Addendum to Chapter 16 Local Biodiversity Planning Guidelines for the Perth Metropolitan Region (WALGA, 2004)

Information and statistics are presented in this section to assist in the development of a Local Biodiversity Strategy and in particular the setting of objectives and Natural Area Condition targets. The statistics provided are an update to the statistics provided in Tables 17 to 25 in Chapter 16 of the *Local Biodiversity Planning Guidelines for the Perth Metropolitan Region* (WALGA, 2004).

These WALGA data sets are available from the Perth Biodiversity Project for Local Governments who require native vegetation extent updates based on the 2005 Native Vegetation Extent for the Perth Metropolitan Region (DAFWA, 2006).

Table 15 Native vegetation extent in the Swan Coastal Plain Interim Bioregionalisation of Australia (IBRA) subregions south of Moore River for the vegetation complexes occurring within the Perth Metropolitan Region and Table 16 Remnant vegetation extent in the Bush Forever study area are based on circa 1997 data prepared by the Environmental Protection Authority and Department of Environment (2003) and are yet to be updated.

16.3. Datasets to assist Local Governments identify and describe natural area resources

Tables 19 to 25 provide statistics that were prepared to assist Local Government in completing components of Phase 2 of the local biodiversity planning process. The statistics presented in Tables 19 to 25 were derived from interpretation and analysis of the following datasets:

- 2005 Native Vegetation Extent by Administrative Planning categories
- 2005 Native Vegetation Extent by Ownership Category
- 2005 Native Vegetation Extent by Vegetation Complex
- 2005 Native Vegetation Extent by Metropolitan Region Scheme Zoning

The above datasets were prepared by interpretation and analysis of the 2005 Native Vegetation Extent for the Perth Metropolitan Region (DAFWA, 2006) with other GIS datasets (WALGA, 2007). The 2005 Native vegetation extent dataset was derived using the following datasets:

- Perth Bushland dataset (2001/02) maintained by the Department for Planning and Infrastructure and DAFWA and utilised for the Bush Forever initiative.
- Environmental Protection (Clearing of Native Vegetation) Regulations 2004
 Database maintained by the Department of Environment (DoE now DEC) and
 the Department of Industry and Resources (DOIR). The database includes the
 boundaries and status of clearing applications over the entire State.
- Land Monitor program Agency consortium lead by the Department of Land Information (DLI) vegetation cover classified from LandSat satellite imagery on an approximately annual basis.

Native vegetation was captured at 1:20,000 from orthophoto mosaics captured in December 2004.

When viewing the statistics in the following tables it is important to consider the limitations associated with mapped native vegetation extent in the Perth Metropolitan Region (PMR) and it should therefore not be assumed that the statistics provided are accurate to the nearest hectare. The limitations are the same as those that exist when using the 2001 native vegetation mapping datasets such as:

- The preferential mapping of treed landscapes, leading to some mapping of areas that are parkland cleared or completely degraded
- The inclusion of areas that are approved for clearing through development approvals and/or clearing permits
- Some areas have been cleared since the time of the aerial photography.

Where a zero (0) appears in the tables this indicates that mapped native vegetation does occur but it has an area less than 0.5 ha. Where there are blank cells within a table it indicates that no mapped native vegetation exists.

Table A1 2005 Native Vegetation Extent compared to 2001 Native Vegetation Extent per Local Government

This table was derived from the 2005 Native Vegetation Extent by Administrative Planning Categories and compared to the 2001 Native Vegetation Extent by Administrative Planning Categories as published in Table 17 (Total (ha) per Local Government) in the Guidelines (WALGA, 2004).

Key to Table A1

Remaining Extent 2001 - Total (ha)

► The remaining area in 2001 of native vegetation according to Local Government administrative boundaries

Remaining Extent 2005 - Total (ha)

► The remaining area in 2005 of native vegetation according to Local Government administrative boundaries

Difference - Total (ha)

▶ 2001 native vegetation extent minus 2005 native vegetation extent.

Notes:

- 1. The Shire of Serpentine-Jarrahdale joined the South West Biodiversity Project in 2005 and the 2005 Native Vegetation Extent for this local government area has not been included in the tables that follow.
- 2. An increase in area in some Local Government areas is due to native vegetation being mapped in the 2005 dataset that was not mapped in the 2001 dataset.

Table 17 2005 Native Vegetation Extent by Administrative Planning Category

This table was derived from the 2005 Native Vegetation Extent by Administrative Planning Category dataset and provides a broad overview of the different themes of native vegetation according to existing administrative planning and protection categories. Importantly this table quantifies the spatial extent of vegetated Local Natural Areas. Local Natural Areas are the major focus of Local Biodiversity Strategies.

Key to Table 17

Bush Forever

► Area (ha) of mapped native vegetation occurring in Bush Forever Sites. Includes Bush Forever sites that are within the CALM Estate.

CALM Conservation

► Area (ha) of mapped native vegetation occurring in CALM Conservation Estate (5(g) Reserve, Conservation Reserve, National Park, Nature Reserve). Excludes those Bush Forever Sites that are within CALM Estate.

CALM State Forest

Area (ha) of mapped native vegetation occurring in CALM State Forest. Excludes those Bush Forever Sites that are within CALM Estate.

CALM Other

Area (ha) of mapped native vegetation occurring in CALM estate (Executive Director Freehold land, 5(1)(g) Reserves and Miscellaneous Reserves). Excludes those Bush Forever Sites that are within CALM Estate.

Regional Parks

► Area (ha) of mapped native vegetation occurring in Regional Parks. Excludes Bush Forever Sites and CALM estate that are within Regional Parks.

Vegetated Local Natural Areas

Area (ha) of mapped native vegetation not occurring within CALM estate, Bush Forever Sites or Regional Parks. This represents only the vegetated extent of Local Natural Areas and therefore does not include the other components of Local Natural Areas (e.g. open water, rock outcrops etc).

Table 18 2005 Native Vegetation Extent by Ownership Category

This table was derived from the 2005 Native Vegetation Extent by Ownership Category dataset and categorises native vegetation extent according to ownership categories. This is an important consideration when determining opportunities and constraints for protection and management of vegetated natural areas and for identifying the extent of vegetated natural areas for which the Local Government has a management responsibility.

Key to Table 18

Commonwealth

▶ Area (ha) of mapped native vegetation occurring on Commonwealth Land.

Local Government - Vested

 Area (ha) of mapped native vegetation occurring on land vested with the Local Government.

Local Government - Freehold

Area (ha) of mapped native vegetation occurring on land owned (freehold) by the Local Government.

Multiple Vesting

Area (ha) of mapped native vegetation occurring on land vested in multiple agencies, most often a Local Government and a State Agency.

Unknown

Area (ha) of mapped native vegetation occurring on land where the ownership details are unknown at the time of mapping.

Private

▶ Area (ha) of mapped native vegetation occurring on private land.

Private - Commercial

► Area (ha) of mapped native vegetation occurring on private commercial land.

State Government

▶ Area (ha) of mapped native vegetation occurring on State Government land.

Vacant Crown Land

▶ Area (ha) of mapped native vegetation occurring on vacant Crown land.

Notes:

- 1. The sum of the 'Local Government Freehold' and 'Local Government Vested' is equivalent to the 'Local Government' total in Table 18 for the 2001 Native Vegetation Extent published in the *Guidelines*.
- 2. All areas that had no ownership information in the tenure dataset were put as unknown. This does not necessarily represent Crown (unknown) in the 2001 statistics. This total includes roads. In 2001 all roads were out as State Government published in the *Guidelines*.
- 3. 'Private' represents individual ownership and 'Private Company' represents private company ownership.
- 4. The sum of the 'Private' and 'Private Commercial' is equivalent to the sum of 'Private' and 'Multiple Owner' in the ownership statistics for the 2001 NV extent published in the *Guidelines*.

Table 19 2005 Native Vegetation Extent in Local Government Reserves

This table was derived from the 2005 Native Vegetation Extent by Ownership Category dataset and categorises native vegetation extent that occurs within Local Government Reserves (vested and freehold) according to administrative planning categories.

Key to Table 19

Bush Forever

► Area (ha) of mapped native vegetation occurring within Local Government Reserves that are also Bush Forever Sites.

Local Natural Area

Area (ha) of mapped native vegetation occurring within Local Government Reserves that are considered to be a Local Natural Area. This represents only the vegetated extent of Local Natural Areas within Local Government Reserves and therefore does not include other components of Local Natural Areas (eg open water, rock outcrops etc).

Regional Parks

► Area (ha) of mapped native vegetation occurring within Local Government Reserves that are also Regional Parks and are not Bush Forever Sites.

Table 20 2005 Vegetated Local Natural Areas by Ownership Categories

This table was derived from the 2005 Native Vegetation Extent by Ownership Category dataset and categorises vegetated Local Natural Areas by ownership categories.

Key to Table 20

Commonwealth

▶ Area (ha) of mapped native vegetation occurring on Commonwealth Land.

Local Government - Vested

► Area (ha) of mapped native vegetation occurring on land vested with the Local Government.

Local Government – Freehold

Area (ha) of mapped native vegetation occurring on land owned (freehold) by the Local Government.

Multiple Vesting

► Area (ha) of mapped native vegetation occurring on land vested in multiple agencies, most often a Local Government and a State Agency.

Unknown

Area (ha) of mapped native vegetation occurring on land where the ownership details are unknown at the time of mapping.

Private

▶ Area (ha) of mapped native vegetation occurring on private land.

Private - Commercial

► Area (ha) of mapped native vegetation occurring on private commercial land.

State Government

► Area (ha) of mapped native vegetation occurring on State Government land.

Vacant Crown Land

► Area (ha) of mapped native vegetation occurring on vacant Crown land.

Table 21 2005 Native Vegetation Extent by Vegetation Complex per Local Government

This table was derived from the 2005 Native Vegetation Extent by Vegetation Complex dataset and categorises native vegetation extent according to vegetation complexes mapped by Mattiske and Havel (1998) and Heddle, Longeragan and Havel (1980). For the Perth Metropolitan Region vegetation complexes represent the most appropriate level to interpret ecological communities for establishing quantitative targets based on area. These vegetation complexes are based on the patterning of vegetation at a regional scale reflected by the underlying key determining factors of landform, soil and climate.

Table 21 includes the 2001 extent so that the areas of vegetation complexes within Local Government Areas can be compared to the 2005 native vegetation mapping.

Key to Table 21

Vegetation Complex

► Name allocated to the vegetation complex by Mattiske and Havel (1998) and Heddle, Longeragan and Havel (1980).

Pre-European – Total (ha)

 Pre-European extent (ha) of each vegetation complex according to Local Government administrative boundaries

Pre-European - %

 Pre-European extent of each vegetation complex as percentage of the Local Government area.

Remaining Extent 2001 – Total (ha)

► The remaining area in 2001 of vegetation complex according to Local Government administrative boundaries

Remaining Extent 2001 - %

► The remaining area in 2001 of vegetation complex as a percentage of the pre-European extent of each vegetation complex.

Remaining Extent 2005 - Total (ha)

► The remaining area in 2005 of vegetation complex according to Local Government administrative boundaries

Remaining Extent 2005 - %

► The remaining area in 2005 of vegetation complex as a percentage of the pre-European extent of each vegetation complex.

Notes:

- 1. The Pre-European % does not have to equal 100% where there are bare areas not mapped as vegetation complexes within the Local Government administrative boundary i.e. areas of open water.
- 2. The 2005 remaining extent total (ha) per Local Government does not always equal the 2005 remaining extent within that Local Government (as shown in Table A1) due to differences in the vegetation complex mapping boundaries and the local government area boundaries.

Table 22 2005 Native Vegetation Extent by Metropolitan Region Scheme (MRS) Zoning

This table was derived from 2005 Native Vegetation Extent by MRS Zoning dataset and is useful for determining the planning constraints associated with the native vegetation and degree of threat due to future development. For example, native vegetation zoned Urban under the MRS faces a different level of threat compared to native vegetation that exists on Rural zoned land.

Key to Table 22

MRS Zoning

► Area (ha) of native vegetation according to Metropolitan Region Scheme Zoning.

Table 23 2005 Vegetated Local Natural Areas by Metropolitan Region Scheme (MRS) Zoning

This table was derived from the Native Vegetation Extent by MRS Zoning dataset and provides information on the MRS zoning of vegetated Local Natural Areas.

Key to Table 23

MRS Zoning

► Area (ha) of native vegetation according to Metropolitan Region Scheme Zoning.

Table 25 Threatened Ecological Communities (TEC's) that occur in the Perth Metropolitan Region (on CALM Threatened Ecological Community [TEC] database (Department of Environment and Conservation, June 2006), and endorsed by the Minister for the Environment.

Table A1. 2005 Native Vegetation Extent compared with 2001 Native Vegetation Extent per Local Government within the Perth Metropolitan Region (Perth Biodiversity Project, unpub. 2007)

Local Government	Remaining Extent 2001 (ha)	Remaining Extent 2005 (ha)	Difference (ha)
Armadale	42911	42816	-95
Bassendean	24	27	3
Bayswater	57	50	-7
Belmont	504	469	-35
Cambridge	536	537	1
Canning	481	430	-51
Claremont	3	3	0
Cockburn	4570	4125	-445
East Fremantle	1	1	0
Fremantle	19	19	0
Gosnells	3751	3649	-102
Joondalup	1605	1333	-272
Kalamunda	24140	24081	-59
Kwinana	4818	4595	-223
Melville	293	291	-2
Mosman Park	11	11	0
Mundaring	44763	44641	-122
Nedlands	248	242	-6
Peppermint Grove	0	2	2
Perth	6	5	-1
Rockingham	7695	6890	-805
Serpentine-Jarrahdale	48698	48704	6
South Perth	57	50	-7
Stirling	692	614	-78
Subiaco	1	1	0
Swan	46043	45514	-529
Victoria Park	12	12	0
Vincent	0	0	0
Wanneroo	34057	32899	-1158
Total (ha)	265,996	262,012	-3989

Table 17. 2005 Native Vegetation Extent by Administrative Planning Category (Perth, Biodiversity Project, unpub. 2007)

Local Government	Bush Forever (ha)	CALM Conservation (ha)	CALM State Forest (ha)	CALM Other (ha)	Regional Parks (ha)	Vegetated Local Natural Areas (ha)	Total (ha)
Armadale	1088	5218	27264		3695	5552	42816
Bassendean	20					7	27
Bayswater	28					22	50
Belmont	402					67	469
Cambridge	488					49	537
Canning	309				0	121	430
Claremont	0					3	3
Cockburn	2441	0			34	1650	4125
East Fremantle	0					1	1
Fremantle	13					6	19
Gosnells	648	544	0		1533	924	3649
Joondalup	903			0	0	430	1333
Kalamunda	307	9185	11011	0	1467	2110	24081
Kwinana	2039	0			2	2555	4595
Melville	161	1			16	114	291
Mosman Park	3					8	11
Mundaring	59	8057	14735	32	3837	17922	44641
Nedlands	185					57	242
Peppermint Grove	2					0	2
Perth	2					3	5
Rockingham	3899	15		9	4	2963	6890
South Perth	29					21	50
Stirling	409				0	204	614
Subiaco	0					1	1
Swan	11498	5896	441	1578	1889	24213	45514
Victoria Park	9					3	12
Vincent	0					0	0
Wanneroo	22721	23	68	0	0	10088	32899
Total (ha)	47660	28939	53519	1619	12477	69094	213308

Table 18. 2005 Native Vegetation Extent by Ownership Category (Perth Biodiversity Project, unpub. 2007)

Local Government	Commonwealth (ha)	Local Gov't - Vested (ha)	Local Gov't - Freehold (ha)	Multiple Vesting (ha)	Unknown (ha)	Private (ha)	Private - Commercial (ha)	State Gov't (ha)	Vacant Crown Land (ha)	Total (ha)
Armadale		973	32		8779	1676	615	30715	27	42816
Bassendean		2	4		4	1	0	16	0	27
Bayswater		4	3		4	3	2	34	0	50
Belmont	390	1	5		5	1	10	57		469
Cambridge	0	25	106		5	0	0	400		537
Canning		38	61		23	34	20	252	0	430
Claremont		0			1	1	1	0		3
Cockburn	372	273	16		146	699	502	2104	13	4125
East Fremantle					0	0		1		1
Fremantle	0	7	6		4		2	0		19
Gosnells		492	82		90	577	581	1817	10	3649
Joondalup	0	223	28	22	33	5	306	635	82	1333
Kalamunda	16	264	39		9930	1231	169	12352	79	24081
Kwinana	1	149	14		126	1210	709	2154	233	4595
Melville		119	51		9	0	6	102	4	291
Mosman Park		0			0	0		11		11
Mundaring	1	942	14		17578	4808	1963	19277	58	44641
Nedlands	108	39	2		4	0	8	80	1	242
Peppermint Grove		2			0					2
Perth		2	0		1	0	1	1		5
Rockingham	0	467	45		244	1271	384	4441	38	6890
South Perth		6	1		3	0	30	10		50
Stirling		284	0		23	1	101	189	15	614
Subiaco					0			1		1
Swan	984	669	142		4946	12943	11221	14581	28	45514
Victoria Park			10		1		2			12
Vincent					0			0		0
Wanneroo	117	511	450	38	5131	2188	6141	18187	136	32899
Total (ha)	1989	5494	1111	60	47089	26650	22775	107416	724	213308

Table 19. 2005 Native Vegetation Extent in Local Government Reserves (Perth Biodiversity Project, unpub. 2007)

Local Government	Ownership - Local Gov't	Bush Forever (ha)	Local Natural Area (ha)	Regional Parks (ha)	Total (ha)
Armadale	Vested	136	59	779	973
	Freehold	6	19	7	32
Bassendean	Vested	2	0		2
	Freehold	2	2		4
Bayswater	Vested	2	2		4
	Freehold	1	2		3
Belmont	Vested	0	1		1
	Freehold	1	4		5
Cambridge	Vested	25	0		25
	Freehold	68	38		106
Canning	Vested	33	6	0	38
	Freehold	31	31	0	61
Claremont	Vested	0	0		0
Cockburn	Vested	189	84	0	273
	Freehold	3	11	2	16
Fremantle	Vested	7	0		7
	Freehold	6	0		6
Gosnells	Vested	41	14	437	492
	Freehold	31	21	30	82
Joondalup	Vested	145	78		223
	Freehold	22	6		28
Kalamunda	Vested	97	61	106	264
	Freehold	0	5	33	39
Kwinana	Vested	95	54	0	149
	Freehold	6	7	0	14
Melville	Vested	80	39	0	119
	Freehold	49	3		51
Mosman Park	Vested	0	0		0
Mundaring	Vested	10	271	661	942
	Freehold	0	14	0	14
Nedlands	Vested	25	15		39
	Freehold	1	0		2
Peppermint Grove	Vested	2	0		2
Perth	Vested	0	2		2
	Freehold	0	0		0
Rockingham	Vested	323	143	0	467
	Freehold	0	45	0	45
South Perth	Vested	6	0		6
	Freehold	0	1		1
Stirling	Vested	244	40		284
	Freehold	0	0		0
Swan	Vested	132	487	50	669
	Freehold	30	72	40	142
Victoria Park	Freehold	9	1		10
Wanneroo	Vested	394	117	0	511
	Freehold	202	248		450
Total (ha)	Vested	1988	1473	2034	5494
	Freehold	468	530	112	1111

NB: Cottesloe, East Fremantle and Vincent have no vegetated Local Government Reserves

Table 20. Vegetated Local Natural Areas by Ownership Categories

	Commonwealth	Local Gov't -	Local Gov't -	Unknown		Private -	State Gov't	Vacant Crown	Total
Local Government	(ha)	Vested (ha)	Freehold (ha)	(ha)	Private (ha)	Commercial (ha)	(ha)	Land (ha)	(ha)
Armadale		59	19	1266	1442	507	2248	11	5552
Bassendean		0	2	3	1	0	1	0	7
Bayswater		2	2	3	3	2	10	0	22
Belmont	23	1	4	4	1	1	32		67
Cambridge		0	38	4	0	0	7		49
Canning		6	31	10	34	15	27	0	121
Claremont		0		1	1	1	0		3
Cockburn	1	84	11	66	680	358	438	12	1650
East Fremantle				0	0		1		1
Fremantle	0	0	0	4		2	0		6
Gosnells		14	21	28	425	386	50	0	924
Joondalup	0	78	6	26	2	166	145	7	430
Kalamunda	2	61	5	253	1201	149	385	55	2110
Kwinana		54	7	83	1162	483	736	29	2555
Melville		39	3	6	0	5	57	3	114
Mosman Park		0		0	0		7		8
Mundaring	1	271	14	839	4771	1958	10044	25	17923
Nedlands	7	15	0	3	0	2	29		57
Peppermint Grove		0							0
Perth		2	0	0	0	0	1		3
Rockingham	0	143	45	165	1118	352	1104	36	2963
South Perth		0	1	1	0	18	1		21
Stirling		40	0	10	1	97	56	0	204
Subiaco				0			1		1
Swan	264	487	72	444	12293	9836	809	8	24213
Victoria Park			1	1		2			3
Vincent				0			0		0
Wanneroo	2	117	248	249	1669	5613	2151	38	10088
Total (ha)	301	1473	530	3470	24803	19953	18340	225	69095

Table 21. 2005 Native Vegetation Extent by Vegetation Complex per Local Government (Perth Biodiversity Project, 2007), 2001 Native Vegetation Extent by Vegetation Complex per Local Government (Perth Biodiversity Project, unpub. 2003)

	Armadale							Basser			Bayswater							
Vegetation Complex	Pre-Euro	opean	Remai Extent		Remai Extent		Pre Europ		Rema Extent		Rema Extent		Pre Europ		Rema Extent		Rema Extent	
	Total (ha)	%	Total (ha)	%	Total (ha)	%	Total (ha)	%	Total (ha)	%	Total (ha)	%	Total (ha)	%	Total (ha)	%	Total (ha)	%
Bassendean Complex-																		
Central and South	879	2	298	34	286	33	679	66	2	0	2	0	2750	84	8	0	8	0
Beermullah Complex	674	1	27	4	27	4												
Cooke	778	1	754	97	754	97												
Darling Scarp	1754	3	622	35	625	36												
Dwellingup 1	379	1	369	97	369	97												
Dwellingup 2	19203	34	17697	92	17641	92												
Dwellingup 4	1393	2	1365	98	1364	98												
Forrestfield	1898	3	82	4	78	4												
Goonaping	719	1	716	100	716	100												
Guildford	1436	3	27	2	26	2	91	9	7	8	10	11	96	3	5	5	1	2
Helena 1	2341	4	1563	67	1563	67												
Karrakatta Complex- Central and South													32	1	1	5	2	5
Murray 1	8194	15	7297	89	7297	89												
Murray 2	54	0	54	100	55	101												
Southern River Complex	4073	7	1234	30	1211	30	1	0	0	10	0	14	59	2	0	0	0	0
Swamp	1913	3	1892	99	1892	99												
Swan Complex	158	0	23	14	23	15	245	24	13	5	13	5	257	8	21	8	19	7
Vasse													12	0	3	26	3	27
Yarragil 1	4031	7	3045	76	3043	75												
Yarragil 2	5920	11	5834	99	5834	99												
Total (ha)	55799	100	42899		42804		1017	98	22		25		3194	98	35		33	

Table 21 (cont)

			Belm	ont					Camb	ridge					Cann	ing		
Vegetation Complex	Pre Europ		Rema Extent	_	Rema Extent		Pre Europ		Rema Extent		Rema Extent	_	Pre Europ		Rema Extent	_	Rema Extent	
	Total (ha)	%	Total (ha)	%	Total (ha)	%	Total (ha)	%	Total (ha)	%	Total (ha)	%	Total (ha)	%	Total (ha)	%	Total (ha)	%
Bassendean Complex- Central and South	2082	53	129	9	125	6							3781	59	256	7	217	6
Cannington Complex													430	7	3	1	2	0
Cottesloe Complex- Central and South							1056	48	438		438	42						
Guildford	201	5	2	1	2	1							305	5	5	2	5	2
Herdsman Complex							88	4	0	1	0	1						
Karrakatta Complex- Central and South							926	42	68	7	67	7						
Quindalup Complex							113	5	30		31	27						
Southern River Complex	1512	38	344	23	314	21							1643	26	160	10	150	9
Swan Complex	43	1	7	16	7	16							265	4	56	21	56	21
Total (ha)	3838	97	482		447		2183	99	536		537		6424	100	480		429	

			Clarer	nont					Cockb	urn			Cottesloe					
Vegetation Complex	Pre Europ	-	Rema Extent		Rema Extent		Pre-Euro	opean	Rema Extent		Rema Extent		Pre Europ		Rema Extent		Rema Extent	
	Total (ha)	%	Total (ha)	%	Total (ha)	%	Total (ha)	%	Total (ha)	%	Total (ha)	%	Total (ha)	%	Total (ha)	%	Total (ha)	%
Bassendean Complex- Central and South							6850	46	2680	39	2355	34						
Cottesloe Complex- Central and South	33	7	2	7	2		4845	33	976	20	922	19	366	94				
Herdsman Complex							1235	8	442	36	443	36						
Karrakatta Complex- Central and South	462	93	1	0	1	0	1390	9	269	19	209	15	16	4				
Quindalup Complex							139	1	80	57	80	58						
Southern River Complex							313	2	123	39	116	37						
Total (ha)	495	100	3		3		14771	100	4570		4124		382	98	0		0	

Table 21 (cont)

			East Fre	mantle					Frema	antle					Gosn	ells		
Vegetation Complex	Pre Europ		Rema Extent		Rema Extent		Pre Europ		Rema Extent		Rema Extent		Pre-Eur	opean	Rema Extent		Rema Extent	
	Total (ha)	%	Total (ha)	%	Total (ha)	%	Total (ha)	%	Total (ha)	%	Total (ha)	%	Total (ha)	%	Total (ha)	%	Total (ha)	%
Bassendean Complex- Central and South													98	1	6	6	2	2
Cannington Complex													171	1	1	1	1	1
Cooke													27	0	27	100	27	100
Cottesloe Complex- Central and South	333	88	1	0	1	0	1693	90	14	1	14	1						
Darling Scarp													1121	9	898	80	894	80
Dwellingup 2													1320	10	1164	88	1162	88
Forrestfield													1608	13	180	11	172	11
Guildford													1966	15	176	9	165	8
Helena 1													81	1	73	90	73	90
Karrakatta Complex- Central and South							87	5	5	6	5	6						
Murray 1													253	2	213	84	212	84
Southern River Complex													4871	38	645	13	583	12
Swan Complex													928	7	159	17	151	16
Yarragil 1													343	3	208	61	208	61
Total (ha)	333	88	1		1		1780	94	19		19		12787	100	3750		3649	