



Barking up the wrong trees

WA's Forest Products Commission (FPC) and the performance of its native forestry

The WA FPC has received more financial support from the government than it has generated in profit. FPC's native forestry operations have posted repeated losses, and log quality and forest values have steadily declined. Relatively few people are employed in native forestry. A plan for transition would protect both forests and state finances.

Discussion paper

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Summary

The Forest Products Commission (FPC) is a statutory body wholly owned by the Western Australian government. Its primary function is to conduct forestry activities on a commercial basis in state-owned forests, including softwood plantations, sandalwood and native forests.

The FPC is responsible for most of Western Australia's (WA) native forestry, which occurs in the state's South West (SW) forests. The SW forests of WA lie within one of the world's 36 Global Biodiversity Hotspots and include jarrah and karri forests found nowhere else. While some areas are off-limits, logging and forestry operations continue in other areas.

Native forestry in the SW forests is a small part of the overall WA forestry industry, and one that has seen declining production and quality. WA forestry is dominated by the growing output from plantations.

While the FPC has a primarily commercial function, it has struggled to make a profit over its 16 years of operation, with losses in many years.

Around half of the accumulated profit since inception is accounted for in an unusually high profit in 2016, a result driven almost entirely by sandalwood. Native forestry posted a loss for the fourth year in a row.

Government contributions to the FPC have exceeded profits and far exceeded dividends. To 2015 FPC paid just \$19 million in dividends, an average of 0.45% of equity. Yet the WA government has provided numerous payments to the FPC. The Annual Reports show net cash payments from the government of \$111 million to the FPC. By comparison, the FPC's accumulated net profit is \$45 million.

The WA government has made numerous 'equity injections' to the FPC. One large equity injection in 2012 left the FPC without its former loans to WA Treasury. Since the WA government wholly owns the FPC, this is equivalent to a debt write-off. Net of equity injections, equity in real terms has declined substantially since 2003. There have been other forms of government assistance.

The native forestry division has benefited from the government support to the FPC. Despite this, it has seen profits decline to low levels over the past decade, and net losses over the last four years totalling \$34 million.

This trend has been associated with:

- Declining production volumes;
- Declining quality, with an increasing majority of production going to chiplogs, firewood and charcoal, and other lower quality products;
- Declining recovery rates for turning sawlogs into sawn timber, which are well below those of other states;
- Declining yield of sawlogs per hectare of native forest logged.

The FPC values its forests as assets based on expected cash flows, considered purely as an asset for forestry, and changes in asset values are booked as a profit or loss. Nearly all of the recorded increases in forest values have been due to changes in accounting methods. Following these changes, forest value and profits have both declined. The value of native forests has declined by a third since 2012 and in real terms they have lost nearly half of their value over the last decade.

The challenges faced by the FPC in native forestry are found nation-wide. State-owned companies, often heavily involved in native forestry, have been posting losses as they struggle with numerous structural changes in forest products markets and decline in quantity and quality of logs.

The poor and deteriorating performance of FPC native forestry raises concerns about the employment it provides. Native forestry employs relatively few people in WA, here estimated to be between 170 and 330 people. There are further jobs in sawmills processing FPC native sawlogs, estimated here at 130. For context, total employment in the state exceeds 1.3 million. Forestry employment has declined over the past 15 years, while state-wide employment has grown substantially over the same period.

FPC native forestry is now in decline and running at a loss, creating a need for a transition plan. Such a plan would include forest product substitution – for example, using existing alternatives for lower quality material and plantation logs for structural purposes. It would also take advantage of the alternative economic uses of the forests – for example tourism, carbon abatement, wildflower harvesting and honey production.

Combined with the environmental implications of continued logging operations in the unique SW forests of WA, there are strong arguments for a transition out of native forestry. Given alternatives, the forests are worth more to the state left standing. The relatively few workers that would be affected could be assisted with a transition plan.

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NOTES

The Western Australia Forest Alliance commissioned this analysis of the FPC’s native forestry operations. Unless otherwise noted, all data come from FPC Annual Reports and years refer to the financial year.

Introduction

FORESTS AND FORESTRY IN WA

Western Australia's South-West forests are made up of some 2.4 million hectares of native forest.¹ These forests are mostly jarrah or karri, often found in association with marri. These types of forest are found nowhere else in the world. Forests of tuart and wandoo also occur in this region.

The forests lie within one of the world's 36 Global Biodiversity Hotspots. These are areas where over 1,500 unique plant species are found (WA's SW forests have 2,948) but less than 30% of original vegetation remains.² The forests provide habitat for several endangered species, including WA's official animal – the numbat.³ When they are logged, little or no shelter and support are left for plants and animals.

Despite their ecological significance, WA's SW forests continue to be logged. Logging of forest identified as "old-growth" is prohibited, but logging of areas that "contain old trees" is permitted.⁴ Jarrah trees over 400 years old and karri trees over 500 years old continue to be felled.⁵ Jarrah and karri timber has a distinct, beautiful appearance that historically has made it popular for furniture and other high-value products. Despite this, most native trees cut down in Western Australia are used for paper pulp, charcoal or firewood.⁶

While native forestry has important environmental implications, it is a small part of the WA forestry industry, and has declined by a third over the last decade. The vast bulk of

¹ DPaW (2013) *Forest Management Plan 2014–2023*, p 8:

https://www.dpaw.wa.gov.au/images/documents/conservation-management/forests/FMP/20130282_WEB_FOREST_MGT_PLAN_WEB.pdf

² Conservation International (2016) *Hotspots*: <http://www.conservation.org/How/Pages/Hotspots.aspx>;

Critical Ecosystem Partnership Fund (2016) *Southwest Australia*:

<http://www.cepf.net/resources/hotspots/Asia-Pacific/Pages/Southwest-Australia.aspx>

³ Critical Ecosystem Partnership Fund (2016) *Southwest Australia*.

⁴ Paddenburg (2014) *Jarrah trees up to 400 years old cut down in Challar Forest*:

<http://www.perthnow.com.au/news/western-australia/jarrah-trees-up-to-400-years-old-cut-down-in-challar-forest/story-fnhocxo3-1226848998371>

⁵ Paddenburg (2014) *Jarrah trees up to 400 years old cut down in Challar Forest*; Paddenburg (2012)

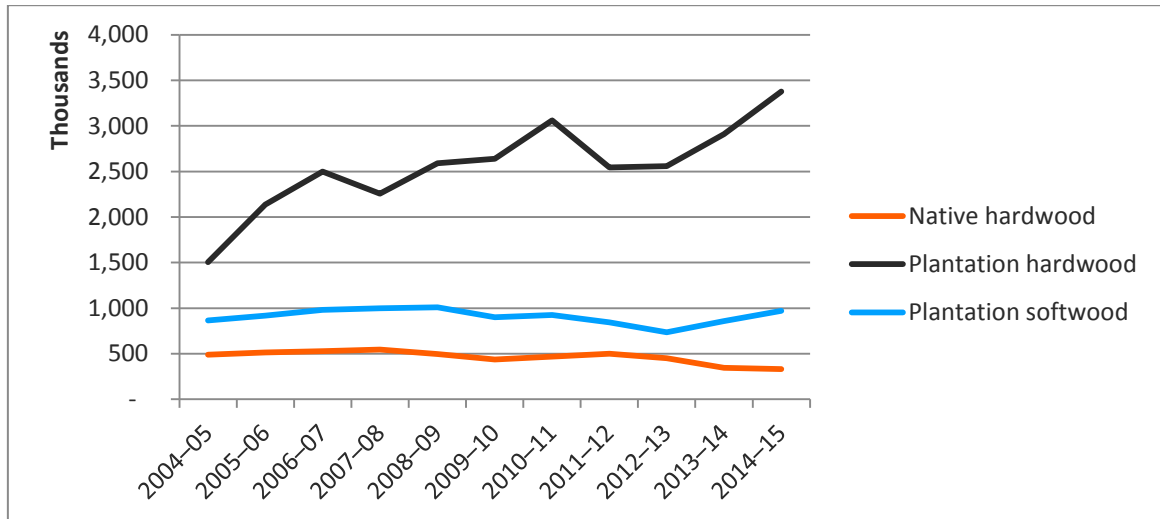
Ancient karri trees destroyed by woodchippers, say environmentalists:

<http://www.theaustralian.com.au/news/ancient-karri-trees-destroyed-by-woodchippers-say-environmentalists/story-e6frg6n6-1226495048156>

⁶ FPC (2015) *Annual Report*, pp 134–135.

WA forestry is focused on plantation forestry. Plantation hardwood production for chiplogs has more than doubled over the last decade, as shown in Figure 1 below.

Figure 1 - WA Forest production by volume (m3)



Source: ABARES (September and December quarters 2015) *Tabular data of Australian forest and wood products statistics summary statistics*

Chiplog production from hardwood plantations has more than doubled over the last decade and now makes up nearly three-quarters of WA forestry annual production by volume. By contrast, native forestry has seen a steady decline in volumes produced, down by a third over the decade.

FOREST PRODUCTS COMMISSION

Most native forestry in WA is conducted by the state-owned Forest Product Commission (FPC).

The FPC is a statutory authority responsible for managing and developing the forest and timber industry on land owned or leased by the state of Western Australia (WA).⁷ Previously this had been the responsibility of Department of Conservation and Land Management (CALM).⁸ The WA government established the FPC in November 2000 to manage state-owned native forests, softwood plantations and sandalwood. The FPC is currently responsible for most of the WA production within these sectors.

⁷ FPC (2015) *Annual Report*.

⁸ FPC (2015) *Annual Report*, p 8.

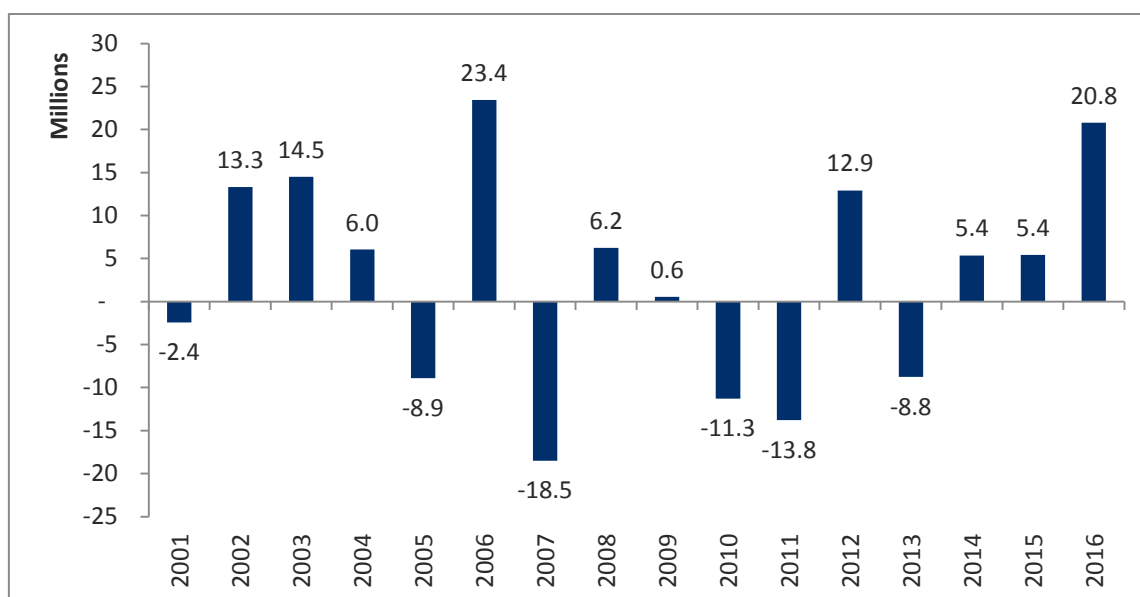
The FPC functions primarily as a commercial body. In terms of FPC revenue and expenditure, the vast bulk of its activities consist in conducting and contracting for forestry, logging, marketing and sale of forest products. The FPC also has non-commercial functions, for example industry development and policy advice.

FPC Financial Performance

PROFIT

Although the FPC aims to be commercially viable,⁹ it has struggled to make a profit over most of its life. Net profit after tax for the FPC overall is shown in Figure 2:

Figure 2 – FPC net profit (after tax and biological asset revaluations)



Source: FPC Annual Reports.

The FPC's accumulated net profit since inception has been \$45 million. This is accounted for in the net profit produced in just two years – 2006 and 2016. Other years show modest profits or losses. This has occurred despite various forms of government assistance, discussed below.

The unusually strong FPC performance in 2016 has occurred despite losses in the native forest segment, and is mostly driven by the increase in sandalwood revenue and biological asset values. This is discussed below.

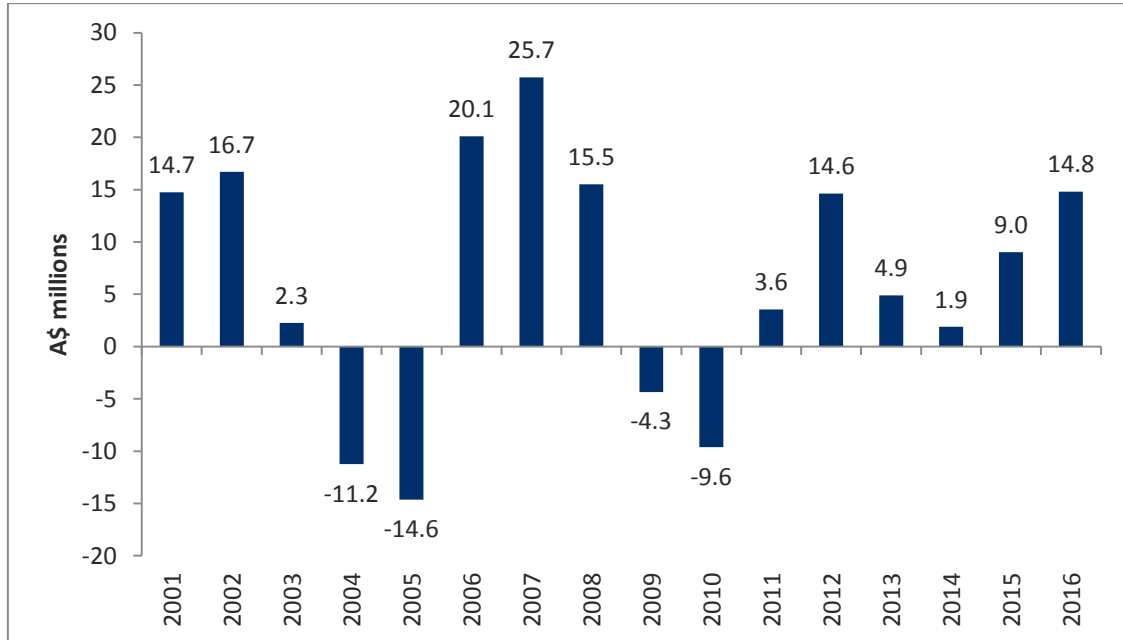
The FPC's net profit figures include tax¹⁰ as well as the impact from annual revaluations of its native forest, plantation and sandalwood assets. Every year the FPC revalues

⁹ FPC (no date) *Vision and Values*: <http://www.fpc.wa.gov.au/vision-and-values>

¹⁰ Technically, 'income tax equivalent expenses': "The FPC operates within the National Tax Equivalent Regime (NTER) whereby an equivalent amount in respect of income tax is payable to the Treasury" in

these assets and changes are recorded as ‘increments’ and ‘decrements’ towards net profit. Figure 3 below shows FPC profit before tax and biological asset revaluations.

Figure 3 – FPC profit before tax and biological asset revaluations



Source: FPC Annual Reports.

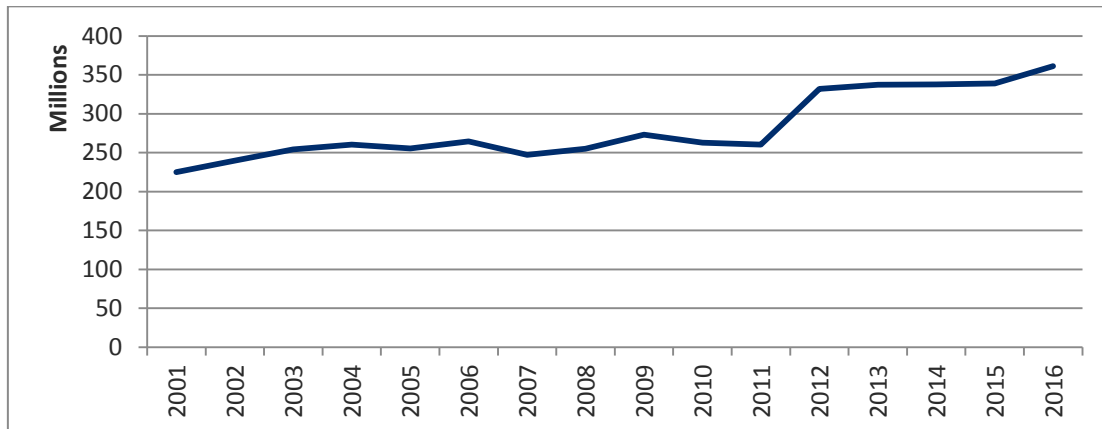
Many large changes in recorded asset values have been associated with changes in accounting methodology, which have also impacted recorded profits. These are discussed below.

FPC Annual Reports, Notes to the Financial Statements, 2.06 Income tax. Accounting standards make clear NTER is to be accounted as a tax not payment to an owner.
 see AASB (2015) *Accounting for income tax of public sector entities*:
http://www.aasb.gov.au/admin/file/content102/c3/M147_15.2_Staff_Issues_Paper_Accounting_for_Income_Tax_of_Public_Sector_Entities.pdf

EQUITY

As shown in Figure 4 below, the equity in the FPC appears to have largely remained flat over the life of its operation, except for the large increase in 2012.

Figure 4 – FPC equity



Source: FPC Annual Reports.

The large increase in 2012 was due to a large ‘equity injection’ from the WA government, its sole shareholder. An equity injection is when a government, or other owner, gives money to a company in exchange for equity. In 2012, the state gave the FPC \$72 million, which it used to pay back the money it owned the state, as shown in the 2012 Annual Report:

Figure 5 – Cash transfer from government used to eliminate debt to government

	2012	2011
	\$'000	\$'000
Borrowings		
<i>Current</i>		
Western Australian Treasury Corporation loans	-	8,342
Total current	-	8,342
<i>Non-Current</i>		
Western Australian Treasury Corporation loans	-	74,465
Total non-current	-	74,465
Total interest bearing borrowings	-	82,807

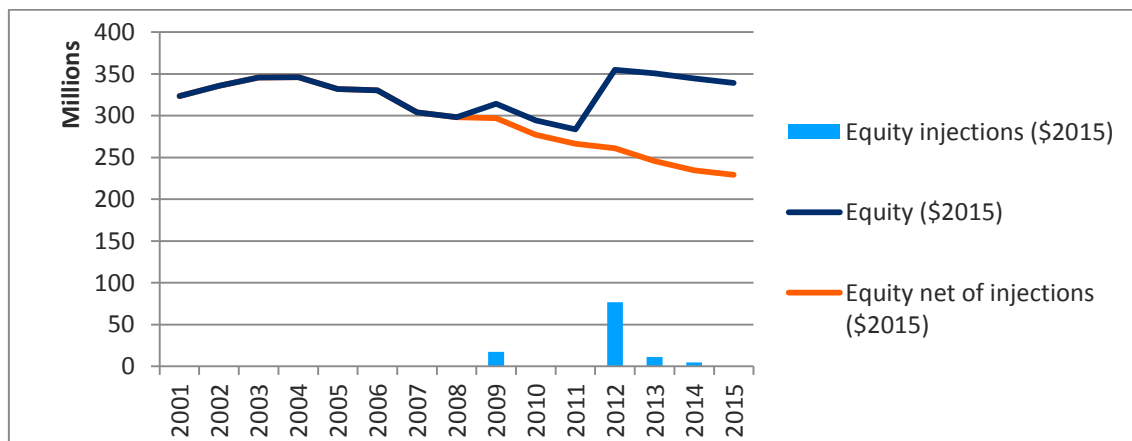
Source: FPC Annual Report 2012, p 86. See also p 53.

Since the state of Western Australia was already the sole shareholder and the holder of the debt that was to be “replaced”, this manoeuvre is equivalent to a debt write-off.

Other, smaller equity injections occurred in 2009, 2013 and 2014, for reasons such as “computers, plant and equipment” and “second rotation investment”.¹¹

Adjusting for inflation and for these equity injections, it is clear that the value of the FPC has been steadily eroded, as shown in Figure 6:

Figure 6 – FPC equity injections



Source: FPC Annual Reports; RBA Inflation Calculator

Figure 6 shows that, in real terms, the value of the FPC to the Western Australian public declined by over \$100 million since the early 2000s.

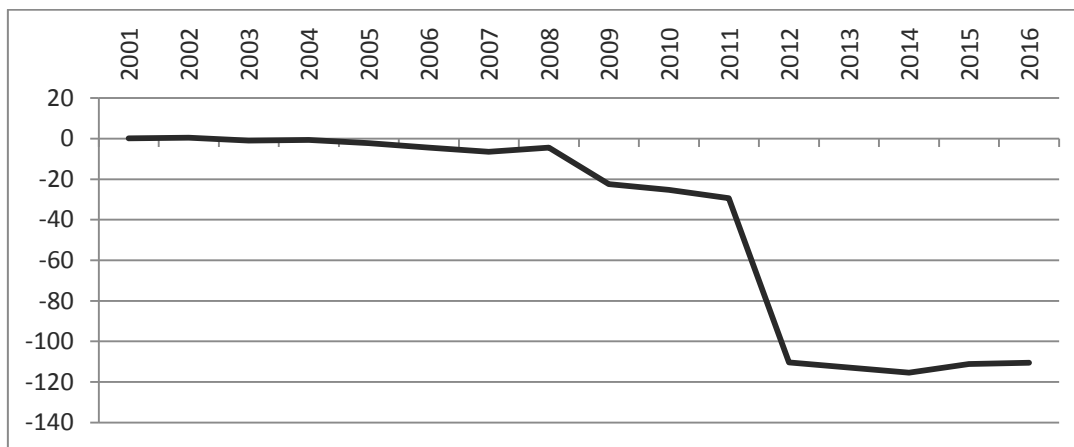
DIVIDENDS AND STATE GOVERNMENT CONTRIBUTIONS

Since its founding in 2000, the FPC has paid the WA government, its sole shareholder, a total of \$19 million in dividends. In five years it paid no dividends at all. The FPC’s dividends have averaged just 0.45% of equity per year.

While the FPC has paid dividends to the government, the government has made much bigger transfers to the FPC. The Annual Reports show net cash provided from the state government – dividends and repayments *to* the state, net of state contributions and loans *from* the state. Figure 7 shows these transactions.

¹¹ FPC (2014) *Statement of Corporate Intent*, p 18.

Figure 7 – WA government return from FPC – accumulated ‘net cash from government’



Note: “Net cash from (to) government” – adjusted to exclude Commonwealth.

Source: FPC Annual Reports.

The net cash flow from the state government to the FPC has been \$111 million, or \$7 million a year. In other words, transfers from the government to the FPC have far exceeded FPC payments to the government. Even excluding equity injections, other state government payments have been more than double the dividend payments.¹²

OTHER GOVERNMENT SUPPORT

The FPC has received a range of government assistance beyond those included above.

Government agencies have supported the FPC through the purchase of native forest products. In 2012, jarrah logs worth \$7.8 million were purchased to make 100,000 railway sleepers. By 2014, almost 194,000 new timber sleepers were used.¹³

Environmentalists have claimed this represents a subsidy, as jarrah sleepers were chosen over longer-lasting concrete sleepers.¹⁴

¹² Categories are not consistent between years. The figures here include contributions *from* the state government for ‘Peel B’ and other land sales, (-\$8.8m), and ‘repayments’ *to* the state government (\$6.3m) and tax equivalent (NTER) payments (\$6.9m). (See note 10 re requirements not to treat NTER payments as payments to an owner.)

¹³ Western Australia Questions without Notice (2014) *Question 621*: <http://scott-ludlam.greensmps.org.au/content/questions-notice/native-timbers-railway-sleepers>

¹⁴ Western Australia Estimates and Financial Operations Committee (2011) *Additional Questions*, p 7: [http://www.parliament.wa.gov.au/parliament/commit.nsf/\(Evidence+Lookup+by+Com+ID\)/7E2FC3EE6BA2E8EC48257D7100104A86/\\$file/Sub+No.+1+20140318+Wafa+The+Wilderness+Society.pdf](http://www.parliament.wa.gov.au/parliament/commit.nsf/(Evidence+Lookup+by+Com+ID)/7E2FC3EE6BA2E8EC48257D7100104A86/$file/Sub+No.+1+20140318+Wafa+The+Wilderness+Society.pdf)

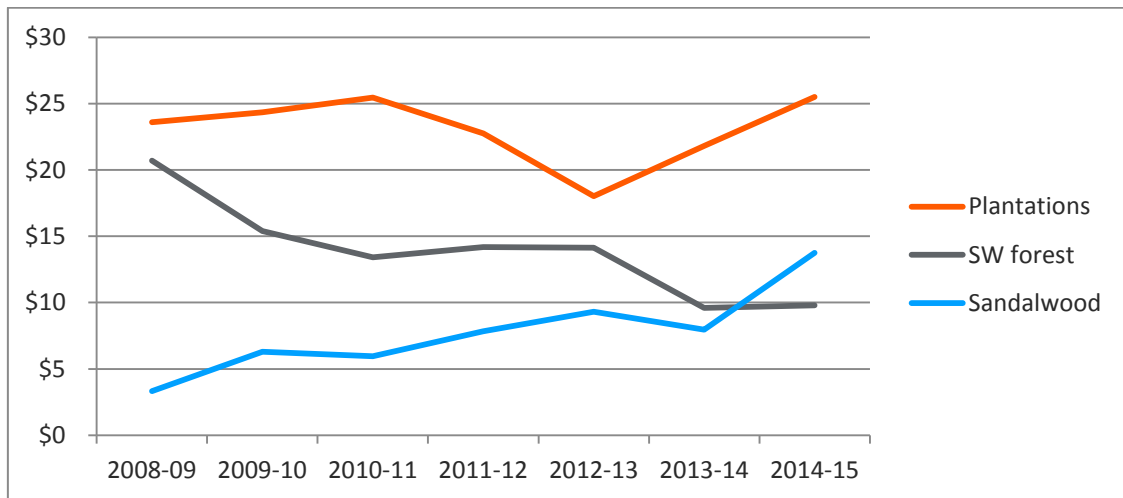
The FPC has also received support from the Commonwealth government. To 2015, it received Commonwealth government contributions of \$37.5 million for activities under the National Action Plan on Salinity and Water Quality.¹⁵

¹⁵ FPC (all years) *Annual Reports*.

FPC Operating Segments

The FPC's three main operating segments – softwood plantations, native forestry (the SW forests) and sandalwood – have experienced varied performance in recent years. Figure 8 below shows the stumpage revenue for these segments. (Stumpage revenue is revenue from forestry, less direct forestry costs. It is not a measure of profit.)

Figure 8 – FPC Stumpage Revenue (millions)

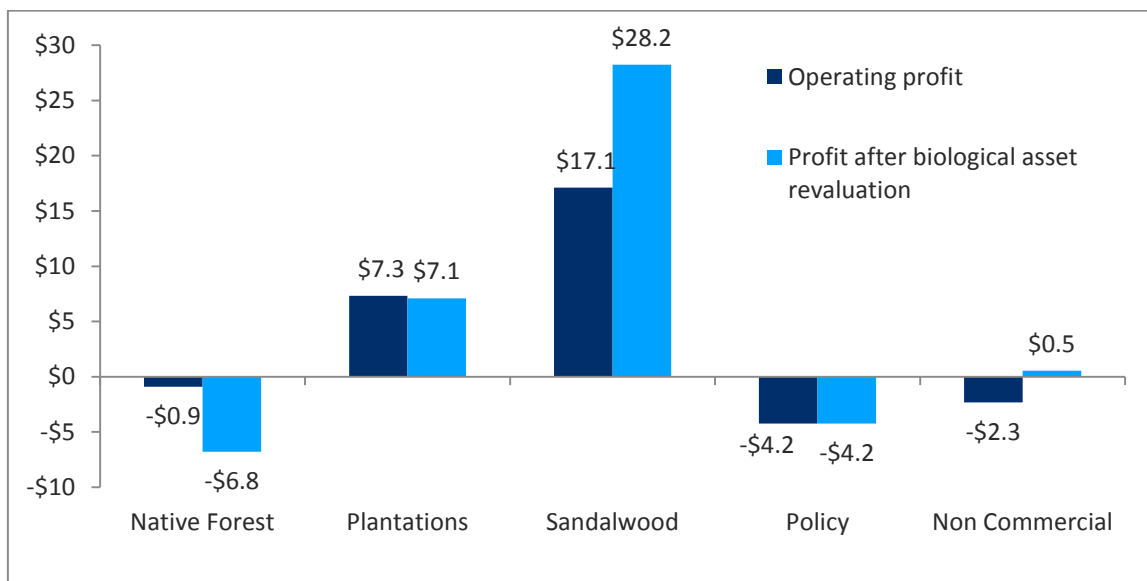


Source: FPC Annual Report 2015, p 64

While native forestry has been in decline, the other segments have performed relatively well. Stumpage revenue from native forestry has halved since 2009. By contrast, sandalwood has tripled its stumpage revenue since 2009 and has now overtaken native forestry. FPC production has long been dominated by softwood plantation production, by both volume and revenue.

The decline in native forestry stumpage revenues has led to losses in the native forest segment, examined in detail in Figure 9 below.

Figure 9 – FPC segment profit in 2016 (millions)



Source: FPC (2016) Annual Report 2015-16

By contrast with losses in native forestry, sandalwood accounted for most of FPC profit in 2016. Plantations also made a small profit.

The FPC plantations have from time to time been considered for privatisation.¹⁶ The state government presumably thinks private buyers will consider the plantations profitable. The current *Softwood Industry Strategy* explains that “Following the recent decision to retain ownership of the plantation estate – the State Government will be investing to expand these assets that are the foundation of the industry.”¹⁷

NON-COMMERCIAL FUNCTIONS

Although the FPC is expected to deliver financial returns to the state from its commercial activities, it also has ‘non-commercial’ functions. The FPC describes them in general terms as “non-core” activities it would not otherwise pursue.¹⁸ Conversely, these are the activities the government may fund even if the FPC did not have a commercial function.

¹⁶ Nahan (2015) *Budget Speech*, p 8: <http://www.ourstatebudget.wa.gov.au/Previous-Budgets/>; Parker (2015) *WA Budget delivers record deficit*: <https://au.news.yahoo.com/thewest/wa/a/27918528/wa-state-budget-2015/#page1>

¹⁷ FPC (2016) *Softwood Industry Strategy*, <http://www.fpc.wa.gov.au/softwoodstrategy>, p 1

¹⁸ FPC (2015) *Annual Report*, p 122.

The Annual Reports mention activities like forestry industry development, policy advice and forest management, but the FPC does not report on these in a consistent or detailed way. In some years there is a 'non-commercial' operating segment, sometimes alongside a 'policy' segment (as in 2016). In most years there are neither. In any case, non-commercial activity is a small part of the FPC's operations.

Most WA forest management activity is carried out by DPaW. In 2015, DPaW spent \$204 million on conservation, Forest Management Plan implementation and fire management and suppression.¹⁹ In the same year, the FPC spent just \$2.6 million in its 'non-commercial' segment.²⁰ DPaW spent nearly 80 times more than the FPC on non-commercial forest-related activities.

¹⁹ Western Australia Department of Treasury (2017) *WA Budget, Budget Papers no 2*, p 536.

²⁰ FPC (2015) *Annual Report*, p 123.

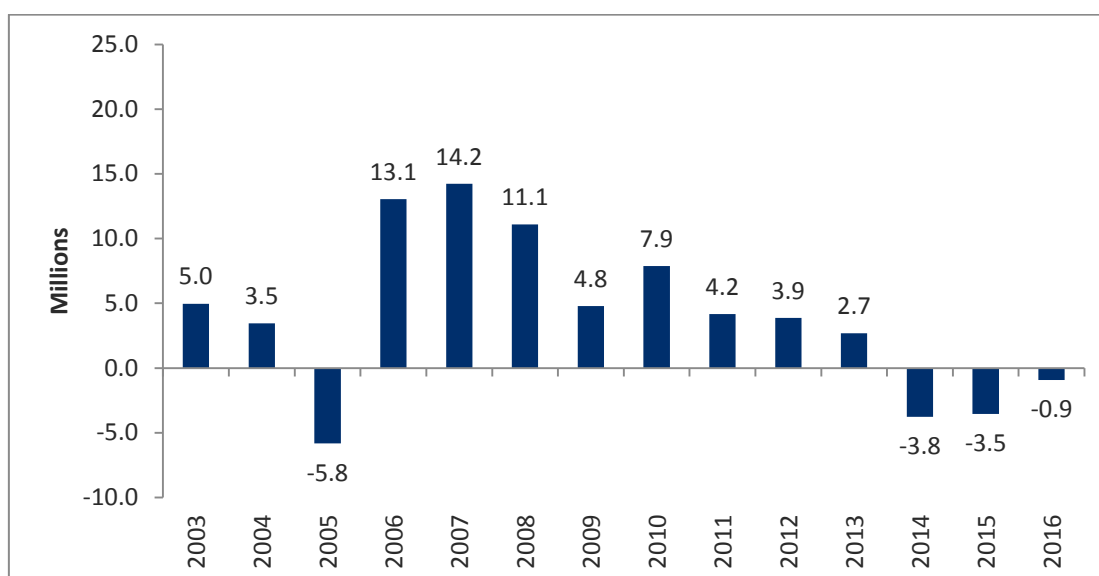
FPC’s native forestry operations

The financial fortunes of the FPC’s native forestry segment have been declining for some years. Profits have declined and in recent years there have been losses. In part, the declining performance of the FPC’s native forestry reflects a decline in quality of the products being produced. Over time, production has shifted from high value sawlogs towards lower value products such as chiplogs and firewood.

DECLINING PROFITS AND INCREASING LOSSES

During some of the more difficult years for the FPC overall, the native forest segment delivered a profit. However, since 2007 native forestry performance has steadily declined and in recent years it has delivered losses, as shown in Figure 10 below.²¹

Figure 10 – SW forests segment profit before tax and biological revaluation



Note: Revised figures pre-2016. Pre-2003 excluded as segment included sandalwood.

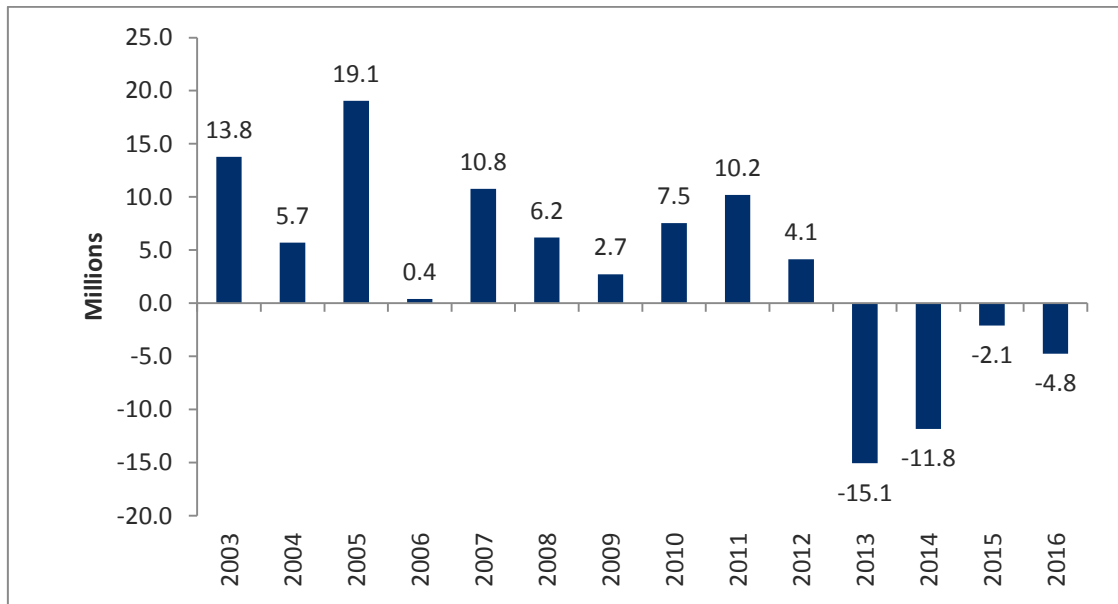
Source: FPC Annual Reports.

²¹ Where available, these figures include the segment’s share of corporate overheads (e.g., business development and corporate support) although it is unclear if these have been treated consistently over time. Between 2005 and 2007, each segment's share of these costs was identified. In other years it is unclear how these are allocated between segments. See for example FPC (2007) *Annual Report*, p 114.

While there were more substantial profits recorded in 2006–2008, since then there has been a clear decline. Losses over the last three years total \$8.2 million.

Another perspective on the SW forest segment comes from profits after tax equivalent and revaluation of forest assets, shown in Figure 11 below:

Figure 11 – SW forests segment net profit after tax equivalent and biological revaluation



Note: Revised figures pre-2016. Pre-2003 excluded as segment included sandalwood.

Source: FPC Annual Reports

Net profits have been modest over the last decade and the segment has recorded losses in each of the last four years. The accumulated profit after tax and revaluation in native forests has been \$46 million or \$3.3 million per year. However, profits have declined and losses over the last four years have totalled \$34 million. In accumulated terms the segment has not been profitable since 2007.

The declining profits and recent losses in native forestry have occurred in the context of government support to the FPC, as discussed above. Indeed, the native forestry segment has delivered losses despite the large “equity injection”.

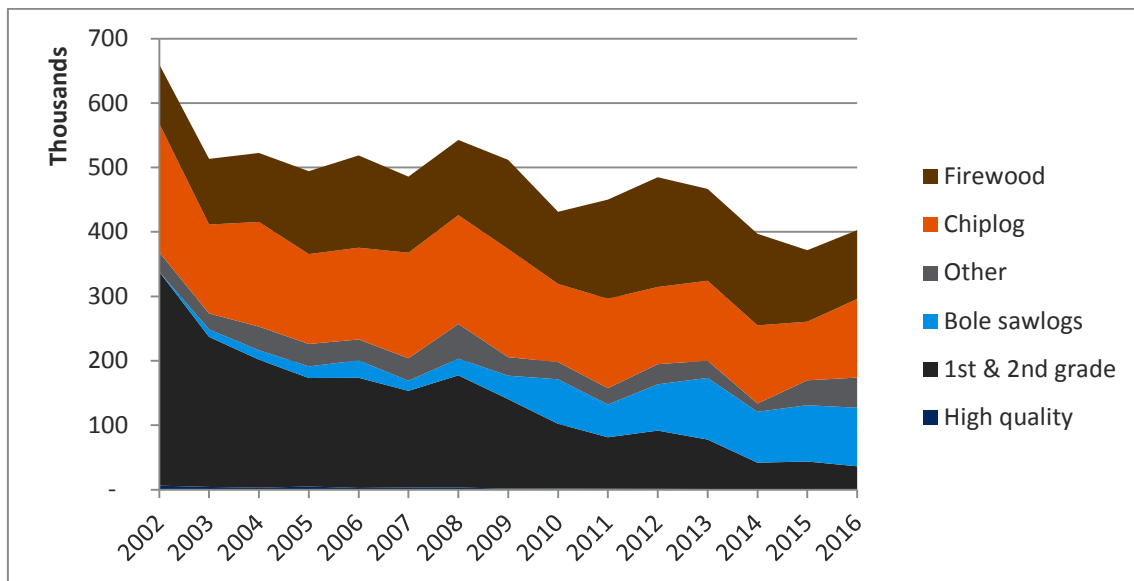
Note that in early years of FPC operation, native forest profits were increased by forest asset revaluations. As discussed in detail below, the increases in native forest values appear to be substantially due to accounting changes. Post-2005, biological revaluations have dragged down net profit from native forestry.

DECLINING PRODUCTION AND QUALITY

Not only has native forest output declined; so has the quality of that output.

In 2002, most of the FPC’s native forest production was first- and second-grade sawlogs: logs met a particular standard. By 2015, logs of these grades had dwindled to a very small share of the FPC’s production. Most native forest production is now going to relatively low value products, as shown in Figure 12.

Figure 12 – Change in native forest production, by variety



Source: FPC Annual Reports.

Figure 12 shows a major decline in higher value sawlogs from 51% of the native forest production to just 12%. Firewood and chiplogs now make up 57% of production by volume.

Declining first and second grade sawlogs were, in part, replaced by “bole sawlogs” or “other bole logs”. These are logs that may be able to be trimmed to a first- or second-grade sawlog, but that are more useful to the client in untrimmed form. Most bole sawlogs are jarrah.²²

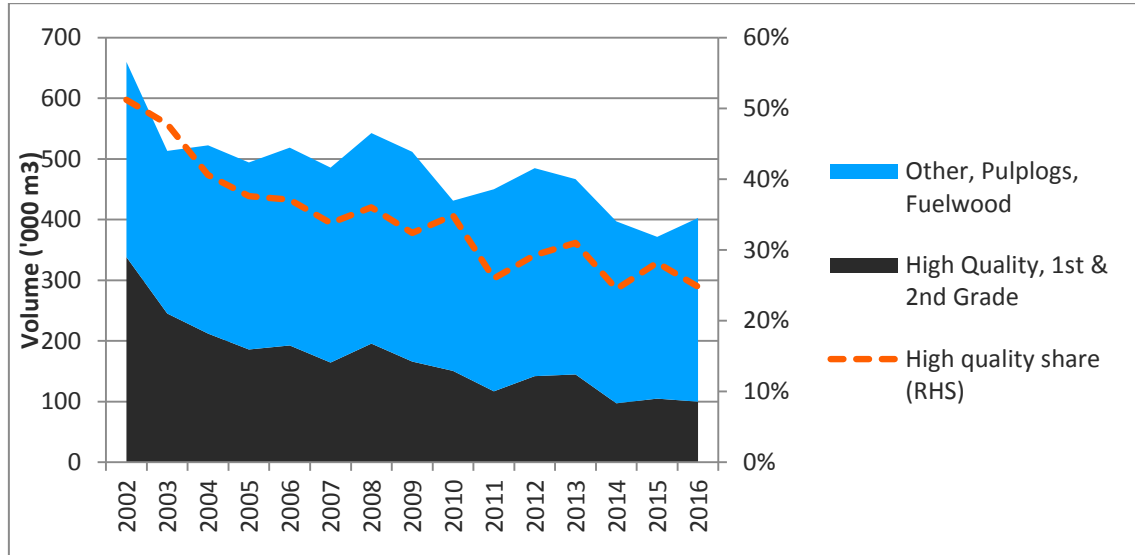
Not all of a bole sawlog is of the quality of a first- or second-grade sawlog. In 2006 and 2007, the FPC counted 70% of ‘other bole’ towards the overall first- and second-grade timber yield.²³ Applying this ratio to other years of the FPC’s operation,²⁴ we estimate

²² See for example FPC (2015) *Annual Report*, p 134.

²³ FPC (2006) *Annual Report*, p 138; FPC (2007) *Annual Report*, p 126.

a steep decline in the ratio of first- and second-grade timber to other wood, from around half in 2002 to a quarter in 2016, shown in Figure 13.

Figure 13 – Decline in higher-grade native logs



Source: FPC Annual Reports. Other bole logs allocated to 1st and 2nd grade logs at 70%.

DECLINING RECOVERY RATE

As well as a decline in the number of native hardwood sawlogs produced by the FPC, the Western Australian timber industry has seen a decline in the amount of sawn timber produced from each hardwood sawlog.

In 2005, 89,000 cubic metres of sawnwood were produced from 339,000 cubic metres of sawlogs – a recovery rate of 26%. By 2013 (the last year for which figures are available), 61,000 cubic metres of sawnwood were produced from 308,000 cubic metres of sawlogs – a recovery rate of just 20%.²⁵ The remainder of the sawlogs becomes sawdust, woodchips or fuelwood, or it is unusable.

Western Australia’s recovery rate has not only declined, but is behind that of other states. Queensland, another state with very little plantation hardwood for sawlog

²⁴ After 2007, the FPC used a different, variable rate in its calculations. Without detail on how the FPC’s variable rate is derived, or what it is, it was not feasible for us to apply it in our analysis.

²⁵ These figures are for hardwood sawlogs in Western Australia, not specifically FPC harvested sawlogs. However, the FPC is the main producer of native hardwood sawlogs in the state, and plantation hardwood is a negligible portion of hardwood sawlogs in WA. ABARES (September and December quarters 2015) *Tabular data of Australian forest and wood products statistics summary statistics*.

production, has a recovery rate of 35–40% in every year of reporting.²⁶ Overall, Australia’s recovery rate is between 28 and 34%,²⁷ although other states’ hardwood figures include some plantation hardwood.

DECLINING YIELD

Yields are also declining. In particular, FPC production of jarrah and karri sawlogs has declined relative to the area of forest logged, as shown in Figures 14 and 15. Greater areas of forest must now be logged to recover the same volume of timber. While there has been considerable variability in yield, and karri yield has increased in recent years, there is a clear downwards trend.

Figure 14 – First- and second-grade jarrah yield per hectare logged

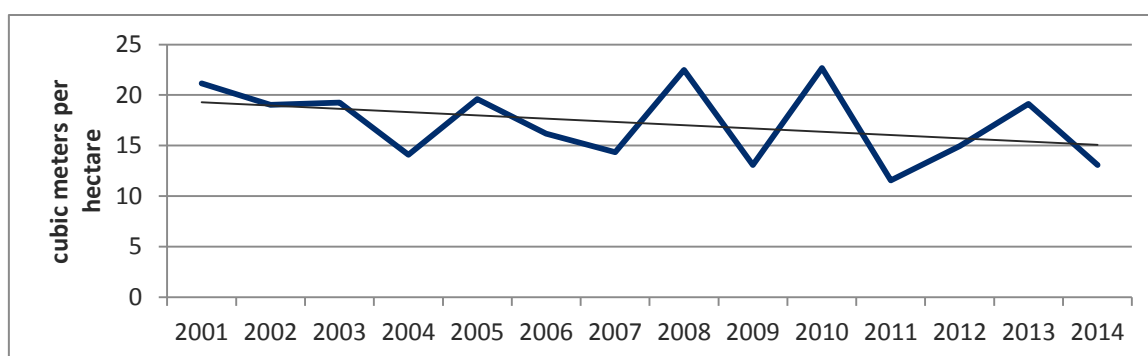
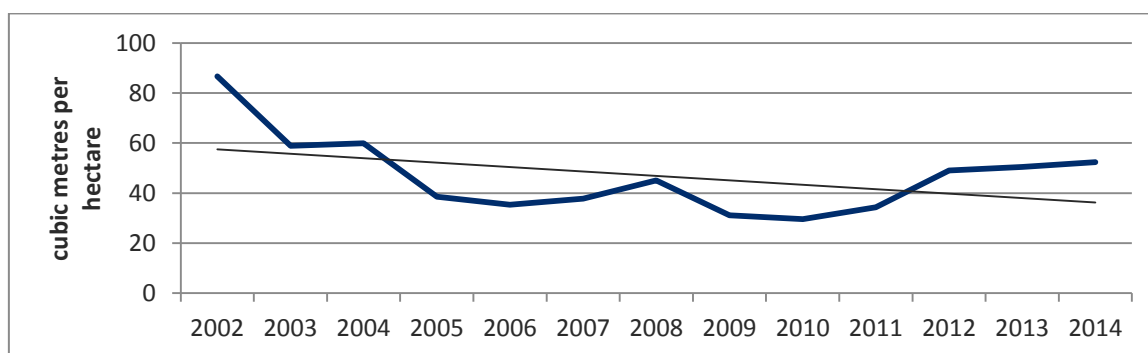


Figure 15 –First- and second-grade karri yield per hectare logged or thinned



Source: FPC Annual Reports, 2001 to 2015, typically under the “harvesting activity” heading, and historical data in the 2015 Annual Report, p 127. Some figures read from FPC graphs.

²⁶ ABARES (September and December quarters 2015) *Tabular data of Australian forest and wood products statistics summary statistics*.

²⁷ ABARES (September and December quarters 2015) *Tabular data of Australian forest and wood products statistics summary statistics*.

DECLINING FOREST VALUE

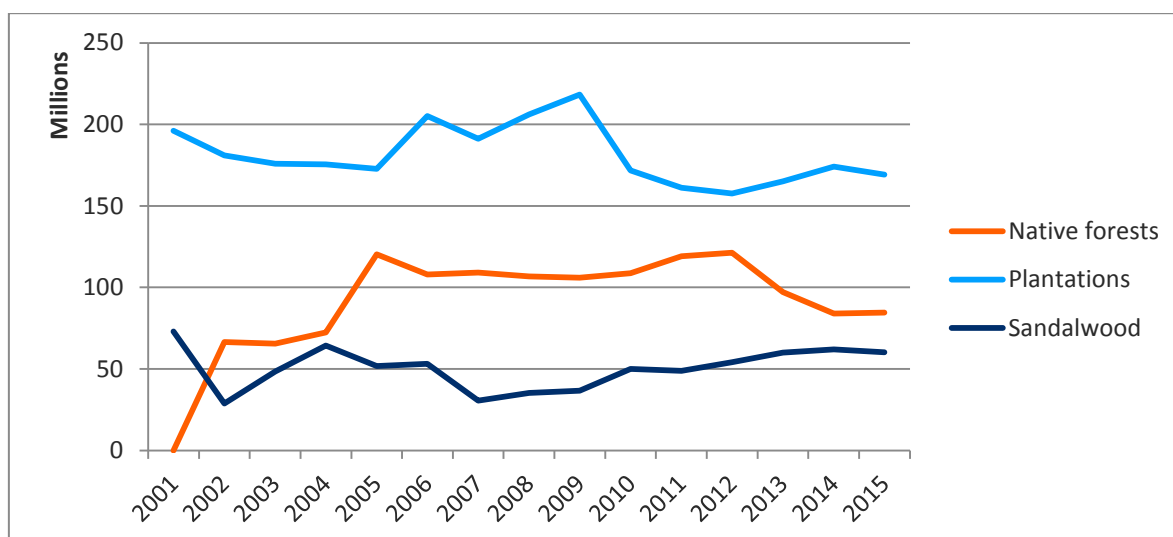
Each year, the FPC re-assesses the value of its forest assets, including its native forests, according to changes in forecast volumes, prices, costs and financial context.²⁸

Revaluations have also included changes to accounting methodology, discussed below. The earliest figures derived from the current accounting methods are from 2005.²⁹

The FPC's asset values reflect judgments about future cashflows. (They do not consider alternative values, costs or uses.) The ongoing decline in native forest values suggests the FPC thinks that the native forest segment's fortunes are not likely to improve.

In the ten years since 2005, the value of the forests fell from \$120 million to \$84 million.³⁰ That is a decline in nominal terms of 30%, or in real terms, a fall of 46%. In a decade, the FPC's access to the SW forests has lost almost half its real value.

Figure 16 – FPC forest asset values



Source: FPC Annual Reports.

Note the FPC initially recorded its native forest values at \$0. There was a large increase in value in 2001 and again in 2005. These increases were due accounting changes.

²⁸ See FPC (2015) *Annual Report*, p83: "assumptions that must be reviewed annually. Valuation changes mainly arise from: • changes in timber volume; • changes in timber prices; • changes in production costs, including management, marketing and selling costs; • changes in the discount rate".

²⁹ The change in methodology occurred in 2006, but that year's *Annual Report* included revised figures for 2005. It involved the adoption of the Australian equivalent International Financial Reporting Standards (AIFRS) accounting standard. See FPC (2006) *Annual Report*, pp 59, 94.

³⁰ Revised 2005 figures from FPC (2006) *Annual Report*, p 94. 2015 figures from FPC (2015) *Annual Report*, p 98.

DESPITE ACCOUNTING CHANGES

While native forest values increased in some years, nearly all of these increases were associated with changed accounting methods:

- In 2001, the FPC recorded its native forests as having no value. That was despite positive recorded values for the plantations and sandalwood. In 2002, the native forests were then revalued, with a recorded value of \$66 million. The change was “due to a reduction in attributable management and protection costs”.³¹ These costs were not explained. Strangely, the reported change in forest value was booked as profit.³²
- In 2005 the FPC changed its methodology for valuing assets, excluding corporate overheads and changing its treatment of tax in the discount rate.³³ This change again increased native forest values from \$72 million in 2004 to \$105 million in 2005,³⁴ a 45% increase. This was booked as profit.³⁵
- In 2006, the FPC adopted a new accounting standard. Between the 2005 and 2006 Annual Reports, native forests increased their value by \$3 million (3%).³⁶
- The FPC reduced its discount rate used to value native forests, from 12.4% in 2011 to 9.5% in 2014 and 2015.³⁷ All else being equal, a lower discount rate should *increase* asset values. Despite being valued with a lower discount rate, the native forest values declined substantially from 2012 (see Figure 16 above).

All of the above accounting changes have increased the value of the native forests. Despite this, native forest values have fallen in real terms. Adjusting for these

³¹ FPC (2002) *Annual Report*, pp 22, 29–30, 34

³² The net increment for the ‘native forest’ segment—at this stage including both native forests and sandalwood—was \$22m as the increase in native forest assets was partially offset by a \$44m downwards revaluation of sandalwood assets. At the same time, plantation assets were revalued down by \$23m. Across the segments, the net decrement was about \$1m.

³³ FPC (2005) *Annual Report*, p 88.

³⁴ At the same time, sandalwood assets decreased in value from \$64m to \$52m, a 20 percent decrease, and plantation assets decreased in value from \$183m to \$170m, a 7 percent decrease. The net increment across segments was \$7m.

³⁵ The native forests increased in value by \$32.7m between 2004 and 2005. The net increment booked as profit for the native forest segment was \$30.7m, due to \$2.1m in valuation expenses. FPC (2005) *Annual Report*, pp 86, 104.

³⁶ The value of the sandalwood increased by \$1m (3%) and plantations by \$35m (21%); the net increment was \$39m.

Note this is a change in asset value for a year as recorded between Annual Reports, rather than a change in asset values between years, hence it is not represented in Figure 16 above.

³⁷ The FPC adjusts its discount rate over time to account for relevant long-term risks to cashflow. These are assessed by a third party.

accounting changes would see even greater falls in values and greater losses over the life of the FPC's native forestry operations.

The Annual Reports do not include reference to any assessment of the historical accuracy of its previous cashflow projections used to value assets.

Experience of other states

The FPC's challenges occur in the context of challenging times for many businesses in the forestry industry. The Global Financial Crisis hit the industry hard. Huge new plantations have been established in SE Asia, particularly Vietnam, which compete with Australian woodchips and are closer to major markets. Through the early years of the millennium, tax incentive "managed investment schemes" also produced supplies that were not sustainable and brought major instability to the industry.

The malaise afflicting the FPC is shared by state-owned forestry agencies around the country and by Australia's native forest product industry as a whole. As in WA, struggling state-owned native forestry operations in many states have relied on financial support from the government or other forms of forestry.

The Forestry Corporation of New South Wales, another state owned forestry body, has seen its hardwood division (mostly native timber) lose a total of \$79 million over the last seven years.³⁸ This is the cross-subsidy from the Corporation's more successful plantation operations. Like Western Australia, NSW has seen its volume of logs fall steadily over the last decade.³⁹

Elsewhere, state-owned forestry fared no better. Forestry Tasmania lost \$30 million per year in the period 2010–2013, and the Tasmanian government budgeted tens of millions of dollars of subsidies for subsequent years.⁴⁰ Sawlogs and chiplogs from public native forests are steeply down over the last decade.⁴¹

In a major 2013 review of Australian native forestry for The Australia Institute, Andrew Macintosh outlines six major pressures impacting demand for Australia's native forestry:⁴²

- Competition from domestic plantation softwoods for the structural timber market
- Competition from domestic and imported engineered wood products
- A lack of growth in detached housing construction, keeping demand weak

³⁸ Campbell and McKeon (2016) *Money doesn't grow on trees*, p 5.

³⁹ Campbell and McKeon (2016) *Money doesn't grow on trees*, p 7.

⁴⁰ Macintosh (2013) *Chipping away at Tasmania's future*, pp 21, 22.

⁴¹ Macintosh (2013) *Chipping away at Tasmania's future*, p 17.

⁴² Macintosh (2013) *The Australian native forest sector: Causes of the decline and prospects for the future*, pp 4–5.

- A restriction in the public native forest estate and more stringent forest management regulations
- Wood saving innovations in production processes
- Increased harvesting and haulage costs

Other pressures impact the ability of Australian native forestry to serve the international and domestic woodchip markets:⁴³

- Competition from domestic hardwood plantations
- Competition from South East Asian, African and South American plantation hardwood exporters
- Contraction in Japan's pulp and paper industry
- High harvesting and haulage costs, the high Australian dollar and the market's preference for plantation woodchips

Macintosh concludes that these problems are likely to continue "into the foreseeable future".⁴⁴

The state of native forestry in WA is part of a nation-wide decline. Historic levels of supply are not sustainable.

⁴³ Macintosh (2013) *The Australian native forest sector*, pp 4–5.

⁴⁴ Macintosh (2013) *The Australian native forest sector*, pp 4–5.

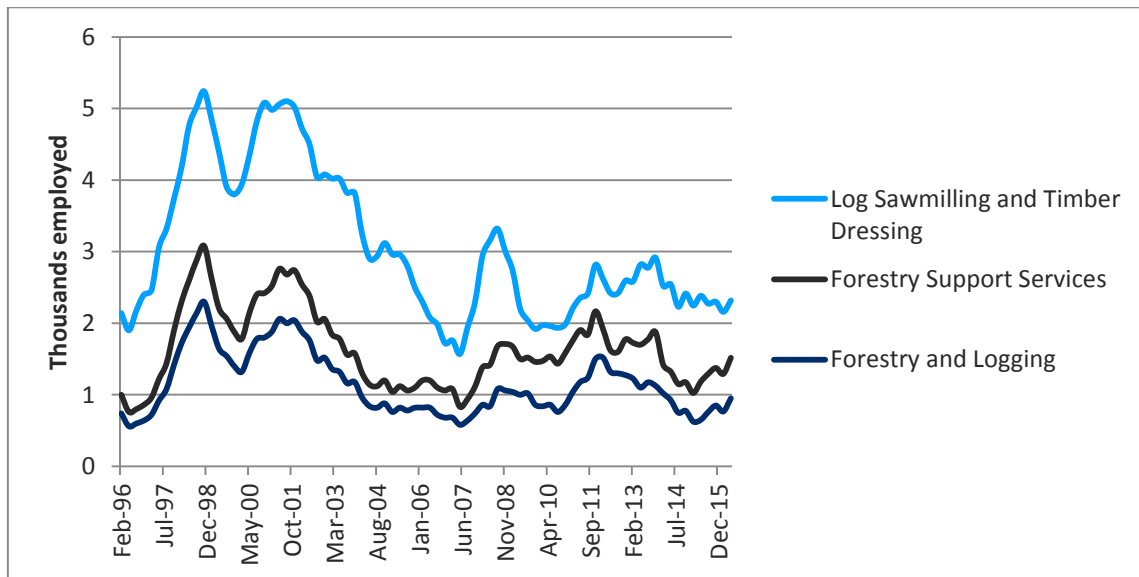
Native forestry and WA employment

Forestry plays a minor role in the state economy, providing a small share of all WA jobs. Native forestry is an even smaller employer.

The industry divisions most directly associated with the FPC are *Forestry and Logging*, and *Forestry Support Services*. The 2011 Census shows direct employment of 811 in Forestry and Logging and Forestry Support Services in Western Australia. This was 0.07% of all WA employment.⁴⁵ There were another 915 jobs in the downstream industry of *Log Sawmilling and Timber Dressing*.

Time series data from the Labour Force Survey show higher figures for 2011, yet forestry employment was a very small share of the over 1.2 million then employed in WA. In 2011, logging, forestry and support services were 0.15% of WA jobs. Moreover, there has been a clear declining trend, shown in Figure 17.

Figure 17 – Total forestry employment in in Western Australia



Source: Original, 5-period average, ABS Cat no 6291.0.55.003 Labour Force Detailed Quarterly

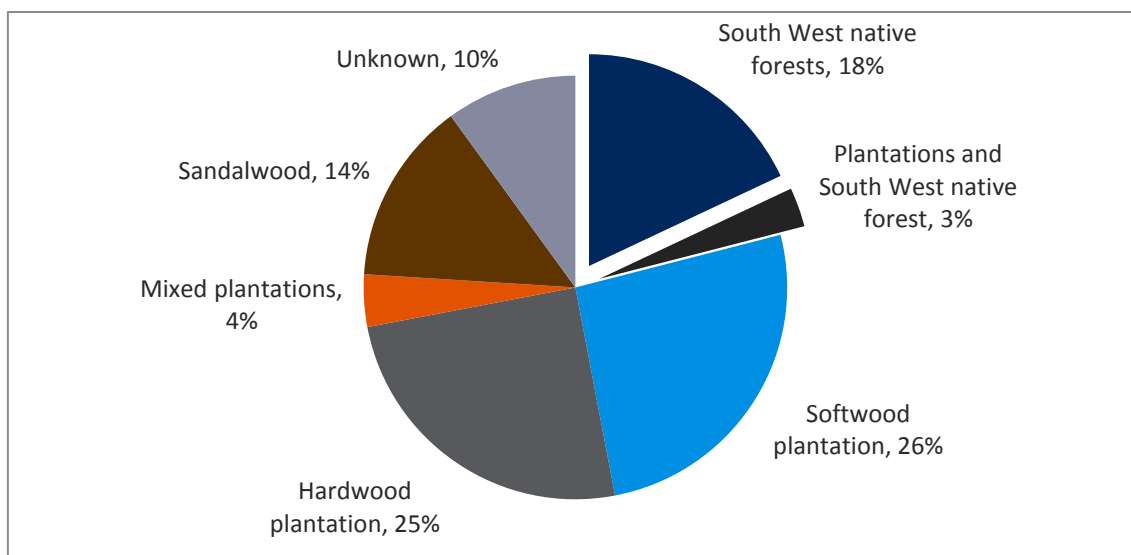
⁴⁵ ABS (2011) 2011 Census

Forestry industries have declined by around 30% since 2011, as WA employment has grown substantially—by 7.5% since 2011 and 46% since the FPC was established in 2000.⁴⁶ In 2016, forestry, logging and support services provided 0.1% of WA jobs.

The FPC claims that forest products industries employ over 5,000 people in Western Australia. However, this includes employment unrelated to the FPC, for example, hardwood plantations for pulp and paper products industries, as well as jobs associated with imported products. It also includes employment associated with softwood plantations and sandalwood.

The FPC’s native forestry is only a small portion of the WA forestry industry. While ABS statistics do not separately count native forestry workers, the FPC gives share of employment by forest type:⁴⁷

Figure 18 – Employment by forest type



Source: FPC Annual Report 2015, p 8

Employment attributed by the FPC to native forests is 18–21% of total forestry employment. This ratio can be applied to the two aforementioned data-points for total forestry employment. On this basis, the SW forests employ between 170 and 330 people in logging, forestry and support services.⁴⁸

⁴⁶ ABS Cat no 6202.0 Labour Force, Australia, trend, Table 8.

⁴⁷ FPC (2015) *Annual Report*. The FPC indicates these figures came from the Census, but the Census does not show this data. The FPC may have allocated workers to forests based on proximity.

⁴⁸ Maximum from Labour Force Survey, average over last five years. Minimum from the Census.

The 2014 *South West Regional Blueprint* claims there were 258 jobs in SW timber processing in 2011, including both softwood plantations and native forestry.⁴⁹ If half of these workers were processing native sawlogs, in line with the proportions in Figure 18 above, then processing native sawlogs operations employed roughly 130.

Given declines in native forestry output and forestry employment overall, native forestry employment is likely to have also declined over the last 15 years. Continued declines of native forestry will have implications for employment.

In recent years the number of forestry and haulage workers registered to work in state forests and timber reserves (both native and plantation) has increased from less than 360 in 2011⁵⁰ to 680 total workers in 2016.⁵¹ Yet in this time native forest production declined, suggesting registered workers are becoming less reliant on native forests.

⁴⁹ South West Development Corporation (2014) *South West Regional Blueprint*:
http://www.swdc.wa.gov.au/media/230871/sw%20blueprint_final_web.pdf p 30

⁵⁰ Western Australia Hansard (2011) *Timber Workers – Registration*:
[http://www.parliament.wa.gov.au/Hansard/hansard.nsf/0/21578aa1bfbe7e2c4825791b002ef7ab/\\$FILE/C38+S1+20110928+p7848c-7848c.pdf](http://www.parliament.wa.gov.au/Hansard/hansard.nsf/0/21578aa1bfbe7e2c4825791b002ef7ab/$FILE/C38+S1+20110928+p7848c-7848c.pdf), note does not show number registered for both activity.

⁵¹ Western Australia Hansard (2016) *State Forests – Timber Harvesters*:
[http://www.parliament.wa.gov.au/Hansard/hansard.nsf/0/25e862561450389748258029001d643f/\\$FILE/C39+S1+20160906+p5395d-5396a.pdf](http://www.parliament.wa.gov.au/Hansard/hansard.nsf/0/25e862561450389748258029001d643f/$FILE/C39+S1+20160906+p5395d-5396a.pdf)

A transition to alternatives

NEED FOR A PLAN

There are strong financial reasons to plan for the transition out of native forestry in WA's SW forests. The FPC overall has required government support far exceeding its returns to government. Performance has been dragged down by the FPC's native forest segment, with losses and declining production, quality and forest value. The FPC's challenges are similar to those facing many other state-owned native forest operations.

Native forestry workers are already being affected. In October 2016 Austwest Timbers announced it would close Manjimup Processing Facility and Pemberton sawmill, directing processing of timber from these areas to an expanded Greenbushes sawmill.⁵² The closure will impact local employment; the Manjimup Shire President has expressed has called for state government assistance with alternative employment, such as creating a tourism icon. It will also increase transport costs; the Greenbushes Sawmill is some 85 kilometres away from Pemberton. The increased number of log trucks on the road will also impact tourism, other forest industries and road use and safety.

These trends create a need for a transition plan for native forestry workers. The impacts from intermittent closures would be better managed as part of coordinated or part of a planned phase-out that is gradual and includes support and training for workers. Even without a phase out plan, the decline of WA native forestry will have implications for the relatively few workers that remain in the industry. A planned phase out would enable the government to manage the transition for workers and communities. Given the size of the native forestry workforce, this transition should be manageable.

New industry policy is needed to support alternatives, whether plantation or other outside of forestry. Two 2014 tables of FPC native timber contracts show almost all

⁵² Jeffers (2016) *Town sawmills to close by next year*:

<https://au.news.yahoo.com/thewest/regional/south-west/a/32811855/town-sawmills-to-close-by-next-year/#page1>

expire in 2023.⁵³ Good planning could minimise the disruption to the workforce and localised economies over that time period.

The WA government has provided 'Investment Security Guarantees' to sawmills, which guarantee contracted volumes for logs, requiring compensation to the mills if these volumes are not maintained. At March 2015 there was one such guarantee, with a total liability of up to \$11.8m per annum.⁵⁴ If still operative, this will need to be considered in any transition plan; it does not justify continuing native forestry operations at a loss.

Importantly, the government is not liable for this payment if a reduction supply "was influenced by climate change or an increase in the estimated spread of dieback."⁵⁵ Impacts from climate change are likely to intensify as temperatures increase and regional rainfall decreases.

OPTIONS WITHIN FORESTRY

A transition plan would consider options within other parts of forestry, and other values supported by the native forests. Such a plan would consider potential for both demand and supply substitution of the relatively small proportion of forest products currently provided by native forestry.

The vast bulk of the material logged from WA's unique native forests currently goes to low value products, such as pulp, charcoal or firewood, as outlined above. Some higher quality sawlog products are used for structural purposes that could be replaced with other wood. Jarrah forests currently being cleared for contracted mining will provide a modest ongoing supply of jarrah timber over coming years.

Loss-making FPC operations are likely negatively impacting other forest product business. Some private forestry operators have made this allegation.⁵⁶ As noted above, increased plantation woodchip production has negatively impacted the performance

⁵³ Western Australia Questions (2014) *Question on Notice 1518*:
<http://www.parliament.wa.gov.au/parliament/pquest.nsf/Parliament/pquest.nsf/SrchQON/EA225EE3E4C5E43648257D4E0019EAD1?opendocument>

⁵⁴ Western Australia Questions (2014) *Question on Notice 2248*:
<http://www.parliament.wa.gov.au/parliament/pquest.nsf/Parliament/pquest.nsf/SrchQON/37567C7318E61C3648257DA20026B977?opendocument>

⁵⁵ Ibid.

⁵⁶ See e.g. Seares (2014) *Public Submission – Inquiry into microeconomic reform discussion paper*:
<https://www.erawa.com.au/cproot/12010/2/Roger%20Seares%20-%20Public%20Submission%20-%20Inquiry%20into%20Microeconomic%20Reform%20Discussion%20Paper.pdf>

of native forest woodchips.⁵⁷ Where subsidised native forestry operations are impacting private forestry businesses, phasing out native forestry would not only protect state finances but also support the private businesses.

As noted above, the new *Softwood Industry Strategy* includes plans for new plantation investment. It also focuses on potential areas of higher value growth, including through manufacturing wood products such as engineered timbers, which might displace other higher carbon materials. Growth in these areas could provide alternative employment for forest product workers as part of a phase out of native forestry.

OTHER VALUES OF THE NATIVE FORESTS

There are less destructive harvests of the forests. In 2010, 4.2 million wildflower stems were harvested and 12.7 tonnes of seeds were collected from the SW forests.⁵⁸ The state is also home to businesses producing high value honey from jarrah and karri blossom. Beekeepers have raised concerns about negative impacts from FPC logging of native forests.⁵⁹

A policy of not logging the remaining native forests could support tourism in the area. “Australia’s South West” tourism region contains the SW forests and uses them as a key element of its ‘brand’. This region generated \$1,530 million from tourism in 2016, up 27% from the previous year. Three million tourists spent 12 million nights in the region in 2016.⁶⁰ Tourists would have made up a large portion of the 7.1 million visits to the SW forests in 2013.⁶¹ Given the enormous contribution of tourism to the region, not logging the forests could increase the attractiveness to tourists; even a small increase could have a substantial financial benefit.

Merely keeping the forests standing could be financially beneficial. In 2014, the Department of Environment and Conservation estimated that the 2.25 million hectares

⁵⁷ Macintosh (2013) *The Australian Native Forest Sector*, pp 46–47, 65; Campbell and McKeon (2016) *Chipping away*, p 6.

⁵⁸ ABARES (2013) *Australia’s State of the Forests Report*, p 157.

⁵⁹ Correspondence with honey industry spokesperson (September 2016).

⁶⁰ Tourism Western Australia (June 2016) *Fast Facts Year Ending March 2016*, p 16:

http://www.tourism.wa.gov.au/Publications%20Library/Research%20and%20reports/Fast%20Facts%20YE%20March%202016_Revised.pdf

⁶¹ Conservation Commission of Western Australia (2013) *Forest Management Plan 2014 –2023*, p 117.

of forests in the South-West⁶² contain 91.3 million tonnes of carbon (the equivalent of 335.1 million tonnes of CO₂).⁶³ They project that this stock will grow, even with logging, by 3–5% over the decade 2014–2023.⁶⁴ Ending logging would not only reduce forestry emissions; it would increase the sequestration potential of the retained forests.

In 2013, Perkins and Macintosh assessed the economic viability of ending native forest harvesting and using the native forests to generate carbon.⁶⁵ NSW's Southern Forestry Region was used as a case study because its native forest sector is broadly representative of those found in other parts of the country.⁶⁶ The authors found ending native forest harvesting in 2014 would generate 33.8 million Kyoto carbon credits between 2014–2023 – a net gain to NSW of \$222 million over that period.⁶⁷

The authors concluded:

Overall, the analysis supports two general conclusions:

- under current and likely future market conditions, the harvesting and processing of native logs in the SFR [the region studied] is likely to generate substantial losses; and
- the aggregate net financial benefits are likely to be significantly higher if commercial harvesting is stopped and the native forests of the SFR are used to generate carbon credits.⁶⁸

Similar results are likely in the SW forests of WA.

⁶² The area used was that of the Regional Forest Agreement. See Department of Environment and Conservation (n.d.) *Draft Forest Management Plan (2014–2023) – carbon stocks information sheet*, p 1.

⁶³ Department of Environment and Conservation (n.d.) *Draft Forest Management Plan (2014 –2023) – carbon stocks information sheet*.

⁶⁴ Department of Environment and Conservation (n.d.) *Draft Forest Management Plan (2014 –2023) – carbon stocks information sheet*, p 8.

⁶⁵ Perkins and Macintosh (2013) *Logging or carbon credits*: <http://www.tai.org.au/content/logging-or-carbon-credits>

⁶⁶ Perkins and Macintosh (2013) *Logging or carbon credits*, p 6.

⁶⁷ Perkins and Macintosh (2013) *Logging or carbon credits*, pp 37–38.

⁶⁸ Perkins and Macintosh (2013) *Logging or carbon credits*, p 39.

Conclusion

The unique jarrah and karri forests of Western Australia are being logged mostly to produce pulpwood and fuelwood – low-value products. There has been little reward for this activity and substantial financial cost to the state. The falling profits of the FPC's native forest logging have become repeated losses. This is despite direct and indirect government subsidies and "equity injections" which exceed many times over the small amount of dividends that it has been able to pay.

Under the stewardship of the FPC, the real value of the forests has halved, the quality of the wood has declined, the amount of sawn timber recovered from sawlogs has fallen, and the volume of wood produced from each hectare logged is down. Current trends give no indication that native forestry is sustainable in the SW forests.

Plantations are responsible for most wood produced in the state, and even 2,000 cubic metres of sandalwood harvested each year generates more revenue for the state than hundreds of thousands of cubic metres of native wood.

Forestry provides a small share of employment in WA, and native forestry an even smaller share. With proper planning, the FPC's struggling native forestry operations could be gradually phased out and a transition for workers could be managed with minimal disruption to the state economy.

The WA government should consider closely the options for demand and supply substitution, and the alternative economic uses of the SW native forests, such as tourism and recreation, honey production, wildflower harvesting and carbon storage. Given current losses from native forestry, alternative uses offer greater economic benefits to the state.