%	6.3%	92.1%	100.0%	
36. Have landings been properly managed and stabilised?		2	58	60		3.3%	96.7%	100.0%	
Native Forest Streamside Reserves									
37. Is the width of the SSRs and MEZs correct, and is marking correct?			22	22			100.0%	100.0%	
38. Have class 4 streams been upgraded according to Class 4 Guidelines, where necessary?			20	20			100.0%	100.0%	
39. Has felling and machinery avoided unreasonable damage to SSRs and MEZs?	1		20	21	4.8%		95.2%	100.0%	
40. Has approved felling in SSRs and MEZs complied with the Code?			11	11			100.0%	100.0%	
Plantation Streamside Reserves									
41. Has harvesting of trees in plantation SSRs complied with Code requirements?			32	32			100.0%	100.0%	
Steep Country Harvesting									
42. Have cables been pulled through Class 1, 2, 3 SSR without causing unacceptable damage?									
43. Have potential erosion chanels on cabled areas been stabilised?									
Overall	12	23	760	795	1.5%	2.9%	95.6%	100.0%	

Reforestation		Score	s			Percent	tages	
	Unacceptable	Below Sound	Sound	Grand Total	Unacceptable	Below Sound	Sound	Grand Total
Native Forest Regeneration								
44. Has an appropriate reforestation technique and stocking standard been prescribed?			20	20			100.0%	100.0%
45. Have fuel reduction, low or high intensity burns, been effectively carried out?		1	5	6		16.7%	83.3%	100.0%
46. Have streamside reserves and MEZs been protected from fire?			6	6			100.0%	100.0%
47. Has appropriate seed been selected for native forest regeneration?			10	10			100.0%	100.0%
48. Has stocking standard as prescribed in the plan been achieved, or is it likely to be achieved?			16	16			100.0%	100.0%
49. Have trees been effectively protected from grazing and browsing damage?			15	15			100.0%	100.0%
Plantation Development								
50. Has burning been effectively carried out and streamside reserves protected?			7	7			100.0%	100.0%
51. Was soil cultivation carried out in a manner that minimises the risk of uncacceptable soil erosion?	1		18	19	5.3%		94.7%	100.0%
52. Has cultivation been excluded from within 2m of the edge of drainage depressions?		2	14	16		12.5%	87.5%	100.0%
53. Have class 1,2,3, and 4 streams and their stream side reserves and/or MEZs been protected?	1		23	24	4.2%		95.8%	100.0%
54. Has the specified stocking standard been achieved?	2	4	31	37	5.4%	10.8%	83.8%	100.0%
55. Have trees been effectively protected from grazing and browzing damage?			22	22			100.0%	100.0%
56. Have firebreaks been located and managed to protect soil, water, and visual values?			52	52			100.0%	100.0%
Overall	4	7	239	250	1.6%	2.8%	95.6%	100.0%

Soils		Score	s		Percentages			
	Unacceptable	Below Sound	Sound	Grand Total	Unacceptable	Below Sound	Sound	Grand Total
Soils								
58. Had the soil erodibility rating been correctly determined?	1	3	73	77	1.3%	3.9%	94.8%	100.0%
59. Has land slip potential been correctly determined?			78	78			100.0%	100.0%
60. Has burning intensity been appropriate for soil erodibility and nutrient status of the soils?			42	42			100.0%	100.0%
61. Have coupes with high and very high erodibility soils or with land exceeding the landslide threshold been referred to the FPA for comment?		1	34	35		2.9%	97.1%	100.0%
62. Is there evidence of post-operation accelerated erosion?		1	69	70		1.4%	98.6%	100.0%
Overall	1	5	296	302	0.3%	1.7%	98.0%	100.0%

Water quality and flows		Scores	•		Percentages			
	Unacceptable	Below Sound	Sound	Grand Total	Unacceptable	Below Sound	Sound	Grand Total
Water quality and flows								
63. Have all watercourses been identified and correctly classified?	1	2	73	76	1.3%	2.6%	96.1%	100.0%
64. Is there evidence of significant post-operation stream erosion?			67	67			100.0%	100.0%
Overall	1	2	140	143	0.7%	1.4%	97.9%	100.0%

Biodiversity		Score	:S			Percent	ages	
	Unacceptable	Below Sound	Sound	Grand Total	Unacceptable	Below Sound	Sound	Grand Total
Flora								
65. Has the flora section of the biodiversity evaluation been completed correctly, including a map detailing the results of the field assessment?		2	76	78		2.6%	97.4%	100.0%
66. Have flora values been referred to FPA Biodiversity section as required?			76	76			100.0%	100.0%
67. Have important flora values and advice been taken into account in the FPP?			72	72			100.0%	100.0%
68. Have the flora prescriptions of the FPP and variations been implemented?			75	75			100.0%	100.0%
Fauna								
69. Has the fauna section of the biodiversity evaluation been completed correctly, including a map detailing the results of the field assessment?		8	70	78		10.3%	89.7%	100.0%
70. Have fauna values been referred to the FPA Biodiversity section as required?		1	70	71		1.4%	98.6%	100.0%
71. Were prescriptions for threatened species incorporated clearly in FPP text and map?	1	7	70	78	1.3%	9.0%	89.7%	100.0%
72. Have threatened fauna prescriptions, and other fauna provisions (WHS/WHC) in the FPP been implemented?	1	2	70	73	1.4%	2.7%	95.9%	100.0%
Overall	2	20	579	601	0.3%	3.3%	96.3%	100.0%

Landscape		Score	s		Percentages			
	Unacceptable	Below Sound	Sound	Grand Total	Unacceptable	Below Sound	Sound	Grand Total
Landscape								
73. Was the Landscape Management Objective (LMO) assessed correctly?	1	4	73	78	1.3%	5.1%	93.6%	100.0%
74. Were the Code provisions included in the FPP?			72	72			100.0%	100.0%
75. Have landscape prescriptions been implemented?			69	69			100.0%	100.0%
76. Was the recommended LMO in the Evaluation Sheet achieved?		1	66	67		1.5%	98.5%	100.0%
Overall	1	5	280	286	0.3%	1.7%	97.9%	100.0%

Cultural Heritage		Score	s			Percent	ages	
	Unacceptable	Below Sound	Sound	Grand Total	Unacceptable	Below Sound	Sound	Grand Total
Cultural Heritage								
77. Has MDC zoning been complied with on PTPZL land?			61	61			100.0%	100.0%
78. Has the Aboriginal Known Sites Report and Conserve been consulted?		2	76	78		2.6%	97.4%	100.0%
79. Have areas of sensitivity for Aboriginal cultural heritage been identitified using the Archaeological Potential Zone maps, or the potential zoning predictive statements?			76	76			100.0%	100.0%
80. Was specialist advice sought where necessary?			70	70			100.0%	100.0%
81. Has specialist advice and cultural heritage prescriptions been incorporated into the FPP?		12	62	74		16.2%	83.8%	100.0%
82. Were the FPP prescriptions implemented?		2	64	66		3.0%	97.0%	100.0%
83. Have site recording and management been in accordance with the Aboriginal Relics Act 1975?		2	59	61		3.3%	96.7%	100.0%
Overall		18	468	486	0.0%	3.7%	96.3%	100.0%

Geoscience		Score	es .		Percentages			
	Unacceptable	Below Sound	Sound	Grand Total	Unacceptable	Below Sound	Sound	Grand Total
Geoscience		Sound		TOTAL		Sound		IOLAI
84. Has the Geoscience evaluation been correctly completed?		1	77	78	0.0%	1.3%	98.7%	100.0%
85. Has the FPA Geoscientist been consulted, or a consultant engaged as required?		1	70	71	0.0%	1.4%	98.6%	100.0%
86. Have appropriate prescriptions been included in the FPP?			77	77	0.0%	0.0%	100.0%	100.0%
87. Have geoscience prescriptions been implemented satisfactorily?	1		70	71	1.4%	0.0%	98.6%	100.0%
Overall	1	2	294	297	0.3%	0.7%	99.0%	100.0%

Fuels, rubbish and emissions		Score	5		Percentages					
	Unacceptable	Below Sound	Sound	Grand Total	Unacceptable	Below Sound	Sound	Grand Total		
5. Fuels, Rubbish and Emissions			74	74			100.0%	100.0%		
Overall			74	74			100.0%	100.0%		

Appendix 4 Monitoring of the maintenance of the permanent native forest estate

1 Background

Section 4C(fa) of the Forest Practices Act requires the FPA to monitor and report on the clearing of trees, harvesting and reforestation activity in relation to the maintenance of a permanent native forest estate.

The Permanent Native Forest Estate (PNFE) Policy was established through the Tasmanian Regional Forest Agreement (RFA), and was most recently revised in July 2017. The policy is available on the Department of State Growth's website.

The policy aims to maintain a permanent native forest estate by placing limits on conversion of native forest communities to other land uses. The policy does not restrict management activities such as timber harvesting and grazing. Harvesting is permitted in all forest types where the silvicultural system ensures successful regeneration and long-term maintenance of that forest community.

In the 2017–18 financial year the version of the PNFE Policy in place was dated 30 June 2017.

The PNFE Policy dated 30 June 2017 requires the following:

- State-wide ban on broad scale clearance and conversion of native forest on public or private land is not permitted except for a number of defined activities including (but not limited to): agricultural clearing (where it amounts to less than 40 hectares on a property in twelve month period), construction of new significant infrastructure and to facilities development demonstrating a substantial public benefit.
- Threatened (rare, vulnerable and endangered) forest communities (as listed in the Tasmanian Nature Conservation Act 2002) are to be regulated in accordance with the Forest Practices Act.

The PNFE Policy is given effect through the FPA's consideration of applications for FPPs under the Forest Practices Act. Planning tools and instructions current in the 2017–18 financial year ensured that any planned forest practices affecting communities with a priority for conservation were referred by FPOs to the Chief Forest Practices Officer. The FPA maintains a database which contains details of all certified FPPs, including (for each FPP) the forest communities in the FPP area and the type of operation affecting each community; this database forms the basis for the FPA's monitoring and reporting on Tasmania's permanent native forest estate.

The extent of forest communities as mapped in 1996 is the benchmark for reporting on the permanent native forest estate. Until 2007, FPA annual reports used the 1996 figures as identified in the Tasmanian RFA (1997) and associated documents. The 1996 mapping was reassessed during preparation of the <u>State of the forests Tasmania 2002 report</u>. For most communities, differences between the 1997 and 2002 figures are minor, with the most substantial differences being an

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increase in the mapped extent of some rainforest communities in the 2002 assessment. The revised (2002) figures are used in this annual report.

From 1997 to 2006, suitable areas of private land that contain forest communities with a priority for conservation, or other values specified in the RFA, were referred to the Private Forest Reserves Program, DPIPWE, so that this program could assess and, if appropriate, negotiate conservation options with the landowner. The Private Forest Reserves Program was replaced by the Australian Government's Forest Conservation Fund from 2006 to 2009. No dedicated forest reserve programs currently exist. However, persons who have an application for an FPP refused or amended because of threatened native vegetation may apply for compensation under the Nature Conservation Act.

2 The extent of the permanent native forest estate

The tables below provide the bioregional extent and conversion of forest communities to 30 June 2018. Figures given for the 1996 RFA forest community extent (in hectares) are based on the *State of the forests Tasmania 2002* report revision of the 1996 RFA mapping data. Care is needed in interpreting the data, for the following reasons:

- The figures relate to planned 'forest practices' operations, not all of which will have been completed in the reporting period.
- Areas of forest communities given in FPPs are generally gross areas that may not exclude
 informal reserves such as streamside reserves or additional areas excluded for the
 protection of other natural and cultural values or due to operational constraints. The figures
 relating to the conversion of native forest are therefore likely to be overestimates for some
 communities.
- Conversion of threatened forest communities was permitted under the 1997 PNFE Policy. The FPA imposed a moratorium on further conversion of threatened communities in 2002, pending a review by the government of its PNFE Policy. The moratoriums were supported by bilateral agreements (signed in May 2003 and May 2005) between the Australian and Tasmanian governments. Under the revised PNFE Policy (2007), the FPA was given discretionary power to allow conversion of threatened communities in exceptional circumstances, where the conversion will not substantially detract from the conservation of that forest community or conservation values within the immediate area. Such clearance, in some cases, has been accompanied by reservation (offsets) of other areas of equal or greater conservation value. The FPA revised its offset policy in 2016–17 to allow more flexibility in offsetting options.
- The proportions of forest communities converted are based on the area of each community as mapped in 1996 (from RFA mapping and revised State of the forests Tasmania 2002 report mapping, as discussed above). The mapping of forest communities is also subject to other reviews (e.g. through mapping undertaken by DPIPWE and the Sustainability indicators report 2007). Such revisions have provided more accurate information on the extent and distribution of forest communities, and have assisted the FPA to supply advice for operations affecting threatened forest communities or other communities approaching

- regional thresholds. Some figures given in previous annual reports have been revised in the light of more accurate information.
- In the 2005–06 reporting period, the Tasmanian and Australian governments approved the reclassification of the RFA community 'Inland *E. amygdalina* forest', following a review of this community by the Scientific Advisory Committee to the Private Forest Reserves Program (CARSAG). This community has been replaced by:
 - 'Inland E. amygdalina E. viminalis E. pauciflora forests and woodlands on Cainozoic deposits'
 - o 'E. amygdalina forest on mudstone'.

Conversion figures for these communities are given separately in the tables below for this reporting period (2017–18) and the total conversion since the reclassification (i.e. 1996–18) is also given.

• The analyses do not include figures for clearing not associated with harvesting, which was conducted before such clearing became subject to regulation in 2002, under the Forest Practices Act. A negligible amount of such clearing would have occurred in more commercial forest types, but may have been significant in some drier forests and woodlands with low timber quality. The analyses also do not include figures for clearing for other land use activities not regulated under the Tasmanian forest practices system (e.g. subdivisions etc.). However the state totals do include the area cleared as a result of dam works permits issued under the *Water Management Act 1999*.

Woolnorth Bioregion as at 30 June 2018

No.	RFA Forest Community	1996 RFA area (ha) (2002 dataset)	2017–18 decrease^ (ha)	Total decrease 1996–2018^ (ha)	% total decrease from 1996 RFA Area (2002 dataset)
1	Coastal E. amygdalina forest	24646.0	1.0	989.6	4.0
2	E. amygdalina forest on dolerite	18134.0	17.7	2365.3	13.0
3⊁	Inland E. amygdalina forest	902.0		121.6	13.5
4*	E. amygdalina forest on sandstone	330.0		16.5	5.0
5	Allocasuarina verticillata forest	177.0		9.9	5.6
6*	E. brookeriana wet forest	4439.0	0.42	273.8	6.2
7	Acacia melanoxylon forest on flats	7987.0	0.5	712.8	8.9
8	Acacia melanoxylon forest on rises	7852.0		277.2	3.5
9*	Banksia serrata woodland	156.0		0.0	0.0
10	E. coccifera dry forest	41.0		1.0	2.4
12	Dry E. delegatensis forest	3892.0		52.0	1.3
13	E. viminalis / E. ovata / E. amygdalina / E. obliqua damp sclerophyll forest	29915.0		1927.4	6.4
14	Tall E. delegatensis forest	14552.0	2.2	2327.9	16.0
16*	E. viminalis and/or E. globulus coastal forest	10.0		1.4	14.0
19*	King Island E. globulus / E. brookeriana / E. viminalis forest	2411.0		9.0	0.4
20	Leptospermum sp. / Melaleuca squarrosa swamp forest	7304.0	2.3	1806.1	24.7
21	Callidendrous and thamnic rainforest on fertile sites	28659.0		4562.9	15.9
22	Thamnic rainforest on less fertile sites	25623.0		262.5	1.0
23*	Melaleuca ericifolia coastal swamp forest	198.0		114.9	58.0
25	Dry E. nitida forest	14012.0	1.1	1868.9	13.3
27*	Notelaea ligustrina and/or Pomaderris apetala closed forest	42.0		3.0	7.1
28	Tall <i>E. nitida</i> forest	2932.0	2.0	650.6	22.2
29	Dry E. obliqua forest	29106.0	1.0	4577.7	15.7
30	Tall <i>E. obliqua</i> forest	124714.0	80.03	19745.13	15.8
31*	Shrubby <i>E. ovata – E. viminalis</i> forest	2979.0		82.0	2.8
34	E. pauciflora forest on Jurassic dolerite	-		0.5	&
36	E. pauciflora forest on sediments	-		3.4	&
37	E. regnans forest	2632.0		926.3	35.2

No.	RFA Forest Community	1996 RFA area (ha) (2002 dataset)	2017–18 decrease^ (ha)	Total decrease 1996–2018^ (ha)	% total decrease from 1996 RFA Area (2002 dataset)
39	E. rodwayi forest	104.0		3.0	2.9
41	Acacia dealbata forest	16450.0		736.8	4.5
43	E. subcrenulata forest	125.0		0.0	0.0
47	E. viminalis grassy forest/woodland	2905.0	0.6	66.6	2.3
49*	E. viminalis wet forest	2610.0		294.6	11.3
50*	King Billy Pine Forest	0.0		0.0	0.0
64*≫	Inland <i>E.amygdalina – E. viminalis – E.</i> pauciflora on Cainozoic deposits	-		0.0	&
65≫	E. amygdalina forest on mudstone	-		68.0	&
	TOTAL	375,839.0	108.88	44,849.68	11.9

 $[\]ensuremath{^{*}}$ Indicates a threatened native vegetation community (rare, vulnerable or endangered).

Anomalies in mapping (shown with an ampersand (&)) are subject to further field verification. Area data may be modified as mapping is refined.

Figures take into account areas that have been cleared and converted as a result of activities covered by the Forest Practices Act and areas approved for conversion by a Dam Works Permit issued under the *Water Management Act 1999*.

Luring 2005–06, Inland *E. amygdalina* was separated into 'Inland *E. amygdalina – E. viminalis – E. pauciflora* on Cainozoic deposits' and '*E. amygdalina* forest on mudstone', with only the former being considered a threatened forest community.

Ben Lomond Bioregion as at 30 June 2018

1 Coastal E. amygdalina forest 133418.0 233.07 8630.67 6.5 2 E. amygdalina forest on dolerite 42456.0 22.71 1860.2 4.4 3× Inland E. amygdalina forest 4567.0 1187 26.0 4* E. amygdalina forest on sandstone 1024.0 207.5 20.3 5 Allocasuarina verticillata forest 303.0 0.4 1.4 0.5 6* E. brookeriana wet forest 0.0 2.3 & 7 Acacia melanoxylon forest on flats 259.0 0.59 20.19 7.8 8 Acacia melanoxylon forest on flats 259.0 0.59 20.19 7.8 8 Acacia melanoxylon forest on flats 259.0 0.59 20.19 7.8 8 Acacia melanoxylon forest on flats 259.0 0.0 0.0 0.0 10 E. coccifera dry forest 28.0 0 0 0.0 12 Dry E. delegatenis forest 29876.0 0.07 1780.27 6.0 <	No.	RFA Forest Community	1996 RFA area (ha) (2002 dataset)	2017–18 decrease^ (ha)	Total decrease 1996–2018^ (ha)	% total decrease from 1996 RFA Area (2002 dataset)
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27* Notelaea ligustrina and/or Pomaderris apetala closed forest 20.0 0 0.0 29 Dry E. obliqua forest 29573.0 9.47 10119.37 34.2 30 Tall E. obliqua forest 53509.0 1.33 7025.43 13.1 31* Shrubby E.ovata / E. viminalis forest 428.0 0.57 581.37 135.8 36 E. pauciflora forest on sediments 1851.0 0 0.0 37 E. regnans forest 27517.0 7.7 9169 33.3 39 E. rodwayi forest 39.0 77 197.4 40 E. sieberi forest on granite 16866.0 3.6 227.3 1.3 41 Acacia dealbata forest 21434.0 4.4 1529 7.1 42 E. sieberi forest on other substrates 43278.0 9.5 266.2 0.6	21		25085.0	3.58	391.98	1.6
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31* Shrubby E.ovata / E. viminalis forest 428.0 0.57 581.37 135.8 36 E. pauciflora forest on sediments 1851.0 0 0.0 37 E. regnans forest 27517.0 7.7 9169 33.3 39 E. rodwayi forest 39.0 77 197.4 40 E. sieberi forest on granite 16866.0 3.6 227.3 1.3 41 Acacia dealbata forest 21434.0 4.4 1529 7.1 42 E. sieberi forest on other substrates 43278.0 9.5 266.2 0.6	29	Dry E. obliqua forest	29573.0	9.47	10119.37	34.2
36 E. pauciflora forest on sediments 1851.0 0 0.0 37 E. regnans forest 27517.0 7.7 9169 33.3 39 E. rodwayi forest 39.0 77 197.4 40 E. sieberi forest on granite 16866.0 3.6 227.3 1.3 41 Acacia dealbata forest 21434.0 4.4 1529 7.1 42 E. sieberi forest on other substrates 43278.0 9.5 266.2 0.6	30	Tall E. obliqua forest	53509.0	1.33	7025.43	13.1
37 E. regnans forest 27517.0 7.7 9169 33.3 39 E. rodwayi forest 39.0 77 197.4 40 E. sieberi forest on granite 16866.0 3.6 227.3 1.3 41 Acacia dealbata forest 21434.0 4.4 1529 7.1 42 E. sieberi forest on other substrates 43278.0 9.5 266.2 0.6	31*	Shrubby <i>E.ovata / E. viminalis</i> forest	428.0	0.57	581.37	135.8
39 E. rodwayi forest 39.0 77 197.4 40 E. sieberi forest on granite 16866.0 3.6 227.3 1.3 41 Acacia dealbata forest 21434.0 4.4 1529 7.1 42 E. sieberi forest on other substrates 43278.0 9.5 266.2 0.6	36	E. pauciflora forest on sediments	1851.0		0	0.0
40 E. sieberi forest on granite 16866.0 3.6 227.3 1.3 41 Acacia dealbata forest 21434.0 4.4 1529 7.1 42 E. sieberi forest on other substrates 43278.0 9.5 266.2 0.6	37	E. regnans forest	27517.0	7.7	9169	33.3
41 Acacia dealbata forest 21434.0 4.4 1529 7.1 42 E. sieberi forest on other substrates 43278.0 9.5 266.2 0.6	39	E. rodwayi forest	39.0		77	197.4
42 E. sieberi forest on other substrates 43278.0 9.5 266.2 0.6	40	E. sieberi forest on granite	16866.0	3.6	227.3	1.3
	41	Acacia dealbata forest	21434.0	4.4	1529	7.1
47 <i>E. viminalis</i> grassy forest/woodland 18872.0 14.4 157 0.8	42	E. sieberi forest on other substrates	43278.0	9.5	266.2	0.6
	47	E. viminalis grassy forest/woodland	18872.0	14.4	157	0.8

No.	RFA Forest Community	1996 RFA area (ha) (2002 dataset)	2017–18 decrease^ (ha)	Total decrease 1996–2018^ (ha)	% total decrease from 1996 RFA Area (2002 dataset)
49*	E. viminalis wet forest	92.0	0.4	52.12	56.4
64*%	Inland <i>E.amygdalina / E.viminalis / E.pauciflora</i> on Cainozoic deposits	-		10.4	&
65≫	E. amygdalina forest on mudstone	-	0.02	204.42	&
	TOTAL	500,654.0	318.48	47,611.88	9.5

^{*} Indicates a threatened native vegetation community (rare, vulnerable or endangered).

Figures take into account areas that have been cleared and converted as a result of activities covered by the Forest Practices Act and areas approved for conversion by a Dam Works Permit issued under the Water Management Act.

>< During 2005–06, Inland *E. amygdalina* was separated into 'Inland *E. amygdalina* – *E. viminalis* – *E. pauciflora* on Cainozoic deposits' and '*E. amygdalina* forest on mudstone', with only the former being considered a threatened forest community.

Anomalies in mapping (shown with an ampersand (&)) are subject to further field verification. Area data may be modified as mapping is refined.

Midlands Bioregion as at 30 June 2018

No.	RFA Forest Community	1996 RFA	2017–18	Total	% total
		area (ha)	decrease^	decrease	decrease from
		(2002	(ha)	1996–2018^	1996 RFA Area
		dataset)		(ha)	(2002 dataset)
1	Coastal E. amygdalina dry sclerophyll forest	3250.0		5	0.2
2	E. amygdalina forest on dolerite	41279.0	19	1177	2.9
3⊁	Inland E. amygdalina forest	19734.0		662.1	3.4
4*	E. amygdalina forest on sandstone	3935.0		74.6	1.9
5	Allocasuarina verticillata forest	269.0		7.5	2.8
12	Dry E. delegatensis forest	9642.0		1584.2	16.4
13	E. viminalis / E. ovata / E. amygdalina / E.	7608.0	5	736.5	9.7
	obliqua damp sclerophyll forest				
14	Tall E. delegatensis forest	3812.0		297.5	7.8
16*	E. viminalis and/or E. globulus coastal	70.0		2	2.9
	shrubby forest				
17*	Grassy E. globulus forest	2805.0		172.5	6.1
21	Callidendrous and thamnic rainforest on	108.0		0	0.0
	fertile soils				
22	Thamnic rainforest on less fertile soils	113.0		0	0.0
24*	E. morrisbyi forest	22.0		0	0.0
25	Dry E. nitida forest	7.0		0	0.0
27*	Notelaea ligustrina and/or Pomaderris	28.0		8	28.6
	apetala closed forest				
29	Dry E. obliqua forest	13599.0		1699.6	12.5
30	Tall E. obliqua forest	8315.0		494.5	5.9
31*	Shrubby E. ovata/E. viminalis forest	2656.0	1.27	40.27	1.5
32	E. pulchella / E. globulus / E. viminalis grassy	28223.0		595.5	2.1
	shrubby forest				
34	E. pauciflora forest on Jurassic dolerite	450.0		69	15.3
36	E. pauciflora forest on sediments	1290.0		0	0.0
37	E. regnans forest	996.0		84.2	8.5
38*	E. risdonii forest	375.0		2	0.5
39	E. rodwayi forest	113.0		22	19.5
41	Acacia dealbata forest	1911.0	2.3	109.2	5.7

No.	RFA Forest Community	1996 RFA	2017–18	Total	% total
		area (ha)	decrease^	decrease	decrease from
		(2002	(ha)	1996–2018^	1996 RFA Area
		dataset)		(ha)	(2002 dataset)
42	E. sieberi forest on other substrates	0.0	1.1	2.2	&
43	E. subcrenulata forest	10.0		0	0.0
46*	Inland E. tenuiramis forest	33913.0	0.99	6.59	0.0
47	E. viminalis grassy forest/woodland	60259.0	33.5	470	0.8
49*	E. viminalis wet forest	61.0		9.5	15.6
64*%	Inland <i>E.amygdalina – E. viminalis – E.</i> pauciflora on Cainozoic deposits	-	7.3	7.3	&
65≫	E. amygdalina forest on mudstone	-		309.5	&
	TOTAL	244,853.0	69.36	8644.46	3.5

^{*} Indicates a threatened native vegetation community (rare, vulnerable or endangered).

Anomalies in mapping (shown with an ampersand (&)) are subject to further field verification. Area data may be modified as mapping is refined.

Figures take into account areas that have been cleared and converted as a result of activities covered by the Forest Practices Act and areas approved for conversion by a Dam Works Permit issued under the Water Management Act.

>< During 2005–06, Inland *E. amygdalina* was separated into 'Inland *E. amygdalina* – *E. viminalis* – *E. pauciflora* on Cainozoic deposits' and '*E. amygdalina* forest on mudstone', with only the former being considered a threatened forest community.

Freycinet Bioregion as at 30 June 2018

No.	RFA Forest Community	1996 RFA area (ha) (2002 dataset)	2017–18 decrease^ (ha)	Total decrease 1996–2018^ (ha)	% total decrease from 1996 RFA Area (2002 dataset)
1	Coastal E. amygdalina forest	28,574.0		85	0.3
2	E. amygdalina forest on dolerite	70,401.0		1821.1	2.6
3≫	Inland E. amygdalina forest	568.0		154	27.1
4*	E. amygdalina forest on sandstone	24,012.0		314.9	1.3
5	Allocasuarina verticillata forest	391.0		0	0.0
6*	E. brookeriana wet forest	19.0		1.2	6.3
10	E. coccifera dry forest	82.0		1	1.2
11*	Callitris rhomboidea forest	606.0		0	0.0
12	Dry E. delegatensis forest	66,809.0	2.3	2005.6	3.0
13	E. viminalis / E. ovata / E. amygdalina / E. obliqua damp sclerophyll forest	0.0		230	&
14	Tall E. delegatensis forest	21,263.0		262.1	1.2
16*	E. viminalis and/or E. globulus coastal shrubby forest	977.0		0	0.0
17*	Grassy E. globulus forest	10,842.0		352.8	3.3
20	Leptospermum species / Melaleuca squarrosa swamp forest	81.0		7	8.6
21	Callidendrous and thamnic rainforest on fertile sites	627.0		0	0.0
27*	Notelaea ligustrina and/or Pomaderris apetala closed forest	21.0		0	0.0
29	Dry E. obliqua forest	30,256.0	20	2475.9	8.2
30	Tall <i>E. obliqua</i> forest	30,511.0		1494	4.9
31*	Shrubby E. ovata / E. viminalis forest	719.0		6.9	1.0
32	E. pulchella / E. globulus / E. viminalis grassy shrubby forest	110,203.0		1165.9	1.1
34	E. pauciflora forest on Jurassic dolerite	1,274.0		3.5	0.3
36	E. pauciflora forest on sediments	47.0		0	0.0
37	E. regnans forest	3,280.0		804.6	24.5
39	E. rodwayi forest	2,149.0		2.5	0.1
40	E. sieberi forest on granite	829.0		0	0.0
41	Acacia dealbata forest	2,079.0		171.1	8.2
42	E. sieberi forest on other substrates	2,986.0		0	0.0

No.	RFA Forest Community	1996 RFA area (ha) (2002 dataset)	2017–18 decrease^ (ha)	Total decrease 1996–2018^ (ha)	% total decrease from 1996 RFA Area (2002 dataset)
44	E. tenuiramis forest on granite	2,983.0		4.3	0.1
45	E. tenuiramis forest on dolerite	7,514.0		45.3	0.6
46*	Inland E. tenuiramis forest	2,301.0		4.9	0.2
47	E. viminalis grassy forest/woodland	20,908.0		264	1.3
49*	E. viminalis wet forest	815.0		0	0.0
64*⊁	Inland <i>E. amygdalina – E. viminalis – E. pauciflora</i> on Cainozoic deposits	-		0	&
65≫	E.amygdalina forest on mudstone	-		21.1	&
	TOTAL	444,127.0	22.3	11698.5	2.6

^{*} Indicates a threatened native vegetation community (rare, vulnerable or endangered).

Anomalies in mapping (shown with an ampersand (&)) are subject to further field verification. Area data may be modified as mapping is refined.

Figures take into account areas that have been cleared and converted as a result of activities covered by the Forest Practices Act and areas approved for conversion by a Dam Works Permit issued under the Water Management Act.

>> During 2005–06, Inland *E. amygdalina* was separated into 'Inland *E. amygdalina – E. viminalis – E. pauciflora* on Cainozoic deposits' and '*E. amygdalina* forest on mudstone', with only the former being considered a threatened forest community.

Central Highlands Bioregion as at 30 June 2018

No.	RFA Forest Community	1996 RFA area (ha) (2002 dataset)	2017–18 decrease^ (ha)	Total decrease 1996–2018^ (ha)	% total decrease from 1996 RFA Area (2002 dataset)
1	Coastal E. amygdalina dry sclerophyll forest	276.0		0.0	0.0
2	E. amygdalina forest on dolerite	5986.0		1494.1	25.0
4*	E. amygdalina forest on sandstone	49.0		15.0	30.6
6*	E. brookeriana wet forest	6.0		0.0	0.0
8	Acacia melanoxylon forest on rises	151.0		18.7	12.4
10	E. coccifera dry forest	49927.0		23.5	0.0
12	Dry E. delegatensis forest	165758.0	1.5	9339.2	5.7
13	E. viminalis / E. ovata / E. amygdalina / E. obliqua damp sclerophyll forest	1093.0		107.9	9.9
14	Tall E. delegatensis forest	152381.0		6689.9	4.4
15*	King Billy pine – deciduous beech forest	176.0		0.0	0.0
20	Leptospermum sp. / Melaleuca squarrosa swamp forest	388.0		1.0	0.3
21	Callidendrous and thamnic rainforest on fertile sites	24755.0		2207.4	8.9
22	Thamnic rainforest on less fertile sites	53914.0		137.3	0.3
25	Dry E. nitida forest	5501.0		4.0	0.1
28	Tall <i>E. nitida</i> forest	1815.0		0.0	0.0
29	Dry E. obliqua forest	6626.0		1875.9	28.3
30	Tall E. obliqua forest	14125.0		1164.5	8.2
31*	Shrubby E. ovata / E. viminalis forest	104.0		3.0	2.9
32	E. pulchella / E. globulus / E. viminalis grassy shrubby forest	1750.0		51.0	2.9
33*	Pencil pine – deciduous beech forest	176.0		0.0	0.0
34	E. pauciflora forest on Jurassic dolerite	17079.0		435.8	2.6
35*	Pencil pine forest	314.0		0.0	0.0
36	E. pauciflora forest on sediments	13026.0	20.0	84.7	0.7
37	E. regnans forest	7843.0		736.54	9.4
39	E. rodwayi forest	6272.0		965.8	15.4
41	Acacia dealbata forest	7275.0		326.7	4.5
43	E. subcrenulata forest	3610.0		3.9	0.1
45	E. tenuiramis forest on dolerite	8.0		24.7	308.8
46*	Inland E. tenuiramis forest	17489.0		27.9	0.2

No.	RFA Forest Community	1996 RFA area (ha) (2002 dataset)	2017–18 decrease^ (ha)	Total decrease 1996–2018^ (ha)	% total decrease from 1996 RFA Area (2002 dataset)
47	E. viminalis grassy forest / woodland	10141.0		260.3	2.6
49*	E. viminalis wet forest	593.0		0.0	0.0
50*	King Billy pine forest	3568.0		0.0	0.0
64*≫	Inland <i>E. amygdalina – E. viminalis – E. pauciflora</i> on Cainozoic deposits	-		0.0	&
65≫	E.amygdalina forest on mudstone	-		25.0	&
	TOTAL	572,175.0	21.5	25950.4	4.5

^{*} Indicates a threatened native vegetation community (rare, vulnerable or endangered).

Figures take into account areas that have been cleared and converted as a result of activities covered by the Forest Practices Act 1985 and areas approved for conversion by a Dam Works Permit issued under the Water Management Act.

>< During 2005–06, Inland *E. amygdalina* was separated into 'Inland *E. amygdalina* – *E. viminalis* – *E. pauciflora* on Cainozoic deposits' and '*E. amygdalina* forest on mudstone', with only the former being considered a threatened forest community.

Anomalies in mapping (shown with an ampersand (&)) are subject to further field verification. Area data may be modified as mapping is refined.

West and South-west Bioregion as at 30 June 2018

No.	RFA Forest Community	1996 RFA area (ha) (2002 dataset)	2017–18 decrease^ (ha)	Total decrease 1996–2018^ (ha)	% total decrease from 1996 RFA Area (2002 dataset)
2	E. amygdalina forest on dolerite	0.0		2	&
6*	E. brookeriana wet forest	75.0		0	0.0
7	Acacia melanoxylon forest on flats	744.0		0	0.0
8	Acacia melanoxylon forest on rises	5074.0		290	5.7
10	E. coccifera dry forest	600.0		0	0.0
12	Dry E. delegatensis forest	6148.0		28	0.5
13	E. viminalis / E. ovata / E. amygdalina / E. obliqua damp sclerophyll forest	0.0		3	&
14	Tall E. delegatensis forest	21408.0		104	0.5
15*	King Billy pine – deciduous beech forest	622.0		0	0.0
16*	E. viminalis and/or E. globulus coastal shrubby forest	99.0		0	0.0
18	Huon pine forest	8503.0		0	0.0
20	Leptospermum sp. / Melaleuca squarrosa swamp forest	9309.0		431.5	4.6
21	Callidendrous and thamnic rainforest on fertile sites	106311.0		321.6	0.3
22	Thamnic rainforest on less fertile sites	275451.0		20.2	0.0
25	Dry E. nitida forest	136768.0		72	0.1
27*	Notelaea ligustrina and/or Pomaderris apetala closed forest	95.0		0	0.0
28	Tall E. nitida forest	67174.0		326.5	0.5
29	Dry E. obliqua forest	24924.0		249	1.0
30	Tall E. obliqua forest	83500.0		2431.9	2.9
37	E. regnans forest	12588.0		1398.1	11.1
41	Acacia dealbata forest	499.0		1.8	0.4
43	E. subcrenulata forest	2253.0		0	0.0
50*	King Billy pine forest	13907.0		0	0.0
	TOTAL	776,052.0	0.0	5681.2	0.7

 $[\]ensuremath{^{*}}$ Indicates a threatened native vegetation community (rare, vulnerable or endangered).

Figures take into account areas that have been cleared and converted as a result of activities covered by the Forest Practices Act and areas approved for conversion by a Dam Works Permit issued under the Water Management Act.

D'Entrecasteaux Bioregion as at 30 June 2018

No.	RFA Forest Community	1996 RFA area (ha) (2002 dataset)	2017–18 decrease^ (ha)	Total decrease 1996–2018^ (ha)	% total decrease from 1996 RFA Area (2002 dataset)
1	Coastal E. amygdalina forest	61.0	0.8	1.1	1.8
2	E. amygdalina forest on dolerite	219.0		4.3	2.0
4*	E. amygdalina forest on sandstone	798.0		6	0.8
10	E. coccifera dry forest	3952.0		2	0.1
12	Dry E. delegatensis forest	7996.0	6.6	107.2	1.3
14	Tall E. delegatensis forest	24803.0	3.81	653.81	2.6
15*	King Billy pine – deciduous beech forest	6.0		0	0.0
17*	Grassy E. globulus forest	596.0		61	10.2
18	Huon Pine forest	9.0		0	0.0
20	Leptospermum sp. / Melaleuca squarrosa swamp forest	1244.0		10.8	0.9
21	Callidendrous and thamnic rainforest on fertile sites	6889.0		14.7	0.2
22	Thamnic rainforest on less fertile sites	22944.0		3.4	0.0
25	Dry E. nitida forest	3031.0		28.1	0.9
27*	Notelaea ligustrina and/or Pomaderris apetala closed forest	54.0		0	0.0
28	Tall <i>E. nitida</i> forest	2402.0		18.9	0.8
29	Dry E. obliqua forest	29486.0	0.5	1050.9	3.6
30	Tall E. obliqua forest	111866.0	4.99	7892.19	7.1
31*	Shrubby E. ovata / E. viminalis forest	222.0		1.2	0.5
32	E. pulchella / E. globulus / E. viminalis grassy shrubby forest	10905.0	2.67	63.07	0.6
35*	Pencil pine forest	11.0		0	0.0
37	E. regnans forest	21388.0	5.18	3843.38	18.0
41	Acacia dealbata forest	3890.0		142	3.7
43	E. subcrenulata forest	4238.0		8.2	0.2
45	E. tenuiramis forest on dolerite	766.0		0	0.0
46*	Inland E. tenuiramis forest	1042.0		7.2	0.7
47	E. viminalis grassy forest/woodland	194.0		0	0.0

No.	RFA Forest Community	1996 RFA area (ha) (2002 dataset)	2017–18 decrease^ (ha)	Total decrease 1996–2018^ (ha)	% total decrease from 1996 RFA Area (2002 dataset)
50*	King Billy pine forest	2581.0		0	0.0
65≫	E. amygdalina forest on mudstone	-		5	&
	TOTAL	261,593.0	24.55	13924.25	5.3

^{*} Indicates a threatened native vegetation community (rare, vulnerable or endangered).

Figures take into account areas that have been cleared and converted as a result of activities covered by the Forest Practices Act and areas approved for conversion by a Dam Works Permit issued under the Water Management Act.

Luring 2005–06, Inland *E. amygdalina* was separated into 'Inland *E. amygdalina* – *E. viminalis* – *E. pauciflora* on Cainozoic deposits' and '*E. amygdalina* forest on mudstone', with only the former being considered a threatened forest community.

Anomalies in mapping (shown with an ampersand (&)) are subject to further field verification. Area data may be modified as mapping is refined.

Furneaux Bioregion as at 30 June 2018

No.	RFA forest community	1996 RFA area (ha) (2002 dataset)	2017–18 decrease^ (ha)	Total decrease 1996–2018^ (ha)	% total decrease from 1996 RFA Area (2002 dataset)
5	Allocasuarina verticillata forest	142.0		0	0.0
11*	Callitris rhomboidea forest	120.0		0	0.0
20	Leptospermum sp. / Melaleuca squarrosa swamp forest	285.0		0	0.0
23*	Melaleuca ericifolia coastal swamp forest	11.0		1.7	0.0
26	Furneaux E. nitida forest	29 712.0		63	0.2
48*	Furneaux E. viminalis forest	135.0		0	0.0
	TOTAL	30 405.0	0	64.7	0.2

State totals as at 30 June 2018 1

Bioregion and state totals as at 01/07/2018	1996 RFA area (ha) (2002 dataset)	2017–18^ decrease (ha)	Total decrease 1996–2018^ (ha)	% total decrease from 1996 RFA Area (2002 dataset)
Woolnorth	375,839	108.88	44,849.68	11.9
Ben Lomond	500,654	318.48	47,611.88	9.5
Midlands	244,853	69.36	8,644.46	3.5
Freycinet	444,127	22.3	11,698.5	2.6
Central Highlands	572,175	21.5	25,950.4	4.5
West and Southwest	776,052	0.0	5,681.2	0.7
D'Entrecasteaux	261,593	24.55	13,924.25	5.3
Furneaux	30,405	0.0	64.7	0.2
State total	3,205,698	565.07	158,425.47	4.9

This table includes the area cleared as a result of dam works permits issued under the Water Management Act 1999.