

REPORT OF

INDEPENDENT EXPERT SCHEDULERS

APPOINTED UNDER

THE TASMANIAN FORESTS
INTERGOVERNMENTAL AGREEMENT

SUPPLEMENTARY REPORT

Owen Hoffmann
David Williams

17 November 2011

Note: This advice, and the report of 12th October, has been limited to harvesting work up until the end of December 2011. Further assessment would be required before any comment could be made on the likely situation post the end of December 2011.

INTRODUCTION

In accordance with the requirements of the Tasmanian Forests Intergovernmental Agreement, we were appointed to determine what harvesting work is currently occurring in coupes within the ENGO-nominated 430,000 ha area; the contractual wood supply that this harvesting is required to meet; and whether there are practical alternative coupes outside the 430,000 ha area (and preferably the 572,000 ha area) for meeting these contractual wood supply requirements.

Our initial advice was presented to governments and Signatories on 13 October 2011. Following consideration of the advice, Signatories agreed to request further information from us to clarify and expand on a number of elements covered by the initial advice. The Signatories have requested this information by 10 November 2011 to enable finalisation of the Conservation Agreement also required by the Intergovernmental Agreement.

Specifically we were asked to provide:

- Additional information on wood supply including:
 - Aggregated data regarding Forestry Tasmania's wood supply commitments broken into product grade, region and timing for scheduled coupes.
 - Tables showing the aggregate volumes of wood of each specification coming from coupes outside and inside the 572,000 ha and 430,000 ha area – by district, and also by coupes to the maximum extent possible.
 - A description of the difference between peeler log specifications and the trial veneer shipment logs and an assessment whether there is any 'leakage' of domestic peelers to the export market.
- An analysis of potential alternative coupes outside the 572,000 ha area. This analysis should include consideration of:
 - Product mix requirements.
 - Logistical and regulatory requirements, with and without options for handling pulp logs (including Triabunna).
 - The planning status and potential wood supply from coupes listed in the 2010-11 published three year plan, that were not previously assessed and that have not been harvested.
 - The status, including planning and potential wood supply (as well as timing) from the 38 coupes identified by Forestry Tasmania in April 2011 outside of the 572,000 ha that could be logged if roading was available.
 - Identification and assessment of the potential suitability and availability of any coupes previously listed as being excluded for economic reasons.

- An assessment of availability and practicality of bringing forward winter shoulder coupes as substitutes (product mix) for scheduled coupes within the 572,000 ha area.
- An assessment of whether any of the 18 coupes identified in Table 5, or any other potentially suitable coupes, could be brought forward (prior to the end of December 2011) by prioritising finalisation of Forest Practices Plans and/or roading – and an estimate of the time and costs that would be involved.

Summary of Findings

Following consideration of all of the requested matters the following table (Table 1) presents our expert assessment of the potential that exists for rescheduling the 41 coupes previously scheduled for harvesting within the 430,000 ha area. As indicated below, we have concluded that 21 current coupes cannot be rescheduled and will be required to meet wood supply contracts. In addition there is one coupe that could possibly be rescheduled but additional roading is required for this to occur.

We have also concluded that additional resources or funding would not enable alternative coupes to be made available for harvesting before 31 December 2011.

Table 1. Current status of 41 coupes in designated areas		
	Status 10 th Nov	Status 12th Oct
Re-schedule – do not harvest in 2011	9	7
Possible re-schedule – subject to roading	1	1
Suspended – do not harvest in 2011	4	4
Completed	5	3
Plantation	1	1
Harvesting cannot be re-scheduled	21	25
Total	41	41

This advice, and the report of 12th October, has been limited to harvesting work up until the end of December 2011. Further assessment would be required before any comment could be made on the likely situation post the end of December 2011.

ADDITIONAL RESCHEDULING WORK

(As discussed by the Reference Group of Signatories on 25 October 2011)

Agreed issues for clarification/expansion in relation to the period to end December 2011 – to be initiated immediately with report back by 10th November at the latest

Additional Information on wood supply including:

- ***Aggregated data regarding Forestry Tasmania’s wood supply commitments broken into product grade, region and timing for scheduled coupes.***

Estimated sales for Forestry Tasmania (FT) by District for November and December 2011 are presented in table 2 below. The volumes incorporate all sales, i.e. volume sourced from inside the 430,000ha designated area, volume from inside the 572,000ha designated area but outside the 430,000ha area, and volumes sourced from outside the 572,000ha area. This information was sourced from sales forecast information provided by FT and is consistent with known historical and contractual demand. Sales volumes are not shown at coupe level as most coupes supply product to all markets within the region.

Table 2 Sales volume by district and product

	District	HQSL	LQSL	Merch	Export	Pulpwood	Total
November	<i>Bass</i>	3,211	2,535	3,380	773	31,689	41,588
	<i>Murchison</i>	1,563	761	7,605	1,546	10,180	21,655
	<i>Derwent</i>	5,070	338	5,000	6,959	15,695	33,062
	<i>Huon</i>	4,257	169	10,985	17,397	11,268	44,076
		14,102	3,803	26,971*	26,675	68,832	140,382
December	<i>Bass</i>	1,927	1,014	3,380	567	19,013	25,901
	<i>Murchison</i>	938	203	7,605	1,134	6,628	16,508
	<i>Derwent</i>	3,042	203	5,000	5,103	9,777	23,125
	<i>Huon</i>	2,554	101	10,985	12,758	6,761	33,160
		8,461	1,521	26,970*	19,562	42,179	98,693
Summary	<i>Bass</i>	5,138	3,549	6,760	1,340	50,702	67,489
	<i>Murchison</i>	2,501	963	15,210	2,680	16,808	38,163
	<i>Derwent</i>	8,112	541	10,000	12,062	25,472	56,187
	<i>Huon</i>	6,811	270	21,971*	30,155	18,029	77,236
		22,562	5,324	53,941*	46,237	111,011	239,075

*Note: these volumes are for merchandising logs from which a smaller volume of peeler billets are produced (i.e. producing 265,000m³ of peeler billets typically requires 330,000m³ of these logs)

From the table above it can be seen that the customer demand for HQSL, LQSL, export and pulpwood reduces in December as compared with November figures. This is a reflection of the annual closure of sawmills and woodchip mills over the Xmas period as they run down log stockpiles leading up to the shutdown period. Ta Ann on the other hand will continue to operate at the same level of operation in December as in November. This will require the ongoing supply of logs during the sawmill and woodchip mill downtime.

Traditionally this has not been a problem as log stockpiles of sawlogs produced during the shutdown can be protected under bark or buried to help cater for the increased demand once operations recommence in the New Year. As sawmills have generally run down their stock to as low as possible over the Xmas period the demand once operations resume is expected to be above the normal weekly intake as they build up to manageable stockpile levels once again. This would not be able to be achieved from normal production levels and will require the use of logs stockpiled while the mills are not operational.

- ***Tables showing the aggregate volumes of wood of each specification coming from coupes outside and inside the 572,000ha and 430,000ha area – by district, and also by coupes to the maximum extent possible.***

Table 3 below presents volume by logs to be produced in November and December from each of the 22 coupes (including the one coupe identified for possible rescheduling subject to roading) within the 430,000 ha designated area. Table 4 then summarises the volume contribution from the 22 coupes to November and December sales. The 22 coupes inside the 430,000 ha area is taken from FT's most recent updated harvest schedule (21 October – this was the most recent at the time of this report). Table 5 summarises production volumes from coupes inside the 430,000ha area, inside the 572,000ha area and outside the 430,000ha area and outside the 572,000ha area.

These tables show the following

- Reconciling 22 coupes on current schedule with table 3 of our 12th October report. Table 3 of the earlier report listed 25 coupes that were operational at the time or were required for harvesting before 31 December. Of the original list
 - 1 coupe is now completed (MU CF041A) and another coupes is expected to be completed within the next 2 weeks (BA TY022D)
 - 2 coupes have been re-scheduled beyond 31 December (BA FL112E & BA SY005A). It was noted in 12th October report that these coupes required access through private property. Consent & planning is no longer expected before 31 December.
 - 1 coupe that was previously described as “possible re-schedule” in table 3 of our initial advice has not been re-scheduled (DE CZ006C) and is listed as still required. This coupe is still listed as a possible reschedule if funds could be provided to complete roading in DE WW020B. This funding has not been provided as yet. DE CZ006C is due to commence operations in the first week of December and as such if funding were provided now, the required bridge repairs and associated roadworks could be completed within the timeframe.

- Of the coupes that were listed in table 3 (12TH October Report) as still required and with an FPP or Rooding status of N (N = Not finalised). The status of these coupes is now as follows:
 - MO109A – FPP certified and rooding commenced
 - SA044B – FPP still not certified; rooding of spur not commenced
 - PC070B – FPP with the Forest Practices Authority – No Rooding now required
 - PC085 – FPP with the Forest Practices Authority – waiting feedback before certification
 - BV011B – FPP in final stages of certification – roadworks already completed
 - PC024B – FPP certified and rooding operations have commenced
- The total volume contribution of the 22 coupes to November and December sales. The 22 coupes will contribute 86,000 m³ (volumes are rounded to nearest '000) to November/December sales of 239,000 m³ which represents 36% of the total sales for this period.
- The rationale for the 22 coupes can be understood by analysing the expected product recoveries from these coupes. The 12th October report indicated that merchandising log in particular, and also HQSL, are important products. The reduction in pulpwood sales has meant that the required percentage of merchandising log is now higher than the historical log mix proportions. Table 2 (12th Oct report) indicated that historically 8% of total volume was merchandising logs. The changed sales product mix (per FT July 2011 sales schedule) now requires merchandising log to make up 17% of total volume. As a result, the harvesting schedule for 2011/12 prioritises high yielding merchandising coupes.
- The sales contribution of the 22 coupes makes a significant contribution to merchandising log and HQSL sales, being 29% and 58% respectively for these products. Ten of the 22 coupes have high merchandising log proportions, being equal to or >20% and 15 coupes have merchandising log proportions > 10%. Of the 7 “low merchandising log” coupes, 3 coupes are targeted for high recovery of HQSL, HQSL >25%. Another coupe provides high recovery of speciality timber.
- Matching November and December sales with production. Information in tables 1 and 4 presents sales and production data and reveals sales volumes are less than production volumes, total sales being 239,000 m³ while production target is 261,000 m³ i.e. production volume exceeds sales by almost 10 per cent – this is because the excess produced in these is required to meet ongoing contractual demand in January when harvesting activities are lower. Table 1 shows that November sales are 40 per cent greater than December. Whilst November sales represent normal pro-rata sales, reduced December sales are a normal pattern, especially for sawmill customers. Most sawmills have an extended close over the December-January period to coincide with extended close by the building sector. As described above, customers and FT reduce intake in December in line with fewer production days at the mills as well as managing reduced log stocks over Xmas period.
- The supply challenge for FT over this period is that whilst sawlog and pulpwood sales are down, Ta Ann runs at normal production through December - January period and closes for just the main Xmas/New Year public holidays. Consequently, FT is required to maintain Ta Ann supply at normal volumes throughout this period. This is achieved by preferencing high merchandising log mix coupes and building up bush stocks of other products. These stocks are then delivered in January. Hence, production does not closely align with log deliveries

volumes over the holiday period but is appropriately managed to meet Ta Ann supply over the period.

- There are 22 coupes within the designated area that are currently active or will be so by the end of December. In fact, 16 of the 22 coupes will have operations during November. Consequently, the time window for re-scheduling most coupes is less than 3 weeks (and a maximum of 7 weeks) as most of the coupes will be needed by the end of November.

District	Coupe	Total	HQSL	LQSL	Merch log	Export	Pulp
BA	RS117C	5,900	1,180	472	1,180	295	2,773
BA	TY025E	5,200	416	260	624	260	3,640
BA	CD106C	2,300	184	115	184	69	1,748
BA	MO109A	4,500	360	90	675	90	3,285
BA	TY021A	1,500	60	60	75	30	1,260
BA	TY030G	300	15	15	24	6	240
BA	BS115H	3,100	310	62	310	62	2,356
BA	SA044B	300	24	15	30	12	219
DE	BT009D	7,486	2,250	525	300	1,322	3,075
DE	BT013A	2,000	600	140	80	360	820
DE	CZ006C	4,000	680	280	400	800	1,840
DE	TN046A	3,000	360	0	60	450	2,130
DE	TN044B	5,400	648	0	2,052	648	2,052
DE	DU020C	2,000	540	100	160	340	840
DE	TA013A	4,000	280	0	1,000	720	2,000
HU	CM004C	6,300	945	0	1,575	2,205	1,575
HU	PC015B	6,300	1,219	0	1,260	630	3,160
HU	PC024B	8,400	1,260	0	1,680	2,520	2,940
HU	PC070B	1,000	128	0	203	300	369
HU	RU043H	4,000	600	0	1,200	800	1,400
HU	PC085A	4,000	600	0	1,600	800	1,000
MU	BV011B	5,100	408	102	1,122	0	3,519
Production from 22 coupes	Total vol	86,086	13,067	2,236	15,794	12,747	42,241
	% of total	100%	15%	3%	18%	15%	49%

	Total	HQSL	LQSL	Merch	Export	Pulp
Prod from 22 coupes	86,086	13,067	2,236	15,794	12,747	42,241
Total sales	239,075	22,562	5,324	53,941	46,237	111,011
% from 22 coupes	36%	58%	42%	29%	28%	38%

Table 5 Production volumes for November & December inside 430,000 ha area, outside 430,000 ha but inside 572,000 ha area, and outside 572,000 ha area. 77 coupes in total.							
Nov/Dec prod inside 430 K ha 22 coupes		HQSL	LQSL	Merch	Export	Pulp	Total
	MU	188	47	517	0	1,598	2,350
	BA	2,737	1,140	3,639	824	17,143	25,483
	HU	4,752	0	7,558	7,255	10,444	30,009
	DE	5,390	1,049	4,080	4,668	13,057	28,244
	Total	13,067	2,236	15,794	12,747	42,241	86,086
Nov/Dec prod volume inside 572 but outside 430 K ha 15 coupes		HQSL	LQSL	Merch	Export	Pulp	Total
	MU	361	167	1,003	0	2,893	4,424
	BA	242	327	152	187	11,961	12,869
	HU	2,109	0	4,836	4,245	6,910	18,100
	DE	2,200	0	5,080	4,200	6,520	18,000
	Total	4,912	494	11,071	8,632	28,283	53,392
Nov/Dec prod volume outside 572 & 430 K ha areas 40 coupes		HQSL	LQSL	Merch	Export	Pulp	Total
	MU	1,912	944	14,446	0	28,234	45,536
	BA	1,692	948	2,397	517	24,719	30,273
	HU	1,361	0	3,790	6,090	12,859	24,099
	DE	2,480	40	3,373	3,438	13,228	22,559
	Total	7,445	1,932	24,005	10,045	79,040	122,467
Overall total		25,424	4,662	50,870	31,424	149,564	261,945

- ***A description of the difference between peeler log specifications and the trial veneer shipment logs and an assessment whether there is any “leakage” of domestic peelers to the export market.***

Logs are supplied to the domestic peeler market as merchandising logs to FT at Southwood plant or as veneer billet logs when sold to Ta Ann’s Smithton plant.

The difference is due to the presence of the merchandising yard at Southwood operated by FT. The actual recovered billets are then on sold to Ta Ann. At Smithton the entire log is purchased by Ta Ann and they process to produce their required billets.

There is little difference in the specifications between veneer billet logs and merchandising logs. Small and large end diameters are the same; veneer billet logs have slightly tighter specifications on the number and location of significant bumps and the amount of sweep in a log. Terminology for these logs can be confusing as the different descriptions for logs directed to the domestic veneer industry are interchangeably used from time to time. For the purpose of this report, the log descriptions are also considered interchangeable because the specification differences are not significant.

Trial veneer shipment logs, variously referred to as export peelers are stratified into 3 categories. Export peelers have a broader range of end diameter limits than domestic peeler logs i.e. small end diameter is lower and large end diameter is higher for export peelers than domestic peeler logs. There are limits on the knot size and bumps but not on the number of limbs or bumps. Export peelers are supplied in fixed lengths whereas domestic veneer peeler logs are of variable lengths within minimum and maximum length range. The Veneer Billet Log specification indicates a preference for set lengths to be supplied but this is not a formal specification and is not an absolute requirement. The supplier commits to use reasonable endeavours to meet the preferred lengths.

Table 6 below highlights the main differences between domestic and export peeler logs. It should be noted that table 6 does not present a full description of the specifications.

Table 6 Summary specifications for domestic and export peeler logs

	Diameter		Knot Size		Bumps	Length
	Min	Max	Logs <35cm Diam	Logs >35cm Diam		
Domestic Peelers						
Merch Logs To Southwood	20	70	<10cm	<20cm	Allowable	Max & Min Length only
Veneer Billet Log	20	70	<10cm	<20cm	Only 1 Significant bump/m allowed	Set Lengths preferred
Export Peelers						
Pulp Grade	15	30	Unlimited knots and Bumps with size not to exceed 1/4 of circumference of log			Set Lengths
Pulp Plus Grade	15	30	Unlimited knots and Bumps with size less than 7x5cm			Set Lengths
Premium Grade	30	100	Unlimited knots and Bumps with size not to exceed 1/4 of circumference of log			Set Lengths

Field inspection of stockpiles at Leslie Vale and Bridgewater was undertaken to assess the log stocks to identify whether there are logs directed to export that should have been directed to Southwood as merchandising logs.

Assessing logs in stacks is difficult as only a small number of logs can be fully assessed. Assessing a log from the end of the stack allows assessment of log diameter whereas knots and bumps cannot be accurately assessed because they are not visible. A small number of the total logs can be assessed at the end of each pile of logs where the full length can be viewed. This allows a better judgement of log characteristics but is still limited as the ability to closely inspect an individual log which is restricted due to safety issues associated with climbing on log stockpiles.

The Leslie Vale site is located to serve logs delivered from the Huon District and then to the discharge port for sale to export market. Hence, the logs are predominantly from regrowth stands. The sales target is to provide an outlet for logs which do not meet domestic peeler specifications.

The site inspection confirmed a large percentage of logs were in the range 15-30cm. This inspection revealed there were some logs containing some sections that may be suitable for billets but there appeared to be only a small number of such log sections. Segregating such logs and recovering log sections for peeler billets would incur additional cost and result in waste of the sections that do not meet the peeler billet specification. In effect the yard would act as another merchandising yard. While there are sections of logs that could produce billets, the logs as presented in log form did not meet the merchandising log specification.

Logs at Bridgewater site are sourced predominantly from the Derwent Valley from older stands and therefore align with larger diameter and lower quality (knots & bumps) specifications of export peeler logs. Again, some recoverable sections of domestic peeler billets were observed but there were few such sections.

There was some evidence of logs that would be suitable as merchandising logs. The number of such logs was small. The source of the logs is difficult to determine from the log stack. Both log yards receive material from other than State Forest operations. Private supply may not be in a commercial location to supply Southwood and hence private growers may supply their entire product to Bridgewater or Leslie Vale for export. Private logs are identified by painting the small end of the log. In log stacks it is very difficult to match both ends of a single log. Hence, the large diameter or other features cannot be easily matched with the small end of the log, which is where private logs are identified. It was not clear whether some of the identified "potential domestic peeler billet sections" were FT or private suppliers.

Both log yards are managed under contract arrangements operated by third party operators. The contracts include procedures requiring independent assessment of loads of logs delivered to the sites. Qualified employees assess the logs to determine if they meet the specifications. Logs outside the specifications are set aside for either re-processing or re-allocation as appropriate. During the site visit small piles of logs set aside for re-processing were observed.

During the Bridgewater visit log assessment by the independent contractor was observed. This afforded opportunity to obtain first hand observations of the independent log assessor. This confirmed the view that only a small proportion of logs are out of specification. From the inspection of the log yard and the observation of the assessment process, it is our view that the leakage of merchandising logs to the export market is minimal and within reasonable operational tolerances. The utilisation standards being applied to the formal log specifications are consistent with FT's stated objective of maximising recovery of merchandising logs for Ta Ann. Efforts to further increase the recovery of Ta Ann merchandising logs would, at best, only marginally increase supply to Ta Ann.

It was confirmed in discussions with FT staff that Ta Ann has been given and taken up the opportunity on several occasions to inspect the 2 export log yards to reclaim any material they feel as suitable for their operation. To date very little volume has been recovered from this process.

Our conclusion is that FT and Ta Ann are acting to maximise the supply of merchandising logs to Southwood and Smithton.

The reference to the supply of 39,000m³/yr of peeler billets from outside public native forests in the footnote on page 8 of the 6th June report (Evaluation of Wood Resource Scenarios relevant to the *Tasmanian Forests Statement of Principles to lead to an Agreement – Final Report to Signatories*) provides a misleading inference that this supply is a specified part of the contractual supply to Ta Ann. FT have confirmed that the actual contracts between FT and Ta Ann are for the supply in aggregate of 265,000m³/yr of billets and do not specify that 39,000 m³/yr of this supply must be sourced from outside State Forests.

The resource model that was used by FT in the 6th June 2011 report indicates that Ta Ann's contractual requirement cannot be met solely from public native forests during the period 2011-2030. The 39,000m³ of peeler billets per year represents a modelled annualised shortfall in supply. It is not a contractual obligation and does not represent actual current resource supply to Ta Ann from FT's eucalypt plantations or private property.

While FT has sourced wood from Private Property as opportunities arise, and will continue to do so, it cannot build a schedule that is dependent on these opportunities. Currently FT is supplying the Smithton Mill with approximately 320 m³ per month from private property, which is expected to continue until the end of December. This volume of log product equates to about 300m³ per month (3,600m³ per year) of actual billet production which is less than 1.5% of the overall supply target.

FT records show that supply to Ta Ann from private native forest is not a significant volume but is increasing slightly as the market develops. In 2008/09 the equivalent of 980m³ of billets were supplied, in 2009/10, 1,900m³ and 2010/11, 3,100m³ were supplied.

Future availability of private resource in the North West (to supply the Smithton mill) is limited under current market conditions, due to the lack of ready access to a sale for the pulpwood produced (private native forests traditionally have higher proportions of pulpwood than public native forests), but could reasonably be expected to provide a relatively small ongoing component of supply in line with the figures presented above. A significant plantation volume of *E. globulus* is expected to be available from around 2020 onwards and this may assist in meeting future peeler billet contractual requirements.

An Analysis of potential alternative coupes outside the 572,000 ha area. This analysis should include consideration of:

- ***Product mix requirements.***

Matching the mix of sales products with production from coupes on the harvesting schedule is an important criterion when investigating alternative substitute coupes. As stated previously, producing

sufficient volume of merchandising logs is the primary challenge for scheduling coupes as this product is the limiting product.

The effect of moving to an alternative coupe with a lower percentage of the limiting product would create or exacerbate problems associated with surplus of other products.

To produce the required tonnes per week of merchandising logs from a lower quality coupe, the operation would need to work at a rate that is higher than the current harvesting rate. This would require the harvest of a larger area and would produce additional volume of other products. Some or most of this additional volume is unlikely to be saleable because production from current operations is already producing enough of these products to meet current sales. Securing additional sales for these products is challenging in the short term given the restricted access to processing facilities for these products. There are likely very limited options for stockpiling unsold products. There are safety and Forest Practice Code restrictions (for example, restrictions on the size, height and location of stockpiles) that would prevent significant additional stockpiling in the forest, and available storage facilities outside the forests (e.g. Triabunna) typically only have capacity for several days normal throughput.

The option of trying to substitute product from a currently scheduled coupe, with product from multiple replacement coupes, is not considered to be viable both because it would produce even larger volumes of unsaleable products, and also because there is not sufficient contracting capacity to undertake the additional harvesting activity that would be required.

It is also not practical to replace coupes in one part of the state with coupes in another part, as the different types of forests produce a different product mix. Coupes in the south generally produce a significantly higher proportion of sawlogs and merchandising wood compared to those in the north. Therefore, if coupes in the north were to be used as substitutes, it would create additional product that was unsaleable – thus creating the issues identified above.

The 38 coupes identified in table 5 of our 12th October report as “Product mix and location do not meet current sales targets” would produce a product mix with significantly less merchandising wood than the current coupes while producing additional volumes of pulpwood and other products that are currently already being produced at or above customer sales levels.

- ***Logistical and Regulatory requirements, with and without options for handling pulp logs (including Triabunna).***

FT is required by its’ sustainability charter and good forest practice to maximise volume and/or value recovery from harvesting operations. Wasting product above normal operational tolerances is unacceptable as it would breach the sustainability charter and represent poor forest practice.

The production of additional pulpwood in the Huon and Derwent districts without the operation of Triabunna woodchip mill and ready market for expanded volume poses logistical challenges.

As mentioned in our 12th October report, there is limited opportunity for pulpwood to be transported to the North of the State as part of a back cart arrangement. Limited volume of

hardwood pulpwood can be back hauled north from softwood pulpwood being delivered to the South from operations in the North.

The limited sale volume of pulpwood is therefore limiting selection of coupes to achieve the required sales product mix. Availability of Triabunna chip plant and export facility may improve coupe selection flexibility in the medium term but this is not a practical option for re-scheduling coupes before end of December. The most optimistic estimate for establishing a new sale, making the chip plant and export facility operational and recruiting employees to operate the facility would be several weeks. Re-scheduling coupes could only occur after these actions were completed. Hence, it is unlikely to make a positive contribution before the end of December.

As noted previously, there are also limited options for stockpiling unsold products. There are safety and Forest Practice Code restrictions that would prevent significant additional stockpiling in the forest, and available storage facilities outside the forests (e.g. Triabunna) typically only have capacity for several days normal throughput.

The option of trying to substitute product from a currently scheduled coupe, with product from multiple replacement coupes, is not considered to be viable both because it would produce even larger volumes of unsaleable products, and also because there is not sufficient contracting capacity to undertake the additional harvesting activity that would be required.

It is also not practical to replace coupes in one part of the state with coupes in another part, as the different types of forests produce a different product mix. Coupes in the south generally produce a significantly higher proportion of sawlogs and merchandising wood compared to those in the north. Therefore, if coupes in the north were to be used as substitutes, it would create additional product that was unsaleable – thus creating the issues identified above.

- ***The Planning Status and potential wood supply from coupes listed in the 2010-2011 published 3 year plan, that were not previously assessed and that have not been harvested.***

Within the timeframe of the preparation of this additional information it was not possible for us to determine the differences in the coupe lists between the previous 2010/2011 3 year plan and the current plan.

It was decided that this time was not productively spent as it does not alter the planning status of any coupes that are not included in the current plan. As mentioned in our 12th October report coupes that are not in the current 3 year plan are not available for harvesting operations until an assessment process, planning and roading are undertaken (noting that it is highly unlikely that any coupe with volume remaining to be harvested and an active FPP would not have been included in the current operational plan). Given the short time frame between now and December 31 2011 it was determined that this process would not provide alternatives within this time frame.

- ***The Status, including planning and potential wood supply (as well as timing) from the 38 coupes identified by Forestry Tasmania in April 2011 outside the 572,000 ha that could be logged if roading were available.***

The March letter (FT letter 28th March, 2011) identified 38 possible coupes that could be substituted for those inside the 430,000ha or 572,000ha areas. The coupes required roading work and were possibilities if external funds were available. Some of the road works subsequently proceeded using funds for other roads in FT's budget in anticipation that external funding would be provided. Further roading works for the listed coupes ceased when funding was not available, however this may only have directly impacted the potential availability of 3 coupes.

Of the 38 coupes listed in the above letter.

- 4 coupes have been completed already.
- 7 coupes are currently operational,
- 12 coupes are affected by the presence of Wedge Tailed Eagles,
- 5 have a certified Forest Practices Plan in place and of these coupes
 - 3 are waiting for ground conditions to improve to allow roading to occur
 - 2 have been delayed in the schedule because of high pulpwood product percentage within the coupe.
- 3 coupes are scheduled for January/February 2012
 - 1 Coupe PN002D has a very small volume (<1,000t) and would not be a practical substitution.
 - 1 coupe RP009C requires drier conditions to allow harvesting to commence and is not expected to be practically available until February
 - The 3rd coupe MA120A is currently in the final stages of FPP certification and requires ground conditions to dry out before roading can be completed – which is unlikely to occur before the end of the year given ongoing wet conditions in the north west.
- 3 coupes have not had planning or roading work commenced and this could not occur in the limited time between now and the end of the year.
- 1 coupe is restricted by Fire Management issues
- 1 coupe is a plantation coupe
- 1 coupe requires access to be established through Private Property
- 1 coupe is a cable coupe that has a significantly lower percentage of merch wood than the current cable coupe planned for operations.

From this list of coupes no suitable alternative coupes can be found to replace any of the 22 coupes required prior to December 2011. Details of each coupe on the list are provided in appendix 1.

- ***Identification and assessment of the potential suitability and availability of any coupes previously listed as being excluded for economic reasons.***

Coupes excluded for “economic reasons” were so considered on the assessment that costs involved in either accessing these coupes or relocating contractors to them would significantly exceed sales revenue.

Coupe MU FD054B is located in the East Murchison District and was previously partially harvested. There is now only a small volume remaining to be harvested. To move a contractor from a coupe within the 430,000 ha area to this coupe would require significant relocation time (and associated lost production) and the small volume remaining on the coupe (approx. 1,400 tonne) would sustain operations for around 2 weeks. If there was no alternative after 2 weeks at coupe MU FD054B, the contractor might likely return to the current coupe. Similarly coupe MU OO72E also requires the construction of significant roading for a small volume of (3,000t approx.).

When coupes are initially included in the 3 year plan there is an assumption about the recoverable volume based on the normal bounds of operational constraints. As planning progresses, special values or other factors may be identified on some coupes that limit the total area available for harvesting. Hence a coupe that was initially considered viable may no longer be suitable if the restrictions reduce the available harvest area to the extent where the planned roading cannot be justified by the limited volume from the reduced coupe. These coupes may become viable once other coupes are scheduled in the general area and the roading cost can be justified by the increased volume.

The other 2 coupes, MU LG002A and MU LG004C required repair work to a washed out bridge. FT staff have now determined that this access is not a viable access and are looking at an alternate route to access this area. At this stage no FPP planning has commenced until a suitable alternative access can be found. Therefore these coupes could not be made available before the end of this year.

- ***An assessment of availability and practicality of bringing forward winter shoulder coupes as substitutes (product mix) for scheduled coupes within the 572,000 ha area.***

A further assessment of the coupes identified in the 12th October report as being required for winter logging indicates that they are not a suitable alternative for any of the 22 coupes required prior to December 31 2011.

The coupes identified in the 12th October report come from Table 5 and Appendix 2. Table 5 indicated that there are 23 coupes that are next in the schedule or scheduled for either early 2012 or for winter 2012 due to ground conditions. As mentioned in table 5, 12 of these coupes were expected to commence prior to December 31, 7 are scheduled for early in 2012 as ground conditions improve or FPP's are completed (and cannot be practically brought forward into 2011) and 4 have FPP's but are scheduled for winter logging in 2012.

Of these 4 coupes identified in the 12th October report.

- 3 coupes have high pulpwood proportions which are a coupe selection limiting factor. They are therefore not considered to be suitable alternatives for the reasons set out on pages 11 and 12.
- The 4th coupe (SX026A), whilst having a suitable product mix, is not suited to conventional harvesting and has been scheduled for a mechanical harvesting operation. It is therefore not a practical alternative for conventional operations within the 22 coupes and simply shifting a mechanised harvesting operation between two coupes outside the 430,000 ha area will do nothing to reduce demand within the 430,000 ha area.

Even if any of these coupes had been suitable in the short term, they are difficult to replace. The Forest Practices Code (FPC) requires prevention of excessive rutting and or mixing of soils. Coupes scheduled for winter and/or wetter periods are selected because they have ground conditions that are suitable for operations that comply with FPC requirements during wetter seasons. The availability of such suitable coupes is limited and in wetter than average seasons limited winter coupes restricts operations. Using winter coupes in drier seasons will increase the risk of supply failure in wetter seasons.

- ***An assessment of whether any of the 18 coupes identified in Table 5, or any other potentially suitable coupes, could be brought forward (prior to the end of December 2011) by prioritising finalisation of Forest Practices Plans and/or roading – and an estimate of the time and costs that would be involved.***

The 18 coupes identified as “FPP not certified or roading required” in Table 5 of the 12 October report were reviewed with FT field staff and updated comments are presented in table 7 below.

Table 7 Updated status of the 18 coupes identified in Table 5 of initial report.

District	Coupe	FPP Status	Comments
DE	RP022D	Certified FPP	Currently being harvested
MU	KA009B	Certified FPP	Not gravelled – and conditions still too wet in NW. Scheduled May June
MU	OL021J	Certified FPP	Needs roading. Conditions still wet in North West
DE	RP021G	Draft FPP	Needs roading
DE	TA011G	Draft FPP	Needs roading. Issues with Special Values & Forest Practices Code dispersal issues
DE	TN004B	Draft FPP	Needs roading. Dry season only harvesting due to Karst
DE	BD027C	Draft FPP prepared	Issue with Private Property/ State Forest boundary. Needs roading & High pulpwood component. Dry weather only & Wedge tailed Eagle affected
DE	SH061D	Draft FPP with Fire Management issues	Potential Sawlog Retention coupe with high pulpwood component
DE	SH040B	Draft FPP with Fire Management issues	Potential Sawlog Retention coupe with high pulpwood component

DE	SH041J	Draft FPP with Fire Management issues	Potential Sawlog Retention coupe with high pulpwood component
DE	MC005C	Early stages of Operational planning	Issues expected with Special Values & High pulpwood component
HU	FN001I	Early stages of Operational planning	Dispersal issues. Awaiting reply from Forest Practices Authority
DE	FT002I	Early stages of Operational planning	Swift Parrot area
DE	PL015E	Early stages of Operational planning	Needs roading
DE	SW128E	No work commenced	Issues expected with Special Values & High pulpwood component. Cable coupe - no cable machine available
DE	SH086D	No work commenced	Eagle constrained, Cable operation - no cable machine available
BA	MF063A	No work commenced	Issue with access to coupe
MU	LG011M	No work commenced	Native Forest thinning coupe only. 100% pulpwood. Needs roading

DE RP022D is shown above as now being underway. At the time of our initial report this coupe was still subject to approval of specialist advice, the timing of which was unknown. This advice was subsequently received and the FPP certified. Harvesting of the road line was commenced in the last few weeks and harvesting of the coupe brought forward from the initial expectation of late 2011. This coupe coming forward has not provided the opportunity to act as a replacement for any of the 22 coupes as it was scheduled to follow a coupe that has not contained as much volume as initially expected and has been completed earlier than planned.

Coupe DE RP021G is the only other coupe from the above list that could theoretically be brought forward for harvesting prior to 31 December. This coupe has a draft FPP but requires roading. Advice from FT indicates that this plan is 75 per cent complete which suggests it could be complete in 2-3 weeks. Roading could then commence. Approximately 0.5km of roading is required to be constructed which could take a week operationally. As to being a suitable alternative, DE RP021G is listed in FT's current operational plan as requiring a mechanised crew to undertake harvesting operations. This makes it an unsuitable replacement for any of the current coupes listed in Derwent District between now and Dec 31 which are being conducted by conventional harvesting operations.

All other listed coupes have other constraints that prevent them being ready for harvesting before 31 December 2011. Additional resources or funding would not enable these coupes to be available for harvesting before 31 December 2011.

In terms of other potential coupe sources FT has commenced identifying coupes for the 2012 three year plan and the coming roading season. These roading plans will commence in 2012 as conditions allow.

Reviewing the planned list of coupes outside the 430,000ha and 572,000ha areas identified only 8 coupes from this list that currently have certified FPP's in place. Of these, 2 coupes are impacted by wedge tailed eagle nests, 1 coupe has issues associated with access through private property, 1 is a plantation coupe and another is scheduled for winter 2012. Of the remaining 3 coupes, 2 require significant road construction of greater than 1km in each instance. This work can commence when ground conditions allow. Work on these coupes is expected to commence early 2012.

The remaining coupe in Bass District requires an upgrade to access a small volume of wood (less than 1,500 tonnes). Whilst this could be brought forward the volume contribution is insignificant.

The remaining coupes in the current roading plan for 2012 do not have FPP's sufficiently progressed to allow construction and harvesting before December 31 2011. They are therefore not practical. Additional resources or funding would not allow these coupes to be available before 31 December.

In addition to the 497 coupes in the current annual operational plan, 182 additional coupes have been identified that have a certified FPP in place and which have either not had harvesting operations commence or completed.

For the reasons set out below, none of these coupes would provide a suitable substitute for currently scheduled coupes in the period up until the end of December 2011.

- 68 coupes are hardwood plantation coupes
- 18 are pine plantation coupes
- 52 coupes have silvicultural prescriptions that will produce significantly higher volumes of pulpwood than other prescriptions
 - 22 are Advanced Growth Retention coupes
 - 4 are Potential Sawlog Retention coupes
 - 5 are Seed Tree Removal coupes
 - 21 are native forest thinning coupes
- 13 are cable coupes that are either located in a district that does not have a cable machine at present or it is already working outside the nominated areas or have a high percentage of pulpwood that is not a suitable replacement.
- 8 coupes are restricted by Fire Management Issues with adjacent coupes
- 5 coupes are restricted by Wedge Tailed Eagles
- 5 coupes have a high pulpwood percentage and are not suitable alternatives
- 4 have been partially harvested but require dry ground conditions to complete the remaining sections of small areas
- 4 have not commenced as yet but cannot be started until ground conditions are dry enough to allow operations to operate within the FPC
- 2 coupes have had conventional operations completed and remain open for firewood operations only
- 2 coupes are targeting Blackwood and are located in areas that require dry ground conditions for operations to commence
- 1 coupe has been delayed until safety issues can be resolved

Appendix 1

Status of the 38 coupes listed by Forestry Tasmania as alternative roading options on 28th March 2011

District	Coupe	Roading Status	Status
Derwent	TN062C	Completed	Cable Operation - Low % of Merchwood
Bass	JV105C	Completed	Harvesting Completed
Derwent	TN037G	Completed	Harvesting Completed
Huon	AR085I	Completed	Harvesting Completed
Huon	AR064I	Completed	Harvesting Completed
Bass	RS129D	Completed	Currently operational
Bass	BW114H	Completed	Currently operational
Bass	NL119C	Completed	Currently operational
Derwent	RP008H	Completed	Currently operational
Huon	DN020B	Completed	Currently operational
Derwent	WW051B		Currently operational - small spur may not be req
Derwent	SX035C	Completed	Currently operational Cable Operation
Bass	BW120D		Eagle Restricted
Bass	BW122D	Completed	Eagle Restricted
Bass	GC076C		Eagle Restricted
Bass	GC077B	Completed	Eagle Restricted
Bass	GC085A	Completed	Eagle Restricted
Bass	LI129C	Completed	Eagle Restricted
Bass	RS116A	Completed	Eagle Restricted
Bass	NL111C		Eagle Restricted
Derwent	RP013H		Eagle Restricted
Huon	DN017H	Completed	Eagle Restricted
Huon	HP031D		Eagle Restricted
Murchison	BY010C		Eagle Restricted
Derwent	WE035B		FPP Certified delayed due to high pulpwood %
Huon	RU001K	Completed	FPP Certified delayed due to high pulpwood %
Derwent	SX025D		FPP Certified Not Roded - In plan for next roading season
Murchison	OL021J		FPP Certified Not Roded - Plan for drier conditions
Murchison	KA009B		FPP Certified Not Roded - Plan for drier conditions
Bass	TY002A		FPP Not Commenced - not roaded
Derwent	PL015D		FPP Not Commenced - not roaded
Murchison	KA004E		FPP Not Commenced - not roaded
Derwent	TA018J		Plantation
Bass	PA165A		Requires access through Private Property
Derwent	SX035I	Completed	Restricted by Fire Management Issues
Derwent	PN002D		Scheduled for Jan/Feb 2012 plus very low volume < 1,000t
Bass	MA120A		Scheduled for Jan /Feb 2012
Derwent	RP009C		Scheduled for Jan/Feb 2012