

**Conservation Commission Advice and  
Recommendations to the Minister for Environment  
and Heritage**

**A Review of High Conservation Values in Western  
Australia's South-West Forests**

**25th March 2002**

## Summary and Recommendations

In the Government's *Protecting our Old-Growth Forests* policy a commitment was made to "complete a rigorous assessment of other high conservation value areas to be included in the reserve system . . . ". This assessment was undertaken by the environmental consultant Ecoscape (Australia) who provided a draft interim report in January 2002 and a draft final report in March 2002. The final report considers 106 block and four general areas of multiple-use State forest.

The Conservation Commission of Western Australia (the Conservation Commission) has already provided interim advice to the Minister for Environment and Heritage on the basis of the first report and now offers this advice and recommendations based on the information provided in the final report entitled *A Review of High Conservation Values in Western Australia's South-West Forests*.

The Conservation Commission's advice and recommendations identifies values that are adequately represented in the comprehensive, adequate and representative (CAR) reserve system (based on the terms of reference and the JANIS reserves criteria) and those that are less well reserved. On some occasions recommendations to include additional areas in the formal reserve system are made, while on other occasions alternative means to protect high conservation values are recommended.

**Recommendation 1: The Conservation Commission recommends that all occurrences of the Darling Scarp ecosystem on multiple-use State forest be protected through informal reserves.**

**Recommendation 2: The Conservation Commission recommends that the Department of Conservation and Land Management be requested to identify suitable parcels of private land with Darling Scarp ecosystem, with a view to increasing the level of reservation/protection of this ecosystem.**

**Recommendation 3: The Conservation Commission notes that the Darling Scarp and the Jarrah Leeuwin ecosystems have been extensively cleared and therefore recommends to Government that approval of applications for clearing in these ecosystems should be refused.**

**Recommendation 4: The Conservation Commission recommends that Stockyard block be added to the Lane Poole Reserve.**

**Recommendation 5: The Conservation Commission recommends that consolidated areas of old-growth forest in the western part of Telerah block and southern part of Red Gully block that are adjacent to existing and proposed formal reserves be added to these formal reserves, subject to detailed boundary design.**

**Recommendation 6: The Conservation Commission recommends that consolidated areas of old-growth forest in the southern part of Central block that are adjacent to the D'Entrecasteaux National Park be added to this formal reserve.**

**Recommendation 7: The Conservation Commission recommends that consolidated areas of old-growth forest in parts of Bidella block that are adjacent to the proposed Hilliger National Park be added to this formal reserve, subject to detailed boundary design.**

**Recommendation 8: The Conservation Commission recommends the Government formally reserve the southern part of Witchcliffe block.**

**Recommendation 9: The Conservation Commission recommends the Government reserve the whole of Dalgarp block.**

**Recommendation 10: The Conservation Commission recommends that the Minister for the Environment and Heritage requests that the Conservation Commission reviews and provides advice on the conservation status of Wandoo ecosystems beyond the area covered by the new Forest Management Plan.**

## **Introduction**

In the Government's *Protecting our Old-Growth Forests* policy a commitment was made to "complete a rigorous assessment of other high conservation value areas to be included in the reserve system . . . ". This assessment was undertaken by the environmental consultant Ecoscape (Australia) who provided a draft interim report in January 2002 and a draft final report in March 2002. The final report considers 106 block and four general areas of multiple-use State forest.

The Conservation Commission of Western Australia (the Conservation Commission) has already provided interim advice to the Minister for Environment and Heritage on the basis of the first report and now offers this advice and recommendations based on the information provided in the final report entitled *A Review of High Conservation Values in Western Australia's South-West Forests*.

The Conservation Commission's advice and recommendations identifies values that are adequately represented in the comprehensive, adequate and representative (CAR) reserve system (based on the terms of reference and the JANIS reserves criteria) and those that are less well reserved. On some occasions recommendations to include additional areas in the formal reserve system are made, while on other occasions alternative means to protect high conservation values are recommended.

## **Basis of the advice and recommendations**

The task undertaken by the consultant was to collate information on high conservation values and present their findings to the Conservation Commission to enable it to formulate its advice and recommendations to the Minister for Environment and Heritage. To ensure that the Conservation Commission's advice and recommendations were developed in an objective and consistent manner it was necessary for the Conservation Commission to apply a transparent method to its analysis of the information provided.

The Ecoscape review was guided by a set of terms of reference that covered four general categories of conservation value, namely:

- old-growth forest
- biodiversity
- wilderness
- other (community attachment).

The Conservation Commission's method of analysis used for each of the elements in the terms of reference is described below (the relevant element from the terms of reference/criteria appears in italics at the beginning of each section).

### **Old-growth forest**

*All old-growth forest (using the definition of old-growth forest in the 1992 National Forest Policy Statement and the operational interpretation in the JANIS Report)*

Under Government policy all old-growth forest is to be protected, which may be through formal reserves or informal reserves.

The Conservation Commission's advice and recommendations note where reserve design work being undertaken by the Department of Conservation and Land Management in consultation with stakeholder groups provides an opportunity to include old-growth that is in informal reserves in adjacent formal conservation reserves.

## **Biodiversity**

*15% of the pre-1750 distribution of each forest ecosystem should be protected in the CAR reserve system*

The CAR reserve system includes those components as defined in the Regional Forest Agreement; i.e. formal reserves and the larger informal reserves.

The Conservation Commission's advice and recommendations identify those ecosystems adequately reserved (CAR reserves > 15%) and those less well reserved (CAR reserves < 15%). The Conservation Commission's advice and recommendations also address those forest ecosystems with < 15% protected in formal reserves. Where there are opportunities to improve reservation only through protection of forest ecosystems on land not vested in the Conservation Commission, this is noted and a recommendation made.

In this way the Conservation Commission has formulated its advice and recommendations within the framework of presently agreed JANIS reserve system criteria. However, the Conservation Commission acknowledges that these criteria are not accepted by all stakeholders. The appropriateness of the 15% threshold and the inclusion of informal as well as formal reserves are two areas where disagreement exists. The present review does not provide an appropriate means to consider these matters. An alternative means therefore should be found. The Conservation Commission does not see this as an immediate priority, nor does it envisage significant additions to the reserve system occurring as a result. As part of the preparation of the new Forest Management Plan, the Conservation Commission will consider this issue further.

*Where forest ecosystems are recognised as vulnerable, at least 60% of their remaining extent should be reserved*

A vulnerable forest ecosystem is one which (i) is approaching a reduction in areal extent of 70% within a bioregional context and which remains subject to threatening processes or (ii) is not depleted but subject to continuing and significant threatening processes which may reduce its extent.

The Conservation Commission's advice and recommendations identify vulnerable ecosystems and assess their adequacy of reservation (CAR reserves > 60% of current extent).

*All remaining occurrences of rare and endangered forest ecosystems should be reserved or protected by other means*

A rare ecosystem is one where its geographic distribution involves a total range of generally less than 10,000ha, a total area of generally less than 1000ha or patch sizes of generally less than 100ha and where such patches do not aggregate to significant areas. This criterion is to be applied within a bioregional context having cognisance of distribution in adjoining

bioregions. It should be noted that rarity can be a naturally occurring phenomenon that does not necessarily imply that the ecosystem is under immediate threat.

An endangered ecosystem is one where its distribution has contracted to less than 10% of its former range or the total area has contracted to less than 10% of its former area, or where 90% of its area is in small patches which are subject to threatening processes and unlikely to persist.

The Conservation Commission's advice and recommendations identify rare and endangered ecosystems and assess their adequacy of reservation (reserves combined with other protection measures should cover 100% of current extent).

*Reserved areas should be replicated across the geographic range of the forest ecosystem*

This element of the criteria is addressed below.

*The reserve system should seek to maximise the area of high quality habitat for all known elements of biodiversity wherever practicable, but with particular reference to:*

- *the special needs of rare, vulnerable or endangered species;*
- *special groups of organisms, for example species with complex habitat requirements, or migratory or mobile species;*
- *areas of high species diversity, natural refugia for flora and fauna, and centres of endemism; and*
- *those species whose distributions and habitat requirements are not well correlated with any particular forest ecosystem.*

The Conservation Commission's advice and recommendations identify where there are opportunities to increase the reservation of these values, particularly in areas identified as contributing to other elements of the criteria. It is noted that information in relation to this element of the criteria is largely based on model outputs rather than survey data and this has been taken into account.

*Reserves should be large enough to sustain the viability, quality and integrity of populations*

The Conservation Commission's advice and recommendations identify where there are opportunities to increase the size of existing and proposed reserves, particularly in areas identified as contributing to other elements of the criteria.

*To ensure representativeness, the reserve system should, as far as possible, sample the full range of biological variation within each forest ecosystem*

Representativeness, geographic replication (see above) and remnants in fragmented landscapes (see below) are related criteria and were assessed as one by using vegetation complexes to indicate how adequately these criteria are catered for in the existing and proposed formal reserves plus informal reserves. Vegetation complexes are a unit of classification of vegetation at a lower level than that of forest ecosystems and there are more than 300 vegetation complexes identified in the Regional Forest Agreement area as opposed to less than 30 forest ecosystems. Vegetation complexes therefore provide a means of

assessing whether the range of biological variation within forest ecosystems is sampled within the reserve system. Vegetation complexes also provide a means of assessing whether reserves are replicated across the geographic range of forest ecosystems because the suite of vegetation complexes that occurs in one part of the geographic range of a broad forest ecosystem such as Jarrah North West is different from the suite of vegetation complexes that occurs in another part of the range of the ecosystem. Therefore if all vegetation complexes are represented in the reserve system, replication across the geographic range of the ecosystem will be achieved. Additionally, vegetation complexes provide a means of assessing whether remnants in fragmented landscapes are adequately sampled in the reserve system because unless remnants areas are adequately sampled the vegetation complexes in these areas will be less well reserved.

The assessment involved a number of steps. Firstly, for the purpose of this exercise those vegetation complexes with (i) <10% in proposed and existing formal reserves and (ii) <15% in proposed and existing formal and informal reserves, were identified. The thresholds used for this exercise recognise that the JANIS reserves criteria do not set quantitative targets for vegetation complexes, as they do for forest ecosystems, and therefore the thresholds above were not used as targets for reservation (formal and informal). Rather they were used to indicate opportunities to improve the representativeness of the reserve system. Secondly, the amount of each of the vegetation complexes that is reserved was considered in the context of reserves in the surrounding landscape. Thirdly, the patch size and distribution of the vegetation complexes was considered to determine if formal reservation may be an option.

It is stressed that the thresholds above are not meant to imply reservation targets for vegetation complexes, rather they serve as a means to identify where there may be a case to enhance representativeness, geographic replication, and protection of remnant elements of biodiversity within forest ecosystems. Opportunities to increase reservation (particularly in areas identified as contributing to other elements of the criteria) and other means of protection of those vegetation complexes thus identified were considered.

It is also acknowledged that the reliability of the mapping of vegetation complexes varies across the systems studied and that the data provided and any conclusions based upon them could be improved should more detailed surveys be undertaken.

*In fragmented landscapes, remnants that contribute to sampling the full range of biodiversity are vital parts of a forest reserve system and should be protected*

This element of the criteria is addressed above.

*Areas of special significance in terms of their biophysical naturalness, or as linkages or corridors*

The Conservation Commission's advice and recommendations identify areas specially significant in terms of their biophysical naturalness on the basis of size, while noting that this value is already reserved at a very high level.

Advice and recommendations also identify areas specially significant in terms of linkages or corridors. The basis of special significance used was where (i) blocks subject of assessment could provide these functions and (ii) these functions are poorly provided for in the design of the existing and proposed reserve system and (iii) noting that under the principles of ecologically sustainable forest management multiple-use State forest does contribute to this function.

Attention was paid to opportunities for additional reservation of these values, particularly in areas identified as contributing to other elements of the criteria.

## **Wilderness**

*90%, or more if practicable, of the area of high quality wilderness that meets minimum area requirements should be protected in reserves*

Blocks subject of assessment where wilderness values meet this threshold were identified. In this case the block-by-block assessment was not able to allow for the cumulative contribution of adjacent blocks to meeting this element of the criteria. The present review does not provide an appropriate means to consider this issue. The Conservation Commission will consider this question as part of the preparation of the new Forest Management Plan.

## **Other**

*Areas of special significance in terms of a high level of community attachment due to their importance:*

- *for association with events, developments or cultural phases which have had a significant role in the human occupation and evolution of the nation, State, region or community; or*
- *in demonstrating a distinctive way of life, custom, or land use no longer practised, in danger of being lost, or of exceptional interest; or*
- *for information contributing to a wider understanding of the history of human occupation in the State; or*
- *for close associations with individuals whose activities have been significant with the history of the State or region.*

The elements of the community attachment criterion have been the most difficult to consider for several reasons. First, the criteria as referred to above are very specific in their wording. Secondly, many of the indicators of community attachment reported on by Ecoscape are of a general character often related to an entire block rather than to a specific area, and were based on only limited data due to time constraints. Thirdly, there are no quantitative thresholds for judging the level of community attachment (local, regional or State-wide) nor are there quantitative targets for reservation of areas with a high level of community attachment.

As a result the Conservation Commission has identified those blocks that it judges have the highest level of community attachment based on information in the Ecoscape report. Measures to protect these values are proposed.



Areas previously found to have National Estate values in relation to community attachment were considered as meeting the threshold for "*areas of special significance in terms of a high level of community attachment*". This includes areas on the Interim List and Registered Places on the Register of the National Estate. It also includes Indicative Places of social value identified through the Comprehensive Regional Assessment.

## **Advice and recommendations**

### **Old-growth forest**

*All old-growth forest (using the definition of old-growth forest in the 1992 National Forest Policy Statement and the operational interpretation in the JANIS Report)*

Consolidated areas of old-growth forest protected in informal reserves that could be considered for protection in formal reserves occur in the following blocks that are adjacent to existing or proposed formal reserves:

- Stockyard block - which has the largest patch of old-growth outside of formal reserves in the northern jarrah forest and where adding the remaining parts of Stockyard to the Lane Poole Reserve would consolidate the reserve design in the southern part of this reserve. The Conservation Commission understands that this area is being considered for reservation through negotiation with State Agreement Act companies.
- Consolidated areas of old-growth forest in Telerah and Red Gully blocks which are adjacent to the proposed Millyeanup National Park.
- Southern part of Central block - which is adjacent to the D'Entrecasteaux National Park.
- Parts of Bidella block - which is adjacent to the proposed Hilliger National Park.

Formal recommendations for these four areas can be found below under Biodiversity.

The issues raised with respect to the old-growth definition used in the Ecoscape assessment is discussed at the end of this report.

### **Biodiversity**

*15% of the pre-1750 distribution of each forest ecosystem should be protected in the CAR reserve system*

The following forest and other ecosystems that occur in the multiple-use State forest parts of the assessed blocks and to which the 15% target is applicable are adequately reserved:

- Jarrah Blackwood Plateau
- Jarrah Leeuwin
- Jarrah North East
- Jarrah North West
- Jarrah sandy basins
- Jarrah South
- Jarrah woodland
- Karri main belt
- Karri West Coast
- Shrub, herb, and sedgeland

- Rocky outcrops
- Wandoo forest
- Wandoo woodland.

Of the above forest ecosystems, it is noted that the Jarrah North East and Jarrah North West ecosystems have less than 15% in proposed and existing formal reserves. Whilst the advice of the Conservation Commission in response to the interim report was that timber harvesting should be deferred from one block containing a significant area of the Jarrah North West ecosystem, the more detailed analysis of representativeness, geographic replication and remnants in fragmented landscapes that the Conservation Commission has now undertaken provides it with confidence that this ecosystem is adequately represented in the reserve system.

The following forest ecosystem in the multiple-use State forest parts of assessed blocks and to which the 15% target is applicable is less well reserved:

- Darling Scarp.

There is some 36 hectares of this forest ecosystem in the multiple-use State forest parts of blocks subject to assessment. Most opportunities for increased reservation of the Darling Scarp ecosystem can be found outside of land vested in the Conservation Commission

**Recommendation 1: The Conservation Commission recommends that all occurrences of the Darling Scarp ecosystem on multiple-use State forest be protected through informal reserves.**

**Recommendation 2: The Conservation Commission recommends that the Department of Conservation and Land Management be requested to identify suitable parcels of private land with Darling Scarp ecosystem, with a view to increasing the level of reservation/protection of this ecosystem.**

*Where forest ecosystems are recognised as vulnerable, at least 60% of their remaining extent should be reserved*

No forest ecosystems in the multiple-use State forest parts of the assessed blocks are classified as vulnerable. However, two forest ecosystems have been extensively cleared and are close to the threshold for vulnerable, namely:

- Darling Scarp
- Jarrah Leeuwin.

**Recommendation 3: The Conservation Commission notes that the Darling Scarp and the Jarrah Leeuwin ecosystems have been extensively cleared and therefore recommends to Government that approval of applications for clearing in these ecosystems should be refused.**

*All remaining occurrences of rare and endangered forest ecosystems should be reserved or protected by other means*

No forest ecosystems in the multiple-use State forest parts of blocks subject to assessment are classified as rare or endangered.

*The reserve system should seek to maximise the area of high quality habitat for all known elements of biodiversity wherever practicable, but with particular reference to:*

- the special needs of rare, vulnerable or endangered species;*
- special groups of organisms, for example species with complex habitat requirements, or migratory or mobile species;*
- areas of high species diversity, natural refugia for flora and fauna, and centres of endemism; and*
- those species whose distributions and habitat requirements are not well correlated with any particular forest ecosystem.*

Threatened ecological communities occur in two of the assessed blocks and declared rare flora occur in fourteen. Treeton block is the area with the greatest coincidence of these values with eight populations of four species of declared rare flora and 26 hectares of one of the threatened ecological communities. However, many of the occurrences of these values occur near pine plantations, thus making these areas unsuitable for reservation.

High flora species richness is predicted to be widely distributed through Treeton, Rapids, Witchcliffe, Mowen, Chapman, Adelaide, Schroeder, Moonah, Chester, and Blackwood. This part of the Blackwood Plateau is already well represented in the reserve system and areas of high flora species richness as a value has a reservation level of 75%. This is considered adequate.

With regard to centres of endemism, disjunct and relictual flora, the predicted values are well represented in the reserve system at 64%, 56%, and 68% respectively. It is noted that the reserve system has captured the most consolidated areas of these values. This analysis shows Central block and a western portion of Storey and Chester blocks as having a coincidence of all three of these flora values. In the northern forest, Amphion and Pindalup were predicted as a centre of disjunct flora. Additional formal reservation of these values should be considered where coincident with other values such as old-growth forest.

Refugia occur at a low level in many of the blocks assessed. Most of these occurrences are in informal reserves with refugia 97% reserved. None of the assessed blocks are identified as being significant for the addition to the reserve system on the basis of this attribute. A known location of endemic fauna (of National Estate value) was identified in Storry block, but this value is also highly reserved at 85%. This locality should be afforded protection as an exclusion area in the same way as declared rare flora are protected.

The recorded occurrences of threatened fauna in the assessed blocks were largely those species whose conservation is dependent on management, such as fox control, or that are catered for by current formal and informal reservation and habitat protection during logging. Consequently, these fauna species do not have special needs that any particular assessed block could enhance. However, Witchcliffe block contains the known habitat for a declared rare species of fauna with a restricted distribution, the White-bellied frog. The protection of the habitat of this frog was significantly improved in December 2000 when private property to the south of Witchcliffe was purchased and gazetted as a national park. The Conservation Commission understands that the habitat of the White-bellied frog in the southern part of Witchcliffe block (currently unallocated Crown land) is coincident with an area of high potential for heavy mineral sands.

An amalgamation of these values would suggest parts of Treeton, Central, and Wichcliffe blocks should be included in the reserve system.

*Reserves should be large enough to sustain the viability, quality and integrity of populations*

The viability of reserves could be improved through reservation of the following assessed areas:

- Stockyard - which has the largest patch of old-growth outside of formal reserves in the northern jarrah forest and where adding the remaining parts of Stockyard to the Lane Poole Reserve would consolidate the reserve design in the southern part of this reserve. The Conservation Commission understands that this area is being considered for reservation through negotiation with State Agreement Act companies.
- Consolidated areas of old-growth forest in Telerah and Red Gully blocks which are adjacent to the proposed Millyeanup National Park.
- Southern part of Central block - which is adjacent to the D'Entrecasteaux National Park.

*Reserved areas should be replicated across the geographic range of the forest ecosystem*

*To ensure representativeness, the reserve system should, as far as possible, sample the full range of biological variation within each forest ecosystem*

*In fragmented landscapes, remnants that contribute to sampling the full range of biodiversity are vital parts of a forest reserve system and should be protected*

The following vegetation complexes occur in the assessed blocks and have (i) <10% in proposed and existing formal reserves and (ii) <15% in proposed and existing formal and informal reserves.

Vegetation complex	Reservation level (% of pre-1750 area)		Total amount of vegetation complex not reserved in all 106 blocks (ha)	Average patch size in available State forest
	Total (ha in all reserves in brackets)	Formal		
BL	5.5 (3270)	3.3	2203	23
BLf	0.7 (21)	0.5	7	2
BN	5.2 (111)	1.3	189	82
BT	1.6 (344)	0.9	81	14
CI	13.8 (1519)	9.4	925	169
Cw1	10.1 (621)	9.8	14	3
DS	7.8 (2270)	7.6	80	
MT1	13.7 (438)	8.3	981	125
Mi	6.4 (8610)	4.6	234	
PM2	8.8 (329)	0	600	15
Sc	4.3 (135)	3.2	68	8
T	11.3 (3145)	8.8	4976	92
TP	2.7 (27)	0	83	72
Tw	8.0 (698)	4.5	1102	13
Wi	0.2 (47)	0.1	1	

The Conservation Commission understands that the Mi and Wi complexes are being addressed through negotiation with State Agreement Act companies.

The CI, Cw1, MT1 and T complexes are close to the thresholds used for the first step in this analysis and each has significant areas in proposed and existing reserves (1519, 621, 438 and 3145 hectares respectively). Further, the Cw1 complex occurs in small patches (average of 3 hectares) and there is only a very small amount (14 hectares) in the assessed blocks, which makes it unsuitable for formal reservation. Consequently, the CI, Cw1, MT1 and T vegetation complexes do not warrant additional protection.

The DS vegetation complex is a component of the Darling Scarp ecosystem that has been identified as being reserved at < 15% in CAR reserves. Additional protection of this vegetation complex through informal reserves has been recommended above.

In relation to the BLf vegetation complex, there is only a very small amount (7 hectares) in the assessed blocks and the BLf complex is unsuitable for additional reservation.

In relation to the BL vegetation complex, it is noted that this is reserved at 5.5% (all reserves). Additional reservation of this complex should be considered especially if coincident with other values.

In relation to the BN vegetation complex, this occurs along the southern boundary of Barrabup block. As there is only 111 hectares of this complex reserved, it is considered that the occurrence of the BN vegetation complex in Barrabup should be protected through informal reserves.

In relation to the BT vegetation complex, small areas occur in Dalgarp and Mullalyup blocks. Additional reservation of this complex is warranted.

In relation to the PM2 vegetation complex, this occurs in Yardup block. As there are no formal reserves adjacent to this occurrence formal reservation is not appropriate. As there is some 9% protected in informal reserves, additional protection through this means is not warranted.

In relation to the Sc vegetation complex, this occurs in Cleave and Flybrook blocks. As there are no formal reserves adjacent to these occurrences formal reservation is not appropriate. Additional informal reservation of the patch in Flybrook block should be considered.

In relation to the TP vegetation complex, this occurs in Dordagup and Kinkin blocks. As there are no formal reserves adjacent to these occurrences formal reservation is not appropriate. Additional informal reservation of the patch in Kinkin block should be considered.

In relation to the Tw vegetation complex, this occurs in Treeton, Chapman, Molloy and Witchcliffe blocks. Additional formal reservation should occur.

*Areas of special significance in terms of their biophysical naturalness, or as linkages or corridors*

Areas of high biophysical naturalness have been well captured in the existing reserve system and in those parts of the assessed blocks proposed to be added to the reserve system (98%). Because high biophysical naturalness is strongly correlated to the presence of old-growth forest it receives protection through formal and informal reserves that protect old-growth forest. Assessed blocks that had aggregations of high biophysical naturalness are:

- Bidella
- Central
- Cleave
- Red Gully
- Stockyard
- Storry
- Telerah.

Given the distribution of the existing and proposed reserve system and the management of multiple-use State forest that will need to comply with the principles of ecologically sustainable forest management, there are no assessment blocks that have been demonstrated to be specially significant in terms of linkages or corridors.

Taking the Conservation Commission's conclusions regarding old-growth forest and biodiversity as provided in the above discussion, the Conservation Commission makes the following recommendations:

**Recommendation 4: The Conservation Commission recommends that Stockyard block be added to the Lane Poole Reserve.**

**Recommendation 5: The Conservation Commission recommends that consolidated areas of old-growth forest in the western part of Telerah block and southern part of Red Gully block that are adjacent to existing and proposed formal reserves be added to these formal reserves, subject to detailed boundary design.**

**Recommendation 6: The Conservation Commission recommends that consolidated areas of old-growth forest in the southern part of Central block that are adjacent to the D'Entrecasteaux National Park be added to this formal reserve.**

**Recommendation 7: The Conservation Commission recommends that consolidated areas of old-growth forest in parts of Bidella block that are adjacent to the proposed Hilliger National Park be added to this formal reserve, subject to detailed boundary design.**

**Recommendation 8: The Conservation Commission recommends the Government formally reserve the southern part of Witchcliffe block.**

## **Wilderness**

*90%, or more if practicable, of the area of high quality wilderness that meets minimum area requirements should be protected in reserves*

No areas in the multiple-use State forest parts of blocks subject to assessment have wilderness values that meet the threshold.

## **Other**

*Areas of special significance in terms of a high level of community attachment due to their importance:*

- *for association with events, developments or cultural phases which have had a significant role in the human occupation and evolution of the nation, State, region or community; or*
- *in demonstrating a distinctive way of life, custom, or land use no longer practised, in danger of being lost, or of exceptional interest; or*
- *for information contributing to a wider understanding of the history of human occupation in the State; or*
- *for close associations with individuals whose activities have been significant with the history of the State or region.*

The assessment by Ecoscape did not interpret or apply a threshold to the level of community attachment so as to allow a determination of those areas that could be judged to be of a high level of community attachment. Methods are available; for example, under National Estate assessment processes, community attachment is assessed in relation to the length and strength of demonstrated community attachment.

Consequently, with the exception of areas previously found to have National Estate values related to community attachment, the Conservation Commission is not in a position to offer the advice that other areas in the multiple-use State forest parts of blocks subject to assessment have demonstrated high levels of community attachment especially as judged using the rather narrow wording as previously mentioned.

Areas of special significance in terms of a high level of community attachment on the basis of being on the Interim List and Registered Places on the Register of the National Estate, and Indicative Places of social value identified through the Comprehensive Regional Assessment (CRA) include:

- Amphion - the fire exclusion area in this block was identified in the CRA as an indicative National Estate place of social value;
- Bramley - identified in the CRA as an indicative National Estate place of social value; and
- Dalgarp - identified in the CRA as an indicative National Estate place of social value.

In relation to Amphion, current management practices that seek to maintain the unburnt status of the fire exclusion area in this block provide an appropriate means of protecting the social value.

In relation to Bramley block, all but 200 hectares of the 4050 hectare block is proposed for reservation. The areas not proposed for reservation have largely been excluded so as not to preclude the opportunity for future water resource development or because they are disturbed patches around pine plantations. Proposed reservation of Bramley is considered adequate.

Dalgarup was identified through the CRA as an indicative National Estate place of social value. It is noted that the core parts of Dalgarup (as identified through the CRA as an indicative National Estate place of social value) are proposed for reservation through:

- the existing forest management plan and
- the Regional Forest Agreement, following the proposal by the Bridgetown-Greenbushes Accord Group in 1998.

Notwithstanding these additions to the reserve system in Dalgarup, a high level of community interest in further reservation of this block has been expressed through various avenues and was identified in the Ecoscape review as the one block which stood out from the others in terms of community attachment. That is, the highest level of community attachment was recorded for Dalgarup. On this basis the Conservation Commission makes the following recommendation:

**Recommendation 9: The Conservation Commission recommends the Government reserve the whole of Dalgarup block.**

It is noted that the Ecoscape review refers to others places on the Interim List or Register of the National Estate, but that in these cases all of the places occur in areas of existing or proposed reserves; e.g. Barrabup, Blackwood, Boorara Tree and Lane Poole Falls areas.

The other area of multiple-use State forest parts of blocks subject to assessment that had the highest levels of community attachment expressed in relation to them were Kingston, Walcott, Mersea, Dudijup, Warrup and Corbal (the Greater Kingston area).

The Conservation Commission notes that the Government's *Protecting our Old-Growth Forests* policy committed to reserving the Greater Kingston National Park (19,000 hectares) incorporating Kingston, Walcott, Mersea, Dudijup, Warrup, Corbal, Dwalgan and Winnejup forest blocks. The Conservation Commission further notes that the Minister for Environment and Heritage has endorsed an indicative reserve design for Greater Kingston National park. This decision has been publicly released via a press release of 1 January 2002 and an advisory group process will be undertaken to help finalise reserve boundaries. The Conservation Commission notes the proposed Greater Kingston National Park covers nearly 21,000 hectares and that parts of each of the blocks listed in the policy are proposed for reservation.

The following areas of multiple-use State forest parts of assessed blocks have significant areas of indicative National Estate places of aesthetic value, as identified through the CRA:

- Lang and the southern part of Balmoral block
- The eastern part of Barrabup block
- Along the Blackwood River in the Blackwood Plateau
- Along the Donnelly River
- The northern part of Warren block
- Along parts of the Warren River (Crowea and Collins blocks)
- The eastern part of Weld block.



It is noted this value is reserved at 64% and that the Department of Conservation and Land Management has systems and guidelines in place for the management of aesthetic values. A component of the Department's system for management of aesthetic values is the ranking of areas with respect to their aesthetic quality. The assessment of areas for this ranking preceded the CRA process and it is considered that indicative National Estate places of aesthetic value should be afforded the same protection as areas with visual landscape management (VLM) zone A.

## **General matters**

### **Wandoo**

The Ecoscape report raises the issue of the adequacy of the CAR reserve system for Wandoo ecosystems. While the level of reservation of both Wandoo Forest and Woodland meets the >15% criterion, the Conservation Commission is concerned that related ecosystems further East may not be sufficiently protected and recommends accordingly.

**Recommendation 10: The Conservation Commission recommends that the Minister for the Environment and Heritage requests that the Conservation Commission reviews and provides advice on the conservation status of Wandoo ecosystems beyond the area covered by the new Forest Management Plan.**

### **Old-growth and dieback**

The issue of old-growth definitions was raised by the Western Australian Forest Alliance in the course of the assessment by Ecoscape. The Conservation Commission notes that the Government has affirmed its use of the nationally accepted definitions from the National Forest Policy Statement together with the JANIS operational definition. It further notes that the forest identified as being of concern because it has been excluded from being defined as being old-growth, that of unlogged forest infected by dieback, is nevertheless largely reserved to an extent of approximately 86% in existing and proposed reserves. On this basis the Conservation Commission has decided to make no specific recommendation with respect to the definition of old-growth forest.