

East Gippsland RFA Review

The review of the East Gippsland RFA which was signed over 13 years ago is overdue. The Victorian Government failed to honour its undertaking to review the RFA in 2002 and the second 5 year review, due in 2007, is well overdue. With less than 7 years to run, it is quite puzzling why a review is now so urgent, particularly when both Governments have already decided that no major changes are allowed under the current review:

The review to which this report contributes will not open up the RFA's to renegotiation, however both parties may agree to some minor modifications to incorporate review findings.

In this International Year of Biodiversity, I find it appalling that the best that the Victorian and Federal Government can offer is this bit of sham public consultation over an Agreement that has done little to protect biodiversity in East Gippsland. The fact that the Commonwealth Government plans to do nothing to amend this Agreement, which allows the appalling logging of areas such as Brown Mountain to occur, is scandalous. While this area provides habitat for the endangered Long Footed Potoroo, it appears that the Commonwealth Government has abandoned any responsibility for making sure that all suitable habitat for this species is conserved.

While this review is supposed to be reporting on progress of the RFA up to 30/6/09, I am amazed that so much of the Victorian Government's report deals with projects and initiatives that have not yet seen the light of day. For example, 13 years after the signing of the East Gippsland RFA, the Victorian Government still has no data for many of the indicators used in its State of the Forest report and 13 years later, the Victorian Government is still talking about holding another review to try and work out how to get data for these indicators. The Victorian Government promised a comprehensive quality assurance program, but claims that the most important part of this is a new system called EMS that is still under development – despite the fact that a need for this system was identified in the 2002 *Our Forests, Our Future* report. Elsewhere in the report, the Victorian Government claims to be developing “..a new monitoring program which will provide the information required to evaluate the success of policy and management initiatives in achieving desired forest outcomes”.

We are now two thirds of the way through the life of the East Gippsland RFA, and it is testament to the Victorian Government's lack of commitment to sustainable forestry that so many systems and practices required to provide this type of management are still not in place. As the original East Gippsland RFA was being developed, both the Federal and State Liberal Governments decided to water down the funding needs for the Agreement. Initial wording of the Agreement initially read that “achieving the objectives of this Agreement will require the ongoing commitment of *considerable* financial resources from both

Governments” (my emphasis). However, the key word “considerable” was removed from the Agreement, and many of the current problems with the RFAs such as the failure to commence collecting data for all the biodiversity indicators, the failure to properly monitor regeneration, the failure to establish weed and pest programs and the failure to satisfactorily regenerate all logged areas are all due to the Victorian Government's failure to make adequate funding available for these programs. This failure is quite inexcusable, because over the term of the Agreement, the Victorian Government has been running large budget surpluses.

SUSTAINABILITY INDICATORS

One of the key undertakings made when the East Gippsland RFA was signed was the establishment of a program to measure and report on a wide range of indicators so that the Federal Government and public could monitor the delivery of sustainable forestry. From documents obtained under FOI, it appears that at the outset, the Victorian Government white anted this process by insisting that “performance against EFSM indicators will not invalidate the agreement” (i.e. as there would be no required standards to meet , the

Victorian Government was under no pressure to actually deliver sustainable forestry).

So far, the Victorian Government has reported their sustainability indicators in two State of the Forests reports. In the first report, released in 2005, Minister Thwaites stated that “the community is entitled to scientifically robust and transparent information” and that the reports were designed to allow the public to assess whether our forests were being sustainably managed. This report was also introduced as a benchmark report providing baseline data that could be used as a comparison with later years. This first report was heralded as a document that would provide information on forests to improve transparency and accountability.

When the second report was released in 2009, the Government had changed the indicator framework and some of the methods for data collection, so that for many indicators, it was not possible to make comparisons with the earlier report. In any case, when the second report was released, it was clear that some areas of reporting had been ignored by the Government. For the key area of conservation of biological diversity, over half the indicators still had no data available.

In this UN Year of Biodiversity, it is worthwhile examining the ability of the Victorian Government to report on this key area, 13 years after the signing of the East Gippsland RFA:

Indicator	Name	Data Status
1.1a	Area by forest type and tenure	<i>Data not comparable with previous years</i>
1.1b	Area by forest type by growth stage	<i>Data not comparable with previous years</i>
1.1c	Area by forest type by growth stage distribution in protected zones	<i>Data not comparable with previous years</i>
1.1d	Fragmentation of native forest cover	<i>Some preliminary data available</i>
1.2a	The status of forest dependent species at risk of not maintaining viable breeding populations	<i>Partial data only</i>
1.2b	Indicator 1.2b Area of habitat available for forest dependent indicator species	<i>No data</i>
1.2c	Indicator 1.2c Representative indicator species from a range of habitats monitored at scales relevant to regional forest management	<i>No data</i>
1.2d	Indicator 1.2d Degree of disturbance to native forest species caused by invasive species	<i>No data</i>
1.3a	Indicator 1.3a The number of forest dependent species at risk from isolation that may lead to loss of genetic variation	<i>No data</i>
1.3b	<i>Indicator 1.3b Number of in situ and ex situ conservation efforts for forest dependent species</i>	<i>Data available</i>

Table 1. Data availability for DSE Biodiversity indicators used in the State of the Forest report

When the RFAs were signed, the Victorian Government was given clear instructions that the indicators used to monitor the development of sustainable forestry must be practical, measurable, cost effective and able to be implemented at a regional level. It is quite scandalous that after a lengthy review process, the Government released new indicators in the 2007 report *Criteria and Indicators for Sustainable Management in Victoria* and these new indicators appear to be unworkable in many cases.

In fact, the implementation of this monitoring program has been so bungled that the Department is conducting another review. In September 2009, I was told by Lee Mieziš that

Data gaps have been identified for over two thirds of the indicators of sustainable forest management in the current criteria and indicator framework. These are primarily due to difficulties in measuring the indicators, which are based on international criteria and are new to Victoria ..

The Department of Sustainability and Environment is currently undertaking a review of the indicators to assess their measurability and to determine which, if any, of the reported data gaps can be addressed over time.

Thirteen years after the signing of the East Gippsland RFA, we have the Victorian Department still fumbling around trying to work out how to set up the monitoring program and unable to say if the program is even deliverable.

When I queried the need for another review of the Criteria and Indicators, Peter Appleford insisted that this was “essential to maintaining the relevance of data collected for achieving sustainable forest management” , even though ,in many cases, the Department had not collected a single bit of data for some indicators.

To underline the fact that the Victorian Government sees no urgency in completing this monitoring program, Appleford insisted that “many of the criteria and indicators that have been adopted would remain aspirational for the foreseeable future”. So much for the accountability promised by Minister Thwaites back in 2005.

When Lee Miezis wrote to me in September 2009, he was quick to point out that all the data gaps and problems with the monitoring program “does not reflect any failure to manage our forests for sustainable outcomes”. Provision of comprehensive monitoring for sustainable forestry was a key component of the RFA. The Victorian Government has failed comprehensively to deliver on this part of the Agreement and many Victorians would not accept Miezis’ glowing self assessment of his Department’s performance.

Even when the Victorian Government appears to have data for indicators, there are doubts about the accuracy and quality of some of this data. For example, indicator 2.5 is supposed to report on the proportion of forest area regenerated following logging, but a close inspection of these figures shows that a large area of forest has not been surveyed and when it has been surveyed, the work has not followed procedures correctly.

FOREST REGENERATION IN EAST GIPPSLAND

In its introductory comments made about regeneration results made in the 2009 State of the Forest Report, The Victorian Government States that where regeneration has been found to have failed, remedial action is taken to repair the damaged area. In fact, underfunding by the Victorian Government has resulted in the build up of a large area of failed regeneration.

Problems with regeneration failures were highlighted in the media in 2000 when Karl Malakunas from the Herald Sun reported on the large backlog of failed regeneration, mostly occurring in East Gippsland . At the time, I wrote to the State Government, I was given a clear undertaking by Gerard O’Neill, then Executive Director of Forest Services, that this problem was being addressed by the Government

..the Government is making funds available for coupe retreatment, and over the next 4-5 years the majority of the 6000 ha should have been retreated

However, a recent regeneration survey report stated that when the Department of Sustainability and Environment checked the area of failed regeneration in 2004, they found that the area had increased to 7,500 Ha. The Department’s response to this lack of any decrease in the amount of failed regeneration was to state that

Since 2002, resources available for forest regeneration have been mostly directed to large areas of immature forest affected by fire. The Department has, and will continue, to explore funding options to conduct broader retreatment works.

In recent MAHP reports, the authors have warned the State Government a number of times about the consequences of maintaining the large area of failed regeneration. In the 2006-07 report, the Government was warned

Backlog regeneration has existed for a number of years, and the issue will continue to remain until funding and resources are made available. EIAP stresses that resources must be found to regenerate these area and point out that as time passes, the cost to successfully regenerate will only

increase. The importance of regeneration or growing stock is also directly related to resource modelling assumptions and the sustainability of the forest resource.

In its submission to the RFA review, the Victorian Government claims that it is “progressively addressing this issue”, a claim that is a gross overstatement given that the area of failed regeneration now is essentially the same as it was in 2000. The failure to provide adequate funding and resources for this work over the entire span of the RFA Agreement to date is a clear indication that the Victorian Government is not committed to the goal of sustainable forestry. It is totally unacceptable for the Victorian Government to insist that areas of State

forest, like Brown Mountain in East Gippsland, with trees more than 500 years old be cut down to provide resources for the timber industry when they and the industry are incapable of sustainably managing these forests.

When it comes to reporting the results of regeneration surveys, the Victorian Government appears to be incapable of providing timely and accurate reports. When the Department of Sustainability and Environment released its last report in 2008, it covered surveys up to 2000/01. Even so, this report stated that 19,000 Ha of logged forests had still not been surveyed – most of this in East Gippsland. Given that surveys are supposed to be completed no longer than 30 months after the logged area has been re seeded, it is clear that the Victorian Government is a long way behind in its reporting schedule. When the Commonwealth Government released its National State of the forest report last year, the Victoria was the only state that was unable to provide regeneration data for the reporting period of the report. Rather than being critical of the Victorian Government, the Commonwealth accepted the old and totally inaccurate data after accepting an excuse about as ridiculous as “the dog ate my homework”

In Victoria, the area of even aged multiple use public native forest regenerated after harvesting is reported only up to 2000-01 because of a 4-5 year lag between regeneration treatment and assessment

Reviews of regeneration in East Gippsland by the EPA

As part of the RFA, the Victorian Government agreed to provide independent audits of the Code of Forest Practice. Due largely to complaints from VicForests, the Department of Sustainability and Environment resumed running these audits last year. Although they have promised to recommence “independent” audits, it is far from clear that these audits will be conducting audits with the same detail as the EPA audits. Towards the end of the EPA program, they began to start auditing the way the Department was managing regeneration.

In their 2005 and 2007 reports, the EPA audited East Gippsland regeneration management and were quite scathing of the low standard. So while I point out a number of areas where the Department does not appear to be conducting surveys correctly, I am only echoing comments made by other agencies like the EPA and the panel producing the MAHP reports who have all been critical of regeneration practices in East Gippsland.

In its 2005 report, the auditors found that East Gippsland had the worst performance of all the FMA checked for assessment of regeneration, with only 23% of coupes undertaking or documenting assessment of regeneration to specified standards. For many of the coupes checked in this year, the auditors often could not find any evidence of a formal stocking survey. On two coupes, a survey had been taken, but the remedial action recommended in the report had not been followed up.

Two years later, the EPA returned to East Gippsland and again found very poor adherence to procedures for monitoring and regeneration of coupes. For example, when commenting on the Cann River Operational Area, the auditors noted

The level of compliance was found to have been of generally poor standard. There was a low rate of compliance in the area of monitoring with all four coupes found to be 0% compliant.

The auditor found that 7 out of 11 coupes in East Gippsland, there was inadequate evidence of regeneration approximating preharvest species composition and distribution and 10 out of 11 coupes had no regeneration survey completed and noted

The auditor is aware that the DSE silvicultural guideline No 10 requires that the forest

manager undertake established seedling surveys within 18 to 30 months of the regeneration date. The auditor reviewed the dates for each of the coupes not complying with this focus area and found that all had either exceeded the prescribed time frame (30 months) or had not recorded regeneration dates from which to measure the time frame.

Criticisms about the lack of surveys and the failure to complete surveys correctly that are made by the EPA show that there are serious problems with the management of regeneration in East Gippsland.

Problems with East Gippsland Regeneration data

a) Records management

Data presented by the Victorian Government in their 2009 Regeneration report is inaccurate because computer systems errors have caused a number of coupe survey regeneration records to be duplicated. This problem was detected when I obtained copies of the spread sheets containing individual coupe survey results used by the Department of Sustainability and Environment for the production of tables in their report. (I call this document the Regeneration Survey spreadsheets in the discussion below). The data duplication error was also reported in the 2006-07 MAHP Technical report for the East Gippsland FMA. The Department of Sustainability and Environment have confirmed that this duplication problem exists but the Department appears to have done nothing to correct the erroneous reports. Moreover, when the Victorian Government became aware of the problem, it appears that they failed to alert the Commonwealth Government, despite have given them the data to use in the National State of the Forest Report in 2009.

When the duplicate records are removed, the area surveyed for East Gippsland drops from 11,875 Ha to 9,842 Ha i.e. the East Gippsland figures are about 20% too high. Because of the magnitude of the error, it is likely that the stated outstanding survey figure for the State is too high. In its submission to the RFA review, the Victorian Government boasted that it had an extensive quality control program in place but there is no sign that this was in operation when this bungling occurred.

The fact that this data duplication error could occur raises doubts about the quality of computer systems used to support the management of forests in this State. The coupe address is a key field used to identify a coupe, and it is quite surprising that the Coupe Management system apparently allows for the setting up of multiple records for the same coupe.

Other data entered for regeneration work appears to have passed through weak data validation processing. For example, from EPA Audit reports, it is clear that concerns have been raised about key missing dates that are needed to check that the survey had been conducted during the correct time period. Harvest end dates are sometime after the site establishment date or survey dates can be after planting dates.

b) Identification of coupes for survey

Last year, I obtained a list of all clearfelling/seed tree coupes that had been completed in 1996/97 from the Department of Sustainability and Environment's web site "Forest Explorer". When I matched these coupe addresses with coupe addresses from the Regeneration Survey spreadsheets, I found 40 coupes from the Forest Explorer list that were not on the Regeneration survey spreadsheets. i.e. these coupes still had no regeneration survey. These coupes had a total area of 922 Ha.

Some of these coupes may be on the Departments list of coupes with an outstanding survey, but it is clear from the data in the table below that the area of outstanding surveys is too low to explain all the discrepancy. If a coupe was completed in 1996/97, over 90% of these would have had regeneration treatment in the period 1996/97 – 1998/99 i.e. coupes completed in 1996/97 should have a survey recorded for either 1996/97, 1997/98 or 1998/99. If we make the assumption that all the outstanding surveys for 1996/97 and 1997/98 are for coupes where logging was completed in 1996/97, there is still an area of 445 Ha unaccounted. It appears that results for around 20 coupes (approximately 15%) are missing i.e. they don't have a survey result and they are not on the Department's overdue for survey list.

A list of all the coupes from Forest Explorer that were not matched with the Regeneration Survey spreadsheets is available from Appendix 2.

YEAR	Area (Ha)
1996/97	0
1997/98	226
1998/99	251
1999/00	1660
2000/01	3805

Table 2. Area of forest overdue for regeneration survey in East Gippsland FMA. (Source: Stocking following harvesting and regeneration in Victoria's State forests 1996/97-2000/01, Department of Sustainability and Environment 2008)

Data provided from the Regeneration Survey spreadsheets makes it possible, using the Harvesting Finish date, to tabulate the areas surveyed by the year that the logging ended. When these figures are compared with logging areas for each year, it seems clear that some of the logged areas are not being surveyed and are not on the overdue surveys list. (The regeneration areas are totalled after removing duplicated records from the data provided).

In table 3, Regeneration Survey areas are greater than the area logged at the start of the series. Last year, I was advised by the Department of Sustainability and Environment that the areas reported in regeneration surveys are gross areas whereas the logging areas are net

areas, and I believe this is reason for the higher Regeneration surveys area at the start of the series. (In East Gippsland, it appears these can differ by around 30%)

However, towards the end of the series, the logged area figures become much greater, and it is clear that the difference cannot be explained by the area on the overdue survey list. There is a large overdue area for 2000/01, but the vast majority of these coupes will have a harvest end date after 30/6/99 and so cannot all be used to explain this discrepancy.

YEAR	Area Logged (Ha)	Area surveyed for regeneration (Ha)
1991/92	3189	3758
1992/93	3870	4431
1993/94	3909	4301
1994/95	3489	3436
1995/96	3537	2986
1996/97	3519	2432
1997/98	3194	2174
1998/99	3583	2118

Table 3: Comparison of area logged with surveyed area that has a logging end date in the financial year.(Area logged data supplied from letter from Department of Natural Resources and Environment ref MC043125 dated 10/10/02)

c) Survey process

Last year, I lodged an FOI request and asked for the regeneration survey field data sheets for HEMS coupes with an establishment data in 2000/01 from East Gippsland and was provided with documents for nearly 40 coupes.

Although these data sheets were not obtained primarily to check Code breaches, nevertheless the number of comments on these sheets reporting serious problems (10%) was alarming, particularly because they have caused regeneration problems.

On one of the data sheets, the assessor had noted that “this coupe was wrongly seeded, adequate seed but wrong composition” (15/892/518/01). At two coupes (15/840/501/16,

15/890/502/13) piles of logging slash had been pushed into gullies and at 15/894/504/10, the assessor believed that one reason for the failure of the coupe was soil compaction from wet weather logging.

(i) Survey plots

According to the Department of Sustainability, 6 plots/ Ha is the bare minimum number of plots required to assess regeneration. However, checks of the field survey sheets have shown that this standard is frequently not attained.

In assessing the frequency of sampling, the number of sampling points has been divided by the coupe area recorded on the field data sheet or the area obtained from Forest Explorer (the smallest area is used). Results for all coupes are tabled in Appendix 1. Please note that the first two coupes with 0 plots are examples of what the Department calls a “Random Walk” survey that apparently requires no systematic sampling. (these do not appear to be approved practices). One coupe with a high plot rate is another non standard survey that has used a 20m by 50 m sampling frame.(15/837/505/04)

17% of the coupes had 3 or fewer plots / Ha and over half the coupes did not have enough plots to satisfy the standard. This finding is consistent with recent Department of Sustainability and Environment audits. In the 2007/08 Coupe Finalisation Report for coupes submitted to the Department by Vicforests for handback, 8 of the 51 (16%) coupes from the East Gippsland FMA were not accepted due to insufficient plots on regeneration surveys.

The failure to follow Departmental procedures for regeneration surveys means that the results

cannot be considered accurate and is one more example of poor management by the Department.

(ii) Identification of coupe plant species

Current regeneration standards do not require any detailed prelogging survey to be carried out. However, the current procedure does require the assessor to note on the Regeneration Summary sheet all the main eucalypt species expected to be found at the site before commencing the survey. The minimum standard is that “at least 10 acceptable seedlings of those eucalypt species present on the site prior to harvesting or other disturbance must be present on the regenerated site.” On the current field sheet, the assessor is expected to indicate if the species is present. This coupe must satisfy this check before it is classed as regenerated.

Assessors had failed to record the species present on 8% of the field sheets and for 25% of the coupes, the assessors had either failed to indicate if any of the species were present or indicated that some species were missing. (see attachment 1 for details of these checks).

These results are alarming because the EPA had reported similar findings in their reports for 2005 and 2007. Despite several warnings, again we see no action by the Department to rectify problems raised by outsiders. This again points to a culture in the Department that is resistant to outside criticism and again underlines the lack of any meaningful quality control. It is totally unacceptable that problems like this are reported time and time again, without the Department taking any steps to correct the problem. Because many of the coupes in the attached list have not had a proper regeneration assessment, it appears that many of them are being incorrectly treated as satisfactory.

d) Rounding of survey results

A histogram of the regeneration survey results for East Gippsland shows very anomalous counts for values ending in “5” or “0” i.e. many of the results appear to be rounded. If assessors had all been following the Departmental procedures correctly, the proportion results with a last digit of “0” or “5” should be roughly the same as for other digits. However, the proportion with “0” or “5” in the regeneration results for 1989/90-2000/01 is 36% rather than the 20% that would be expected if there was no rounding.

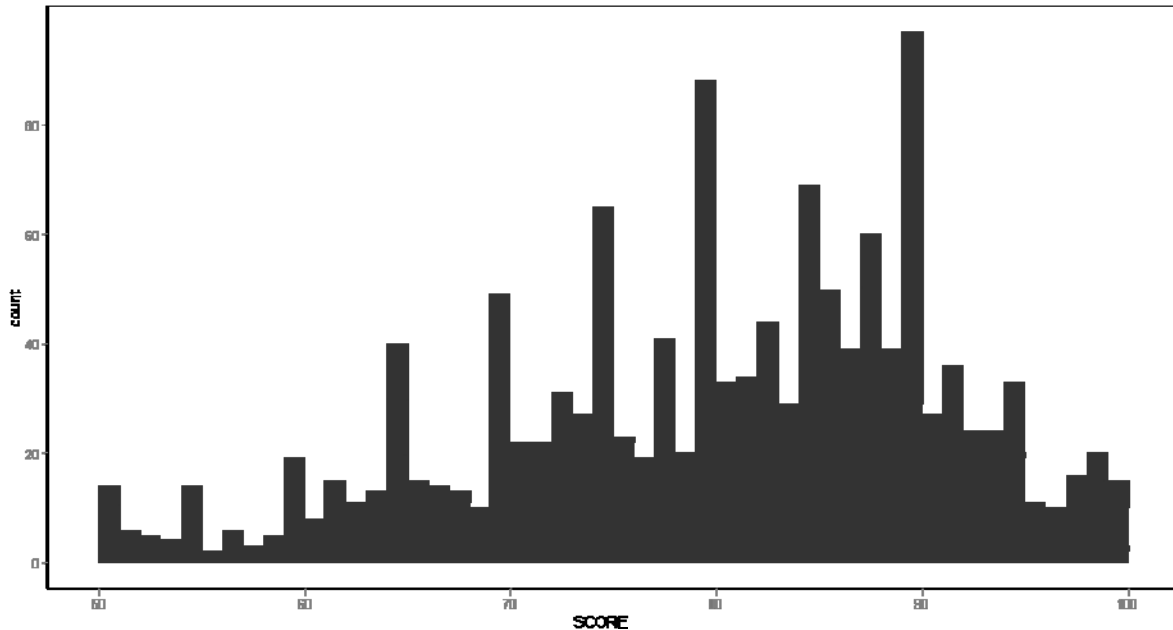


Fig 1. Histogram showing the number of coupes with a regeneration survey score of 50 and above. This data comes from all surveys over the period 1989/90-00/01.

If all the survey work had been carried out as required, it is difficult to see why an assessor would round results. The high proportion of rounded results may indicate that some of the surveys are not been conducted using approved methods. This suggestion is quite reasonable, especially since 6% of the survey sheets had been conducted using a non standard survey method (Random Walk).

CONCLUSION

It is clear that there are serious problems with the management of regeneration in East Gippsland forests. Many of the problems I have raised have also been raised by other organisations such as the EPA who have audited the Department's performance.

The Department's regeneration data is used sometimes to develop models for resource prediction, and this is another reason for requiring the data to be of a high standard. A recent project to analyse forest classified as Assumed Stocked recently used regeneration data. The authors of the report claimed that

Stocking surveys have been shown to provide valuable information for assessing the success of regeneration in assumed stocked stands. This may conflict with data from aerial photo interpretation, particularly for stands less than 10 years old.

Given the importance the Department places on these surveys, it is important that problems with the regeneration data are corrected. Errors in this data clearly have the potential to provide misleading data for resource estimation programs. To address these problems, I believe that the review should recommend:

- a) Surveys are completed faster so that the reporting of Victorian regeneration results is aligned with other States i.e. for the next State of the Forest report, the Victorian Government will have results for the actual period of the report.
- b) The Department of Sustainability immediately releases results of regeneration surveys for the period 2001/02-2005/06
- c) The Department of Sustainability and Environment begins to provide regeneration

results for the public at a coupe level through the online Forest Explorer system

- d) The Victorian Government be required to immediately make available all necessary funds to address the backlog regeneration issue
- e) The Department of Sustainability and Environment conducts an audit of computer systems to check the quality of data and devise methods for better data validation so that errors are minimised.
- f) The Department of Sustainability and Environment is required to start detailed regular reporting on the extent of backlog regeneration.
- g) The Department of Sustainability introduces practices to ensure that all regeneration surveys are conducted according to Departmental guidelines.
- h) Since problems with the sustainability indicators and criteria appear to be so insurmountable for the Department, it should be required to immediately seek assistance from universities and other organizations and provide funding so that programs to assess all indicators are in place by the time of the next State of the Forest report.
- i) The Department of Sustainability and Environment conducts a check of regeneration surveys with “rounded” scores to make sure that correct regeneration survey methods have been used.

Sincerely yours

D Haywood

Appendix 1

East Gippsland HEMS coupes for 2000/01

COUPE	SPECIES IDENTIFIED	ALL SPECIES PRESENT	COUPE AREA (Ha)	NUMBER OF PLOTS	PLOT FREQUENCY (Plots/Ha)
813/501/0104	YES	YES	53	0	0
813/504/0106	YES	YES	19	0	0
814/501/05	NO	NOT CHECKED	26	174	7
815/502/05	YES	YES	8	88	11
816/504/06	YES	YES	15	169	11
817/503/03	YES	YES	24	113	5
837/504/05	YES	YES	38	120	3
837/505/04	YES	NO	4	55	14
837/505/06	YES	NOT CHECKED	12	67	6
840/501/16	YES	YES	27	135	5
840/501/35	YES	YES	24	54	2
846/503/05	YES	YES	25	113	5
846/513/09	YES	YES	30	76	3
885/511/03	YES	YES	32	177	6
885/511/13&17	YES	YES	46	254	6
886/509/01	YES	NOT CHECKED	22	78	4
890/502/13	YES	YES	18	89	5
892/502/04	YES	NOT CHECKED	24	116	5
892/503/04	YES	YES	42	172	4
892/505/01	YES	YES	20	84	4
892/505/02	NO	NOT CHECKED	31	175	6
892/507/04	YES	YES	33	104	3
892/518/01	YES	NOT CHECKED	37	182	5
892/519/01 & 05	YES	YES	30	111	4
893/503/03	YES	YES	33	120	4
893/503/06	YES	YES	44	162	4
893/503/07	YES	NOT CHECKED	29	120	4
893/503/08	YES	YES	21	124	6
894/503/04	NO	NOT CHECKED	27	243	9
894/504/10	YES	YES	14	76	5
895/510/03	YES	YES	15	124	8
895/510/05	YES	YES	26	74	3
895/515/05	YES	YES	19	42	2

Notes

SPECIES IDENTIFIED: The survey summary sheet contains a field where the assessor records a list of all the main species that are expected to be present on the coupe. If this has been entered, this is shown as YES in the table.

ALL SPECIES PRESENT: Under the species required list on the Survey Summary sheet, the assessor must indicate for each species in the species required list whether the species has been found during the survey. If the assessor has failed to complete these boxes, this is shown in the table as NOT CHECKED. If the species assessment has been completed, but some species are not found, the table shows this as NO. YES in this part of the table indicates that the assessor has found all the required species.

On coupe 892/518/01, the assessor has noted "This coupe was wrongly seeded, adequate seed but wrong composition. Coupes 813/501/0104 and 813/504/0106 have both been marked as "Random Walk" surveys i.e surveys that have not been conducted using approved methods. Data for this table comes from documents released under FOI Request FI/03/3196 from the Department of Sustainability & Environment.

Appendix 2

Coupes completed in 1996/97 with no regeneration record

COUPE	LOGGING END DATE	AREA (ha)
15/807/501/9702	30/06/1997	16.85
15/816/506/9715	8/04/1997	20.7
15/823/510/0002	20/03/1997	32.13
15/823/510/0009	24/06/1997	4.83
15/823/514/0002	27/02/1997	49.42
15/823/514/0003	24/04/1997	30.34
15/825/510/0005	14/11/1996	45
15/827/506/0009	15/10/1996	43.3
15/837/505/0006	18/12/1996	10.56
15/842/518/0025	5/06/1997	6.85
15/843/501/9502	14/05/1997	23.67
15/853/504/9204	15/03/1997	48.22
15/853/508/9722	23/09/1996	21.58
15/863/506/9708	4/02/1997	19.5
15/867/507/9704	22/05/1997	38.18
15/869/503/9604	28/04/1997	29.81
15/870/505/9611	5/08/1996	17.71
15/871/506/9603	23/08/1996	7.71
15/872/509/9609	25/09/1996	11.5
15/873/510/9604	26/07/1996	32.95
15/885/515/9602	15/01/1997	31.81
15/886/501/9606	2/04/1997	16.59
15/886/503/9605	26/11/1996	29
15/886/504/9609	21/01/1997	29.78
15/889/503/9617	17/04/1997	28.8
15/890/503/9508	21/01/1997	12.44
15/890/504/9509	29/10/1996	14.81
15/890/504/9609	21/01/1997	6.87
15/890/504/9611	13/02/1997	30.56
15/890/507/9603	15/10/1996	19.21
15/891/513/0003	6/11/1996	20.13
15/892/509/0009	5/03/1997	19.84
15/893/503/0005	14/04/1997	24.16
15/893/505/9607	21/01/1997	15.73
15/893/506/9603	26/11/1996	22.63
15/893/509/9604	11/03/1997	12.84
15/895/506/0001	7/02/1997	11.55
15/895/506/0002	6/03/1997	21.34
15/895/507/0004	13/01/1997	26.97
15/895/510/0004	11/10/1996	16.44
TOTAL		922.31