

Response ID ANON-4EM2-EKWW-P

Submitted to **Native vegetation issues paper**
Submitted on **2020-02-10 20:25:28**

Your details

1 What is your name?

Name:
David Rastrick

2 Can we publish your response?

Yes, you may publish my response in full

3 What is your email address? (optional)

Email:
[REDACTED]

4 What is your postcode? (optional)

Postcode:
[REDACTED]

5 Do your views officially represent those of an organisation?

Yes, I am authorised to submit feedback on behalf of an organisation

If yes, please specify the name of your organisation.:
Albany Community Environment Centre Inc.

6 Which of the following best describes the group or person you represent?

Community / Non-government organisation

If other, please specify.:

7 Which of the following best describes the sector you represent?

Environmental / NRM

If other, please specify.:

8 Are there specific parts of your submission that you want to keep confidential?

If yes, please outline which specific parts of your submission must be kept confidential and explain why. :
No

A State native vegetation policy

9 Referring to the proposed policy objective statements below, how well do you support each one in guiding our development of a policy?

Objective 1 matrix - Objective 1:
Supported

Please explain in the text box below.:

Balance in the context of environmental (native vegetation) and other economic, social and cultural outcomes can only be achieved by a radical reversal of the "18 million hectares of Western Australia's native vegetation already cleared". While reforming legislation around moderating native vegetation clearing is important for maintaining existing biodiversity and ecosystems, the long-term health of this biodiversity is dependent on connectivity and greater holistic ecosystem health. We propose the policy includes an initiative to re-plant a large proportion of cleared land with endemic species, managing this in such a way as creates economic, social and cultural outcomes to Western Australians. Native vegetation is essential for carbon drawdown and sequestration to help rein in global warming, and a plan to implement and manage new native vegetation for multiple purposes can create economic benefits and re-invigorate rural communities.

Objective 2 matrix - Objective 2:
Strongly supported

Please explain in the text box below.:

Restoring previously cleared native vegetation is crucial to reducing salinity and increasing rainfall in southwest W.A. An ambitious plan equal in aspiration and incentive to the plan that incentivised clearing in the wheatbelt from the 1890s is required to restore ecological health and biodiversity to south-west W.A.

Objective 3 matrix - Objective 3:

Strongly supported

Please explain in the text box below.:

ACEC support higher priority and strategic protection for unique and at-risk native vegetation as non-negotiable in any new policy and legislation. This does not mean lesser protection be given to vegetation that does not meet definitions of 'unique and at-risk', only that 'unique and at-risk' vegetation be given automatic protection from land clearing applications. Definitions around 'unique and at-risk' vegetation include Threatened Ecological Communities, core habitat of threatened species and all High Conservation Value areas.

With regards to native forest management, the definition of 'Old Growth Forest' – forest that is protected from logging and added into Conservation Reserves - needs be amended to properly protect High Conservation Value forest from logging, as follows:

KARRI:

In karri-dominant forests, old-growth forest is defined as uncut (never logged) forest or forest subject to minimal unnatural disturbance. A structural characteristic of old-growth karri forest is an uneven-aged canopy where gaps in the senescent tree layer allow new regeneration and there is a high degree of diversity in the ages of the trees. Old-growth functions such as nesting hollows, foraging habitat, understorey refugia and substantial levels of carbon storage, including long-term maintenance of soil organic carbon stocks, are evident. In this definition, previously uncut karri forest and negligibly disturbed 'two-tiered' karri forest are considered old growth. Areas excluded from the old-growth forest layer will include areas of karri forest that have been previously clear-felled or intensively logged. Old-growth karri forest is identified and protected at the 0.5-hectare grid cell level.

JARRAH:

In jarrah-dominant forests, old-growth forest is defined as uncut (never logged) forest or forest subject to minimal unnatural disturbance. Disturbance is regarded as minimal if evidence of disturbance exists (e.g stumps or presence of Phytophthora spp.) but the sampling indicates no significant difference in the structure of the overstorey or ecological function of the forest. Old-growth functions such as nesting hollows, foraging habitat, understorey refugia and substantial levels of carbon storage, including long-term maintenance of soil organic carbon stocks, are evident. In such cases the area will be considered as minimally disturbed old growth and entered into the corporate database as old growth. The presence of dieback caused by Phytophthora spp. does not affect the definition or identification of old-growth jarrah forest. Old-growth jarrah forest is identified and protected at the 0.5-hectare grid cell level.

10 What opportunities are presented by the development of a State Native Vegetation Policy focused on how government manages vegetation?

Please provide your answer in the text box below.:

The development of a State Native Vegetation Policy provides a tremendous opportunity to manage vegetation to:

- 1) Provide community and economic redevelopment in rural areas around a massive revegetation program.
- 2) Encourage tourism via an increased conservation estate.
- 3) Drawdown CO2 through maintaining and protecting existing vegetation and ambitious planting of endemic vegetation and complementary plantation timbers and other native vegetation based crops.
- 4) Protect threatened fauna (and flora) through creation of new National Parks including High Conservation Value forests with an updated definition of Old Growth Forest.
- 5) Decrease inland salinity and encourage rainfall with inland native vegetation planting programs.

Better information

11 How do you use native vegetation data within your sector? (Choose as many options as you require)

To plan for conservation

If you have chosen 'other', please specify:

12 Which of the following elements of better information provision would be most relevant to your sector? (Choose as many options as you require)

Evidence-base for decisions

If you have chosen 'other', please specify:

13 What other opportunities are presented by improved information and improved access to information?

Please provide your answer in the text box below.:

Information on the Conservation Estate and all native vegetation gives opportunity for strategic planning for conservation, particularly around creating ecological corridors to aid connectivity of otherwise isolate populations of threatened species, thus contributing to their breeding viability and survival/thriving.

Information is essential to judge the effectiveness of possible human activities on a multitude of ecological and human assets. e.g. With greater information we can judge the effects of certain regimes of prescribed burning on various species of flora and fauna and ecosystems, and on protecting human assets.

Better regulation

14 Which of the following elements of better regulation would be most important to your sector? (Please rank your top three)

Rank better reg elements - Improved protection for native vegetation:

1

Rank better reg elements - Ensuring development is sustainable:

Rank better reg elements - Streamlined regulation for cost saving:

Rank better reg elements - Clearer requirements for business certainty:

Rank better reg elements - Improved assessment timeframes:

Rank better reg elements - Transparent, evidence-based decisions:

2

Rank better reg elements - Improved compliance and enforcement of unauthorised clearing:

3

Rank better reg elements - Equitable treatment of all proponents:

Rank better reg elements - Confidence in the regulatory system for all stakeholders:

Rank better reg elements - Other:

If you selected Other, please provide further information.:

15 What other opportunities are presented by better regulation?

Please provide your answer in the text box below.:

Community inclusion in decision making

A bioregional approach

16 Which of the following elements are the most important to you/your sector? (Please rank your top three)

Rank bioregional elements - 1. Transparent outcomes and objectives:

1

Rank bioregional elements - 2. Leveraging local knowledge:

2

Rank bioregional elements - 3. Strategic and innovative approach to conflicting interests:

Rank bioregional elements - 4. Clear targets and thresholds:

Rank bioregional elements - 5. Planned approach to dealing with cumulative impacts:

Rank bioregional elements - 6. Effective monitoring and evaluation framework:

Rank bioregional elements - 7. Supporting public-private partnerships for conservation:

3

Please explain in the text box below.:

W.A. has over 20 bioregions* (and several more sub-regions) and in each the needs of ecosystems and their biota can require different strategies of human intervention or non-intervention. Local indigenous and other ecological and land management is essential for developing beneficial strategies for looking after the land and all its inhabitants. Co-operation between community, government and commercial sectors is essential for long-term programs to look after the land in harmony with community and economic development. Equity and transparency is essential for trust and the establishment of long-term relationships and co-operation.

*<https://www.environment.gov.au/land/nrs/science/ibra/australias-bioregions-maps>

17 What other opportunities are presented by a bioregional approach?

Please explain in the text box below.:

A bio-regional approach gives opportunity for community building and cultural development around the various bio-regional and sub-regional eco-scapes, thus enriching WAs culture and sense of place.

18 What concerns are presented by a bioregional approach, for your sector?

Please explain in the text box below.:

The main challenge of a bio-regional approach is in developing legislation simple enough to be interpreted easily, and complex and flexible enough to meet the needs of all regions.

Other initiatives

19 What initiatives do you think would work best to improve native vegetation outcomes in your region?

Pricing, incentives and markets (e.g. biodiversity banking, offsets, carbon farming etc), Aboriginal land management, Pastoral diversification, Nature-based or cultural tourism, Private land management, Other

Please explain in the text box below.:

Other: Legislation to add all High Conservation Value forest (see response to Objective 3) and all other remnant native vegetation in the conservation estate would work best to improve native vegetation outcomes in regions throughout the South-west and W.A.

Incentives to add farmland to ecological corridors and with tree-planting for multiple purposes as pastoral diversification would be effective strategies to improve native vegetation outcomes.

20 What else could be done to improve the management of native vegetation to arrest the decline of native vegetation extent and condition?

Please provide your answer in the text box below.:

End land clearing on both public and private land, providing compensation to private landholders for financial gains they would have had through any planned clearing.

Purchase privately held land in co-operation with commercial investors as lessees, to plant native vegetation for conservation and mixed commercial purposes, or give tax rebates to land that becomes newly planted with native vegetation, ultimately returning this land to traditional custodians with mutually agreeable land sharing agreements.

End all logging of native forests on public land, especially High Conservation Value forests, limiting logging to single tree scenarios on private land, for high grade timber and craft-wood.

Upload a document

21 If you would like to upload a document to support your submission, please upload it here.

Upload document 1 here.:

explaining the old-growth definitions very briefly.pdf was uploaded

Please describe which question(s) document 1 relates to. :

Objective 3

Source: WA Forest Alliance.

Upload document 2 here.:

old-growth forest definitions and recommendations summary.pdf was uploaded

Please describe which question(s) document 2 relates to. :

Objective 3

Source: WA Forest Alliance.

Explaining the definition of old-growth forest - karri forest

A very short background to accompany the more detailed document, *Old Growth Forest Definitions and Recommendations Summary*

Imagine you're walking through an ancient karri forest, with massive old karri and marri trees, nesting hollows for birds and mammals and a beautiful, diverse under-storey. Eventually, you come across a stump from one tree that has been cut down at some time in the last 150 years.

That one stump automatically disqualifies 2 hectares of the forest you've been walking through from old-growth status, and the whole area can now be clear-felled.

There is another problem that results from what the State Government agencies¹ call the *minimum area rule*. It says that an old-growth karri forest has to be at least 2 hectares in size, and it has to be square. Long, thin areas of old-growth or patches with winding boundaries perhaps alongside a stream or road are also disqualified, even where there are *no stumps in the forest at all, ie: it has never been logged but doesn't meet the minimum area rule*.

This definition needs to change in order to fully protect the South West old-growth forests.

Some people within the timber industry are claiming that the forests we're talking about are 'regrowth forests'. Regrowth karri forests are forests that have been clear-felled or very intensively logged in the past. The vast majority of the karri trees are the same age because they have all grown up together after intensive logging. It looks like a plantation. In contrast, old-growth forests look like old forests - they have ancient trees as well as younger trees and saplings, trees with very old canopies and nesting hollows for birds and mammals and old decomposing logs on the ground. They have a high diversity of tree ages and types. They look and feel like ancient forest ecosystems.

¹ The Department of Biodiversity, Conservation and Attractions (DBCA) and the Forest Products Commission (FPC)

Explaining the definition old-growth forest - jarrah forest

A very short background to accompany the more detailed document, *Old Growth Forest Definitions and Recommendations Summary*

The definition of old-growth jarrah forest has never been great, but it got a lot worse in March 2017. These issues were exposed in Barrabup Forest. The definition of old-growth jarrah forest was made worse at that time; the old-growth karri definition has always been as bad as it is now.

When the Conservation Commission of WA was responsible for old-growth assessments (until March 2017), survey teams used to go into the forest and do surveys to see whether the forest still had old-growth characteristics even if there had been light logging in the past. If a forest had around 5 stumps per hectare and an intact old-growth canopy, it was still considered old-growth forest.

Now that the Department of Biodiversity, Conservation and Attractions (DBCA) does the assessments, there are no surveys to consider canopy maturity. Instead, where there are 6 stumps found in a 2-hectare square (an average of 3 stumps in a hectare), that forest is automatically disqualified from old-growth status regardless of whether the forest still has old-growth forest characteristics. DBCA also disqualifies half-hectare cells if they have more than 2 stumps in them.

Another problem is that if jarrah forest is known to be 'affected' by *Phytophthora cinnamomi* (sometimes called jarrah dieback), it is automatically disqualified from old-growth status. This problem is not new. It's been around since old-growth mapping was done in the 1990s for the WA Regional Forest Agreement, and fixing it is long overdue.

The minimum area rule that wrongly disqualifies small and irregularly shaped old-growth karri forest also applies to old-growth jarrah forest, leaving genuine old-growth forest available for intensive logging.

Old-Growth Forest Identification and Protection: History and Overview

The national definition of old-growth forest, developed as part of the National Forest Policy Statement (NFPS) in 1992, is:

Forest that is ecologically mature and has been subjected to negligible unnatural disturbance such as logging, roading and clearing. The definition focuses on forest in which the upper stratum or overstorey is in the late mature to over-mature growth phases.¹

Old-growth forest identification in the South West of WA began in the mid-1990s as a part of the development of the WA Regional Forest Agreement (RFA). The Department of Conservation and Land Management (now Department of Biodiversity, Conservation and Attractions, DBCA) developed applied definitions and identification procedures to map and describe old-growth forest during this process.

The WA ‘Comprehensive Regional Assessment’ report (1998), prepared by CALM as the underpinning report for the preparation of the WA RFA, states at page 166:

In summary, the working definition for the mapping of old-growth is:

- *karri and karri/tingle forest – uncut forest which is mature or senescent;*
- *jarrah and jarrah/tingle forest – uncut forest or forest subject to minimal disturbance as defined above and which is not known to be affected by *Phytophthora cinnamomi*;*
- *jarrah woodland—all woodland which is not known to be affected by *Phytophthora cinnamomi*; and*
- *wandoo forest and woodland—uncut forest or woodland*

In March 2017, the Department of Parks and Wildlife (now DBCA) took over responsibility for the assessment of community nominations of unmapped old-growth forest from the Conservation Commission. As a part of this transfer of responsibility the Department made changes to the criteria and procedure for the protection of old-growth jarrah forest while leaving those for old-growth karri unchanged.

¹Australian Government, *National Forest Policy Statement*. Glossary, p3.
http://www.agriculture.gov.au/SiteCollectionDocuments/forestry/australias-forest-policies/nat_nfps.pdf

The restrictive criteria for both old-growth jarrah and karri forest are resulting in old-growth forest being disqualified from protection. Karri forest, including stands within Lewin, Channybearup and Nelson blocks, and jarrah forest such as parts of Barrabup, Rocky and Helms blocks has been disqualified. Changes to the criteria need to be made to protect all old-growth forest.

Karri old-growth forest definition, criteria and identification procedures

1. Current Definition and Criteria for Identification:

In karri-dominant forests, old-growth forest is defined as *'uncut (never harvested) forest that is dominated by overstorey trees possessing mature or senescent characteristics.'* In this definition, a mature or senescent forest is *'one where mature or senescent trees have a crown cover of 25% or more.'*²

Areas excluded from the old-growth forest layer will include:

Areas of karri... forest that have been previously cut over. (p26)

This means that where just one tree has been cut down at some time in the past 150 years, that 2-hectare area of forest does not qualify for old-growth status. Forests with all the characteristics of old-growth are being excluded on this basis.

2. Minimum Area Rule

Old-growth karri forest is further excluded from protection by a minimum area rule that DBCA applies to its mapping process. The procedure, illustrated in maps below, first of all assesses the forest at the 0.5-hectare grid cell level, and then uses an algorithm that compares four adjacent 0.5-hectare cells in a square alignment. Only those 2-hectare squares that are made up of 4 'uncut' 0.5-hectare cells meet the rule and are found to be old growth.

This means that where one stump is found in a 2-hectare square, an entire 2-hectare stand is excluded. This has two impacts:

- (i) Small and irregularly shaped old-growth areas are not protected, and
- (ii) Larger, continuous stands of old-growth forest are broken up into smaller stands with connecting stands subject to clear-felling, degrading the surrounding forest and reducing the ecological integrity of the whole stand.

²DPAW, 2017, *Procedures for the Ao. FEM075*. Department of Parks and Wildlife, Perth, p14.

This minimum area rule is not applied to other informal reserves, including Diverse Ecotype Zones and stream reserves, and should not be applied to old-growth forest.

3. Example of Old-growth Karri Forest excluded from Identification and Protection - Case study of Lewin 05/06 near One Tree Bridge, west of Manjimup.



Photographs 1 and 2 (above) were taken in Lewin 06 in June 2018 within Survey Area 7 in the maps on page 4.

Figure 1 shows the areas in Lewin 05/06 that were surveyed by DBCA in 2017 for unmapped old-growth. Signs of disturbance are indicated with yellow stars (stumps) and red circles (clearings for roads / landings). A 0.5-hectare grid overlaid on the survey areas shows the scale.

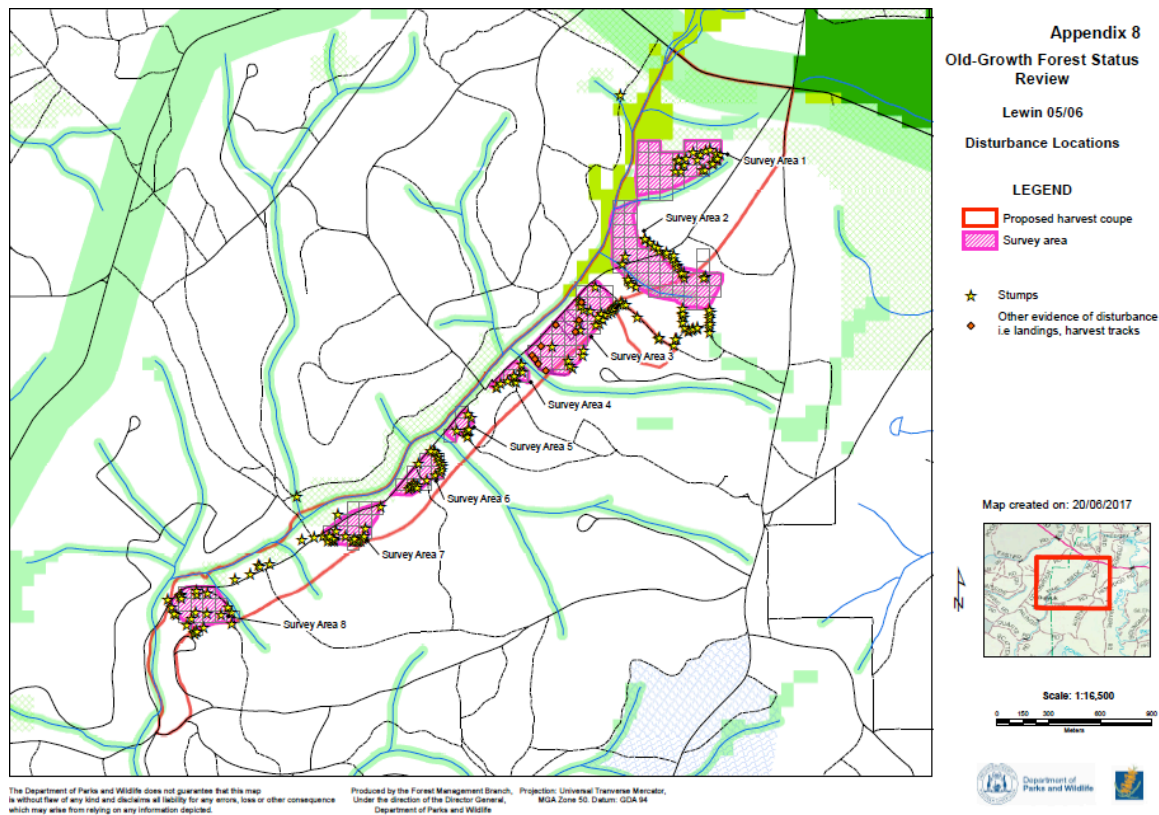


Figure 2 shows the four polygons found to meet the uncut and minimum area criteria.

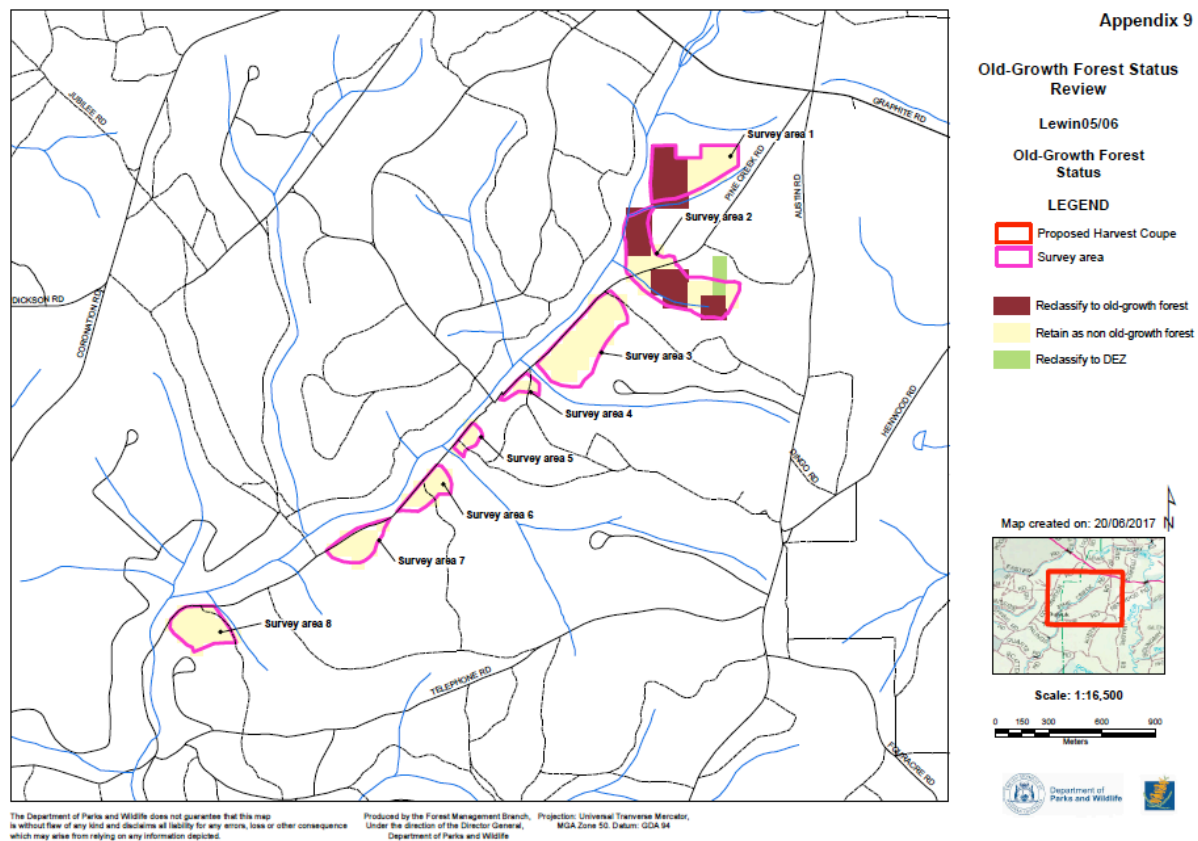
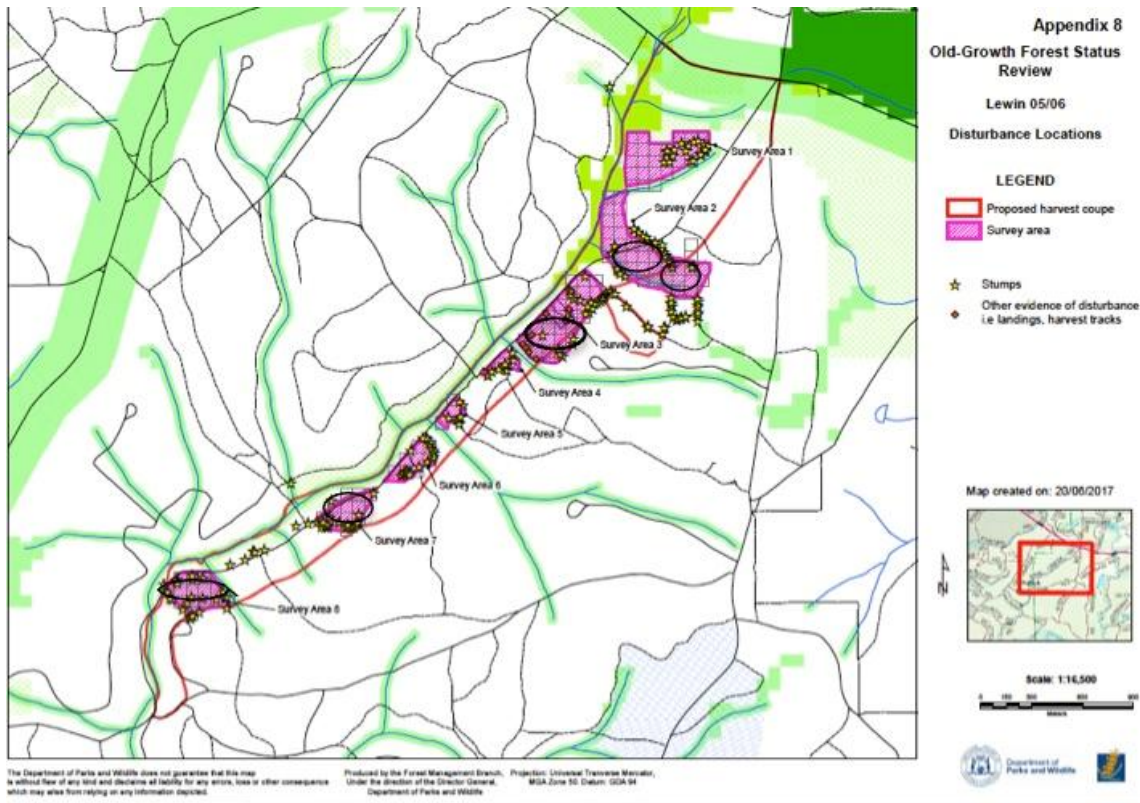


Figure 3 shows, within the black ovals, those areas that meet the ‘uncut’ criterion but that were excluded by the minimum area rule.



The figures above have been reproduced from DBCA’s Lewin old-growth report.³ The black circles have been added subsequently to illustrate the areas excluded by the minimum area rule.

The figures show that the majority of the uncut old-growth forest identified in the Lewin 06 survey has been excluded from protection on the basis of not meeting the minimum area rule, either because it is arranged in a linear, rather than square, alignment, or because there are fewer than 4 adjacent 0.5-ha cells.

The photographs on page 3 were taken in Survey Area 7 (of Figures 1, 2 and 3) and show an old-growth forest that has been disqualified from old-growth classification and is scheduled for clear-felling.

Note that the previously unmapped Diverse Ecotype Zone shown in green in Survey Area 2 (Figure 2 above) is a 1.5-hectare size and linear shape, that is, it doesn’t meet the minimum area rule applied to old-growth, but has been mapped and will be demarcated in the field to protect it from logging. By extension it is therefore clear that there is no

³Western Australian Department Biodiversity Conservation and Attractions, 2017. *Old-growth report Lewin05-06 Final, May 2017*. DBCA Kensington, WA.

technical reason, either mapping or field related, to prevent small, irregular shaped stands of old growth from being protected.

3. Recommendations

WA Forest Alliance recommends that:

1. All old-growth karri forest be protected, including where it does not meet the 2-hectare square minimum size and shape rule, and
2. Karri forest that has been lightly, selectively logged in the past and is now classified by DBCA and FPC as 'two-tiered' be recognised as old-growth forest and protected.

WA Forest Alliance recommends the following definition and criteria for karri old growth:

In karri-dominant forests, old-growth forest is defined as uncut (never logged) forest or forest subject to minimal unnatural disturbance. A structural characteristic of old-growth karri forest is an uneven-aged canopy where gaps in the senescent tree layer allow new regeneration and there is a high degree of diversity in the ages of the trees. Old-growth functions such as nesting hollows, foraging habitat, understorey refugia and substantial levels of carbon storage, including long-term maintenance of soil organic carbon stocks, are evident. In this definition, previously uncut karri forest and negligibly disturbed 'two-tiered' karri forest are considered old growth.

Areas excluded from the old-growth forest layer will include areas of karri forest that have been previously clear-felled or intensively logged.

Old-growth karri forest is identified and protected at the 0.5-hectare grid cell level.

Benchmarks of (i) no more than 2 stumps per 0.5-hectare grid cell and (ii) minimum of 15% mature and senescent canopy cover would inform the need for surveys.ⁱ

Surveys would confirm the presence of old-growth structure and functions, as was the case when the Conservation Commission (now Conservation and Parks Commission) was responsible for assessing forests for unmapped old growth.

Jarrah old-growth forest definition and identification procedures

1. Current Definition and Criteria for Identification

*In jarrah and jarrah tingle dominant types, old-growth forest is defined as ‘uncut (never logged) forest or forest subject to minimal disturbance and that is not affected by *Phytophthora cinnamomi* (RFA 1998a)’.⁴*

2. Changes since DBCA assumed responsibility for unmapped old-growth assessments

In 2017, under the Forest Management Plan 2014-2023 (p42), the responsibility for assessing nominations of unmapped old-growth forests was transferred from the Conservation and Parks Commission to the Department of Biodiversity, Conservation and Attractions (DBCA, previously Department of Parks and Wildlife).

Under the previous Conservation Commission assessment process, jarrah forests with intact, mature canopies were classified as old-growth including where a number of stumps from logging activities were present:

Therefore if evidence of disturbance exists (e.g stumps etc) but the sampling indicates no significant difference in the structure of the overstorey, the area will normally be considered as minimally disturbed old-growth and returned to the corporate database as old-growth.⁵

A benchmark of 5 stumps per hectare was developed from an earlier pilot study, but the Conservation Commission would sample areas with up to 10 stumps per hectare as potential candidates for old-growth forest classification:

A threshold figure of the order of 5 stumps per hectare was developed from the pilot study analysis, as a guide for minimally disturbed old-growth forest. However, the Conservation Commission does recognize the concerns raised in relation to the natural range in both forest density and spatial pattern across the geographic range of forest species, and the variability of the silvicultural practices which have been applied. For this reason, the Conservation Commission proposes to assess the criteria in conjunction with other

⁴Department of Parks and Wildlife, 2017. *Procedures for the assessment, identification and demarcation of old-growth forest* FEM Procedure No. FEM075, Department of Parks and Wildlife, Perth(p7)

⁵Conservation Commission of Western Australia, 2005. *Assessment criteria and process for the Conservation Commission review of old-growth amendments*. CPC Kensington, WA. (p31) <http://www.conservation.wa.gov.au/media/1037/Old-GrowthAmendments2.pdf>

information such as relative crown cover estimates and the available records, to improve the assessment and to provide transparent information to stakeholders.⁶

Conservation Commission old growth assessments employed the above process. Surveys in Gregory 03, Arcadia 03 and Warrup 06 found negligibly disturbed old-growth forests with averages of 5, 3.8 and 4.5 stumps per hectare respectively.⁷

The DPAW *Old-Growth Forest Procedures* March 2017 has made a significant change to these procedures. Now forests with more than 6 stumps per 2-hectare block are automatically disqualified from old-growth status regardless of overstorey maturity:

In western jarrah forest (defined as areas receiving higher than 900 mm annual rainfall as per the silviculture guidelines) a threshold of 6 or less stumps per two hectares indicates a minimally disturbed area.⁸

The DPAW (now DBCA) threshold of 6 stumps per 2-hectare block is substantially more restrictive than the Conservation Commission's benchmark of 5 stumps per individual hectare with associated field surveys to assess canopy maturity. Old-growth forest found in Gregory 03, Arcadia 03 and Warrup 06 would have been logged had the DPAW procedures been in place at the time of its assessments.

Areas that are potential candidates for old-growth classification are reduced by a further blanket threshold of no more than 2 stumps per 0.5-hectare cell, including where the removal of trees has had a negligible impact on the structural integrity and maturity of the surrounding forest and would not have disqualified the forest under the Conservation Commission's procedures:

The combination of four half-hectare FMIS grid cells cannot contain areas which are more than minimally disturbed at the 0.5 hectare grid cell i.e. any FMIS grid cell cannot have more than two stumps in it.⁹

This restricts the criteria further and increases the likelihood of negligibly disturbed jarrah forests that retain old-growth structure and functions being disqualified from old-growth classification.

⁶Ibid, p 29-31

⁷ Reports for these and other forests assessed by the Commission between 2006 and 2017 are available here: <http://www.conservation.wa.gov.au/periodic-assessments/old-growth-overview/public-nominations.aspx>

⁸Department of Parks and Wildlife, 2017. *Procedures for the assessment, identification and demarcation of old-growth forest* FEM Procedure No. FEM075, Department of Parks and Wildlife, Perth (p21)

⁹Ibid, p24.

3. Independent assessment process

The Conservation and Parks Commission carried out independent field assessments:

Following the decision to undertake field inspection, the Conservation Commission will inspect and sample the target area. The field-work will be undertaken by the Conservation Commission independently of all parties.¹⁰

DBCA is involved in coupe planning and lacks the independence of the Conservation and Parks Commission. In Barrabup 03, the first test case of the DBCA Procedure in 2017, the FPC also undertook field-work used in the old-growth assessment:

The Forest Products Commission had commenced stump survey work in the northern portion of Survey Area 1, and their dataset was validated by sampling in the field to confirm it was fit-for-purpose to use in this assessment. (DBCA, 2017, p4)

DBCA Forest Management Branch Manager, Dr Martin Rayner, confirmed in an email to old-growth nominees Ellie and Martin McKie that FPC stump survey data were used in the DBCA report, saying:

I confirm that the FPC did survey all of Survey area 1, while DBCA resurveyed the southern portion and did spot checks in the northern portion.

4. Recommendations

WA Forest Alliance recommends the following definition and criteria for old-growth jarrah identification:

In jarrah-dominant forests, old-growth forest is defined as uncut (never logged) forest or forest subject to minimal unnatural disturbance. Disturbance is regarded as minimal if evidence of disturbance exists (e.g stumps or presence of *Phytophthora* spp.) but the sampling indicates no significant difference in the structure of the overstorey or ecological function of the forest. Old-growth functions such as nesting hollows, foraging habitat, understorey refugia and substantial levels of carbon storage, including long-term maintenance of soil

¹⁰Conservation Commission of Western Australia, 2005. *Assessment criteria and process for the Conservation Commission review of old-growth amendments*. CPC Kensington, WA. (p24) <http://www.conservation.wa.gov.au/media/1037/Old-GrowthAmendments2.pdf>

organic carbon stocks, are evident. In such cases the area will be considered as minimally disturbed old growth and entered into the corporate database as old growth.

The presence of dieback caused by *Phytophthora spp.* does not affect the definition or identification of old-growth jarrah forest.

Old-growth jarrah forest is identified and protected at the 0.5-hectare grid cell level.

Conclusion

Images of old-growth forest being prepared for logging, 500-year old trees stockpiled for woodchips or firewood, and ancient trees reduced to stumps in expanses of churned up mud and burned limbs attract outrage in the West Australian public.

In recent months the WA Forest Alliance Facebook page has reached hundreds of thousands of people who have expressed their frustration that this practice continues in spite of the State Government's commitment to protect old-growth forests. Polling shows that majority of West Australians in both rural and urban areas oppose the ongoing logging of these forests and understand that these are current issues that remain to be resolved.

We recommend that in order to meet national and international standards and community expectations for forest and wildlife conservation, the Department of Biodiversity, Conservation and Attractions amend its the old-growth forest procedures so that all the unique and irreplaceable old-growth forest in the South West is protected.
