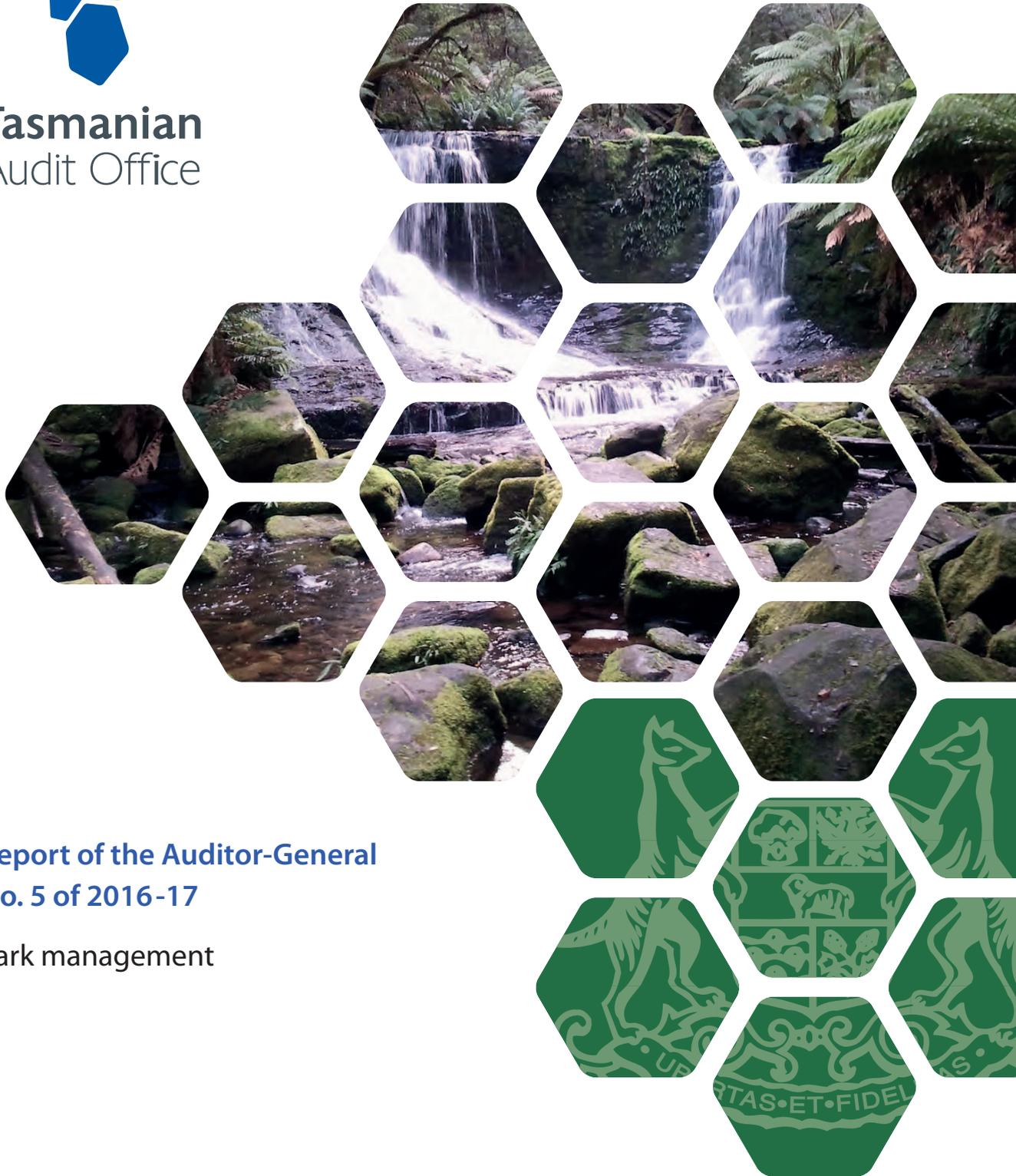




Tasmanian
Audit Office



**Report of the Auditor-General
No. 5 of 2016-17**

Park management

November 2016

THE ROLE OF THE AUDITOR-GENERAL

The Auditor-General's roles and responsibilities, and therefore of the Tasmanian Audit Office, are set out in the *Audit Act 2008 (Audit Act)*.

Our primary responsibility is to conduct financial or 'attest' audits of the annual financial reports of State entities. State entities are defined in the Interpretation section of the Audit Act. We also audit those elements of the Treasurer's Annual Financial Report reporting on financial transactions in the Public Account, the General Government Sector and the Total State Sector.

Audits of financial reports are designed to add credibility to assertions made by accountable authorities in preparing their financial reports, enhancing their value to end users.

Following financial audits, we issue a variety of reports to State entities and we report periodically to the Parliament.

We also conduct performance audits and compliance audits. Performance audits examine whether a State entity is carrying out its activities effectively and doing so economically and efficiently. Audits may cover all or part of a State entity's operations, or consider particular issues across a number of State entities.

Compliance audits are aimed at ensuring compliance by State entities with directives, regulations and appropriate internal control procedures. Audits focus on selected systems (including information technology systems), account balances or projects.

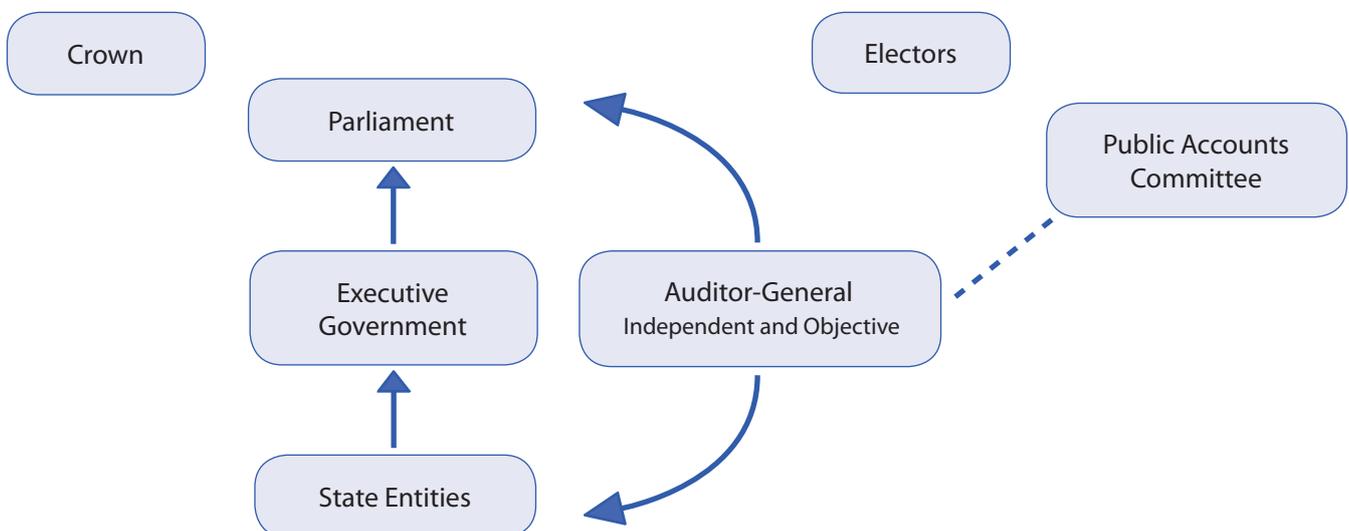
We can also carry out investigations but only relating to public money or to public property. In addition, the Auditor-General is now responsible for state service employer investigations.

Performance and compliance audits are reported separately and at different times of the year, whereas outcomes from financial statement audits are included in one of the regular volumes of the Auditor-General's reports to the Parliament normally tabled in May and November each year.

Where relevant, the Treasurer, a Minister or Ministers, other interested parties and accountable authorities are provided with opportunity to comment on any matters reported. Where they choose to do so, their responses, or summaries thereof, are detailed within the reports.

The Auditor-General's Relationship with the Parliament and State Entities

The Auditor-General's role as Parliament's auditor is unique.



2016

No. 22



2016

PARLIAMENT OF TASMANIA

**REPORT OF THE
AUDITOR-GENERAL
No. 5 of 2016–17**

Park management

November 2016

Presented to both Houses of Parliament in accordance with the provisions of the Audit Act 2008

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15 November 2016

President
Legislative Council
HOBART

Speaker
House of Assembly
HOBART

Dear Mr President
Dear Madam Speaker

**REPORT OF THE AUDITOR-GENERAL
No.5 of 2016–17: Park management**

This report has been prepared consequent to examinations conducted under section 23 of *the Audit Act 2008*. The objective of the audit was to form an opinion on how effectively the Parks and Wildlife Service manages the state's national parks by reference to the adequacy of planning processes and plan implementation..

Yours sincerely



Rod Whitehead
AUDITOR-GENERAL

Contents

Foreword	vii
List of acronyms and abbreviations	viii
Executive summary	2
Background	2
Detailed audit conclusions	3
Recommendations made	4
Audit Act 2008 section 30 — Submissions and comments received	8
Introduction	12
1 Was there logical allocation of funding and resources?	16
1.1 Background	16
1.2 Was there logical allocation of funding to national parks?	16
1.3 Was there reasonable allocation of funding between activities?	17
1.4 Did PWS obtain adequate additional funding to manage reserves transferred from Forestry Tasmania?	19
1.5 Conclusion	21
2 Was PWS effectively managing its high-value assets?	24
2.1 Background	24
2.2 Did PWS identify its high-value assets?	24
2.3 Did PWS have processes to protect identified high-value assets?	25
2.4 Did PWS manage risks to high-value assets?	27
2.5 Conclusion	28
3 Was PWS effectively managing threats?	30
3.1 Background	30
3.2 Was PWS effectively managing bushfires?	30
3.3 Was PWS effectively managing pests, weeds and diseases?	32
3.4 Had PWS managed threats from human impact?	35
3.5 Conclusion	37
4 Was PWS effectively managing infrastructure and visitor safety?	40
4.1 Background	40
4.2 Had PWS defined objectives for infrastructure and visitor safety?	40
4.3 Had PWS developed and implemented infrastructure maintenance plans?	41
4.4 Was PWS monitoring infrastructure and visitor risks?	42
4.5 Conclusion	44
Independent auditor's conclusion	46

Recent reports	50
Current projects	52
Appendix 1 Tasmanian parks and reserves.....	54
A1.1 Reserves	54
A1.2 National parks.....	54

List of figures

Figure 1: Priority budget allocations in regional business plans for 2014–15	17
Figure 2: Total hectares and dollars per hectare for parks and reserves	20
Figure 3: RAA allocation analysis 2011–15	34
Figure 4: Number of incidents and severity 2010–15	43

List of tables

Table 1: Actions relevant to high-value assets	26
Table 2: Examples of identified PWD threats.....	33
Table 3: Tasmanian reserve classes.....	54
Table 4: Tasmanian national parks.....	55

Foreword

Tasmania's 19 national parks cover 1.5 million hectares and are renowned worldwide for their spectacular landscapes and diversity of unspoiled habitats and ecosystems. Although their primary purpose is the protection of biodiversity, national parks also deliver other invaluable economic, social, cultural and health benefits to the Tasmanian community and to visitors from interstate and overseas.

The Director, National Parks and Wildlife, supported by the Parks and Wildlife Service (PWS), is the managing authority for state-owned reserved lands in Tasmania. To prepare for the challenges affecting the environment, and manage changing community expectations and environmental pressures on the protected area estate, PWS requires comprehensive, robust and integrated systems to ensure our national parks are managed in an informed, effective and transparent manner.

The objective of this audit was to determine whether PWS had adequate systems in place to ensure conservation of the state's natural and cultural heritage was managed efficiently and effectively. This report specifically considered whether there was effective planning for, and management of:

- national parks and national park values (e.g. information about the condition of ecosystems and natural diversity, environmental quality, wilderness quality, Aboriginal and historical cultural heritage, etc.)
- threats, risks and impacts (e.g. information about the management of fire, weeds, diseases, new and emerging issues, etc.)
- tourism, recreation and other uses (e.g. information about infrastructure, public health and safety, sensitivity and sustainability of human use, etc.).

The report contains ten recommendations, most of which are aimed at improvements that can be made to monitoring and reporting systems to provide information that addresses the formal responsibilities for reserve management but also provides information that is relevant and meaningful to PWS, stakeholders and the broader community.

Rod Whitehead

Auditor-General

15 November 2016

List of acronyms and abbreviations

BRAM	<i>Bushfire Risk Assessment Model</i>
DPIPWE	Department of Primary Industries, Parks, Water and Environment
EMS	Environmental management system
FT	Forestry Tasmania
PMP	Park management plan
PWD	Pests, weeds and diseases
PWS	Parks and Wildlife Service
RAA	Reserve activity assessment
TAO	Tasmanian Audit Office
TWWHA	Tasmanian Wilderness World Heritage Area

Executive summary

Executive summary

Background

The Tasmanian Parks and Wildlife Service (PWS) — a division of the Department of Primary Industries, Parks, Water and Environment (DPIPWE) — manages Tasmania’s reserves. Reserves are declared under the *Nature Conservation Act 2002* that sets out the values and purposes of each reserve class¹ and managed under the *National Parks and Reserves Management Act 2002*.

To achieve this, PWS undertakes a range of activities, including:

- track and hut construction and maintenance
- management of fire, pests, weeds and diseases
- visitor services.

To guide these activities PWS prepares both statutory plans (e.g. park management plans) and non-statutory plans (e.g. business plans, development plans and site plans).

Audit objective

The objective of the audit was to form an opinion on how effectively PWS manages the state’s national parks by reference to the adequacy of:

- planning processes
- plan implementation.

Audit scope

This audit assessed performance of the PWS over the period 2010–15.

The audit scope included national parks, but largely excluded other parks and reserves.

Audit criteria

Criteria included whether there was effective planning for management of:

- logical allocation of funding and resources
- high-value assets

¹ PWS responsibilities included national parks, state reserves, nature reserves, game reserves, conservation areas, nature recreation areas, regional reserves and historic sites-.

- threats: bushfires, pests, weeds and diseases
- development activities
- park infrastructure
- visitor safety.

Detailed audit conclusions

The audit conclusions are based on criteria that we developed to support the audit's objective and are aligned to the chapter structure of the Report.

Was there logical allocation of funding and resources?

PWS had developed and implemented a logical process to guide allocation of recurrent funding to parks. On the other hand, only a small percentage of priorities in regional business plans related to pest, weed and disease control, with most being allocated for infrastructure work and visitor services. We were not persuaded that sufficient priority was being given to pest, weed and disease control.

Despite an initial decline in appropriation per hectare following the transfer to PWS of the Forestry Tasmania reserves, pre-transfer levels had been restored by 2014–15. Nonetheless, 2014–15 appropriation per hectare continued to be low compared to other jurisdictions or funding of PWS in previous years.

Was PWS effectively managing its high-value assets?

PWS had identified high-value assets and had processes to ensure they were taken into account when considering new processes and proposals. However, park management plans (PMPs) were outdated, which made it unlikely that identified assets were a significant element of current management and monitoring.

PWS was carrying out some actions relevant to protection of high-value assets, including actions to reduce the impact of visitors. However, there was no systematic process by which identified high-value assets or threats to them were routinely monitored or managed.

Was PWS effectively managing threats?

We concluded that PWS was effectively managing bushfires as fire management plans existed across all national parks. Objectives and related strategies to address bushfire risks were identified and a bushfire risk assessment model had been implemented.

PWS had identified and documented pests, weeds and disease (PWD) threats, but the documents were in some cases more than ten years out-of-date. There was little evidence of strategies or actions to control threats and no routine monitoring process.

Threats from human impact were generally well managed using the *Reserves Standards Framework* and reserve activity assessments (RAAs). However, we were not persuaded that there was an effective system for monitoring identified risks.

Was PWS effectively managing infrastructure and visitor safety?

PWS had generally effective processes to manage infrastructure and visitor safety, in that it:

- had adequately defined high-level objectives and safety requirements
- had outlined infrastructure objectives and priorities
- was effectively maintaining highly-used infrastructure
- had an extensive inspection regime.

However, we had concerns that the safety statistic of incidents per 100 000 visitors had trended sharply upward from 2010 to 2014.

Recommendations made

The Report contains the following recommendations:

Rec	Section	We recommend that ...
1	1.3	... PWS review whether regional business plans are giving sufficient priority to PWD control.
2	1.4	... the Department of Primary Industries, Parks, Water and Environment (DPIPWE) review whether it requires additional funding to meet government objectives in national parks, and, if so, to submit a case to the government.
3	2.2 2.3 2.4 3.3	...PWS: - update its PMPs and revise every five years - use the PMPs as a basis for regular monitoring of high-value assets and threats.
4	2.3	... when updating PMPs, PWS considers the measurability of goals.

Rec	Section	We recommend that ...
5	3.3	... PWS place greater emphasis on monitoring PWD threats and planning strategies and actions to control them.
6	3.3	... PWS further develop and implement environmental management system to ensure greater monitoring of threats.
7	3.4	... risks identified in RAAs are transferred to a risks register and regularly monitored.
8	4.3	... a more structured approach be developed that ensures all infrastructure is adequately maintained and kept safe at a level commensurate with use and PWS capability.
9	4.4	... PWS investigate whether the upward trend in incidents per 100 000 from 2010 to 2014 is an indicator of falling safety standards.
10	4.4	... PWS liaise with emergency services to ensure it is provided with information of rescues performed by them.

Audit Act 2008 section 30 — Submissions and comments received

Audit Act 2008 section 30 — Submissions and comments received

Introduction

In accordance with section 30(2) of the *Audit Act 2008*, a copy of this Report was provided to the state entities indicated in the Introduction to this Report.

A summary of findings, with a request for submissions or comments, was also provided to the relevant portfolio Ministers and the Treasurer.

Submissions and comments that we receive are not subject to the audit nor the evidentiary standards required in reaching an audit conclusion. Responsibility for the accuracy, fairness and balance of these comments rests solely with those who provided the response. However, views expressed by agencies were considered in reaching review conclusions.

Section 30(3) of the Act requires that this Report include any submissions or comments made under section 30(2) or a fair summary of them. Submissions received are included in full below.

Department of Primary Industries, Parks, Water and Environment

Thank you for your letter of 4 November 2016 inviting comment on the Performance Audit: Report of the Auditor-General No. 5 of 201 6-17 — Park management.

With respect to the specific recommendations:

Recommendation 1

The reported low level of funding on pest, disease and weed control does not reflect overall Department of Primary Industries, Water and Environment (DPI PWE) expenditure. The analysis also does not take into account funding for eradication projects; examples over the last five years include the rabbit eradication on Macquarie Island and feral cat eradication on Tasman Island.

In addition, the PWS works with a range of partners across Tasmania to tackle pests, diseases and weeds that do not recognise reserve boundaries, but threaten reserve values. For example, significant weed management has been carried out by Wildcare groups, such as the SPRATS group working to remove sea spurge from the entire Southwest National Park coastline,

and the Friends of Freycinet who undertake ongoing control of gorse on Schouten Island.

Nonetheless, regional business plans will be reviewed to ensure they include sufficient detail, including referencing activities of other PWS Branches and DPIPWE Divisions, in particular Natural and Cultural Heritage Division and Biosecurity Tasmania, and volunteer groups.

Recommendation 2 and 8

It is noted that the overall recurrent services appropriation used to calculate the expenditure per hectare does not recognise the State Government's Capital Investment Program through the works and services appropriation. The Program has provided significant funding for many projects since 2014–15, for example:

- \$8 million over two years aimed at high priority maintenance and infrastructure renewal.
- An extra \$4 million to provide additional walking track experiences as part of the Three Capes Track project.
- \$2 million over two years to improve the South Coast Track.
- \$1.7 million investment for the West Coast Trails projects.

Recommendations 3 and 4

The Department supports ongoing review of Management Plans, with revisions made to Plans under the National Parks and *Reserves Management Act 2002* as required. The Department supports consideration of measurability of goals through that process. Recent management plans and site plans have listed key desired outcomes as a means of monitoring implementation.

Recommendations 5 and 6

It is agreed that Management Plans are useful in identifying unique natural and cultural values of a reserve, and recommending specific monitoring programs.

In recent years, the PWS has focused on developing and implementing a monitoring and reporting system for evaluating PWS management effectiveness that includes both subjective and objective performance indicators. The progressive implementation of the PWS environmental management system will address a number of recommendations around recording and monitoring threats to high-value assets.

Recommendation 7

A Reserve Activity Assessment (RAA) provides a list of recommended actions to mitigate the risks that may be exposed in that proposed activity. The risks identified and their mitigation are specifically used for guiding the implementation of that activity, hence are not conducive to inclusion in central risk registers. However, a register is kept of all RAA's that have been approved.

Recommendation 9

The recommendation is supported. PWS has placed considerable effort in recent years into improving its WHS systems.

Recommendation 10

The recommendation is supported. PWS has been recently working with Emergency Services to ensure that records of rescues they have undertaken are passed on to the PWS on a regular basis. This has assisted PWS to address some potential otherwise unforeseen risks.

Thank you again for providing me with the opportunity to comment on this report.

John Whittington
Secretary

Introduction

Introduction

Background

Tasmania's 19 national parks cover 1.5 million hectares and are renowned worldwide for their spectacular landscapes and diversity of unspoiled habitats and ecosystems². They attract over 800 000 visitors annually with this number expected to further increase in the future³. The parks contain iconic attractions such as Wineglass Bay, the Overland track and Cradle Mountain. Tasmania's tourism strategy recognises the value of these natural assets as fundamental to the tourism industry and a core appeal for visitors from interstate and overseas⁴.

The Tasmanian Parks and Wildlife Service (PWS) — a division of the Department of Primary Industries, Parks, Water and Environment (DPIPWE) — manages Tasmania's reserves. Reserves are declared under the *Nature Conservation Act 2002* that sets out the values and purposes of each reserve class⁵ and managed under the *National Parks and Reserves Management Act 2002*.

To achieve this, PWS undertakes a range of activities, including:

- track and hut construction and maintenance
- management of fire, pests, weeds and diseases (PWDs)
- visitor services.

To guide these activities PWS prepares both statutory plans (e.g. park management plans) and non-statutory plans (e.g. business plans, development plans and site plans).

This audit focuses on whether PWS has adequate planning processes and has effectively implemented its plans.

² PWS, Hobart, viewed 4 November 2016, <<http://www.parks.tas.gov.au/index.aspx?base=236> >

³ Tasmanian Government, *Budget Paper Number 2, Volume 1, 2016-17*, Hobart, p.218.

⁴ Tourism Tasmania Board, *The Tasmanian Experience*, Hobart, 2002, p.13.

⁵ PWS responsibilities included national parks, state reserves, nature reserves, game reserves, conservation areas, nature recreation areas, regional reserves and historic sites.

Audit objective

The objective of the audit was to form an opinion on how effectively PWS manages the state's national parks by reference to the adequacy of:

- planning processes
- plan implementation.

Audit scope

This audit assessed performance of PWS, a division of DPIPWE, over the period 2010–15.

The audit scope included national parks, but largely excluded other parks and reserves. Categories of parks and reserves are outlined in Appendix 1.

Where audit testing was performed, it was limited to the following sample of national parks:

- Ben Lomond
- Cradle Mountain – Lake St Clair
- Freycinet
- Maria Island
- Mount Field
- Southwest
- Savage River
- Franklin-Gordon Wild Rivers

Audit criteria

Criteria included whether there was effective planning for management of:

- logical allocation of funding and resources
- high-value assets
- threats: bushfires, pests, weeds and diseases
- development activities
- park infrastructure
- visitor safety.

Audit approach

In line with the preceding audit criteria, we sought appropriate audit evidence through:

- examining reports and legislation

- reviewing records and databases
- checking policies, plans and protocols
- interviewing PWS employees
- visiting parks.

Timing

Planning for this audit began in July 2015 with fieldwork continuing until July 2016. The report was finalised in November 2016.

Resources

The audit plan recommended 1000 hours and a budget, excluding production costs, of \$158 370. Total hours were 1417 and actual costs, excluding production, were \$209 439, which exceeded our budget.

Why this project was selected

This audit was included in the *Annual Plan of Work 2015–16* because of:

- significant public expenditure on parks management
- public interest as evidenced by increasing visitor numbers
- concerns as to PWS's capacity to manage its increased responsibility for reserve management arising from implementation of the *Tasmanian Forest Agreement Act 2013*.

1 Was there logical allocation of funding and resources?

1 Was there logical allocation of funding and resources?

1.1 Background

An important element in PWS's management of the state's national parks is to allocate its scarce resources according to need. This Chapter examines PWS's planning and budgeting processes for evidence of a logical allocation process.

Specifically, we looked at budget allocation from the point of view of:

- allocation of funding to national parks (Section 1.2)
- budget allocation by activity (Section 1.3)
- the impact of the 2013 transfer of 315 600 hectares from Forestry Tasmania's (FT) control to PWS (Section 1.4).

1.2 Was there logical allocation of funding to national parks?

PWS is a division within DPIPWE that received funding through the state budget. The budget outlined major listed initiatives. In addition, DPIPWE had developed corporate plans at a departmental level and outlined priorities for PWS, such as:

- construction of the Three Capes Track
- improvements to the South Coast Track
- fuel reduction burns
- a new management plan for the World Heritage Area.

PWS was divided into three regions (Northern, North West and Southern). Each region contained a number of field centres, which in turn were responsible for one or more parks and reserves.

Annual regional business plans were prepared and identified projects, activities and resource allocations at a more detailed level. We found that projects and activities had been included in regional business plans on the basis of a formal assessment process, which took into account factors such as safety, maintenance needs, benefits to visitors and benefits to the community.

At the field centre level, employee funding (the largest component of recurrent funding) was based on various factors including:

- historical staffing levels

- number of visitors
- specific projects or programs
- an internal model of the complexity of management for each field centre. The 2012 model was based on weighted factors, such as surrounding population, hectares of reserved land and the number of high-use facilities.

We noted that for most field centres, actual staffing broadly reflected the complexity ratings from the model.

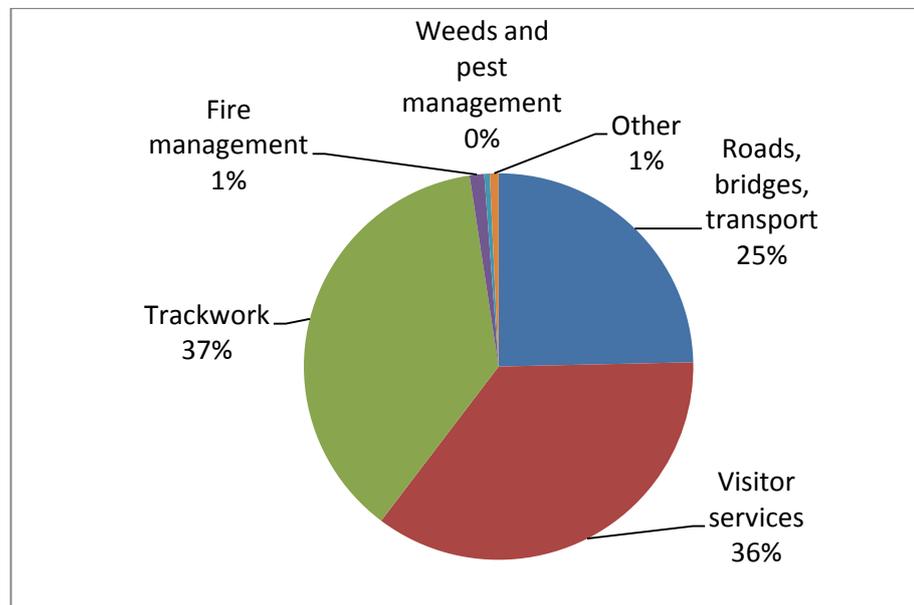
Section 1.2 conclusion

PWS had a logical process to guide allocation funding and resources to parks.

1.3 *Was there reasonable allocation of funding between activities?*

Regional business plans outlined priorities and initiatives for each region. Figure 1 is based on our analysis of priorities outlined in the regional plans and summarises the priority budget allocations for 2014–15.

Figure 1: Priority budget allocations in regional business plans⁶ for 2014–15



Source: TAO based on information provided by PWS.

⁶ Only regional business plans for the South and North West were included for our analysis because insufficient detail was included in the Northern plan.

Figure 1 shows that most of the priorities outlined in regional plans related to trackwork, visitor facilities and transport infrastructure. Only a small proportion was allocated to fire management, PWD control.

We were concerned at the possibility that the low funding on threats might suggest a higher priority for infrastructure projects because of their greater visibility rather than their inherent value.

It is noted that:

- at a whole-of-state level, (not included in regional plans) fire management was approximately ten per cent of total recurrent funding for PWS⁷. In addition to fire management funding, the government has committed to invest in fuel-reduction burning over multiple years, commencing with \$4.0 million in 2014–15

We concluded that fire management was being given high priority

- the analysis based on regional business plan expenditure did not include:
 - funds allocated to reserve management by other PWS Branches in Hobart and other business units within DPIPW. That included Biosecurity Tasmania and Natural and Cultural Heritage Division, which have field officers to provide management of invasive species and weeds, respectively. These two divisions work with, but are separate to PWS
 - time and funding provided by volunteer organisations and volunteers
 - research and activities in the Tasmanian Wilderness World Heritage Area (TWWHA) national parks
- the business plan analysis is partly skewed by large projects such as the Three Capes Track.

Nonetheless, PWS largely accepted the finding of relatively low direct funding for identifying, monitoring and combatting PWDs in national parks.

⁷ In addition to fire management funding, the government has committed to invest in fuel reduction burning over multiple years, commencing with \$4 million in 2014–15.

Section 1.3 conclusion

Only a small percentage of priorities in regional business plans related to PWD control, with most being allocated for infrastructure work and visitor services. We were not persuaded that sufficient priority was being given to PWD control.

Recommendation 1

We recommend that PWS review whether regional business plans are giving sufficient priority to PWD control.

1.4 *Did PWS obtain adequate additional funding to manage reserves transferred from Forestry Tasmania?*

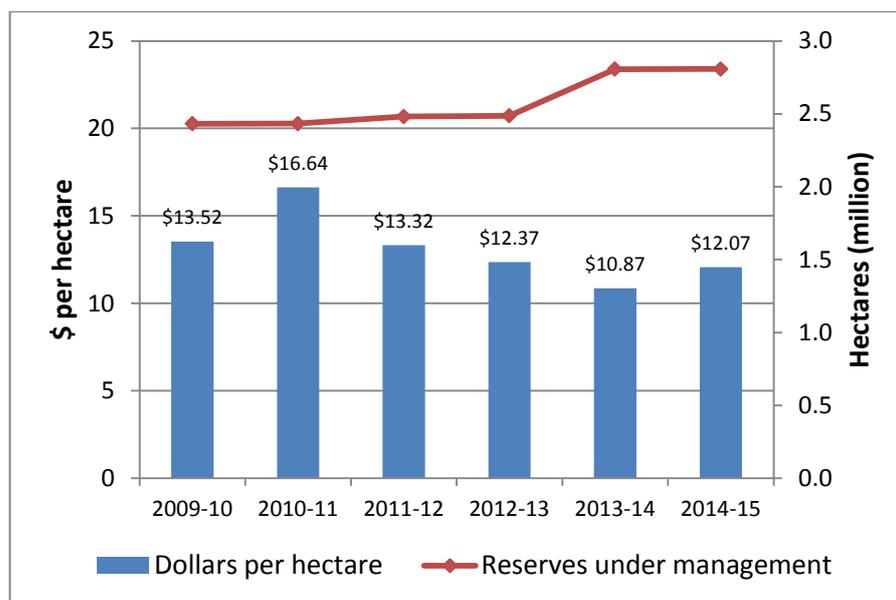
In 2013, PWS took over responsibility for 315 600 hectares of former FT reserves⁸ under the *Tasmanian Forests Inter-Governmental Agreement*. This represented an increase of 12.6 per cent of land under PWS management. Additionally, 412 000 hectares of crown land designated as future potential production forest was placed under PWS responsibility. At this stage, PWS has not included this land in its reserves pending a government decision that may return it to FT as production forest⁹.

Figure 2 shows land under PWS management together with the appropriation revenue per hectare from 2009–10 to 2014–15.

⁸ *Forestry (Rebuilding the Forest Industry) Act 2014 (Tas)*.

⁹ PWS had not included the 412 000 hectares of crown land in its listing of reserves for which it has designated management responsibility, because it is only reactively managed and inclusion would distort inter-jurisdictional comparison.

Figure 2: Total hectares and dollars per hectare for parks and reserves



Source: TAO analysis, based on data supplied by PWS

Figure 2 shows an initial decrease in appropriation revenue per hectare in 2013–14 following the transfer of the FT reserves, however, that had been largely reversed by 2014–15 (with an additional \$3.5 million per annum).

On the other hand, Figure 2 also shows sharply declining appropriation revenue per hectare from 2010–11, so that even with the additional 2014–15 revenue, revenue per hectare was greater in 2009–10 (by 12 per cent), 2010–11 (by 38 per cent) and 2011–12 (by 10 per cent).

In 2012, a Legislative Council Committee examined the impact of PWS acquiring the extra FT reserves¹⁰. The Committee found that PWS’s funding would need to be increased from \$10 per hectare to \$16 per hectare.

We also noted that 2014–15 appropriation per hectare (\$12) was considerably less than in Victoria (\$51), New South Wales (\$37) and the national average (\$26).

Appropriation per hectare is a fairly blunt indicator of funding and we would expect PWS’s funding to be determined by more sophisticated methods than comparison with other states. Nonetheless, there may be a need for DPIPWE to review the adequacy of funding for PWS.

¹⁰ Parliament of Tasmania, Legislative Council Government Administration Committee B, *The Operation and Administration of Tasmanian Parks and Wildlife Service*, Hobart, 2012.

Section 1.4 conclusion

Despite an initial decline in appropriation per hectare following the 2013 transfer to PWS of the FT reserves, pre-transfer levels had been restored by 2014–15. Nonetheless, 2014–15 appropriation per hectare continued to be low compared to other jurisdictions or funding of PWS in previous years.

Recommendation 2

We recommend that DPIPWE review whether it requires additional funding to meet government objectives in national parks, and, if so, to submit a case to the government.

1.5 Conclusion

PWS had developed and implemented a logical process to guide allocation of recurrent funding to parks. On the other hand, only a small percentage of priorities in regional business plans related to PWD control, with most being allocated for infrastructure work and visitor services. We were not persuaded that sufficient priority was being given to PWD control.

Despite an initial decline in appropriation per hectare following the transfer to PWS of the FT reserves, pre-transfer levels had been restored by 2014–15. Nonetheless, 2014–15 appropriation per hectare continued to be low compared to other jurisdictions or funding of PWS in previous years.

2 Was PWS effectively managing its high-value assets?

2 Was PWS effectively managing its high-value assets?

2.1 Background

Within national parks there are high-value assets based on attractiveness to visitors, rarity of species, cultural heritage and other factors.

We examined whether high-value assets were:

- formally identified (Section 2.2)
- subject to management processes to protect them from damage or degradation (Section 2.3)
- subject to risk management (Section 2.4).

2.2 Did PWS identify its high-value assets?

We found that for each of our reviewed parks, park management plans (PMPs) contained a detailed breakdown of important geology, flora, fauna and Aboriginal heritage values¹¹. We also noted that PWS had sought stakeholder engagement from:

- other government agencies
- Aboriginal Heritage Council
- interest groups
- general members of the public.

Most of the plans were over ten years old, which detracted from their usefulness for most purposes, although probably not for identification of higher-value assets. However, while the identification was still valid the age of the plans inevitably reduced their relevance to PWS's planning and monitoring.

PWS also advised that high-value assets were also included in various internal information systems. That information was taken into account in environmental assessments of reserve management processes and proposals.

However, PWS accepted that PMPs were outdated and that accordingly regular monitoring of the high-value assets identified in PMPs was not a significant element of current park management.

¹¹ PWS used the term 'values' to refer to what we call 'high-value assets'. We will use 'high-value assets' throughout this Report.

Section 2.2 conclusion

PWS had identified high-value assets and had processes to ensure they were taken into account when considering processes and proposals. However, PMPs were outdated, which made it unlikely that identified assets were a significant element of current management and monitoring.

Recommendation 3

We recommend that PWS:

- update its PMPs and revise every five years
- use the PMPs as a basis for regular monitoring of high-value assets and threats.

2.3 *Did PWS have processes to protect identified high-value assets?*

PMPs and site plans consistently identified:

- Goals (e.g. habitat preservation)
- Threats (e.g. weed encroachment)
- Strategies (e.g. habitat preservation and threatened species management programs¹²)
- Actions (e.g. annual volunteer program of weed clearing).

Our view was that all of this information was outdated because of the age of the plans. It was also noted that many of the identified goals lacked measurability; an important attribute when assessing the extent to which they have been implemented.

On the other hand, we found evidence of relevant actions in regional business plans and the PWS website. Examples are included in Table 1.

¹² For example, The *Freycinet National Park and Wye River State Reserve Management Plan*, PWS, Hobart, 2000, p.28, is maintaining habitat for the New Holland Mouse and implementing the Swift Parrot Recovery Plan.

Table 1: Actions relevant to high-value assets

National Park	High-value asset	Current and proposed actions
Ben Lomond	<ul style="list-style-type: none"> ▪ Alpine plants 	<ul style="list-style-type: none"> ▪ Research, fire management, erosion control, weed and disease control
Freycinet	<ul style="list-style-type: none"> ▪ Old growth forest communities ▪ Swift parrot 	<ul style="list-style-type: none"> ▪ Use of lookouts and track to reduce visitor impact ▪ Swift parrot recovery plan
Maria Island	<ul style="list-style-type: none"> ▪ Pardalote and sea eagle ▪ Environment and cultural heritage 	<ul style="list-style-type: none"> ▪ Pardalote recovery plan ▪ Monitoring sea eagle breeding sites ▪ Relocating the campground
Mount Field	<ul style="list-style-type: none"> ▪ Communities of pencil pine and fagus ▪ Eastern Quoll ▪ Tall trees 	<ul style="list-style-type: none"> ▪ No specific actions
Savage River	<ul style="list-style-type: none"> ▪ Funnel heath, ▪ Wedge-tailed eagle and the grey goshawk 	<ul style="list-style-type: none"> ▪ Mapping vegetation ▪ Discouraging feeding of birds
Southwest	<ul style="list-style-type: none"> ▪ Swift parrot and masked owl ▪ Aboriginal heritage values of the Melaleuca-Cox Bight area 	<ul style="list-style-type: none"> ▪ Statewide actions for birds ▪ Access restriction

Table 1 demonstrates that many of the current and proposed actions were specifically relevant to identified high-value assets. In addition, PWS strategies of relevance to all park assets were:

- use of tracks, visitor facilities and signs to reduce the impact of visitors
- application of controls over proposed developments.

Despite this observed matching of identified high-value assets and actions, we found no documentary linkage to indicate that the actions had resulted from identification of the assets in the PMPs.

PWS responded that there were also other management processes that provided protection over reserve assets such as:

- zoning systems, which limit activities to specific areas
- Reserve Activity Assessments (RAAs), which were used to assess the environmental impact of maintenance or development works in national parks and reserves
- Environmental Management System (EMS), which was used by PWS rangers to log observed hazards for prioritisation and action.

Nonetheless, we concluded that there was not a systematic process to protect high-value assets. The importance of a systematic process is that it introduces thoroughness and rigour that might not otherwise be achieved.

Section 2.3 conclusion

PWS was carrying out some actions relevant to protection of high-value assets, including actions to reduce the impact of visitors. However, there was no systematic process by which identified high-value assets were managed.

Restated recommendation 3

We recommend that PWS:

- update its PMPs and revise every five years
- use the PMPs as a basis for regular monitoring of high-value assets and threats.

Recommendation 4

We recommend that when updating PMPs, PWS considers the measurability of goals.

2.4 *Did PWS manage risks to high-value assets?*

Managing risks is an important element in provision of timely protection for assets. Since 2007, PWS has had an environmental risk management policy in place. The policy required PWS to:

- identify, analyse and document risks
- determine risk management controls including monitoring of risk.

We were satisfied that PMPs and site plans had identified and analysed threats and other risks to the national parks. As previously discussed, the PMPs were outdated; nonetheless we considered that they provided a useful baseline.

Risk monitoring was implemented using RAAs and EMS (refer Section 2.3). However, while the above mechanisms provide some monitoring of risks, there was no process to routinely assess threats identified in PMPs or site plans. Our view is that for each national park an annual report should be prepared indicating the status of each of the risks (or threats) identified in the PMPs.

Section 2.4 conclusion

Current systems provided monitoring of risks to national parks, including high-value assets, from new development or maintenance activities or observed hazards. However, there was no mechanism to provide routine monitoring of risks or threats identified in PMPs.

Restated Recommendation 3

We recommend that PWS:

- update its PMPs and revise every five years
- use the PMPs as a basis for regular monitoring of high-value assets and threats.

2.5 Conclusion

PWS had identified high-value assets and had processes to ensure they were taken into account when considering new processes and proposals. However, PMPs were outdated, which made it unlikely that identified assets were a significant element of current management and monitoring.

PWS was carrying out some actions relevant to protection of high-value assets, including actions to reduce the impact of visitors. However, there was no systematic process by which identified high-value assets or threats to them were routinely monitored or managed.

3 Was PWS effectively managing threats?

3 Was PWS effectively managing threats?

3.1 Background

Parks are vulnerable to many threats that can endanger flora, fauna or other park values. The risks posed by threats need to be identified and mitigated where ever possible. In this Chapter, we selected three major groups of threats under the categories of:

- bushfires risk (Section 3.2)
- PWD (Section 3.3)
- human impact. (Section 3.4)

We examined whether PWS's has planned and implemented strategies to deal with the above threats.

3.2 Was PWS effectively managing bushfires?

Bushfires can be devastating, especially in a park environment where there may be unique natural values and endangered species. PWS is responsible for fire management in national parks and reserves. Responsibilities include:

- preparation of fire management plans, including strategies to protect neighbouring settlements and towns, as well as visitors and natural values within reserves
- planned burning under specific fuel and weather conditions to reduce the risk posed to natural and human assets by wildfire
- responding to large bushfires in coordination with FT and the Tasmania Fire Service.

In this Section, we examined whether PWS had:

- developed plans at strategic, regional and local levels
- outlined objectives and strategies
- managed bushfire risks.

3.2.1 Development of plans

PWS had a strategic planning framework for fire management across all its parks and reserves. The framework incorporated a series of actions to be undertaken, across the four areas of fire management (prevention, preparedness, response and recovery). The framework was supported by a fire management policy and a fire planning policy.

At a lower level, PWS had fire management plans for each of its three regions (Northern, North-West and Southern). The plans took a 'tenure blind' approach¹³ to fire management that included strategies applicable to parks as well as other land tenures.

PWS had incorporated stakeholder input into plan development using:

- ten fire management area committees across the state, which included representatives from Tasmanian Fire Service, landowners and local councils
- stakeholder and community engagement for planned fuel reduction burns.¹⁴

We were satisfied that plans existed for the various levels at which bushfire risk is managed: strategic, regional and local.

3.2.2 Objectives and strategies

Each strategic fire management plan had a range of objectives and related strategies to address bushfire risk across all four aspects of fire management¹⁵. Examples included:

- development of fire management zone procedures
- development of enforcement protocols
- ensuring bushfire backup resources were available
- ensuring roads and tracks needed for fire management were maintained.

In regard to road and track maintenance, PWS advised that all major roads were maintained within each park by PWS or by another government agency. Maintenance of other tracks depended on funding, the class of road and the park.

We tested a sample of actions from the three regional strategic fire management plans and found evidence that all had been implemented.

¹³ 'Tenure-blind' is a term used to mean that fire management of land areas is based on risk assessment, regardless of whether land is owned by the public or by private land owners.

¹⁴ For example, the vegetation at Savage River National Park and Hartz Mountains National Park were not suitable for any form of fuel reduction burns.

¹⁵ The four aspects of fire management are prevention, preparedness, response and recover — *PWS Fire Planning Policy* p.1

3.2.3 Risk management

PWS assessed bushfire risk using its *Bushfire Risk Assessment Model* (BRAM), which is a computer-based landscape risk assessment tool. BRAM maps the entire state according to its bushfire risk (e.g. low, moderate, high and extreme). The tool combined ten factors relating to the likelihood and thirteen factors concerning the consequences of bushfires.

PWS undertake an annual risk assessment using BRAM¹⁶. Each year, PWS receives updated data from a variety of stakeholders, such as private forestry companies and other state entities, along with fire history of bushfires and planned burns, which are fed into BRAM for processing. The re-run of the model produces a new annual bushfire risk assessment for the state that incorporates the change in fire risk as a result of changing fuel loads and or new identified values. The updated risk assessment is then used to help identify and prioritise mitigation works which include fuel reduction burning.

We were provided with March 2015 maps for each of the parks in our sample. The maps covered:

- fuel types and flammability
- bushfire risk
- fire management zones
- planned burns.

Section 3.2 conclusion

We concluded that PWS was effectively managing bushfires, as fire management plans existed across all national parks. Objectives and related strategies to address bushfire risks were identified and a bushfire risk assessment model had been implemented.

3.3 *Was PWS effectively managing pests, weeds and diseases?*

PWS is responsible for the management of PWDs within national parks. In this Section, we examine whether PWS had effectively:

- identified likely threats
- implemented control strategies

¹⁶ We were provided with the March 2015 maps update and understand that a further update was undertaken in December 2015.

- monitored the threats.

3.3.1 Identification of PWD threats

We found that all PMPs identified major threats to each park with examples provided in Table 2.

Table 2: Examples of identified PWD threats

National park	PWD issues from PMPs
Ben Lomond	<ul style="list-style-type: none"> ▪ Feral cats ▪ Phytophthora
Cradle Mountain/Lake St Clair	<ul style="list-style-type: none"> ▪ Goats ▪ Blackberry ▪ Phytophthora
Franklin-Gordon Wild Rivers	<ul style="list-style-type: none"> ▪ Feral cats ▪ Blackberry ▪ Phytophthora
Freycinet	<ul style="list-style-type: none"> ▪ Rabbits, rodents, feral cats ▪ Marram grass, thistle and gorse ▪ Phytophthora
Maria Island	<ul style="list-style-type: none"> ▪ Fallow deer ▪ Canary broom ▪ Phytophthora
Mount Field	<ul style="list-style-type: none"> ▪ Trout, feral cats, rabbits, house mice ▪ Blackberries, holly and willow ▪ Myrtle wilt and Phytophthora
Savage River	<ul style="list-style-type: none"> ▪ Little introduced fauna ▪ Little weed issues ▪ Myrtle wilt
Southwest	<ul style="list-style-type: none"> ▪ Rabbits ▪ Blackberry, marram grass ▪ Phytophthora

The PMPs typically contained a descriptive section, identifying the magnitude of the problem in a specific park, followed by objectives and actions designed to minimise the risk and control

the threat. In addition, there were specific weed management and introduced species plans for the TWWHA.

Unfortunately, although the PMP information appeared thorough, it was outdated, as discussed in Section 2.2. It seemed probable to us that, in the intervening periods since the plans were last updated, the status of some identified threats would have changed and new threats emerged.

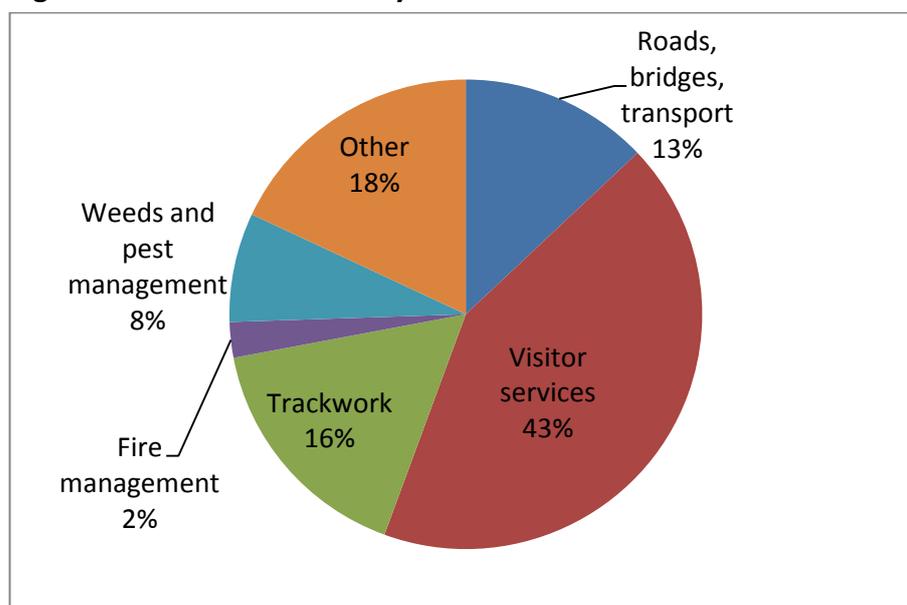
3.3.2 Strategies and actions to manage PWD threats

Strategies and actions to control PWD were outlined in:

- PMPs: however, as noted in Section 2.2, PMPs were too out-of-date to be relevant.
- A 2010 weed strategy for TWWHA: however, this document was three years overdue for review.
- Annual business plans: however, only four of 168 actions in two examined regional plans and one per cent of total budget related to PWDs
- RAAs, which were used to assess the environmental impact of maintenance or development works in national parks and reserves, including the impact on PWD.

Only eight per cent of RAAs for proposed activities related to PWD (see Figure 3, below). We could find no RAAs that dealt with diseases.

Figure 3: RAA allocation analysis 2011–15



Source: TAO from data (570 RAAs) supplied by PWS

Based on the above dot points and Figure 3, we were not persuaded that PWDs were a significant focus of PWS planned

activities compared to infrastructure-related activities (roads, tracks, bridges, visitor services).

We did note however that some weed management was undertaken by volunteer groups, such as Wildcare and Friends of Mt Field.

3.3.3 *Monitoring of PWD threats*

PWS had no routine monitoring process addressing PWD threats identified in PMPs or other planning documents.

We were advised that PWS monitored PWD risks via rangers logging observed risks and hazards into the EMS system. However, on examination we found less than one per cent of 3638 planned or completed tasks related to PWDs. PWS advised that development of EMS was a work in progress.

Section 3.3 conclusion

PWS had identified and documented PWD threats, however the documents were in some cases more than ten years out-of-date. There was little evidence of strategies or actions to control threats and no routine monitoring process.

Restated recommendation 3

We recommend that PWS:

- update its PMPs and revise every five years
- use the PMPs as a basis for regular monitoring of high-value assets and threats.

Recommendation 5

We recommend PWS place greater emphasis on monitoring PWD threats and planning strategies and actions to control them.

Recommendation 6

We recommend that PWS further develop and implement EMS to ensure greater monitoring of threats.

3.4 *Had PWS managed threats from human impact?*

Inappropriate development can pose a threat or dilute the attraction of national parks. In addition, increasing numbers of visitors can also be a threat to a park's natural values if not properly managed. Also relevant is the government's recent decision to increasingly open national parks to consideration of development proposals.

In this Section, we looked at whether PWS had strategies to manage potential threats from people.

3.4.1 Identification of threats from human impact

All PMPs dealt with threats from development. They also contained policies and actions aimed at managing visitor impact. However, as noted in Section 2.2, most PMPs were outdated. In addition, they were necessarily discussing threats at a broad level, rather than looking at current proposals.

Of greater current importance, PWS had:

- a 2014 *Reserves Standards Framework* that used management zones (visitor services, recreation, conservation, remote) to specify standards for allowed uses, including development and recreational infrastructure. Any new developments planned within national parks were guided by the management zoning framework.
- the RAA process, which was used by PWS to assess the environmental, social and legislative impacts of any activity or development in parks and reserves. All RAAs must conform to the management zoning framework. The RAA process also allowed PWS to engage with stakeholders with regard to environmental threats.

We were mainly satisfied that the framework and RAA process met our threat-identification criteria, with our only concern being a lack of attention to the risk of vandalism in many of the PMPs and the framework and a lack of strategies to address the risk.

3.4.2 Strategies and actions to manage threats from human impact

Strategies drawn from the PMPs that were widely used by PWS to manage the impact of people on parks included:

- visitor education: PWS uses extensive educational materials available on its website and at visitor centres to educate visitors on minimising human impact on the parks.
- placing limits on group numbers: A number of tracks, including 'The Overland Track', now have limits on the number of people using them during the peak summer period.

With regard to development and maintenance applications, PWS's main strategy is use of the RAA process. We tested a sample of RAAs for compliance with the *Reserves Standards Framework*. Eighty seven per cent of RAAs had been found to comply. The remaining 13 per cent did not initially comply with

standards for the applicable zone. The main strategies in response to initially non-compliant assessments were:

- rejection of the application
- amendment to the application to comply with zone standards
- re-zoning the location, where appropriate to do so
- documenting risks to be managed.

3.4.3 *Consideration of risks related to human impact*

PWS had guidelines that outlined uncontrolled and controlled risks and the impacts of activities in a generic form. Risks discussed included development, vandalism, theft and pollution.

In addition, PWS uses RAAs to assess whether activities proposed on its managed land are environmentally, socially and economically acceptable. From examination of a sample of RAAs we found that risks from human impact had been consistently considered. Risks considered included risks relating to flora, fauna, biosecurity, cultural and activity hazards.

While RAAs outlined ways to mitigate identified risks, they do not document ongoing risk monitoring and we were not aware of any system for doing so.

Section 3.4 conclusion

Threats from human impact were generally well managed using the *Reserves Standards Framework* and RAAs. However, we were not persuaded that there was an effective system for monitoring identified risks.

Recommendation 7

We recommend that risks identified in RAAs are transferred to a risks register and regularly monitored.

3.5 *Conclusion*

We concluded that PWS was effectively managing bushfires as fire management plans existed across all national parks. Objectives and related strategies to address bushfire risks were identified and a bushfire risk assessment model had been implemented.

PWS had identified and documented PWD threats, but the documents were in some cases more than ten years out-of-date. There was little evidence of strategies or actions to control threats and no routine monitoring process.

Threats from human impact were generally well managed using the *Reserves Standards Framework* and RAAs. However, we were not persuaded that there was an effective system for monitoring identified risks.

4 Was PWS effectively managing infrastructure and visitor safety?

4 Was PWS effectively managing infrastructure and visitor safety?

4.1 Background

PWS is responsible for managing infrastructure, visitor facilities and ensuring visitor safety. We examined whether PWS had:

- defined objectives (Section 4.2)
- developed and implemented maintenance plans (Section 4.3)
- monitored risks (Section 4.4).

4.2 Had PWS defined objectives for infrastructure and visitor safety?

Infrastructure planning mechanisms were included in PMPs, the 2014 *Reserves Standards Framework* and regional business plans.

PMPs outlined infrastructure objectives. Examples included:

- provide for and encourage visitors throughout the year
- provide a range of visitor services and opportunities consistent with the values of the park
- concentrate visitor services development in designated locations.

However, the PMPs were outdated which lessened their usefulness to the planning process.

The 2014 *Reserves Standards Framework* documented infrastructure and visitor safety requirements on a zone basis. Examples of requirements included:

- stopover visitors to have sealed road access, flushing toilets in a fully lined amenities building and disabled access
- easy access campers to have two wheel drive access, a basic toilet building and defined campsites
- bush camping remote visitors can expect no services or facilities.

The framework took into account applicable legislation such as the *Public Health Act 1997*. The framework also precluded inappropriate infrastructure from remote wilderness areas.

Regional business plans provided an up-to-date lower-level list of infrastructure objectives and priorities based on a point-score system which included safety, conservation and visitor benefit.

Section 4.2 conclusion

PWS had defined high-level objectives and safety requirements. In addition, current regional planning documents provided up-to-date infrastructure objectives and priorities.

4.3 *Had PWS developed and implemented infrastructure maintenance plans?*

PWS's *Reserves Standards Framework* dictated the standard of assets provided in parks and reserves, as per designated zones. Applicable standards were listed for assets such as buildings, toilets, roads and tracks. For example, the main standard for buildings and structures was the *National Construction Code* and for walking tracks it was the *Australian standard for walking tracks (AS 2156)*.

Maintaining assets to the standards specified in the framework involved either regular condition assessments or planned maintenance programs. Frequency of assessments and planned maintenance was based on risk assessments that took into account factors such as health, safety and asset structure. For example, an elevated structure would be scheduled for regular inspections and an engineering assessment every five years. Inspections and maintenance programs were incorporated in PWS's asset system.

For this criterion, we reviewed:

- whether maintenance was being scheduled for national park assets
- whether safety inspections were being performed.

From our audit sample, we found that maintenance and inspections had been scheduled and performed for 48 per cent of park assets in 2014. It appeared that maintenance and inspections was consistently scheduled for highly used assets such as visitor centres and major roads.

On the other hand, maintenance did not appear to be specifically scheduled for less used assets, such as walking and four wheel drive tracks. There was some evidence that the asset maintenance system was not yet fully accurate and also that more maintenance work was being performed than documented.

PWS acknowledged that given its substantial acquisition of roads from FT, a more strategic approach was required to determine those roads to be retained/maintained and regularly inspected and those to be decommissioned.

Section 4.3 conclusion

Highly used infrastructure was being effectively maintained, but there was little evidence of a structured maintenance program for less used assets such as walking and four wheel drive tracks.

Recommendation 8

We recommend that a more structured approach be developed that ensures all infrastructure is adequately maintained and kept safe at a level commensurate with use and PWS capability.

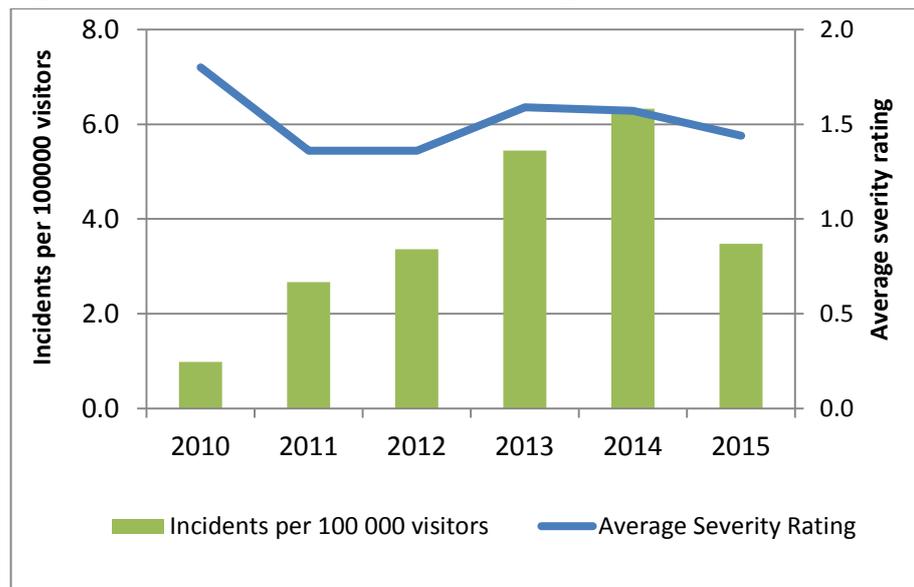
4.4 *Was PWS monitoring infrastructure and visitor risks?*

PWS had a visitor risk management policy that included regular monitoring (condition inspections) and review of assets.

Our analysis of EMS data found that PWS had undertaken 323 condition inspections 2015–16.

PWS used the number and severity of incidents to indicate the adequacy of its condition inspections and risk reviews over time. Results over five years are shown in Figure 5.

Figure 4: Number of incidents and severity¹⁷ 2010–15



Source: TAO, based on PWS data

While the average severity rating had remained reasonably steady since 2010, there had been a constantly increasing number of incidents until a sharp decline in 2015. PWS also advised there have been no visitor incident insurance claims since 2007.

A particular issue brought to our attention during the audit was that where emergency services had performed rescues in national parks, PWS was not always made aware of the details of these incidents. This lack of knowledge could result in PWS not being able to assess whether there may be an ongoing safety concern and taking action to prevent a reoccurrence.

¹⁷ Severity of incidents were rated by PWS as:

- 1 first aid e.g. bandage
- 2 disabling injury e.g. fracture
- 3 severe injury e.g. amputation
- 4–6 very serious/catastrophic injury resulting in fatality or multiple fatalities.

Section 4.4 conclusion

We were satisfied PWS had an extensive inspection regime. However, the safety statistic of incidents per 100 000 had trended sharply upward from 2010 to 2014.

Recommendation 9

We recommend that PWS investigate whether the upward trend in incidents per 100 000 from 2010 to 2014 is an indicator of falling safety standards.

Recommendation 10

We recommend PWS liaise with emergency services to ensure it is provided with information of rescues performed by them.

4.5 Conclusion

PWS had generally effective processes to manage infrastructure and visitor safety, in that it:

- had adequately defined high-level objectives and safety requirements
- had outlined infrastructure objectives and priorities
- was effectively maintaining highly-used infrastructure
- had an extensive inspection regime.

However, we had concerns that the safety statistic of incidents per 100 000 had trended sharply upward from 2010 to 2014.

Independent auditor's conclusion

Independent auditor's conclusion

This independent conclusion is addressed to the President of the Legislative Council and to the Speaker of the House of Assembly. It relates to my performance audit on how effectively the Parks and Wildlife Service (PWS) manages the state's national parks.

Audit objective

The objective of the audit was to form an opinion on how effectively PWS manages the state's national parks by reference to the adequacy of:

- planning processes
- plan implementation.

Audit scope

This audit assessed performance of the PWS over the period 2010–15.

The audit scope included national parks, but largely excluded other parks and reserves.

Management responsibility

The Secretary for the Department of Primary Industries, Parks, Water and Environment was responsible for ensuring PWS effectively manages the state's national parks

Auditor-General's responsibility

In the context of this performance audit, my responsibility was to express a conclusion on how effectively PWS manages the state's national parks.

I conducted my audit in accordance with Australian Auditing Standard ASAE 3500 *Performance Engagements*, which required me to comply with relevant ethical requirements relating to audit engagements. I planned and performed the audit to obtain reasonable assurance that PWS was effectively managing the state's national parks.

My work involved obtaining evidence that PWS was effectively planning for the management of:

- logical allocation of funding and resources
- high-value assets
- threats, such as bushfires, pests, weeds and diseases (PWDs)
- development activities
- park infrastructure

- visitor safety.

Auditor-General's conclusion

Based on the audit objective and scope and for reasons outlined in this Report, it is my conclusion that:

- PWS had developed and implemented a logical process to guide allocation of recurrent funding to parks. On the other hand, only a small percentage of priorities in regional business plans related to PWD control. We were not persuaded that sufficient priority was being given to PWD control.
- Despite an initial decline in appropriation per hectare following the transfer to PWS of the Forestry Tasmania reserves, pre-transfer levels were restored by 2014–15. Nonetheless, 2014–15 appropriation per hectare continued to be low compared to other jurisdictions or funding of PWS in previous years.
- PWS had identified high-value assets and had processes to ensure they were taken into account when considering new processes and proposals. However, park management plans (PMPs) were outdated.
- PWS was carrying out some actions relevant to protection of high-value assets. However, there was no systematic process by which identified high-value assets or threats to them were routinely monitored or managed.
- PWS was effectively managing bushfires as fire management plans existed across all national parks. Objectives and related strategies to address bushfire risks were identified and a bushfire risk assessment model had been implemented.
- PWS had identified and documented PWD threats, but the documents were in some cases more than ten years out-of-date. There was little evidence of strategies or actions to control threats and no routine monitoring process.
- Threats from human impact were generally well managed using the *Reserves Standards Framework* and reserve activity assessments, but we were not persuaded that there was an effective system for monitoring identified risks.

- PWS had generally effective processes to manage infrastructure and visitor safety.

Rod Whitehead
Auditor-General
15 November 2016

Recent reports

Recent reports

Tabled	No.	Title
July	No. 1 of 2015-16	Absenteeism in the State Service
August	No. 2 of 2015-16	Capital works programming and management
October	No. 3 of 2015-16	Vehicle fleet usage and management in other state entities
October	No. 4 of 2015-16	Follow up of four reports published since June 2011
November	No. 5 of 2015-16	Financial Statements of State entities, Volume 2 — Government Businesses 2014-15
November	No. 6 of 2015-16	Financial Statements of State entities, Volume 3 — Local Government Authorities and Tasmanian Water and Sewerage Corporation Pty Ltd 2014-15
December	No. 7 of 2015-16	Financial Statements of State entities, Volume 1 — Analysis of the Treasurer's Annual Financial Report, General Government Sector Entities and the Retirement Benefits Fund 2014-15
February	No. 8 of 2015-16	Provision of social housing
February	No. 9 of 2015-16	Funding of Common Ground Tasmania
May	No. 10 of 2015-16	Financial Statements of State entities, Volume 4 — State entities 30 June and 31 December 2015 findings relating to 2014-15 audits and other matters
June	No. 11 of 2015-16	Compliance with legislation
September	No. 1 of 2016-17	Ambulance emergency services
October	No. 2 of 2016-17	Workforce Planning in the Tasmanian State Service
October	No. 3 of 2016-17	Annual Report 2015-16
October	No. 4 of 2016-17	Event funding

Current projects

Current projects

The table below contains details of performance and compliance audits that the Auditor-General is conducting and relates them to the *Annual Plan of Work 2016–17* that is available on our website.

Title	Audit objective is to...	<i>Annual Plan of Work</i> reference
Tasmanian Forests Intergovernmental Agreement	... assess the effectiveness of the state's administration of projects listed for implementation by the Tasmanian Government, under the Tasmanian Forests Intergovernmental Agreement 2011 and 2013.	Page 19 Topic No. 1
Follow-up audit	... measure the extent to which audit clients implemented recommendations contained in four reports of the Auditor-General tabled between September 2011 and June 2014.	Page 24 Topic No. 9
Tasmanian prisons	... review the management of Tasmanian prisons including security, reduction in recidivism and cost control/efficiency considerations. Also, explore the impact of prisoner release program run by nongovernmental organisations (NGOs) such as Bethlehem House.	Page 17 Topic No. 1

Appendix 1 Tasmanian parks and reserves

Appendix 1 Tasmanian parks and reserves

A1.1 Reserves

Reserves are declared under the *Nature Conservation Act 2002*, which sets out the values and purposes of each reserve class and managed under the *National Parks and Reserves Management Act 2002* according to management objectives for each class.

In total, the PWS manages 823 terrestrial and marine reserves covering about 2.9 million hectares. The terrestrial (land based) reserves cover 40 per cent of the land area of the state. Total areas of reserves are shown in Table 3.

Table 3: Tasmanian reserve classes

Reserve class	Number of reserves	Total Area (ha)
National Parks	19	1 515 793
State Reserve	65	47 116
Nature Reserve	86	118 977
Game Reserve	12	20 389
Conservation Area	438	616 640
Nature Recreation Area	25	67 340
Regional Reserve	148	454 286
Historic Site	30	16 051

Source: PWS

A1.2 National parks

A national park is a large area which is reserved for conservation purposes. National parks typically have the following characteristics:

- ecosystems not materially altered by human exploitation and occupation
- landscapes, habitats, species of special scientific, educational, recreational or aesthetic value
- statutory legal protection
- visitors allowed, subject to conditions
- budget and staff sufficient to provide effective protection.

Tasmania's 19 national parks cover 1.5 million hectares (ha) and are renowned both within Australia and overseas. They attract over 800 000 visitors annually with this number expected to further increase in the future. The parks contain iconic attractions such as Wineglass Bay, the Overland Track and Cradle Mountain. Much of Tasmania's tourism strategy is built around its natural beauty and appeal to tourists both interstate and overseas.

Tasmania's national parks are listed in Table 4.

Table 4: Tasmanian national parks

Name	Location	Area (ha)	Year first gazetted	Description
Ben Lomond	North-east	18 192	1947	<ul style="list-style-type: none"> ▪ 1500 metre high alpine plateau ▪ Ski fields ▪ Wide variety of flora and fauna (particularly birdlife)
Cradle Mountain-Lake St Clair	West central	161 204	1922	<ul style="list-style-type: none"> ▪ World famous mountainous landscape including Cradle Mountain, Dove Lake and Tasmania's tallest mountain: Mount Ossa ▪ Used by Aboriginal people for thousands of years ▪ Diverse mosaic of vegetation communities ▪ Stands of ancient plants of Gondwanan origins, including King Billy pine and celery top pine ▪ Diverse wildlife including rare quolls ▪ The Overland Track
Douglas Apsley	East coast	16 086	1989	<ul style="list-style-type: none"> ▪ Dry sclerophyll forest ▪ Deep river gorges and waterfalls ▪ Colourful heathlands

Name	Location	Area (ha)	Year first gazetted	Description
Franklin-Gordon Wild Rivers	Southwest	446 342	1939	<ul style="list-style-type: none"> ▪ In the heart of the Tasmanian Wilderness World Heritage Area ▪ Dramatic mountain peaks, beautiful rainforest, wild and deep river valleys and gorges ▪ Many Aboriginal sites extending back over 36 000 years ▪ Convict heritage ▪ Subject of Australia's largest conservation battle
Freycinet	East coast	16 803	1916	<ul style="list-style-type: none"> ▪ Two eroded blocks of granite joined by a sand isthmus ▪ Imposing granite peaks ▪ White sandy beaches ▪ Wide variety of flora and fauna ▪ Wineglass Bay
Hartz Mountains	South	7140	1939	<ul style="list-style-type: none"> ▪ Dolerite mountains, modified by ice ages ▪ Geological features including cirques, horn peaks, arêtes, glacial lakes and troughs ▪ Eucalypt forest, alpine plants, Tasmanian waratah
Kent Group	North-east Bass Strait	2374	2001	<ul style="list-style-type: none"> ▪ A small group of islands ▪ Limestone and limesand deposits ▪ Significant transition zone between mainland and Tasmanian floras ▪ Important fur seal breeding site and bird sanctuary

Name	Location	Area (ha)	Year first gazetted	Description
Maria Island	East coast	11 550	1972	<ul style="list-style-type: none"> ▪ Historic ruins ▪ Rugged cliffs and mountains ▪ Wide variety of wildlife
Mole Creek Karst	North Central	1345	1996	<ul style="list-style-type: none"> ▪ Over 300 known caves and sinkholes ▪ Gorges and large underground streams and springs. ▪ Highly visited caves ▪ Cave animals, including spectacular glow-worm displays
Mount Field	South Central	15 881	1916	<ul style="list-style-type: none"> ▪ Glaciated landscapes, ▪ Some of the world's tallest eucalypt forests ▪ Network of excellent walking tracks ▪ Russell Falls ▪ Ski fields
Mount William	North-east	18 439	1973	<ul style="list-style-type: none"> ▪ Coastal park ▪ Amazing diversity of animals including Forester kangaroos, wombats, pademelons and echidnas
Narawntapu	North coast	4349	1976	<ul style="list-style-type: none"> ▪ First Tasmanian park to revert to an Aboriginal name (means 'badger') ▪ Rich in both Aboriginal and European heritage ▪ Wide variety of wildlife and wild flowers

Name	Location	Area (ha)	Year first gazetted	Description
Rocky Cape	North-west Coast	3064	1967	<ul style="list-style-type: none"> ▪ Coastal heath ▪ Coastal aboriginal used this area 10 000 years ago. The area provides one of the most complete records of their lifestyle ▪ Geologically the park features some of the oldest rocks in Tasmania, showing their age in the form of complex fractures and folds
Savage River	North-west	17 980	1999	<ul style="list-style-type: none"> ▪ Remote, true wilderness park is largely inaccessible and has no visitor facilities ▪ One of the few remaining temperate wilderness areas left on Earth ▪ Rich primitive flora ▪ Part of the Tarkine region
South Bruny	Southeast	5059	1997	<ul style="list-style-type: none"> ▪ Wild seascapes, sea cliffs, birdlife, ▪ Tall forests ▪ Lighthouse ▪ Important Aboriginal sites
Southwest	Southwest	618 190	1951	<ul style="list-style-type: none"> ▪ Rugged wilderness ▪ Spectacular views ▪ South Coast Track
Strzelecki	Northeast (Flinders Island)	4 15	1967	<ul style="list-style-type: none"> ▪ High granite outcrops ▪ Wide variety of wildlife including potoroos ▪ Important stopover for migrating birds ▪ Rare and threatened species including parrots, pardalotes and frogs

Name	Location	Area (ha)	Year first gazetted	Description
Tasman	Southeast (Tasman Peninsula)	10 750	1917	<ul style="list-style-type: none"> ▪ Dry sclerophyll forest, ▪ Rugged coastline and spectacular features such as the Tasman Arch ▪ Wide range of land and marine animals, and rare plants ▪ Three Capes Track
Walls of Jerusalem	West central	51 800	1981	<ul style="list-style-type: none"> ▪ Alpine plateau ▪ Wild landscape including moraines, tarns, lakes and precipitous dolerite peaks ▪ Stands of pure pencil pine forest

Source: Parks and Wildlife Service, *Visitor Guide: Tasmania's Parks and Reserves*,

< <http://www.parks.tas.gov.au/?base=236> >

AUDIT MANDATE AND STANDARDS APPLIED

Mandate

Section 17(1) of the *Audit Act 2008* states that:

‘An accountable authority other than the Auditor-General, as soon as possible and within 45 days after the end of each financial year, is to prepare and forward to the Auditor-General a copy of the financial statements for that financial year which are complete in all material respects.’

Under the provisions of section 18, the Auditor-General:

‘(1) is to audit the financial statements and any other information submitted by a State entity or an audited subsidiary of a State entity under section 17(1).’

Under the provisions of section 19, the Auditor-General:

‘(1) is to prepare and sign an opinion on an audit carried out under section 18(1) in accordance with requirements determined by the Australian Auditing and Assurance Standards

(2) is to provide the opinion prepared and signed under subsection (1), and any formal communication of audit findings that is required to be prepared in accordance with the Australian Auditing and Assurance Standards, to the State entity’s appropriate Minister and provide a copy to the relevant accountable authority.’

Standards Applied

Section 31 specifies that:

‘The Auditor-General is to perform the audits required by this or any other Act in such a manner as the Auditor-General thinks fit having regard to –

- (a) the character and effectiveness of the internal control and internal audit of the relevant State entity or audited subsidiary of a State entity; and
- (b) the Australian Auditing and Assurance Standards.’

The auditing standards referred to are Australian Auditing Standards as issued by the Australian Auditing and Assurance Standards Board.



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