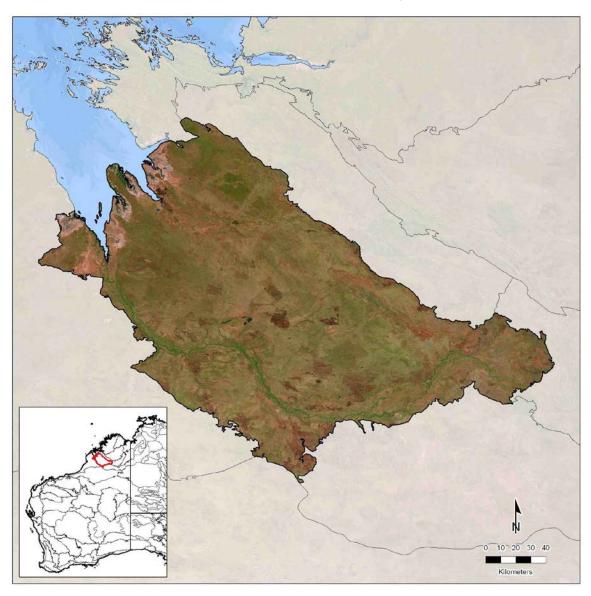
Dampierland 1 Sub-region



Statistics and maps produced by GIS Branch, Department of Parks and Wildlife (2014)

Information on the methods used to generate the statistics is available here.

Note: the analysis was undertaken in 2012 under the auspices of the Department of Environment and Conservation. Therefore the acronym of "DEC" is used in this document.

PROFILE OF SUB-REGION

Total area of sub-region (ha)

Size of sub-region in WA (ha)	Percentage of WA covered by sub-region (%)	Percentage of sub-region within WA (%)	Percentage of sub-region covered by intact habitat* (%)	Percentage of sub-region within DEC-managed conservation reserves (IUCN Ia - IV) (%)
3,432,084	1.36	100	99.79	1.68

^{*}Intact habitat includes remnant vegetation and additional intact habitats (wetlands) not mapped in the remnant vegetation dataset.

Please see the GIS Branch intranet site for the latest annual statistics in the following report:

• <u>DPaW-Managed and Other IUCN Terrestrial Lands by IBRA Sub-Regions Report</u>. Statistic: Percentage of sub-region within DEC-managed conservation reserves (IUCN Ia – IV).

Remnant vegetation

		Extent of veget		Extent of addi habitats (we mapped in the vegetation	tlands) not ne remnant	Total e	xtent
		(ha)	(%)	(ha)	(%)	(ha)	(%)
Native vegetation on DEC-managed lands	Conservation reserves (IUCN Ia - IV)	57,747	1.68	0	0.00	57,747	1.68
	DEC-managed lands proposed for conservation	0	0.00	0	0.00	0	0.00
	Conservation reserves (IUCN V & VI)	0	0.00	0	0.00	0	0.00
	Other DEC-managed lands	46	0.00	0	0.00	46	0.00
Native vegetation on other public lands		259,903	7.57	112	0.00	260,015	7.58
Native vegetation on leasehold lands		3,083,508	89.84	1,081	0.03	3,084,589	89.88
Native vegetation on freehold lands		19,746	0.58	0	0.00	19,746	0.58
Native vegetation with no tenure category assigned		1,648	0.05	1,129	0.03	2,777	0.08
Cleared areas		-	-	-	-	6,952	0.20
Unmapped islands*		-	-	-	-	211	0.01
Total		3,422,598	100	2,322	0	3,432,083	100

NB: some rounding errors may occur.

Please see the GIS Branch intranet site for the latest annual statistics in the following report:

• <u>Statewide Vegetation Statistics (Full report).</u> Statistic: Extent of Remnant Vegetation including on DEC-managed lands.

^{*} DEC regions may advise if these are to be included under additional intact habitat.

Tenure

				Extent (ha)			Extent (%)		Num	ber of rese	erves
			2002	2012	Change	2002	2012	Change	2002	2012	Change
DEC-managed	Conservation reserves (IUCN Ia - IV)		57,918	57,749	-169	1.69	1.68	-0.01	6	6	0
lands	DEC-managed lands proposed for										
	conservation		0	0	0	0.00	0.00	0.00	0	0	0
	Conservation reserves (IUCN V & VI)		0	0	0	0.00	0.00	0.00	0	0	0
	State forest / timber reserves		0	0	0	0.00	0.00	0.00	0	0	0
	Other DEC-managed lands		< 1	60	60	0.00	0.00	0.00	1	2	1
Other lands	Unallocated crown lands		55,237	62,074	6,837	1.61	1.81	0.20	-	-	-
	Other crown reserves		128,280	122,384	-5,896	3.74	3.57	-0.17	-	-	-
		Crown reserves vested in									
		Aboriginal Lands Trust*	-	6,273	-	-	0.18	-	-	-	-
	Pastoral leases^		2,874,860	3,053,816	178,956	83.76	88.98	5.22	-	-	-
		Pastoral leases held by									
		Aboriginal Lands Trust*	-	0	-	-	0.00	-	-	-	-
	Other leasehold lands [^]		0	33,276	33,276	0.00	0.97	0.97	-	-	-
		General purpose leases held by Aboriginal Lands Trust*	-	654	-	-	0.02	-	-	_	_
	Freehold lands		231,066	20,641	-210,425	6.73	0.60	-6.13	-	_	-
		Freehold lands held by									
		Aboriginal Lands Trust*	-	5,937	-	-	0.17	-	-	-	-
	Commonwealth lands (defence)		55,473	55,433	-40	1.62	1.62	0.00	-	-	-
	Other public lands (roads and water bodies)		13,623	22,959	9,336	0.40	0.67	0.27	1	_	_
	No tenure category assigned [†]		15,626	3,693	-11,933	0.46	0.11	-0.35	_	_	_
Total	canal a sategory assigned		3,432,083	3,432,085	-	100	100	-	7	8	-

NB: some rounding errors may occur.

Please see the GIS Branch intranet site for the latest annual statistics in the following report:

• DPaW-Managed and Other IUCN Terrestrial Lands by IBRA Sub-Regions Report. Statistic: DEC-managed lands (extent only).

^{*} Aboriginal Lands Trust data are only available for 2012. The extents shown are a subset of the category they sit below. These values should therefore not be summed since they are not mutually exclusive.

[^] In 2002, there is not data to differentiate other leasehold lands. Therefore it is likely that the total extent shown for pastoral leases in 2002 includes both pastoral leases and other leasehold lands.

[†] The attributing of the state cadastral database has improved considerably over time. Therefore much of the land which had no tenure category assigned in 2002 will have been attributed and consequently distributed between other reporting categories in 2012. Much of this is expected to be distributed to the "Other public lands (roads and water bodies)" category, as road casings are progressively digitised and attributed, though increases in other categories is also possible as attributing improves.

Mining and petroleum

			IBRA sub-region					DEC-managed conservation reserves (IUCN Ia - IV)			DEC-managed lands proposed for conservation			DEC-managed conservation reserves (IUCN V & VI)			Other DEC-managed lands		
		2001/02	2001/02 % of IBRA sub- region	2012	2012 % of IBRA sub- region	Change^	2001/02	2012	Change	2001/02	2012	Change	2001/02	2012	Change	2001/02	2012	Change	
Number of	Prospecting	4	N/A	2	N/A	-2	1	0	-1	0	0	0	0	0	0	0	0	0	
mining (live)	Exploration	59	N/A	98	N/A	39	9	0	-9	0	0	0	0	0	0	1	0	-1	
tenements	Mining	41	N/A	45	N/A	4	1	1	0	0	0	0	0	0	0	0	0	0	
	Other	0	N/A	0	N/A	0	0	0	0	0	0	0	0	0	0	0	0	0	
Number of	Exploration	3	N/A	6	N/A	3	0	1	1	0	0	0	0	0	0	0	0	0	
petroleum (active) titles	Production	2	N/A	4	N/A	2	0	0	0	0	0	0	0	0	0	0	0	0	
Land area (ha)	Mining (live) tenements	347,894	10.14	1,251,145	36.45	26.31	8,906	751	-8,155	0	0	0	0	0	0	< 1	0	< 1	
	Petroleum (active) titles	502,239	14.63	1,285,796	37.46	22.83	0	17,622	17,622	0	0	0	0	0	0	0	0	0	
	Mining (live) tenements and petroleum (active) titles*	822,808	23.97	1,980,355	57.70	33.73	8,906	17,917	9,011	0	0	0	0	0	0	<1	0	<1	

^{*}An area of land can have over it both a mining tenement and petroleum title. The combined total represents the land area which is covered by a mining tenement or petroleum title or both.

[^]For the Land Area "Change" is calculated as the difference in % coverage at the IBRA sub-region scale of the two year dates.

Current dominant land uses

		Extent (ha)			Extent (%)	
	1996/97	2005/06	Change	1996/97	2005/06	Change
Pastoralism	3,004,234	2,831,226	-173,008	87.53	82.49	-5.04
Miscellaneous (non-intensive use)*	172,671	332,034	159,363	5.03	9.67	4.64
Conservation	159,812	154,798	-5,014	4.66	4.51	-0.15
Water (not classified)	89,966	87,072	-2,894	2.62	2.54	-0.08
Traditional indigenous use	0	18,420	18,420	0.00	0.54	0.54
Agriculture (intensive use)	118	1,211	1,093	0.00	0.04	0.04
Urban	823	1,183	360	0.02	0.03	0.01
Water (man-made/man modified)	117	100	-17	0.00	0.00	0.00
Native forestry	0	0	0	0.00	0.00	0.00
Plantation forestry	0	0	0	0.00	0.00	0.00
Mining	0	0	0	0.00	0.00	0.00
No data	4,344	6,039	1,695	0.13	0.18	0.05
Total	3,432,085	3,432,083	-	100	100	-

NB: some rounding errors may occur.

See the methods document available $\underline{\text{here}}$ for definitions of the categories.

Linear infrastructure

	Length (km)	Area of reporting region (ha)	Length per hectare (km/ha)
Roads (sub-region)	6,860	3,432,084	0.0020
Roads (Strategic Survey Roads in national parks,			
conservation parks and nature reserves)	9	57,749	0.0002
Railways (sub-region)	0	3,432,084	0.0000

^{*} Largely unmodified natural systems under various land uses. See detailed descriptions.

Complementary conservation initiatives to the formal conservation reserve system

		Extent (ha)		Extent (%)				
	2002	2012	Change	2002	2012	Change		
Private conservation organisations' land	0	0	0	0.00	0.00	0.00		
Nature Conservation covenants	0	0	0	0.00	0.00	0.00		
Land for Wildlife properties	0	0	0	0.00	0.00	0.00		
Combined total*	0	0	0	0.00	0.00	0.00		

^{*} These conservation initiatives are not mutually exclusive. For example freehold land owned by a private conservation organisation may have a formal nature conservation covenant on its title. Therefore its area will be included in both category totals. The combined total represents the total extent of land which is covered by one or more initiative.

Please see the GIS Branch intranet site for the latest annual statistics in the following report:

• DPaW-Managed and Other IUCN Terrestrial Lands by IBRA Sub-Regions Report. Statistic: Nature conservation covenants.

Indigenous

			Extent (ha)			Extent (%)	
		2002	2012	Change	2002	2012	Change
Native Title determinations	On DEC-managed lands	0	0	0	0.00	0.00	0.00
	On all other lands	0	282,179	282,179	0.00	8.22	8.22
Commonwealth Indigenous Protected Areas		0	0	0	0.00	0.00	0.00

Please see the GIS Branch intranet site for the latest annual statistics in the following report:

• DPaW-Managed and Other IUCN Terrestrial Lands by IBRA Sub-Regions Report. Statistic: Commonwealth Indigenous Protected Areas.

Climate projection 2030, 2050 and 2070

Projected climate change scenarios (OzClim)

ANNUAL	Pro	jected (Avera	ge)	Change fron	n Base Climate	* (Average)	Chan	ge from Base Climate*	(range)		
	2030	2050	2070	2030	2050	2070	2030	2050	2070		
	High impact scenario										
Minimum Temperature (degrees C)	22.07	23.66	25.53	1.47	3.06	4.93	1.26 - 1.62	2.62 - 3.38	4.21 - 5.43		
Maximum Temperature (degrees C)	36.62	38.48	40.66	1.72	3.58	5.75	1.44 - 1.87	2.99 - 3.88	4.81 - 6.24		
Precipitation (mm)	618.10	545.09	475.42	-83.62	-156.63	-226.30	-119.6062.70	-226.00119.80	-329.20176.40		
	Medium imp	act scenario									
Minimum Temperature (degrees C)	21.77	22.60	23.39	1.17	1.99	2.79	1.01 - 1.29	1.71 - 2.20	2.39 - 3.08		
Maximum Temperature (degrees C)	36.27	37.23	38.16	1.37	2.33	3.26	1.15 - 1.49	1.95 - 2.53	2.73 - 3.53		
Precipitation (mm)	633.67	592.51	556.64	-68.06	-109.23	-145.08	-97.1050.80	-156.7082.50	-209.00110.70		

^{*} Base Climate is 1990

The Global Climate Change Model (GCM) used in both scenarios is CSIRO Mk3.5 (CSIRO: CSIRO Mk3.5 on OzClim).

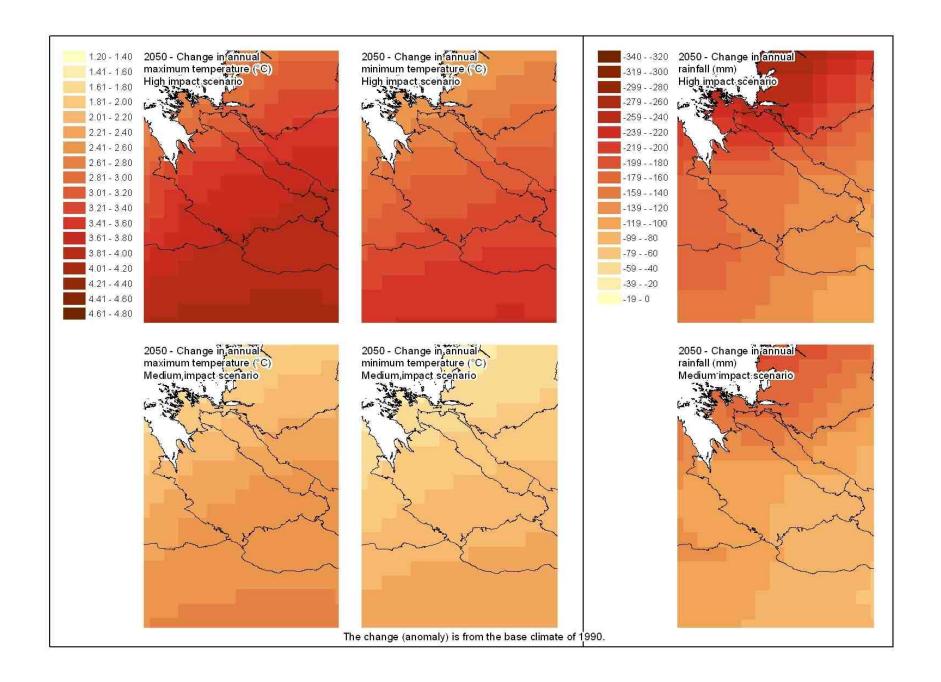
For more information see https://wiki.csiro.au/confluence/display/ozclim/Science#Science-CSIRO35

Medium Impact Scenario:

- Emission Scenario: Medium CO₂ emissions, peaking around 2030 (SRES Marker Scenario A1B)
- Climate Sensitivity (Rate of Global Warming): Moderate rate of global warming corresponds to a global warming of 2.6°C for a doubling of CO2 from 280 ppm to 560 ppm.

High Impact Scenario:

- Emission Scenario: High CO2 emissions, increasing throughout the 21st century (SRES Marker Scenario A1FI)
- Climate Sensitivity (Rate of Global Warming): High rate of global warming corresponds to a global warming of 4.2°C for a doubling of CO2 from 280 ppm to 560 ppm.



BIODIVERSITY ASSETS

Native vegetation

Please see the GIS Branch intranet site for the latest annual statistics in the following report:

• Statewide Vegetation Statistics (Full report). Statistic: All statistics except 'Currently remaining on other lands'.

Vegetation Association descriptions can be viewed here (worksheet "Veg Assoc Descriptions").

Dominant vegetation associations

Dominant vegetation associations are those which together occupied 85% of the sub-region at the time of European settlement (when sorted from largest to smallest).

	Percentage of	Dro			Currer	ntly remaining on DE	C-managed land	ls (ha)	Currently remaining on other lands (ha)				
Beard's veg assoc no.	veg assoc within sub- region (%)	Pre- European extent (ha)	Current extent (ha)	Percentage remaining (%)	IUCN la-IV	Proposed for conservation	IUCN V-VI	Non-IUCN	Public lands	Leasehold lands	Freehold lands		
64	94.32	410,086	409,863	99.95	0	0	0	0	8,046	400,496	1,320		
755	85.65	366,813	366,147	99.82	0	0	0	0	35,510	328,660	1,977		
706	94.46	272,449	271,485	99.65	345	0	0	0	18,288	246,312	6,495		
712	99.76	260,100	260,100	100.00	0	0	0	0	3,782	256,318	0		
700	35.46	212,972	212,972	100.00	0	0	0	0	3,171	209,801	0		
707	63.73	206,793	206,793	100.00	0	0	0	0	23,501	183,032	259		
745	83.66	192,625	191,696	99.52	344	0	0	46	8,455	182,294	555		
754	94.56	184,704	184,704	100.00	0	0	0	0	29,255	155,449	0		
699	9.07	180,119	179,964	99.91	0	0	0	0	3,520	176,338	106		
127	17.83	131,509	129,809	98.71	0	0	0	0	52,987	75,918	44		
61	70.45	130,664	130,569	99.93	938	0	0	0	19,834	108,079	1,718		
116	80.72	95,013	94,973	99.96	13,763	0	0	0	2,009	79,201	0		
744	65.25	90,479	90,479	100.00	1,022	0	0	0	2,157	87,277	23		
746	83.48	80,940	80,940	100.00	10,713	0	0	0	2,119	68,108	0		
709	81.25	61,628	61,399	99.63	559	0	0	0	1,055	59,785	0		
764	100.00	53,248	51,955	97.57	0	0	0	0	11,350	37,759	2,846		

Unique vegetation associations

Unique vegetation associations are those which were largely restricted to only one sub-region at the time of European settlement (i.e. \geq 85% of the vegetation association falls within one sub-region).

	Percentage of	Pre-			Currer	ntly remaining on DE	C-managed land	ls (ha)	Currently remaining on other lands (ha)			
Beard's veg assoc no.	veg assoc within sub- region (%)	European extent (ha)	Current extent (ha)	Percentage remaining (%)	IUCN Ia-IV	Proposed for conservation	IUCN V-VI	Non-IUCN	Public lands	Leasehold lands	Freehold lands	
764	100.00	53,248	51,955	97.57	0	0	0	0	11,350	37,759	2,846	
721	100.00	51,884	51,884	100.00	0	0	0	0	1,770	50,114	0	
737	100.00	36,230	36,217	99.96	0	0	0	0	390	35,627	200	
710	100.00	25,597	25,597	100.00	0	0	0	0	134	25,463	0	
702	100.00	25,433	25,419	99.94	0	0	0	0	2,710	21,880	828	
761	100.00	22,372	22,145	98.99	0	0	0	0	671	21,472	1	
757	100.00	16,176	16,176	100.00	0	0	0	0	328	15,770	78	
716	100.00	11,577	11,577	100.00	0	0	0	0	563	11,014	0	
756	100.00	2,696	2,696	100.00	0	0	0	0	144	2,552	0	
719	100.00	1,300	1,300	100.00	0	0	0	0	0	1,300	0	
33	100.00	273	273	100.00	0	0	0	0	0	273	0	
760	100.00	270	270	100.00	0	0	0	0	0	270	0	
718	100.00	23	23	100.00	0	0	0	0	12	11	0	
712	99.76	260,100	260,100	100.00	0	0	0	0	3,782	256,318	0	
735	98.23	39,477	39,477	100.00	19,620	0	0	0	397	19,461	0	
759	97.76	43,962	43,783	99.59	0	0	0	0	8,671	34,443	570	
754	94.56	184,704	184,704	100.00	0	0	0	0	29,255	155,449	0	
706	94.46	272,449	271,485	99.65	345	0	0	0	18,288	246,312	6,495	
64	94.32	410,086	409,863	99.95	0	0	0	0	8,046	400,496	1,320	
840	92.86	34,819	34,802	99.95	0	0	0	0	2,037	32,553	212	
755	85.65	366,813	366,147	99.82	0	0	0	0	35,510	328,660	1,977	

Rare vegetation associations

Rare vegetation associations are those which together occupied $\leq 1\%$ of the state at the time of European settlement. The table below lists any rare vegetation associations which fall within this sub-region.

	Percentage of	Pre-			Currer	ntly remaining on DE	C-managed land	ls (ha)	Currently remaining on other lands (ha)			
Beard's veg assoc no.	veg assoc within sub- region (%)	European extent (ha)	Current extent (ha)	Percentage remaining (%)	IUCN la-IV	Proposed for conservation	IUCN V-VI	Non-IUCN	Public lands	Leasehold lands	Freehold lands	
718	100.00	23	23	100.00	0	0	0	0	12	11	0	
760	100.00	270	270	100.00	0	0	0	0	0	270	0	
33	100.00	273	273	100.00	0	0	0	0	0	273	0	
724	2.50	310	310	100.00	0	0	0	0	119	191	0	
719	100.00	1,300	1,300	100.00	0	0	0	0	0	1,300	0	
762	21.51	1,465	1,465	100.00	0	0	0	0	197	1,244	23	
864	12.55	2,206	2,206	100.00	0	0	0	0	0	2,206	0	
756	100.00	2,696	2,696	100.00	0	0	0	0	144	2,552	0	
720	66.85	2,859	2,859	100.00	79	0	0	0	1,286	1,495	0	
743	35.10	3,918	3,918	100.00	0	0	0	0	205	3,713	0	
742	66.99	5,616	5,616	100.00	0	0	0	0	1,583	3,950	82	
716	100.00	11,577	11,577	100.00	0	0	0	0	563	11,014	0	
722	64.65	13,750	13,750	100.00	0	0	0	0	0	13,750	0	
757	100.00	16,176	16,176	100.00	0	0	0	0	328	15,770	78	
761	100.00	22,372	22,145	98.99	0	0	0	0	671	21,472	1	
702	100.00	25,433	25,419	99.94	0	0	0	0	2,710	21,880	828	
710	100.00	25,597	25,597	100.00	0	0	0	0	134	25,463	0	