

Appendix B: Perth Biodiversity Project Natural Area Initial Assessment Summary (Del Marco, 2004)

Table 7. Summary of ecological criteria to identify Locally Significant Natural Areas, their priority ('Essential' or 'Desirable') and the appropriate methods to determine natural areas that meet each criterion

ECOLOGICAL CRITERIA	
1. Representation	
1a. Regional Representation	
i) recognised International, National, State or Regional conservation value but not already protected Specify:	yes/no
ii) of an ecological community with only 1500 ha or 30% or less (whichever is the greater) remaining in IBRA subregion Specify:	yes/no
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	yes/no
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 Specify:	yes/no
v) of an ecological community with only 400 ha or 10% or less (whichever is the greater) protected for conservation in the Bush Forever Study Area Specify:	yes/no
1b. Local Representation	
i) of an ecological community with 10% or less remaining of its pre-European extent within the Local Government Area Specify:	yes/no
ii) of an ecological community with 30% or less remaining of its pre-European extent within the Local Government Area Specify:	yes/no
iii) large (greater than 10 ha), viable natural areas in good or better condition of an ecological community with more than 30% remaining within the Local Government Area	yes/no
2. Diversity	
i) natural area in good or better condition that contains both upland and wetland structural plant communities	yes/no
3. Rarity	
i) of an ecological community with only 1500 ha or 10% or less (whichever is the greater) remaining in the IBRA subregion Specify:	yes/no
ii) of an ecological community with only 400 ha or 10% or less (whichever is the greater) remaining in the Bush Forever Study Area Specify:	yes/no
iii) contains a Threatened Ecological Community Specify:	yes/no
iv) contains Declared Rare Flora, Specially Protected Fauna or significant habitat for these fauna Specify:	yes/no
v) contains Priority or other significant flora or fauna or significant habitat for these fauna Specify:	yes/no
4. Maintaining Ecological Processes or Natural Systems - Connectivity	
i) natural areas acting as stepping stones in a Regionally Significant Ecological Linkage	yes/no
ii) natural areas acting as stepping stones in a locally significant ecological linkage	yes/no
5. Protection of Wetland, Streamline and Estuarine Fringing Vegetation and Coastal Vegetation	
i) Conservation or Resource Enhancement category wetland plus buffer	yes/no
ii) EPP Wetland plus buffer	yes/no
iii) riparian vegetation plus buffer	yes/no
iv) floodplain area plus buffer	yes/no
v) estuarine fringing vegetation plus buffer	yes/no

vi) coastal vegetation on foredunes and secondary dunes		yes/no
VIABILITY ESTIMATE		
Viability Factor	Category	Score
Size	Greater than 20 ha	5
	Greater than 10 ha less than 20 ha	4
	Greater than 4 ha less than 10 ha	3
	Greater than 1 ha less than 4 ha	2
	Less than 1 ha	1
Shape	Circle, square or squat rectangle	3.5
	Oval, rectangle or symmetrical triangle	3
	Irregular shape with few indentations	2.5
	Irregular shape with many indentations	2
	Long thin shape with large proportion of area greater than 50 m wide	1.5
	Long thin shape with large proportion of area less than 50 m wide	1
Perimeter to area ratio	Less than 0.01	4
	Greater than 0.01 less than 0.02	3
	Greater than 0.02 less than 0.04	2
	Greater than 0.04	1
Vegetation condition NB: based on Keighery (1994) condition scale	Pristine	10 x % =
	Excellent	8 x % =
	Very Good	6 x % =
	Good	4 x % =
	Degraded	2 x % =
	Completely Degraded	0 x % =
	Total calculated score =	
Connectivity	A. Forms part of a Regional Ecological Linkage and is contiguous with a protected natural area greater than 4ha	5
	B. Not part of a Regional Ecological Linkage but contiguous with a protected natural area greater than 4ha	4.5
	C. Forms part of a Regional Ecological Linkage and is within 500 m of more than 4 protected natural areas having an area greater than 4 ha	4
	D. Not part of a Regional Ecological Linkage but within 500 m of more than 4 protected natural areas having an area greater than 4 ha	3.5
	E. Forms part of a Regional Ecological Linkage and is within 500 m of 3 or 4 protected natural areas having an area greater than 4 ha	3
	F. Not part of a Regional Ecological Linkage but within 500 m of 3 or 4 protected natural areas having an area greater than 4 ha	2.5
	G. Forms part of a Regional Ecological Linkage and is within 500 m of 2 protected natural areas having an area greater than 4 ha	2
	H. Not part of a Regional Ecological Linkage but within 500 m of 2 protected natural areas having an area greater than 4 ha	1.5
	I. Forms part of a Regional Ecological Linkage and is within 500 m of 1 protected natural area having an area greater than 4 ha	1
	J. Not part of a Regional Ecological Linkage but within 500 m of 1 protected natural area having an area greater than 4 ha	0.5
	K. Forms part of a Regional Ecological Linkage but is not within 500 m of any protected natural areas having an area greater than 4 ha	0.25
TOTAL SCORE (Viability Estimate)		