

Appendix C: Guidance on Prioritising Locally Significant Natural Areas

(Del Marco, A. *et al* (2004) Local government Biodiversity Planning Guidelines for the Perth Metropolitan Region, Perth Biodiversity Project, Western Australian Local Government Association, *Guidance on Prioritising Locally Significant Natural Areas*, p118-129).

The ecological prioritisation framework for protection of natural areas

The framework below places natural areas into a primary priority of 1 (A, B, C), 2 or 3 based primarily on ecological values as described by the Local Significance Criteria.

Table 10 provides a suggested framework for further prioritising LSNAs once they have been assigned a priority of 1 (A, B, C), 2 or 3. Some LSNAs will need to go through more steps than others, however within each Priority level; the final ranking is from those areas having the highest viability estimate to those having the lowest. The Natural Area Initial Assessment Summary Template (Section 12.5 in the Guidelines) provides a simple viability estimate and will indicate whether a natural area meets one or more of the Local Significance Criteria.

Table 10. Priority 1, 2 and 3 Locally Significant Natural Areas and subsequent ranking of value within each prioritisation grouping.

ECOLOGICAL VALUES		SOCIAL/ECONOMIC VALUES		ECOLOGICAL VALUES
1st Prioritisation (use Table 11)	2nd Prioritisation (use Table 11)	3rd Prioritisation (use Table 12)		4th Prioritisation Final ranking by relative viability (using the Natural Area Initial Summary Template)
DECREASING PRIORITY →	Priority 1 Areas confirmed as meeting one or more Essential or Desirable Criteria that are of high value in a regional (or greater) context	Priority 1A Meeting one or more of the Essential Criteria that are of high value in a regional (or greater) context	Priority: 1A1	VIABILITY ESTIMATE -----▶ -----▶
			1A2	
			1A3	
1A4				
1A5				
1A6				
Priority 1B Meeting Desirable criteria 1a) ii) only				
Priority 1C Meeting Desirable criteria 1a) iii) only				

<p>Priority 2 Areas confirmed as meeting one or more Essential Criteria that are not also of high value in a regional (or greater) context</p>		
<p>Priority 3 Areas confirmed as meeting one or more Desirable Criteria but no Essential Criteria that are not also of high value in a regional (or greater) context</p>	<p>Priority 3a Meeting both the remaining Desirable Criteria</p> <p>Priority 3b Meeting only one of the two remaining Desirable Criteria</p>	

Table 10 describes the overall framework for prioritisation. The discussion below details the rationale behind assigning LSNAs as Priority 1 (A, B, C), 2 or 3 according to the Local Significance Criteria. This information is summarised in Table 11.

Priority 1 - High Value Locally Significant Natural Areas

A number of Local Significance Criteria identify natural areas that are of biodiversity conservation value within a regional (or greater context) as well as at the local level (discussed in Section 5 of the Guidelines). Partly this is due to the focus of nature conservation being on the retention of rare and threatened species and communities rather than on the protection of the biodiversity resource to prevent further species and communities becoming rare and threatened. All these high value LSNAs are designated Priority 1 to recognise their importance.

In some cases it has not yet been possible to put in place mechanisms to protect these high value LSNAs. In other cases, decisions will already have been made to exclude these areas from Federal, State and/or regional biodiversity conservation plans (such as Bush Forever), due to socio-economic constraints. It may be difficult to protect all Priority 1 LSNAs due to current socio-economic constraints. Therefore the Priority 1 LSNAs have been further broken down into Priority 1A, 1B and 1C.

Priority 1A

The Priority 1A LSNAs are natural areas that are of high value in a regional (or greater) context for their ecological values, even if this has not been formally recognised in current government legislation and/or policy. They are natural areas that:

- meet any of the regional representation criteria (except for Criteria 1 a) ii) or iii) - see below)
- meet any of the rarity criteria
- are part of a regional ecological linkage or

- meet any of the criteria for protection of wetland, streamline and estuarine fringing vegetation and coastal vegetation.

Priority 1B

These are LSNAs within the Bush Forever Study Area that only meet the following Local Significance Criterion:

1. Representation a) Regional ii) of an ecological community with only 1500 ha or 30% or less (whichever is the greater) remaining in the IBRA subregion.

This criterion is designated Desirable (see Section 5.2 of the Guidelines) for the Bush Forever Study Area because of socio-economic constraints. Previous decision-making processes have determined that State Government will allocate resources to protecting and managing regionally significant bushland areas within the Swan Coastal Plain (SCP) portion of the PMR (the Bush Forever Study Area) using a criterion aimed at protecting at least 10% or 400 ha (whichever is the greater) of an ecological community's remaining extent measured across the Bush Forever Study Area (Government of Western Australia 2000a). Thus, while natural areas meeting only Local Significance Criterion 1 a) ii) can still be argued to be of high ecological value, they are designated in these Guidelines as Priority 1B because there is unlikely to be significant support from the State or Federal Government to protect and manage these areas. This situation may change as the new Clearing permit system under the amended Environmental Protection Act 1986 comes into operation or as Regional Natural Resource Management (NRM) initiatives are developed and resourced.

Priority 1C

These are LSNAs that only meet the following Local Significance Criterion:

1. Representation a) Regional iii) large (greater than 20 ha), viable natural areas in good or better condition of an ecological community with more than 30% remaining within the IBRA subregion

This criterion is also designated Desirable (see Section 5.2 of the Guidelines), again due to socio-economic constraints that have required a threshold for retention of native vegetation cover to be set by State and Federal Government policy makers at 30%.

The 30% threshold is a generalisation that is based on a range of studies (Section 17 of the Guidelines). Unfortunately none of these studies were based in the unique ecological communities of the PMR. In addition, once an ecological community reaches the 30% threshold based on remotely measured statistics derived from satellite imagery or aerial photography, invariably a much smaller proportion than this will remain on the ground that is intact, viable and in good condition and so able to maintain biodiversity. Therefore, for natural areas meeting criterion 1 a) iii) there is the opportunity to select the most viable areas with the best condition and the greatest potential for connectivity to other good condition areas to meet the target of 30%.

It is also important to remember that higher thresholds for native vegetation cover may be required for natural resource management objectives other than biodiversity conservation, for example, maintenance of surface or groundwater quantity and quality.

Priority 2 and Priority 3 - Other Locally Significant Natural Areas

The prioritisation of the remaining LSNAs (those meeting the remaining criteria as listed in Table 11) for retention and protection from a biodiversity perspective can then be made using the following:

- the designation of the specific criterion or criteria met as either Essential (Priority 2) or Desirable (Priority 3)
- if only Desirable criteria are met, prioritise according to the number of criteria the natural area meets.

Table 11. Summary of Local Significance Criteria to identify Priority 1, Priority 2 and Priority 3 Locally Significant Natural Areas. Priority 1 LSNAs are of high value in a regional (or greater) context.

Criteria	Primary priority
1. Representation a) Regional	
i) Recognised International, National, State or Regional Conservation Value (outside Bush Forever Sites and CALM Managed Estate), for example, System 6 Areas in the Jarrah Forest outside CALM Managed Estate	Priority 1A
ii) of an ecological community with only 1500 ha or 30% or less (whichever is the greater) remaining in the IBRA subregion	Priority 1A (Jarrah Forest only) Priority 1B (Bush Forever Study Area only)
iii) large (greater than 20 ha), viable natural areas in good or better condition of an ecological community with more than 30% remaining within the IBRA subregion	Priority 1C
iv) of an ecological community with only 1500 ha or 15% or less (whichever is the greater) protected for conservation in the Jarrah Forest IBRA subregion	Priority 1A (Jarrah Forest only)
v) of an ecological community with only 400 ha or 10% or less (whichever is the greater) protected for conservation in Bush Forever Study Area	Priority 1A (Bush Forever Study Area only)
3. Rarity	
i) of an ecological community with only 1500 ha or 10% or less (whichever is the greater) remaining in IBRA subregion	Priority 1A
ii) of an ecological community with only 400 ha or 10% or less (whichever is the greater) remaining in Bush Forever Study Area	Priority 1A
iii) contains a TEC	Priority 1A
iv) contains DRF, Specially Protected Fauna or significant habitat for these fauna	Priority 1A
v) contains Priority or other significant flora or fauna or significant habitat for these fauna	Priority 1A
4. Maintaining Ecological Processes or Natural Systems – Connectivity	

Criteria	Primary priority
i) natural areas acting as stepping stones in a regionally significant ecological link	Priority 1A
5. Protection of Wetland, Streamline and Estuarine Fringing Vegetation and Coastal Vegetation	
i) Conservation or Resource Enhancement Category Wetland plus buffer	Priority 1A
ii) EPP Lake plus buffer	Priority 1A
iii) riparian vegetation plus buffer	Priority 1A
iv) floodplain area plus buffer	Priority 1A
v) estuarine fringing vegetation plus buffer	Priority 1A
vi) coastal vegetation on foredunes and secondary dunes	Priority 1A

Criteria	Primary priority
1. Representation b) Local	
i) of an ecological community with 10% or less remaining within Local government area	Priority 2
ii) of an ecological community with 30% or less remaining within Local government area	Priority 2 Jarrah Forest only Priority 3 Bush Forever Study Area only
iii) large, viable natural areas in good or better condition of an ecological community with more than 30% remaining within Local government area	Priority 3
2. Diversity	
i) natural area in good or better condition that contains upland and wetland structural plant communities	Priority 2
4. Maintaining Ecological Processes or Natural Systems - Connectivity	
ii) natural areas acting as stepping stones in a locally significant ecological link	Priority 2

Prioritisation for the management of natural areas

It is likely that Local governments will need to prioritise (for management) natural areas under their control because resources are always finite. This will firstly need to be based on the ecological values of these areas and the ecological prioritisation framework for protection (Section 10.7.1 of the Guidelines) is suitable for this purpose. Further prioritisation of Priority 1A natural areas (as discussed in Section 10.7.2 of the Guidelines) is not applicable because it is reliant on socio-economic opportunities for protection only.

The next step to prioritise for management requires an analysis of the level of the threats to each natural area as well as the capacity of the Local government to ameliorate the threat. This will depend on the individual circumstance of each natural area and each Local government.