

**Appendix C – Revised information from Flora and Vegetation, Terrestrial  
Fauna and Landforms sections of the Referral Information with Additional  
Information (ELA, 2018a).**

## Flora and Vegetation Tables

**Table 05-1: Vegetation types present within the development envelope**

ID	Vegetation type	Landform and substrate	Extent in development envelope		Extent in development envelope in Degraded or better condition	
			ha	%	ha	%
VT02	<i>Banksia sessilis</i> and <i>Melaleuca systena</i> mid-shrubland	Slopes of dunes with yellow sandy soils	3.25	5.13	3.25	100.00
VT03	<i>Banksia sessilis</i> and <i>Spyridium globulosum</i> tall shrubland	Dune swales with brown sandy soils	12.80	20.21	12.80	100.00
VT04	<i>Banksia attenuata</i> , <i>B. menziesii</i> low woodland	Undulating plain with brown/yellow sandy soils	14.34	22.64	14.17	98.81
VT05	<i>Lomandra</i> sp. herbland	Dunes ridges with white to brown sandy soils	5.95	9.40	5.95	100.00
VT08	<i>Melaleuca huegelii</i> and <i>M. systena</i> shrubland	Upper slopes and ridge of dunes with brown to yellow sandy soils and numerous limestone out-cropping	0.53	0.84	0.53	100.00
VT10	<i>Xanthorrhoea preissii</i> shrubland	Slopes of dunes with brown sandy soils	0.47	0.74	0.47	100.00
VT11	<i>Eucalyptus decipiens</i> woodland	Undulating plain with brown sandy soils	0.26	0.41	0.26	100.00
VT14	<i>Acacia rostellifera</i> tall shrubland	Undulating plain and dune slopes with sandy soils	0.28	0.44	0.28	100.00
<b>Subtotal (native vegetation types)</b>			<b>37.88</b>	<b>59.81</b>	<b>37.72</b>	<b>98.81</b>
VT12	Planted	Undulating plain and dunes slopes with sandy soils	0.11	0.17	0	0.00
VT13	Scattered Natives	Undulating plain and dunes slopes with sandy soils	16.27	25.69	0	0.00
NA	Re-vegetation rail corridor	-	1.82	2.87	-	-
<b>Subtotal (native and non-native vegetation types)</b>			<b>56.08</b>	<b>88.55</b>	<b>37.72</b>	<b>98.81</b>
CL	Cleared	-	7.25	11.45	-	-
<b>Total</b>			<b>63.33</b>	<b>100.00</b>	<b>37.72</b>	<b>98.81</b>

Table adapted from GHD (2019a)

**Table 5-2: Vegetation condition in the development envelope**

Vegetation Condition	Extent in development envelope	
	ha	%
Pristine	1.25	3.31
Excellent	19.74	52.35
Very Good	8.12	21.53
Good	4.83	12.81
Degraded	3.77	10.00
<b>Total</b>	<b>37.72</b>	<b>100.0</b>

**Table 5-5: TECs and PECs within the development envelope**

Ecological community	Conservation status <sup>1</sup>	Extent in development envelope		Associated vegetation type (GHD 2018a)
		ha	%	
<i>Melaleuca huegelii</i> – <i>M. systema</i> shrublands on limestone ridges (Gibson et al. 1994 type 26a) TEC	Endangered; endorsed by the WA Minister for Environment	0.53	0.84	VT08: <i>Melaleuca huegelii</i> and <i>M. systema</i> shrubland
Banksia dominated woodlands of the SCP IBRA region PEC (Banksia woodlands of the SCP (TEC)) <sup>2</sup>	Priority 3 (iii)	14.17 (10.97)	22.37	VT04: <i>Banksia attenuata</i> , <i>B. menziesii</i> low woodland
Northern Spearwood shrublands and woodlands ('community type 24') PEC	Priority 3 (i)	16.05	25.34	VT02: <i>Banksia sessilis</i> and <i>Melaleuca systema</i> mid-shrubland VT03: <i>Banksia sessilis</i> and <i>Spyridium globulosum</i> tall shrubland
<b>Total</b>		<b>30.75</b>	<b>48.56</b>	<b>-</b>

Adapted from GHD (2019a)

<sup>1</sup>Priority 3 (i): Communities that are known from several to many occurrences, a significant number or area of which are not under threat of habitat destruction or degradation.

Priority 3 (iii): Communities made up of large, and/or widespread occurrences, that may or may not be represented in the reserve system, but are under threat of modification across much of their range from processes such as grazing by domestic and/or feral stock, inappropriate fire regimes, clearing, hydrological change.

<sup>2</sup> - *Banksia* woodlands (TEC) extent is a subset of the PEC. To be representative of the *Banksia* Woodlands TEC, vegetation must meet key diagnostic characteristics which include minimum patch size and condition thresholds. Only vegetation in Good or better in condition was considered representative of the *Banksia* Woodlands TEC.

**Table 5-6: Condition ratings of TECs and PECs within the development envelope**

Ecological community (TEC/PEC)	Condition rating	Extent in the development envelope (ha)	Proportion of community occurrence within the development envelope (%)
<i>Melaleuca huegelii</i> – <i>M. systema</i> shrublands on limestone ridges (Gibson et al. 1994 type 26a) TEC	Excellent	0.50	94.34
	Very Good	0.03	5.66
	<b>Subtotal</b>	<b>0.53</b>	<b>100.00</b>
<i>Banksia</i> dominated woodlands of the SCP IBRA region (PEC) ( <i>Banksia</i> woodlands of the SCP (TEC)) <sup>1</sup>	Excellent	3.38 (3.38)	24.33 (30.78)
	Very Good	5.04 (5.04)	36.29 (45.90)
	Good	2.55 (2.55)	16.34 (23.32)
	Degraded	3.20	23.04
	<b>Subtotal</b>	<b>14.17 (10.97)</b>	<b>100 (100)</b>
Northern Spearwood shrublands and woodlands ('community type 24') PEC	Pristine	1.25	7.79
	Excellent	11.76	73.27
	Very Good	2.36	14.70
	Good	0.68	4.24
	<b>Subtotal</b>	<b>16.05</b>	<b>100.00</b>

<sup>1</sup> *Banksia* woodlands (TEC) extent is a subset of the PEC. To be representative of the *Banksia* Woodlands TEC, vegetation must meet key diagnostic characteristics which include minimum patch size and condition thresholds. Only vegetation in Good or better in condition was considered representative of the *Banksia* Woodlands TEC.  
Source: GHD 2019a

**Table 5-8: Extent of pre-European vegetation (vegetation associations) at local, subregional and regional scales mapped within the DE**

Vegetation association (Beard 1979)	Scale	Pre-European extent (ha)	Current extent (ha) <sup>1</sup> (% pre-European extent)	Extent in development envelope (ha) <sup>(2)</sup>	Extent after proposal implementation (ha) (% pre-European extent)
949	Perth IBRA subregion	184,475.82	103,972.25 (56.36%)	11.27 (9.07)	103,963.18 (56.36%)
	NW subregion	38,330.32	17,173.49 (44.80%)		17,164.42 (44.78%)
	1 km buffer	1,208.69	514.88 (42.60%)		505.81 (41.85%)
1007	Perth IBRA subregion	30,109.89	20,681.70 (68.69%)	26.44 (25.58)	20,656.12 (68.60%)
	NW subregion	10,801.16	5,048.24 (46.74%)		5,022.66 (46.50%)
	1 km buffer	987.34	659.97 (66.84%)		634.39 (64.25%)

Source: GHD (2019a)

<sup>1</sup> - Pre-European and Current extents: calculated using Native Vegetation Extent (DPIRD-005), Pre-European Vegetation (DPIRD-006).

<sup>2</sup> - Vegetation in Degraded or better condition mapped by GHD (2018), (vegetation that intersects the Native Vegetation Extent dataset, see section 2.5.2 in GHD 2019a).

**Table 5-9: Cumulative impacts of vegetation clearing (Beard [1979] vegetation associations) due to YRE Parts 1 and 2 and predicted future developments (from the Perth and Peel ULDO) at a local and subregional scale**

Vegetation association (Beard 1979)	Scale	Current extent (ha)	YRE Part 1 proposed clearing (ha) <sup>1</sup>	YRE Part 2 proposed clearing (ha) <sup>1</sup>	Potential future clearing within ULDO areas (ha)	Cumulative clearing (ha)
949	NW subregion	17,173.49	11.27 (0.05%)	0.79 (<0.01%)	788.38 (4.59%)	797.52 (4.64%)
	1 km buffer	514.88	11.27 (1.76%)	0 (0%)	298.37 (57.95%)	307.44 (59.71%)
1007	NW subregion	5,048.24	26.44 (0.51%)	48.38 (0.83%)	3,387.97 (67.11%)	3,455.41 (68.45%)
	1 km buffer	659.97	27.99 (3.88%)	5.11 (0.75%)	463.79 (70.27%)	494.30 (74.90%)

<sup>1</sup> Percentages based on intersect with Native Vegetation Extent dataset.

<sup>2</sup> ULDO areas include all levels of staging for residential, commercial and industrial development where applicable.

Adapted from GHD (2019a).

**Table 5-10: Current extent of vegetation associations in conservation areas mapped within the DE**

Vegetation association (Beard 1979)	Scale	Current extent <sup>1</sup> (ha)	% remaining	Current extent in conservation areas <sup>2</sup> (DBCA Legislated Lands and Waters, and Bush Forever Sites)	
				Area (ha)	% of current extent
949	Perth subregion	103,972.25	56.36	27,350.64	26.31
	NW subregion	17,173.49	44.80	15,011.41	87.41
	1 km buffer	514.88	42.60	43.13	8.38
1007	Perth subregion	20,681.70	68.69	5,003.85	24.19
	NW subregion	5,048.24	46.74	1,089.93	21.59
	1 km buffer	659.97	66.84	37.53	5.69

Source: GHD (2019a)

<sup>1</sup> Current extents: Taken from Table 5-8

<sup>2</sup> DBCA extent: calculated using DBCA – Legislated Lands and Waters (DBCA-011) and DBCA – Lands of Interest (DBCA-012); BF extent; calculated using Bush Forever Areas 2000 (DOP-071) that lies outside of calculated DBCA extent.

**Table 5-11: Extent of pre-European vegetation (vegetation complexes) at local, subregional and regional scales**

Vegetation complex (Heddle et al. 1980)	Scale	Pre-European extent (ha)	Current extent <sup>1</sup> (ha)	Extent in development envelope (ha) <sup>(2)</sup>	Extent after proposal implementation (ha)
Cottesloe complex - central and south	Perth IBRA subregion	45,030.93	14,571.13 (32.36%)	10.91 (8.74)	14,562.39 (32.34%)
	NW subregion	17,272.13	5,841.12 (33.82%)		5,832.38 (33.77%)
	1 km buffer	1,292.49	595.61 (46.08%)		586.87 (45.41%)
Quindalup complex	Perth IBRA subregion	53,007.07	32,954.86 (62.17%)	26.81 (25.90)	32,928.96 (62.12%)
	NW subregion	11,184.24	5,634.59 (50.38%)		5,608.69 (50.15%)
	1 km buffer	1,031.55	650.84 (63.09%)		624.94 (60.26%)

Adapted from GHD (2019a)

<sup>1</sup> Pre-European and Current extents: calculated using Native Vegetation Extent (DPIRD-005), Vegetation Complexes – Swan Coastal Plain.

<sup>2</sup> Vegetation in Degraded or better condition mapped by GHD (2018), (vegetation that intersects the Native Vegetation Extent dataset, see section 2.5.2 in GHD 2019a).

**Table 5-12: Cumulative impacts of vegetation clearing (Heddle et al. [1980] vegetation complexes) due to YRE Parts 1 and 2 and predicted future developments (from the Perth and Peel ULDO) at a local and subregional scale**

Vegetation complex (Heddle et al. 1980)	Scale	Current extent (ha)	YRE Part 1 proposed clearing (ha) <sup>1</sup>	YRE Part 2 proposed clearing (ha) <sup>1</sup>	Potential future clearing within ULDO areas (ha)	Cumulative clearing (ha)
Cottesloe complex - central and south	NW subregion	5,841.12	10.91 (0.19%)	-	834.75 (14.29%)	843.49 (14.44%)
	1 km buffer	595.61	10.91 (1.83%)	-	259.41 (43.55%)	268.15 (45.02%)
Quindalup complex	NW subregion	5,634.59	26.81 (0.46%)	48.13 (0.74%)	3,561.78 (63.21%)	3,629.24 (64.41%)
	1 km buffer	650.84	26.81 (3.98%)	5.11 (0.76%)	502.75 (77.25%)	533.58 (81.98%)

<sup>1</sup> Percentages based on intersect with Native Vegetation Extent dataset.

<sup>2</sup> ULDO areas include all levels of staging for residential, commercial and industrial development where applicable.

Adapted from GHD (2019a).

**Table 5-13: Current extent of vegetation complexes in conservation areas**

Vegetation association (Beard 1979)	Scale	Current extent <sup>1</sup> (ha)	% remaining	Current extent in conservation areas <sup>2</sup> (DBCA Legislated Lands and Waters, and Bush Forever Sites)	
				Area (ha)	% of current extent
Cottesloe complex – central and south	Perth subregion	14,571.13	32.36	9,294.26	63.79
	NW subregion	5,841.12	33.82	3,601.72	61.66
	1 km buffer	595.61	46.08	90.93	15.27
Quindalup complex	Perth subregion	32,954.86	62.17	10,734.03	32.57
	NW subregion	5,634.59	50.38	1,638.47	29.08
	1 km buffer	650.84	63.09	48.87	7.51

<sup>1</sup> Current extents: taken from table 10.

<sup>2</sup> DBCA extent: calculated using DBCA – Legislated Lands and Waters (DBCA-011) and DBCA – Lands of Interest (DBCA-012); BF extent: calculated using Bush Forever Areas 2000 (DOP-071) that lies outside of calculated DBCA extent.

Source: GHD (2019a)

**Table 5-14: Extent of State listed TECs and PECs extrapolated at local, subregional and regional scales**

Ecological community	Scale	Current extent <sup>2</sup> (ha)	Extent in development envelope (ha)	Extent after proposal implementation (ha)
<i>Melaleuca huegelii</i> - <i>Melaleuca systema</i> shrublands on limestone ridges (Gibson et al. 1994 type 26a) TEC	Perth IBRA subregion	199.07	0.53 (0.27%)	198.54 (99.73%)
	NW subregion	100.84	0.53 (0.53%)	99.47 (98.47%)
	1 km buffer	0 <sup>1</sup>	0.53 (100) <sup>1</sup>	-
Banksia dominated woodlands of the SCP IBRA Region PEC <sup>3</sup>	Perth IBRA subregion	249,544.62	14.17 (<0.01%)	259,530.45 (99.99%)
	NW subregion	16,836.81	14.17 (0.08%)	16,822.64 (99.92%)
	1 km buffer	0 <sup>1</sup>	14.17 (100) <sup>1</sup>	-
Northern Spearwood shrublands and woodlands (SCP24) PEC	Perth IBRA subregion	1,008.96	16.05 (1.59%)	992.91 (98.41%)
	NW subregion	332.59	16.05 (4.83%)	316.54 (95.17%)
	1 km buffer	0 <sup>1</sup>	16.05 (100) <sup>1</sup>	-

<sup>1</sup>Vegetation mapped within the development envelope is considered to represent this ecological community, which was not mapped at the local scale by DBCA.

<sup>2</sup>Current extents: provided by DBCA.

<sup>3</sup>*Banksia* woodlands (TEC) extent is a subset of the PEC.

Source: GHD (2019a)

**Table 5-15: Estimated extent of the TECs and PECs in conservation areas**

Ecological community	Scale	Current extent <sup>1</sup> (ha)	Current extent in conservation areas (DBCA Legislated Lands and Waters, and Bush Forever Sites <sup>2</sup> )	
			Area (ha)	% current extent
<i>Melaleuca huegelii</i> - <i>Melaleuca systema</i> shrublands on limestone ridges (Gibson et al. 1994 type 26a) TEC	Perth IBRA subregion	199.07	170.18	85.49
	NW subregion	100.84	81.21	80.54
	1 km buffer	0 <sup>4</sup>	-	-
Banksia dominated woodlands of the SCP IBRA Region PEC <sup>3</sup>	Perth IBRA subregion	259,544.62	91,471.05	35.24
	NW subregion	16,836.81	15,532.33	92.25
	1 km buffer	0 <sup>1</sup>	-	-
Northern Spearwood shrublands and woodlands (SCP24) PEC	Perth IBRA subregion	1,008.96	917.64	90.95
	NW subregion	332.59	329.22	98.98
	1 km buffer	0 <sup>1</sup>	-	-

<sup>1</sup>Current extents: provided by DBCA.

<sup>2</sup>Bush Forever extent: areas that lies outside of calculated DBCA extent.

<sup>3</sup>*Banksia* woodlands (TEC) extent is a subset of the PEC

<sup>4</sup>Vegetation mapped within the development envelope is considered to represent this ecological community, which was not mapped at the local scale by DBCA

Source: GHD (2019a)



**New table:**

**Extents of TECs and PECs mapped within the Part 1 project at local and regional scales taking into consideration YRE Parts 1 and 2 and ULDO**

Ecological Community	Scale	Current extent <sup>1</sup> (ha)	YRE Part 1 proposed clearing (ha)	YRE Part 2 proposed clearing (ha)	Potential future clearing within ULDO areas (ha)	Cumulative clearing (ha)
<i>Melaleuca huegelii</i> - <i>Melaleuca systema</i> shrublands on limestone ridges (Gibson et al. 1994 type 26a) TEC	NW subregion	100.84	0.53 (0.53%)	0.05 (0.05%)	0 (0%)	0.58 (0.58%)
	1 km buffer	0	0.53 (100%)	0 (0%)	0 (0%)	0.53 (100%)
Banksia dominated woodlands of the SCP IBRA Region PEC <sup>2</sup>	NW subregion	16,836.43	14.17 (0.08%)	8.76 (0.05%)		225.94 (1.34%)
	1 km buffer	0	14.17 (100%)	0 (0%)	0 (0%)	14.17 (100%)
Northern Spearwood shrublands and woodlands (SCP24) PEC	NW subregion	332.59	16.05 (4.83%)	13.68 (4.11%)	0 (0%)	29.73 (8.94%)
	1 km buffer	0	16.05 (100%)	2.46 (100%)	0 (0%)	18.51 (100%)

1 Current extents: provided by DBCA.

2 *Banksia* woodlands (TEC) extent is a subset of the PEC.  
Source: GHD (2019a)

# Terrestrial Fauna Tables

**Table 6-1: Fauna habitats present within the development envelope**

Fauna habitat type (GHD 2018a)	Habitat value	Associated vegetation type (GHD 2018a)	Extent in development envelope	
			ha	%
Mixed tall shrubland	High	VT10, VT11, VT13	17.71	32.22
<i>Banksia sessilis</i> over low mixed shrubland	High	VT02, VT03	16.05	29.20
Mixed <i>Banksia</i> woodland	High	VT04, VT15	14.34	26.09
<i>Lomandra</i> herbland on secondary dunes	Medium	VT05	5.95	10.82
Limestone ridgelines	Medium	VT08	0.53	0.96
<i>Acacia</i> shrubland	Medium	VT14	0.28	0.51
Planted <i>Eucalyptus</i> woodland	Medium	VT12	0.11	0.20
<b>Subtotal</b>			<b>54.97</b>	<b>100</b>
Highly Disturbed	Low	None ('cleared')	8.36	13.20
<b>Total</b>			<b>63.33</b>	<b>100.00</b>

Source: GHD (2019a)

**Table 6-4: Carnaby's Black Cockatoo habitat present within the development envelope**

Habitat type	Value	Extent in development envelope	
		ha	%
Foraging (also contains some suitable roosting habitat)	High	30.39	47.99
	Medium	17.82	28.14
<b>Subtotal</b>		<b>48.21</b>	<b>76.13</b>
Remaining area (not considered habitat)	None	15.12	23.87
<b>Total</b>		<b>63.33</b>	<b>100.00</b>

Source: GHD (2019a)

**Table 6-5: Extent of fauna habitat at local, subregional and regional scales**

Scale	Current extent <sup>1</sup> (ha)	Extent in development envelope (ha)	Extent after proposal implementation (ha)	Extent in conservation areas <sup>2</sup> (ha)
Perth IBRA subregion	465,369.28	54.97 (0.01%)	465,334.01 (41.65%)	208,523.32 (44.81%)
NW subregion	42,581.90	54.97 (0.08%)	42,546.63 (55.17%)	22,969.92 (53.94%)
1 km buffer	1,155.34	54.97 (2.78%)	1,235.11 (51.55%)	160.46 (12.63%)

<sup>1</sup> Current extents: taken from table 21.

<sup>2</sup> DBCA extent: calculated using DBCA – Legislated Lands and Waters (DBCA-011) and DBCA – Lands of Interest (DBCA-012); BF extent: calculated using Bush Forever Areas 2000 (DOP-071) that lies outside of calculated DBCA extent.

Source: GHD (2019a)

**Table 6-6: Cumulative impacts of fauna habitat clearing due to YRE Parts 1 and 2 and predicted future developments (from the Perth and Peel ULDO) at a local and subregional scale**

Scale	Current extent (ha)	YRE Part 1 proposed clearing (ha) (% of current extent) <sup>1</sup>	YRE Part 2 proposed clearing (ha) (% of current extent) <sup>1</sup>	Potential future clearing within ULDO areas (ha) (% of current extent) <sup>2</sup>	Cumulative clearing (ha) (% of current extent)
NW subregion	45,581.90	54.97 (0.08%)	61.68 (0.11%)	4,477.76 (10.52%)	4,558.03 (10.70%)
1 km buffer	1,270.37	54.97 (2.78%)	5.49 (0.43%)	761.21 (59.92%)	801.97 (63.13%)

<sup>1</sup> Percentages based on intersect with Native Vegetation Extent dataset.

<sup>2</sup> ULDO areas include all levels of staging for residential, commercial and industrial development where applicable.

Source: GHD (2019a)

**Table 6-8: Extent of Carnaby's Black Cockatoo foraging habitat at local and subregional scales**

Scale	Current extent (ha)	Extent in development envelope (ha) <sup>1</sup>	Extent after proposal implementation (ha)	Extent in conservation areas (ha)
NW subregion	25,808.75	48.21 (27.10) <sup>1</sup>	25,781.65 (99.89%)	20,681.51 (80.13%)
1 km buffer	982.44		955.34 (97.24%)	123.54 (12.57%)

<sup>1</sup> Carnaby's Cockatoo foraging habitat mapped by GHD (2018), (Carnaby's Cockatoo foraging habitat that intersects the Native Vegetation Extent dataset, see section 2.5.2 in GHD 2019a).

Source: GHD (2019a)

**Table 6-9: Cumulative impacts of Carnaby's Black Cockatoo foraging habitat clearing due to YRE Parts 1 and 2 and predicted future developments (from the Perth and Peel ULDO) at a local and subregional scale.**

Scale	Current extent (ha)	YRE Part 1 proposed clearing (ha) (% of current extent) <sup>1</sup>	YRE Part 2 proposed clearing (ha) (% of current extent) <sup>1</sup>	Potential future clearing within ULDO areas (ha) (% of current extent) <sup>2</sup>	Cumulative clearing (ha) (% of current extent)
NW subregion	25,808.75	48.21 (0.10%)	56.31 (0.15%)	2,426.39 (9.40%)	2,493.41 (9.66%)
1 km buffer	982.44	48.21 (2.76%)	5.49 (0.56%)	555.71 (56.56%)	588.29 (59.88%)

<sup>1</sup> Percentages based on intersect with Native Vegetation Extent dataset.

<sup>2</sup> ULDO areas include all levels of staging for residential, commercial and industrial development where applicable.

Source: GHD (2019a)

**Table 6-10: Cumulative impacts of SRE habitat clearing due to YRE Parts 1 and 2 at a local and regional scale**

Scale	Current extent		YRE Part 1 proposed clearing (% of current extent)		YRE Part 2 proposed clearing (% of current extent)		Cumulative clearing (% of current extent) (% of current extent)	
	Low suitability	Medium suitability	Low suitability	Medium suitability	Low suitability	Medium suitability	Low suitability	Medium suitability
Regional <sup>1</sup>	125,225 ha	131,939 ha	25 ha (0.02%)	36 ha (0.03%)	21 ha (0.02%)	52 ha (0.04%)	46 ha (0.04%)	88 ha (0.07%)
Local <sup>2</sup>	1,543 ha	5,696 ha	25 ha (1.62%)	36 ha (0.63%)	21 ha (1.33%)	52 ha (0.92%)	46 ha (2.98%)	88 ha (1.54%)

Adapted from Invertebrate Solutions (2018a).

<sup>1</sup>Regional scale = a 299,616 ha rectangular area bound by the northwest corner 31°21'00"S 115°30'00"E and the southeast corner 31°54'00"S 116°10'15"E (Invertebrate Solutions 2018a).

<sup>2</sup>Local scale = a 9,107 ha area encompassing Yanchep National Park, Bush Forever Site 289 and Neerabup National Park (Invertebrate Solutions 2018a).

**Table 6-11: Extent of SRE habitat at local and regional scales**

Scale	Current extent		Extent in development envelope		Extent after proposal implementation		Extent in conservation areas	
	Low suitability	Medium suitability	Low suitability	Medium suitability	Low suitability	Medium suitability	Low suitability	Medium suitability
Regional <sup>1</sup>	125,225 ha	131,939 ha	25 ha (0.02%)	36 ha (0.03%)	125,200 (99.98%)	131,903 ha (99.97%)	52 ha (0.04%)	4,448 ha (3.71%)
Local <sup>2</sup>	1,543 ha	5,696 ha	25 ha (1.62%)	36 ha (0.63%)	1,518 ha (98.38%)	5,660 ha (99.37%)	52 ha (3.37%)	2,965 ha (52.05%)

Adapted from Invertebrate Solutions (2018a).

<sup>1</sup>Regional scale = a 299,616 ha rectangular area bound by the northwest corner 31°21'00"S 115°30'00"E and the southeast corner 31°54'00"S 116°10'15"E (Invertebrate Solutions 2018a).

<sup>2</sup>Local scale = a 9,107 ha area encompassing Yanchep National Park, Bush Forever Site 289 and Neerabup National Park (Invertebrate Solutions 2018a).

## Landforms Tables

**Table 8-1: Extent of parabolic dune formation at local and regional scales**

Scale	Pre-European extent (ha)	Current extent (ha)	Pre-European extent currently remaining (%)	Current extent within development envelope (ha)	% of current extent within development envelope	Extent after development of the proposal (ha)
NW subregion	5,433.49	3,545.82	65.26	6.98	0.20	3,538.83 (65.13%)
1 km buffer	246.87	216.04	87.51		3.23	209.06 (84.68%)

**Table 8-2: Extent of parabolic dune formation in conservation areas**

Scale	Current extent <sup>1</sup> (ha)	Remaining (%)	Current extent in conservation areas <sup>2</sup> (ha)				
			DBCA Managed Lands	Bush Forever	Total (ha)	% of current extent	% of pre-European extent
NW subregion	3,545.82	65.26	59.76	997.75	1,057.50	29.82	19.46
1 km buffer	216.04	87.51	9.24	–	9.24	4.28	3.74

<sup>1</sup>Current extents taken from **Table 8-1**

<sup>2</sup>DBCA extent: calculated using DBCA – Legislated Lands and Waters (DBCA-011) and DBCA – Lands of Interest (DBCA-012); BF extent: calculated using Bush Forever Areas 2000 (DOP-071) that lies outside of calculated DBCA extent.

**Table 8-3: Likely cumulative impacts to parabolic dunes**

Scale	Current extent <sup>1</sup> (ha)	Current extent within development envelope (ha)	Current extent within YRE Part 2 (ha)	Current extent within ULDO areas (ha)	Cumulative impact (ha) (% of pre-European extent remaining)
NW subregion	3,545.82	6.98 (0.20%)	17.54 (0.49%)	2,236.30 (63.07%)	2,260.82 (63.76%)
1 km buffer	216.04	6.98 (3.23%)	0.35 (0.16%)	148.62 (68.80%)	155.96 (72.19%)