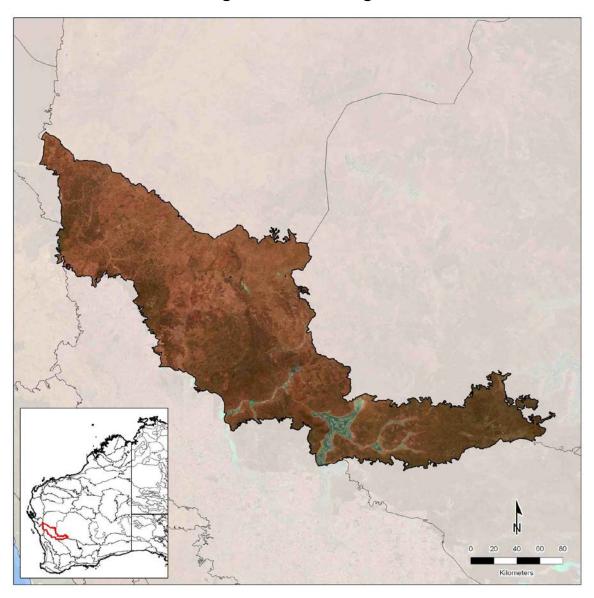
Yalgoo 2 Sub-region



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) (%)
3,498,943	1.38	100	98.79	2.14

^{*}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 add habitats (we mapped in t vegetation	etlands) not he remnant	Total e	xtent
		(ha)	(%) (ha) (%) (ha)				(%)
Native vegetation on DEC-managed lands	Conservation reserves (IUCN Ia - IV)	74,776	2.14	0	0.00	74,776	2.14
	DEC-managed lands proposed for conservation	756,238	21.61	11	0.00	756,249	21.61
	Conservation reserves (IUCN V & VI)	0	0.00	0	0.00	0	0.00
	Other DEC-managed lands	15,178	0.43	0	0.00	15,178	0.43
Native vegetation on other public lands		360,279	10.30	63,024	1.80	423,303	12.10
Native vegetation on leasehold lands		2,149,047	61.42	5,583	0.16	2,154,630	61.58
Native vegetation on freehold lands		32,340	0.92	0	0.00	32,340	0.92
Native vegetation with no tenure category assigned		0	0.00	0	0.00	0	0.00
Cleared areas		-	-	-	-	42,467	1.21
Total		3,387,858	97	68,618	2	3,498,943	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.

Tenure

				Extent (ha)			Extent (%)		Num	ber of res	erves
			2002	2012	Change	2002	2012	Change	2002	2012	Change
DEC-managed	Conservation reserves (IUCN Ia - IV)		74,808	74,840	32	2.14	2.14	0.00	3	3	0
lands	DEC-managed lands proposed for										
	conservation		115,171	757,351	642,180	3.29	21.65	18.36	3	11	8
	Conservation reserves (IUCN V & VI)		0	0	0	0.00	0.00	0.00	0	0	0
	State forest / timber reserves		15,189	15,181	-8	0.43	0.43	0.00	2	2	0
	Other DEC-managed lands		0	0	0	0.00	0.00	0.00	0	0	0
Other lands	Unallocated crown lands		338,072	327,448	-10,624	9.66	9.36	-0.30	-	-	-
	Other crown reserves		44,213	44,620	407	1.26	1.28	0.02	-	-	-
		Crown reserves vested in									
		Aboriginal Lands Trust*	-	0	-	-	0.00	-	-	-	-
	Pastoral leases^		2,788,357	2,154,347	-634,010	79.69	61.57	-18.12	-	1	-
		Pastoral leases held by									
		Aboriginal Lands Trust*	-	0	-	-	0.00	-	-	-	-
	Other leasehold lands [^]		0	4,096	4,096	0.00	0.12	0.12	-	-	-
		General purpose leases held									
		by Aboriginal Lands Trust*	-	0	-	-	0.00	-	-	-	-
	Freehold lands		70,910	68,871	-2,039	2.03	1.97	-0.06	-	-	-
		Freehold lands held by									
		Aboriginal Lands Trust*	-	379	-	-	0.01	-	-	-	-
	Commonwealth lands (defence)		0	0	0	0.00	0.00	0.00	-	ı	-
	Other public lands (roads and water										
	bodies)		46,830	52,189	5,359	1.34	1.49	0.15	-	-	-
	No tenure category assigned [†]		5,394	0	-5,394	0.15	0.00	-0.15	-	-	-
Total			3,498,944	3,498,943	-	100	100	-	8	16	-

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)		eserves	Other DEC-managed lands		naged				
		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	94	N/A	131	N/A	37	0	0	0	29	37	8	0	0	0	0	0	0
mining (live)	Exploration	79	N/A	266	N/A	187	1	0	-1	33	131	98	0	0	0	0	4	4
tenements	Mining	112	N/A	151	N/A	39	0	0	0	33	50	17	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	0	N/A	0	N/A	0	0	0	0	0	0	0	0	0	0	0	0	0
petroleum (active) titles	Production	0	N/A	0	N/A	0	0	0	0	0	0	0	0	0	0	0	0	0
Land area (ha)	Mining (live) tenements	257,736	7.37	1,029,807	29.43	22.06	90	0	-90	78,657	348,574	269,917	0	0	0	0	4,154	4,154
	Petroleum (active) titles	0	0.00	0	0.00	0.00	0	0	0	0	0	0	0	0	0	0	0	0
	Mining (live) tenements and petroleum (active)																	
	titles*	257,736	7.37	1,029,807	29.43	22.06	90	0	-90	78,657	348,574	269,917	0	0	0	0	4,154	4,154

^{*}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	2,713,832	2,786,296	72,464	77.56	79.63	2.07
Miscellaneous (non-intensive use)*	579,113	467,388	-111,725	16.55	13.36	-3.19
Conservation	148,430	148,666	236	4.24	4.25	0.01
Agriculture (intensive use)	3,819	45,529	41,710	0.11	1.30	1.19
Water (not classified)	39,501	36,789	-2,712	1.13	1.05	-0.08
Native forestry	14,032	13,975	-57	0.40	0.40	0.00
Plantation forestry	0	200	200	0.00	0.01	0.01
Mining	109	100	-9	0.00	0.00	0.00
Urban	108	0	-108	0.00	0.00	0.00
Traditional indigenous use	0	0	0	0.00	0.00	0.00
Water (man-made/man modified)	0	0	0	0.00	0.00	0.00
No data	0	0	0	0.00	0.00	0.00
Total	3,498,944	3,498,943	1	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)	7,661	3,498,943	0.0022
Roads (Strategic Survey Roads in national parks,			
conservation parks and nature reserves)	10	74,840	0.0001
Railways (sub-region)	0	3,498,943	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	36,662	50,906	14,244	1.05	1.45	0.40		
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*	36,662	50,906	14,244	1.05	1.45	0.40		

^{*} 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:

• <u>DPaW-Managed and Other IUCN Terrestrial Lands by IBRA Sub-Regions Report</u>. 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	0	0	0.00	0.00	0.00	
Commonwealth Indigenous Protected Areas		0	42,324	42,324	0.00	1.21	1.21	

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)	14.68	16.35	18.30	1.54	3.21	5.16	1.35 - 1.69	2.81 - 3.51	4.52 - 5.64				
Maximum Temperature (degrees C)	29.56	31.44	33.65	1.75	3.63	5.84	1.48 - 1.96	3.08 - 4.07	4.94 - 6.55				
Precipitation (mm)	220.38	182.10	149.37	-47.53	-85.79	-118.53	-55.4035.40	-97.7063.80	-136.6087.90				
	Medium imp	act scenario											
Minimum Temperature (degrees C)	14.37	15.23	16.06	1.23	2.09	2.92	1.08 - 1.34	1.83 - 2.28	2.56 - 3.19				
Maximum Temperature (degrees C)	29.20	30.18	31.12	1.39	2.36	3.31	1.17 - 1.56	2.00 - 2.65	2.80 - 3.71				
Precipitation (mm)	228.97	206.55	187.90	-38.93	-61.35	-79.99	-45.7029.00	-70.8045.60	-90.9059.50				

^{*} Base Climate is 1990

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

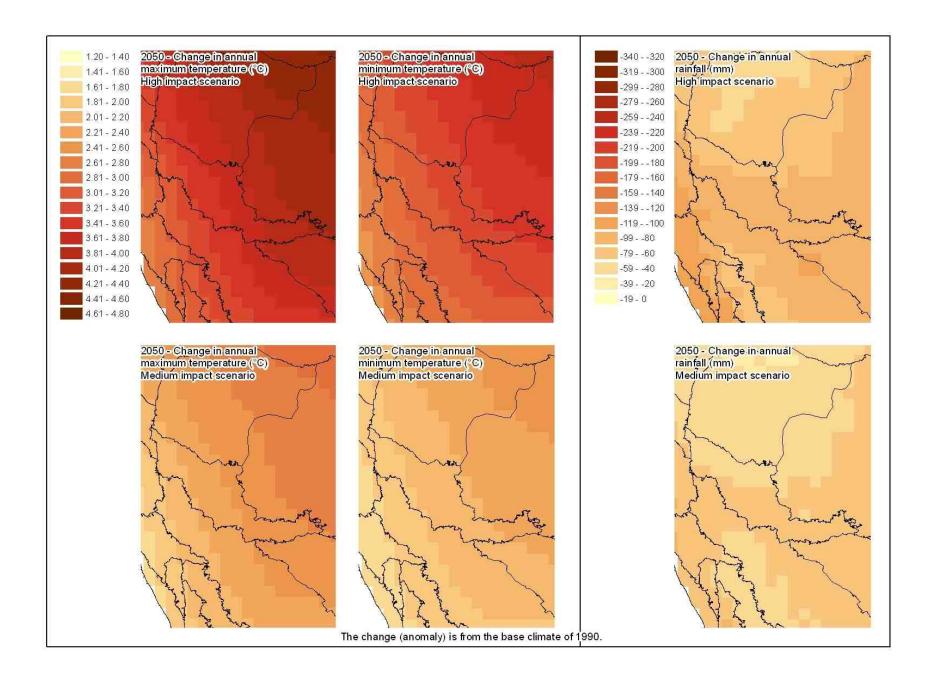
For more information see https://wiki.csiro.au/confluence/display/ozclim/Science#Science-CSIRO35

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	Duo			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	
420	71.64	615,816	614,686	99.82	108	102,078	0	154	13,693	497,109	1,543	
326	52.18	539,742	539,715	99.99	0	235,741	0	0	13,459	290,463	52	
419	96.64	302,708	289,833	95.75	0	128,233	0	6,424	23,207	126,237	5,731	
40	81.75	301,699	284,747	94.38	5,582	7,458	0	0	8,609	243,989	19,109	
416	93.20	223,984	223,247	99.67	12,169	0	0	0	36,286	174,717	76	
483	45.68	200,808	200,808	100.00	22,423	0	0	0	164,172	14,213	0	
404	66.17	136,684	132,835	97.18	0	19,816	0	0	1,281	109,949	1,789	
364	23.91	122,194	119,475	97.77	642	46,117	0	5,905	2,443	62,757	1,611	
125	3.07	106,870	42,333	39.61	0	2,243	0	172	6,159	33,758	0	
18	0.51	101,278	101,180	99.90	0	19,636	0	0	14,832	66,593	120	
361	87.37	76,457	76,430	99.96	0	20,879	0	0	2,122	53,389	41	
256	94.08	63,663	63,658	99.99	29,675	0	0	0	37	33,947	0	
358	92.99	55,530	55,448	99.85	0	17,291	0	0	2,261	35,759	137	
355	89.20	55,020	54,695	99.41	0	22,667	0	1,738	3,977	25,993	319	
683	99.52	50,075	50,061	99.97	0	17,394	0	302	2,300	30,066	0	
202	10.05	45,096	45,012	99.81	0	18,077	0	0	1,588	25,347	0	

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 re	maining on othe	er 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
414	100.00	30,389	30,389	100.00	0	2,478	0	0	1,041	26,871	0
337	100.00	2,785	2,785	100.00	0	0	0	0	0	2,785	0
434	100.00	1,387	1,387	100.00	0	1,182	0	0	205	0	0
357	99.94	36,980	36,447	98.56	0	0	0	0	22	36,425	0
683	99.52	50,075	50,061	99.97	0	17,394	0	302	2,300	30,066	0
419	96.64	302,708	289,833	95.75	0	128,233	0	6,424	23,207	126,237	5,731
256	94.08	63,663	63,658	99.99	29,675	0	0	0	37	33,947	0
416	93.20	223,984	223,247	99.67	12,169	0	0	0	36,286	174,717	76
358	92.99	55,530	55,448	99.85	0	17,291	0	0	2,261	35,759	137
355	89.20	55,020	54,695	99.41	0	22,667	0	1,738	3,977	25,993	319
361	87.37	76,457	76,430	99.96	0	20,879	0	0	2,122	53,389	41

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-			Currei	ntly remaining on DE	C-managed land	ds (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	
314	14.08	1,048	1,048	100.00	0	0	0	0	15	1,010	23	
405	4.25	1,089	1,089	100.00	0	0	0	0	207	882	0	
434	100.00	1,387	1,387	100.00	0	1,182	0	0	205	0	0	
337	100.00	2,785	2,785	100.00	0	0	0	0	0	2,785	0	
228	34.53	3,586	3,401	94.84	0	0	0	0	0	3,401	0	
686	33.00	4,335	4,280	98.73	0	1,105	0	0	485	2,688	2	
412	53.80	5,065	5,026	99.23	0	0	0	0	154	4,872	0	
268	45.62	7,093	7,093	100.00	0	758	0	0	238	6,098	0	
1198	55.35	12,495	11,301	90.44	0	419	0	0	100	10,779	4	