

**Amendments to the 1987 Forest Management
Plans and Timber Strategy and proposals to
meet environmental conditions of the regional
plans and the WACAP ERMP - Change to
Environmental Condition 17**

Department of Conservation and Land Management

**Report and recommendations
of the Environmental Protection Authority**

**Environmental Protection Authority
Perth, Western Australia
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Summary and recommendations

The Minister for the Environment has requested the Environmental Protection Authority (EPA) to consider and provide advice under Section 46(1) of the Environmental Protection Act on changes to Environmental Condition 17 contained in the Statement dated 24 December 1992 related to Amendments to the 1987 Forest Management Plans and Timber Strategy and Proposals to meet Environmental Conditions of the Regional Plans and the WACAP ERMP.

This report provides the EPA's advice and recommendations to the Minister for the Environment on revision of Environmental Condition 17.

Conclusion

The EPA has considered the request by the Minister for the Environment to provide advice on Environmental Condition 17.

Having previously found that the Forest Monitoring and Research Committee has not been effective, the EPA has considered further the objectives, composition and operation of the committee and has proposed that the existing condition be revised to reconstitute the committee as the Forest Systems Research Advisory Committee, to make the objectives more appropriate, to amend the membership and to provide improved operations of the committee.

Recommendations

The EPA submits the following recommendations to the Minister for the Environment:

1. That the Minister notes that the advice in this report relates to Environmental Condition 17 of the 1992 Statement on Amendments to the 1987 Forest Management Plans and Timber Strategy and proposals to meet environmental conditions of the regional plans and the WACAP ERMP.
2. That the Minister considers the report on Environmental Condition 17, Forest Monitoring and Research Committee, as set out in Section 2.
3. That the Minister notes that the EPA has provided a proposed amended condition set out in Section 3 relating to a Forest Systems Research Advisory Committee.
4. That the Minister endorses the proposed changes to the current Forest Monitoring and Research Committee and amends Environmental Condition 17 as proposed in Section 3 and Appendix 3 of this report.

Conditions

The EPA has developed an amended set of conditions which the EPA recommends be imposed. These are presented in Appendix 3.

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3. Proposed Environmental Condition 17

1. Introduction and background

The Minister for the Environment has requested the Environmental Protection Authority (EPA) to consider and provide advice on changes to Environmental Condition 17 contained in the Statement dated 24 December 1992 related to Amendments to the 1987 Forest Management Plans and Timber Strategy and Proposals to meet Environmental Conditions of the Regional Plans and the WACAP ERMP. This request has been made under Section 46(1) of the Environmental Protection Act.

Environmental Condition 17 currently reads as follows:

- 17-1 The Minister for the Environment will set up a committee having objectives which include:
- (1) identification, prioritisation and approval of monitoring and research programmes and projects on environmental impacts of forestry management,
 - (2) the granting of funds towards such monitoring and research,
 - (3) receipt of progress reports,
 - (4) reporting to the Minister for the Environment and
 - (5) publication of results.
- 17-2 The Committee shall include the heads (or nominees) of the Department of Conservation and Land Management, the Environmental Protection Authority, the Western Australian Forest Industries Federation, the Conservation Council and the Water Authority of Western Australia, and the Chairpersons of the Land and Forests Commission and the National Parks and Nature Conservation Authority.
- 17-3 The Committee shall appoint working groups of scientists to recommend and report to the Committee on the design and funding of research projects, the identification, prioritisation and review of monitoring and research programmes and projects relating to the environmental impacts of forest management.
- 17-4 The Committee shall provide brief annual progress reports to the Minister for the Environment, with major reports in 1997 and 2002, at the time of the next review of the Forest Management Plans and Timber Strategy.

The Forest Monitoring and Research Committee (FMRC) was established in accordance with this Condition.

In its Progress Report on Environmental Performance and mid-term Report on Compliance: Forest Management Plans 1994-2003 (Bulletin 912), the EPA concluded that the FMRC has not been able to function in the manner that was intended by the EPA (EPA, 1992) and has been unable to meet its objectives.

In reaching these conclusions, the EPA expressed the following views:

- The FMRC has not functioned in the manner that was intended nor in a manner which enables it to meet its objectives. The Minister should ensure that the Committee establishes processes which enable it to undertake its responsibilities in accordance with Condition 17 and is supported by CALM in a manner which enables it to operate according to its objectives. This could be better achieved by adopting the recommendations from the EPA's 1992 assessment;
- There is a need for research and monitoring in the field in the area of forest management to be focussed on high priority issues identified by the FMRC, on the advice of expert panels, in accordance with Condition 17;
- The role and activity of the FMRC needs to be raised significantly, so that it can undertake its responsibilities. This requires sufficient funding; not only for its own functioning, but also to utilise the mechanism of appointing groups of scientists and the granting of funds for research. As previously recommended (EPA 1992), the allocation of a particular percentage from royalties for research would be an appropriate way to provide the funds;

- The low level of funding currently allocated by CALM to non-salary (operational funds) from the CALM research budget would suggest that it will be difficult to achieve an effective level of field research and monitoring. It should be a matter of highest priority to address this situation; and
- The FMRC should report to the Minister for the Environment through the EPA as recommended in the EPA's 1992 Report. (EPA 1998)

Section 2 outlines the EPA's consideration of changes to Condition 17. A proposed amended Condition is set out in Section 3. Section 4 presents the EPA's conclusion and Section 5 the EPA's recommendations.

References are listed in Appendix 1, the 1992 Statement of Environmental Conditions is Appendix 2 and proposed amended Environmental Condition 17 is provided in Appendix 3.

2. Environmental consideration

2.1 Approach to providing this advice

The Minister for the Environment initiated this Section 46 request related to Environmental Condition 17 following consideration of the EPA's Bulletin 912 and subsequent response by CALM, and there is no specific proposal to consider. As a consequence, the EPA has approached the preparation of this advice by preparing a position on terms of reference, membership and operations. In doing so, the EPA has taken into account the recent comments in Bulletin 912 and in CALM's response to the Bulletin (CALM 1998), and has sought comment on that position from individuals with interest and experience in the issue.

2.2 Terms of Reference

The current Environmental Condition 17-1 outlines the scope of the Forest Monitoring and Research Committee.

17-1 The Minister for the Environment will set up a committee having objectives which include:

- (1) identification, prioritisation and approval of monitoring and research programmes and projects on environmental impacts of forestry management,
- (2) the granting of funds towards such monitoring and research,
- (3) receipt of progress reports,
- (4) reporting to the Minister for the Environment and
- (5) publication of results.

The intention of the establishment of this committee was outlined by the EPA in its 1992 report on forest management (EPA 1992).

"The Authority remains convinced that research and monitoring into forest management should be undertaken under the auspices of an independent co-ordinating committee. This Forest Monitoring Research Committee should have the following terms of reference:

- to identify and approve monitoring and research projects into the environmental impacts of the proposed forests management;
- to co-ordinate the granting of funds towards such monitoring and research;
- to advise the Environmental Protection Authority and the Department of Conservation and Land Management on actions or amendments that need to be made to forest management practices, when necessary;
- to co-ordinate the evaluation of the monitoring and research data and projects;
- to ensure the publication of the results of the monitoring and research projects; and

- to report publicly to the Environmental Protection Authority on outcomes, conclusions and recommendations arising from this monitoring and research, when required by the Authority or the Minister for the Environment, but at least after five years (1997), and again immediately before the expiry of the Forest region Management Plans, in 2002.”

Since 1992, there has been considerable information prepared as part of the Regional Forest Agreement process being undertaken by the Commonwealth and Western Australian Governments. A key component of this has been the preparation of a set of principles for forest management related to Ecologically Sustainable Forest Management (ESFM). In recognition of this, the EPA emphasised in its 1998 report that forest management should be consistent with the ESFM principles. The EPA considers that the committee established under Environmental Condition 17 should play a major part, in association with CALM, the Land and Forest Commission and the National Parks and Nature Conservation Authority, in ensuring that forest research and monitoring is undertaken within the context of these principles. It should also advise on the data requirements and associated monitoring programme necessary, along with research outcomes, to achieve informed management decisions for ESFM.

The EPA looked to the FMRC in 1992 as being modelled on the earlier Steering Committee for Research on Land Use and Water, but it is clear that the way that government operates in the area of research has fundamentally changed since then.

Having considered the current terms of reference of the FMRC and confirmed its strong desire to continue with an independent advisory committee which identifies priorities for forest related research programmes, has a strong influence on the level and allocation of funding to achieve the priority outcomes and agrees upon the related monitoring programme, the EPA considers that new objectives of the reconstituted FMRC should include (but not be limited to):

- advice on strategic directions for forest research;
- advice on identifying and prioritising forest research programmes;
- advice on forest monitoring programmes;
- review and advice on forest system research programmes and monitoring programmes;
- encouraging the publication of data and other research information arising from forest system research programmes and monitoring programmes;
- forming special advisory groups to advise it on specific issues; and
- seeking the assistance of other personnel from time to time to fulfil its requirements.

In achieving these objectives, the EPA considers that the committee will need to comprehend the total forest-related research activity by CALM, by universities, by other government agencies and also relevant research undertaken elsewhere.

The EPA considers that, in view of the ESFM approach to forest management, the title of the committee should be changed from the Forest Monitoring and Research Committee to the Forest Systems Research Advisory Committee (FSRAC). The deletion of the term ‘monitoring’ from its title should not be interpreted as diminishing the requirement for nor importance of monitoring, and the set of issues to be addressed by the FSRAC specifically refer to it. The reference to forest systems promotes the integration of ecosystem and forest research and management, as well as recognising that the influence of forests can extend well outside the forest boundary, eg. water catchments.

2.3 Membership

The EPA expressed its view in Bulletin 912 that the existing membership of the FMRC has not been effective and needs to be revised.

The FSRAC needs to have two basic elements to achieve its objectives, namely, independence and strong scientific knowledge. Associated with this is a need for this committee to be aware of administrative issues and of the various industries which depend on forests and forest products.

The EPA considers that this could be achieved through the membership of the FSRAC comprising the following independent members, where independent means people who are not employed by the State Government departments:

- Chairman, with special knowledge and experience relevant to the above mentioned objectives of the committee;
- five other people chosen for their relevant expertise and experience, encompassing forestry, ecology, forest systems, forest industry and plant pathology;

To help to achieve the desired integration and coordination of forest related research, the EPA considers that the committee should have as ex-officio members:

- The Director of the Science and Information Division plus one other representative from the Department of Conservation and Land Management; and
- one representative from the Water and Rivers Commission (WRC).

These ex-officio members need to be at a senior level, to be able to draw on resources of their respective agencies as necessary and to carry authority for decisions taken. In addition, the EPA believes that these members should be selected for their special knowledge and relevant experience in a similar manner to the independent members. CALM's Director of the Science and Information Division clearly meets these requirements.

Although appointments should be made by the Minister, the Chairman FSRAC should be responsible for recommending membership to the Minister, including the ex-officio positions.

CALM has pointed out in its Response to Bulletin 912 that it may be necessary for independent scientists from interstate to be considered (CALM 1998). The EPA concurs with this view, and suggests that consideration of the membership of the FSRAC and in particular working groups related to the FSRAC should not exclude interstate scientists who have particularly relevant knowledge and experience.

2.4 Operations

Reporting:

Environmental Condition 17-4 requires the FMRC to report to the Minister. Although the EPA suggested in Bulletin 912 that FMRC should report to the Minister for the Environment through the EPA, it has examined this again and has concluded that reporting of the reconstituted FSRAC should be direct to the Minister. Once the report has been received, the Minister may care to seek advice from the EPA and other authorities.

Given the significant role of the FSRAC, the committee's reports and advice on those reports should be available to the public after they have been submitted to the Minister.

Ex-officio members should respond formally to the Committee in relation to recommendations which relate to their activities and responsibilities.

Budget:

The EPA pointed out in 1992 and again in 1998 that the FMRC needed to have specific funding to meet its objectives. However, funding has not been allocated and the activities of the FMRC in part reflect this.

CALM indicated in its response to Bulletin 912 that given current legislative arrangements, the application of Environmental Conditions 17-3 would not be possible in relation to the FMRC having a separate budget and authority to make appointments (CALM 1998). While the EPA can make no specific comment of the legal position, it does believe that the nature of the funding allocated to the FSRAC should be different from that envisaged under Condition 17-1 and 17-3. Previously the EPA has supported the direct funding of research projects through the FMRC. However, that potentially raises some perception issues related to defining, undertaking and then reviewing the project. The EPA now sees the FSRAC role as one of providing advice on priority setting, project definition, overseeing and review.

Nevertheless, it is essential that a specific budget be assigned to the work of the committee to provide for its functions. This should include an allocation for operation of special working groups, field inspections related to research and monitoring, and other matters such as convening of forums to discuss research programmes. The Minister and Chairman of the FSRAC should discuss how this is best achieved.

Although the EPA is not suggesting that the FSRAC have control of research funds, it is implicit in its role that it will advise the Minister on both the level and distribution of funds provided for research. Under its terms of reference, the committee will need to have a clear understanding of the amount of research funds available in relation to the scope of work being undertaken. For instance, research priorities can only be determined in the context of available resources.

Support:

The FMRC is currently supported by officers of the Department of Conservation and Land Management.

The provision of support services to the FSRAC should be the subject of discussion and agreement between the Minister for the Environment and the Chairman of the Research Committee.

3. Proposed amended condition

The EPA has developed proposed amended wording for Environmental Condition 17, as follows.

17-1 Forest Systems Research Advisory Committee

The Minister for the Environment will set up a Committee having objectives which include:

- 1 advising on strategic directions for forest research, including identifying and prioritising;
 - forest research programmes; and
 - forest monitoring programmes;
- 2 reviewing forest research programmes and monitoring programmes; and
- 3 encouraging the publication of data and other research information arising from forest research programmes and monitoring programmes;

17-2 The Committee shall comprise the following membership:

- a Chairman and five other people, chosen for their relevant expertise and experience, encompassing forestry, ecology, forest systems, forest industry and plant pathology;
- three ex-officio members:
 - the Director of the Science and Information Division of the Department of Conservation and Land Management;
 - one other person from the Department of Conservation and Land Management; and
 - one person from the Water and Rivers Commission,

where the ex-officio members are senior officers and the other members, including the Chairman, are not employed by State Government departments.

17-3 To achieve its objectives the Committee may

- form special advisory groups to advise it on specific issues; and
- seek the assistance of other personnel from time to time to meet its requirements.

- 17-4 The Minister will provide funding sufficient for the Committee to fulfil its objectives.
- 17-5 The Committee shall report to the Minister from time to time about progress in fulfilling its objectives. In addition, the Committee shall provide brief annual progress reports to the Minister for the Environment, with a major report in 2002 and at other times when requested by the Minister.
- 17-6 The Minister shall provide a copy of reports submitted under Condition 17-5 to the EPA, Lands and Forest Commission, National Parks and Nature Conservation Authority and CALM, and request advice from these authorities as appropriate.
- 17-7 The Committee reports provided under 17-5 and advice provided under 17-6 shall be made available to the public by the Minister.

4. Conclusions

The EPA has considered the request by the Minister for the Environment to provide advice on Environmental Condition 17, Forest Monitoring and Research Committee.

Having previously found that the Forest Monitoring and Research Committee has not been effective, the EPA has considered further the objectives, composition and operation of the committee and has proposed that the existing condition be revised to reconstitute the committee as the Forest Systems Research Advisory Committee, to make the objectives more appropriate, to amend the membership and to provide improved operations of the committee.

5. Recommendations

The EPA submits the following recommendations to the Minister for the Environment:

1. That the Minister notes that the advice in this report relates to Environmental Condition 17 of the 1992 Statement on Amendments to the 1987 Forest Management Plans and Timber Strategy and proposals to meet environmental conditions of the regional plans and the WACAP ERMP.
2. That the Minister considers the report on Environmental Condition 17, Forest Monitoring and Research Committee, as set out in Section 2.
3. That the Minister notes that the EPA has provided a proposed amended condition set out in Section 3 relating to a Forest Systems Research Advisory Committee.
4. That the Minister endorses the proposed changes to the current Forest Monitoring and Research Committee and amends Environmental Condition 17 as proposed in Section 3 and Appendix 3 of this report.

Appendix 1

References

- CALM (1998) *Report to the Hon Minister for the Environment on CALM's Compliance with Ministerial Conditions on the Forest Management Plans 1994-2003 - A Response to EPA Bulletin 912, November 1998.* Department of Conservation and Land Management, December 1998
- EPA (1992) *Proposals to Amend the 1987 Forest Management Plans and Timber Strategy and Proposals to Meet Ministerial Conditions on the Regional Plans and WACAP ERMP: Report and Recommendations of the Environmental Protection Authority.* Environmental Protection Authority Bulletin 652, October 1992.
- EPA (1998) *Advice in Relation to the Development of the Regional Forest Agreement in Western Australia and Progress Report on Environmental Performance and mid-term Report on Compliance: Forest Management Plans 1994-2003: Advice of the Environmental Protection Authority.* Environmental Protection Authority Bulletin 912, November 1998.

Appendix 2

**1992 Statement on Amendments to the 1987 Forest Management Plans and
Timber Strategy and proposals to meet environmental conditions of the regional
plans and the WACAP ERMP**



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WESTERN AUSTRALIA
MINISTER FOR THE ENVIRONMENT

**STATEMENT THAT A PROPOSAL MAY BE IMPLEMENTED
(PURSUANT TO THE PROVISIONS OF THE
ENVIRONMENTAL PROTECTION ACT 1986)**

AMENDMENTS TO THE 1987 FOREST MANAGEMENT PLANS AND TIMBER
STRATEGY AND PROPOSALS TO MEET ENVIRONMENTAL CONDITIONS ON THE
REGIONAL PLANS AND THE WACAP ERMP

DEPARTMENT OF CONSERVATION AND LAND MANAGEMENT (CALM)

This proposal may be implemented subject to the following conditions:

1 Proponent commitments

The proponent has made a number of environmental management commitments in order to protect the environment.

- 1-1 In implementing the proposal, the proponent shall fulfil the commitments (which are not inconsistent with the conditions or procedures contained in this statement) made in the proposal and in response to issues raised following public submissions.

2 Implementation

Changes to the proposal which are not substantial may be carried out with the approval of the Minister for the Environment.

- 2-1 An expert scientific and administrative committee will be established by the Minister for the Environment to review and report on the implementation of this proposal by 30 June 1993. The terms of reference of the committee will be to consider:

- reserve recommendations within multiple use forest involving those proposals related to temporary exclusion from timber production and potential reserves to act as wildlife corridors;
- the environmental, economic and social implications of such proposals for:
 - nature conservation within WA's native forests,
 - the maximum sustainable timber supply, and
 - the existing and future timber industry;
- the potential to increase the plantation estate on cleared agricultural land to contribute to the production of timber products.

- 2-2 Subject to these conditions, the manner of detailed implementation of the proposal shall conform in substance with that set out in any designs, specifications, plans or other technical material submitted by the proponent to the Environmental Protection Authority with the proposal. Where, in the course of that detailed implementation, the proponent seeks to change those designs, specifications, plans or other technical material in any way that the Minister for the Environment determines on the advice of the Environmental Protection Authority, is not substantial, those changes may be effected.

Published on
24 December 1992

3 Precautionary approach and adaptive management

- 3-1 The proponent shall manage karri and karri-marri forest in accordance with a precautionary approach. This approach requires that where there is a significant risk that a particular forest management measure could lead to an irreversible consequence appropriate monitoring and subsequent adjustments to management within an acceptable timeframe be carried out.
- 3-2 The proponent shall manage the jarrah forest in accordance with the following general principles:
- (1) a precautionary approach;
 - (2) adaptive and flexible management practices based on research and monitoring of environmental monitoring of operations (see condition 17);
 - (3) implementation as a trial, with a reassessment by the Environmental Protection Authority after ten years - the period of the Management Plans and the Timber Strategy (see condition 11); and
 - (4) no commitment of all of the wood resource in the long term (see conditions 9 & 10).

4 Amendments to conservation estate

- 4-1 The proponent shall initiate the Government processes required to implement the proposed amendments to the conservation reserve estate as agreed to by the Minister for the Environment and defined in the approved Forest Management Plans.

5 Revised travel route, river and stream reserves

- 5-1 The proponent shall implement the revised system of travel route (road), river and stream reserves consistent with condition 15. It is noted that the minimum combined width (both sides of a first, second or third order stream) of the proposed zones is 60 metres.
- 5-2 The proponent shall ensure that the travel route (road), river and stream reserves remain unharvested in perpetuity, except for those portions of regrowth forest within road zones where thinning can be undertaken in a manner consistent with, and so as to enhance in the longer term, the defined visual quality objectives.
- 5-3 The proponent shall monitor the effectiveness of the travel route (road) river and stream reserves for nature conservation and protection of water quality to the requirements of the Minister for the Environment.

6 Diverse ecotype conservation areas

- 6-1 Diverse Ecotype Conservation areas shall be identified by the proponent and those greater than five hectares shall be identified on publicly available maps.
- 6-2 The proponent shall ensure that the Diverse Ecotype Conservation areas remain protected from timber harvesting and associated activities in perpetuity.

7 Old growth karri areas of high social or environmental value

7-1 The proponent shall identify and protect areas of old growth karri (up to 3200 hectares) with a high aesthetic, social or environmental value. This is to be implemented on a regional basis and with the benefit of public involvement. These areas shall:

- (1) include those trees in Beavis, Carey and Giblett forest blocks protected from clearfelling by environmental conditions related to the Manjimup-Beenup power line proposal (EPA Bulletin 603);
- (2) be identified publicly and progressively from the adoption of the Management Plans, with the proponent reporting to the Minister on progress towards implementation within three years; and
- (3) shall not be harvested, and shall be managed to retain their values (other than timber production).

7-2 The proponent shall report on the implementation and management of these special areas at the next Forest Management Review.

8 Sustainable yield estimates

8-1 The allocated timber resource for the period ending 30 June 1993, prior to the consideration by the Minister for the Environment of the report of the committee referred to in condition 1 will not exceed the 1993 level described in the 1987 Timber Strategy together with an additional amount of the timber resource that was approved in the 1987 Timber Strategy but remained uncut. This additional amount may be allocated by the proponent with the approval of the Minister for the Environment on a needs basis up to a total level not exceeding that proposed by the proponent in its 1992 proposals.

8-2 Following consideration of the report of the committee referred to in condition 2, the Minister for the Environment shall determine the annual sustainable timber resource available for allocation.

9 Commitment of wood

9-1 Subject to condition 8, in the letting of contracts for wood supply from the jarrah forest, the proponent shall;

- (1) not exceed the annual levels of timber supply defined in condition 8 above; and
- (2) recognise the possibility of the necessity to reduce wood supply beyond 2002 as a result of monitoring and adaptive management following the trial implementation of the jarrah forest silvicultural prescription.

10 Commitment of new resource to be referred

10-1 Notwithstanding Section 38 of the Environmental Protection Act, the proponent shall refer to the Environmental Protection Authority any proposal to enter into a contract for a substantial portion (as determined by the Minister for the Environment) of forest produce identified as other logs (jarrah) or forest residue (marri) in the revised Timber Strategy (Table 13 of the proposals document).

11 Jarrah silviculture trial

- 11-1 The proponent shall implement the jarrah silvicultural prescription so that monitoring of the environmental impacts on a representative range of treated sites and localities in the forest can be carried out to the requirements of the Minister for the Environment. This shall include long term monitoring which quantifies the impacts of silvicultural practices on environmental elements and values in the forest and provides bases to adjust management.
- 11-2 The proponent shall give all necessary assistance to the Monitoring and Research Committee (condition 16) to enable it to have an active and fully informed role in the planning and oversight of the scientific monitoring of this trial period.
- 11-3 The proponent shall report to the Minister for the Environment on outcomes of this implementation and monitoring and on any modifications to the prescriptions by 2002 as part of the next review of the Forest Management Plans and Timber Strategy.

12 Phased logging

- 12-1 The proponent shall ensure that, in all second order catchments in the intermediate and low rainfall zones of the multiple use jarrah forest subject to logging, at least 30 per cent of each second order catchment has a retained basal area of greater than 15 m²/ha for a period of at least 15 years after harvesting of the remainder of the catchment.
- 12-2 This retained forest shall be selected to enhance wildlife, water resource and visual objectives.
- 12-3 The proponent shall monitor, to the requirements of the Minister for the Environment, and report by 2002 on the status and effectiveness of these measures to protect nature conservation values and water quality at the time of the next review of the Forest Management Plans and Timber Strategy.

13 Habitat trees

- 13-1 The proponent shall ensure that the number, condition and age of trees retained on sites subject to gap treatment is sufficient, as determined by the Minister for the Environment, to adequately provide the habitat function throughout the cutting cycle of the forest.

14 *Banksia grandis* reduction

- 14-1 The proponent shall concentrate the proposed reduction of the population of *Banksia grandis* in specific areas where the environmental circumstances suggest that treatment will have the greatest impact on reducing the spread and intensification of *Phytophthora cinnamomi* in the jarrah forest and where required to establish jarrah and marri regeneration.
- 14-2 The proponent shall establish a programme, to the requirements of the Minister for the Environment, to identify and evaluate the environmental implications of the proposed reduction and that the results of that evaluation shall be reported on, at or before the time of the next review of the Forest Management Plans by 2002.

15 Fire management

- 15-1 The proponent shall ensure that the fire management objectives related to the jarrah forest silvicultural prescription include the minimisation of air pollution in urban areas, to the requirements of the Minister for the Environment.
- 15-2 The proponent shall inform the public about its fire management on a regional basis each year in its annual report. This shall include but not be limited to the following:
- (1) occurrences and causes of wildfires;
 - (2) purposes of burns;
 - (3) areas burnt under different regimes of season and periodicity;
 - (4) escapes; and
 - (5) the contribution of prescribed burning to reducing wildfire hazard.
- 15-3 Within 12 months of this proposal being given authority to be implemented the proponent shall initiate a public review of its prescribed burning policy and practices and the wildfire threat analysis. This should be done with the close involvement of the Research and Monitoring Committee. If possible it should be linked with a review of the provisions of the Bush Fires Act.

16 High salt risk catchments

- 16-1 Within three years, or such other period as the Minister for the Environment shall nominate, the proponent, on advice from the Water Authority of Western Australia, shall identify second order catchments with a high salt risk.
- 16-2 Within each catchment identified according to the requirements of condition 16.1, the proponent shall retain additional river and stream buffers and locate areas temporarily reserved during phased logging operations to the requirements of the Water Authority of Western Australia

17 Forest Monitoring and Research Committee

- 17-1 The Minister for the Environment will set up a committee having objectives which include:
- (1) identification, prioritisation and approval of monitoring and research programmes and projects on environmental impacts of forestry management,
 - (2) the granting of funds towards such monitoring and research,
 - (3) receipt of progress reports,
 - (4) reporting to the Minister for the Environment and
 - (5) publication of results.
- 17-2 The Committee shall include the heads (or nominees) of the Department of Conservation and Land Management, the Environmental Protection Authority, the Western Australian Forest Industries Federation, the Conservation Council and the Water Authority of Western Australia, and the Chairpersons of the Lands and Forests Commission and the National Parks and Nature Conservation Authority.

17-3 The Committee shall appoint working groups of scientists to recommend and report to the Committee on the design and funding of research projects, the identification, prioritisation and review of monitoring and research programmes and projects relating to the environmental impacts of forest management.

17-4 The Committee shall provide brief annual progress reports to the Minister for the Environment, with major reports in 1997 and 2002, at the time of the next review of the Forest Management Plans and Timber Strategy.

18 Reporting on compliance

18-1 The proponent shall prepare "Progress and Compliance Reports", to help verify the environmental performance of this project, in consultation with the Environmental Protection Authority. These shall include brief annual progress reports to the Environmental Protection Authority, and major public reports in 1997 and 2002.

Note

Wherever the term "jarrah forest" is used in this statement it includes both the jarrah and the jarrah-marri forests.

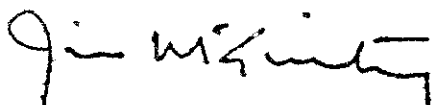
Procedure

Compliance

The Environmental Protection Authority is responsible for verifying compliance with the conditions contained in this statement, with the exception of conditions stating that the proponent shall meet the requirements of either the Minister for the Environment or any other government agency.

If the Environmental Protection Authority, other government agency or proponent is in dispute concerning compliance with the conditions contained in this statement, that dispute will be determined by the Minister for the Environment.

Prior to making determinations as provided for in these conditions the Minister for the Environment may seek advice from the Forest Monitoring and Research Committee.



Jim McGinty, MLA
MINISTER FOR THE ENVIRONMENT

24 December 1992

Appendix 3

Proposed Amended Environmental Condition 17

Forest Systems Research Advisory Committee

17-1 Forest Systems Research Advisory Committee

The Minister for the Environment will set up a Committee having objectives which include:

- 1 advising on strategic directions for forest research, including identifying and prioritising;
 - forest research programmes; and
 - forest monitoring programmes;
- 2 reviewing forest research programmes and monitoring programmes; and
- 3 encouraging the publication of data and other research information arising from forest research programmes and monitoring programmes;

17-2 The Committee shall comprise the following membership:

- a Chairman and five other people, chosen for their relevant expertise and experience, encompassing forestry, ecology, forest systems, forest industry and plant pathology;
- three ex-officio members:
 - the Director of the Science and Information Division of the Department of Conservation and Land Management;
 - one other person from the Department of Conservation and Land Management; and
 - one person from the Water and Rivers Commission,

where the ex-officio members are senior officers and the other members, including the Chairman, are not employed by State Government departments.

17-3 To achieve its objectives the Committee may

- form special advisory groups to advise it on specific issues; and
- seek the assistance of other personnel from time to time to meet its requirements.

17-4 The Minister will provide funding sufficient for the Committee to fulfil its objectives.

17-5 The Committee shall report to the Minister from time to time about progress in fulfilling its objectives. In addition, the Committee shall provide brief annual progress reports to the Minister for the Environment, with a major report in 2002 and at other times when requested by the Minister.

17-6 The Minister shall provide a copy of reports submitted under Condition 17-5 to the EPA, Lands and Forest Commission, National Parks and Nature Conservation Authority and CALM, and request advice from these authorities as appropriate.

17-7 The Committee reports provided under 17-5 and advice provided under 17-6 shall be made available to the public by the Minister.