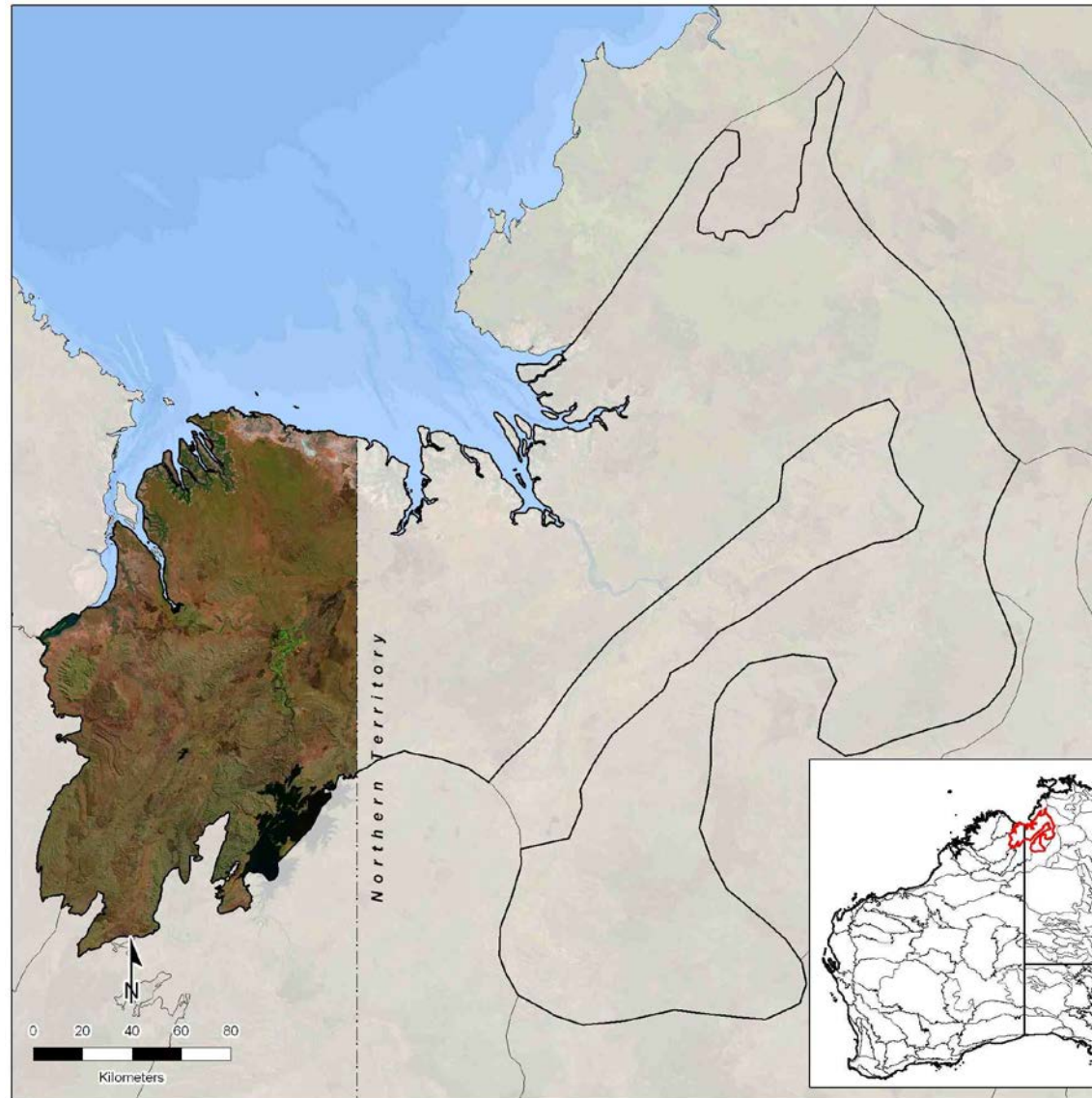


## Victoria Bonaparte 1 Sub-region



*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) (%)
1,890,785	0.75	29	98.71	6.11

\*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:

- [DPaW-Managed and Other IUCN Terrestrial Lands by IBRA Sub-Regions Report](#). Statistic: Percentage of sub-region within DEC-managed conservation reserves (IUCN Ia – IV).

## Remnant vegetation

		Extent of remnant vegetation		Extent of additional intact habitats (wetlands) not mapped in the remnant vegetation dataset		Total extent	
		(ha)	(%)	(ha)	(%)	(ha)	(%)
Native vegetation on DEC-managed lands	Conservation reserves (IUCN Ia - IV)	115,195	6.09	400	0.02	115,595	6.11
	DEC-managed lands proposed for conservation	33,127	1.75	0	0.00	33,127	1.75
	Conservation reserves (IUCN V & VI)	64	0.00	0	0.00	64	0.00
	Other DEC-managed lands	154,223	8.16	0	0.00	154,223	8.16
Native vegetation on other public lands		482,889	25.54	160	0.01	483,049	25.55
Native vegetation on leasehold lands		989,850	52.35	43	0.00	989,893	52.35
Native vegetation on freehold lands		78,922	4.17	1	0.00	78,923	4.17
Native vegetation with no tenure category assigned		4,361	0.23	7,213	0.38	11,574	0.61
Cleared areas		-	-	-	-	24,296	1.28
Unmapped islands*		-	-	-	-	41	0.00
<b>Total</b>		<b>1,858,631</b>	<b>98</b>	<b>7,817</b>	<b>0</b>	<b>1,890,785</b>	<b>100</b>

NB: some rounding errors may occur.

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

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

- [Statewide Vegetation Statistics \(Full report\)](#). Statistic: Extent of Remnant Vegetation including on DEC-managed lands.

## Tenure

			Extent (ha)			Extent (%)			Number of reserves		
			2002	2012	Change	2002	2012	Change	2002	2012	Change
DEC-managed lands	Conservation reserves (IUCN Ia - IV)		116,849	115,612	-1,237	6.18	6.11	-0.07	5	7	2
	DEC-managed lands proposed for conservation		0	33,127	33,127	0.00	1.75	1.75	0	1	1
	Conservation reserves (IUCN V & VI)		0	82	82	0.00	0.00	0.00	0	2	2
	State forest / timber reserves		0	0	0	0.00	0.00	0.00	0	0	0
	Other DEC-managed lands		58	154,242	154,184	0.00	8.16	8.16	3	7	4
Other lands	Unallocated crown lands		412,558	301,131	-111,427	21.82	15.93	-5.89	-	-	-
	Other crown reserves		105,668	104,025	-1,643	5.59	5.50	-0.09	-	-	-
		Crown reserves vested in Aboriginal Lands Trust*	-	1,503	-	-	0.08	-	-	-	-
	Pastoral leases^		1,201,504	972,020	-229,484	63.55	51.41	-12.14	-	-	-
		Pastoral leases held by Aboriginal Lands Trust*	-	340,685	-	-	18.02	-	-	-	-
	Other leasehold lands^		0	18,684	18,684	0.00	0.99	0.99	-	-	-
		General purpose leases held by Aboriginal Lands Trust*	-	63	-	-	0.00	-	-	-	-
	Freehold lands		36,563	97,431	60,868	1.93	5.15	3.22	-	-	-
		Freehold lands held by Aboriginal Lands Trust*	-	0	-	-	0.00	-	-	-	-
	Commonwealth lands (defence)		0	0	0	0.00	0.00	0.00	-	-	-
	Other public lands (roads and water bodies)		1,285	82,666	81,381	0.07	4.37	4.30	-	-	-
	No tenure category assigned†		16,301	11,765	-4,536	0.86	0.62	-0.24	-	-	-
<b>Total</b>			<b>1,890,786</b>	<b>1,890,785</b>	<b>-</b>	<b>100</b>	<b>100</b>	<b>-</b>	<b>8</b>	<b>17</b>	<b>-</b>

NB: some rounding errors may occur.

\* 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.

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).

## 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 mining (live) tenements	Prospecting	2	N/A	28	N/A	26	0	0	0	0	0	0	0	0	0	0	0	0
	Exploration	17	N/A	41	N/A	24	0	0	0	0	2	2	0	0	0	1	7	6
	Mining	37	N/A	43	N/A	6	1	1	0	0	0	0	0	0	0	1	1	0
	Other	1	N/A	1	N/A	0	0	0	0	0	0	0	0	0	0	0	0	0
Number of petroleum (active) titles	Exploration	1	N/A	1	N/A	0	1	1	0	1	1	0	1	0	-1	1	1	0
	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	112,873	5.97	418,882	22.15	16.18	3	3	0	0	27,472	27,472	0	0	0	413	3,810	3,397
	Petroleum (active) titles	698,832	36.96	255,616	13.52	-23.44	41,169	303	-40,866	33,127	28,627	-4,500	57	0	-57	110,580	45,709	-64,871
	Mining (live) tenements and petroleum (active) titles*	798,271	42.22	547,261	28.94	-13.28	41,169	306	-40,863	33,127	28,646	-4,481	57	0	-57	110,580	48,757	-61,823

\*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	1,256,653	1,215,952	-40,701	66.46	64.31	-2.15
Miscellaneous (non-intensive use)*	317,400	339,301	21,901	16.79	17.94	1.15
Conservation	208,497	211,157	2,660	11.03	11.17	0.14
Water (man-made/man modified)	61,916	63,889	1,973	3.27	3.38	0.11
Water (not classified)	34,863	35,537	674	1.84	1.88	0.04
Agriculture (intensive use)	6,406	16,500	10,094	0.34	0.87	0.53
Traditional indigenous use	235	2,611	2,376	0.01	0.14	0.13
Urban	1,068	998	-70	0.06	0.05	-0.01
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	3,743	4,835	1,092	0.20	0.26	0.06
<b>Total</b>	<b>1,890,781</b>	<b>1,890,780</b>	<b>-</b>	<b>100</b>	<b>100</b>	<b>-</b>

NB: some rounding errors may occur.

\* Largely unmodified natural systems under various land uses. See detailed descriptions.

See the methods document available [here](#) for definitions of the categories.

## Linear infrastructure

	Length (km)	Area of reporting region (ha)	Length per hectare (km/ha)
Roads (sub-region)	2,107	1,890,785	0.0011
Roads (Strategic Survey Roads in national parks, conservation parks and nature reserves)	21	114,706	0.0002
Railways (sub-region)	0	1,890,785	0.0000

## 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	213,256	213,256	0.00	11.28	11.28
	On all other lands	0	777,003	777,003	0.00	41.09	41.09
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	Projected (Average)			Change from Base Climate* (Average)			Change from Base Climate* (range)		
	2030	2050	2070	2030	2050	2070	2030	2050	2070
	High impact scenario								
Minimum Temperature (degrees C)	22.65	24.11	25.81	1.34	2.79	4.49	1.16 - 1.47	2.42 - 3.05	3.90 - 4.91
Maximum Temperature (degrees C)	36.18	37.84	39.77	1.53	3.18	5.11	1.27 - 1.70	2.64 - 3.53	4.23 - 5.67
Precipitation (mm)	787.25	702.18	619.54	-94.61	-179.68	-262.32	-134.50 - -77.19	-255.30 - -147.39	-373.30 - -215.20
	Medium impact scenario								
Minimum Temperature (degrees C)	22.38	23.13	23.86	1.07	1.82	2.54	0.93 - 1.16	1.58 - 1.99	2.21 - 2.78
Maximum Temperature (degrees C)	35.87	36.73	37.55	1.22	2.07	2.89	1.01 - 1.35	1.72 - 2.30	2.40 - 3.21
Precipitation (mm)	805.11	757.63	715.75	-76.74	-124.23	-166.10	-109.20 - -62.60	-176.50 - -101.60	-236.00 - -136.10

\* 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>

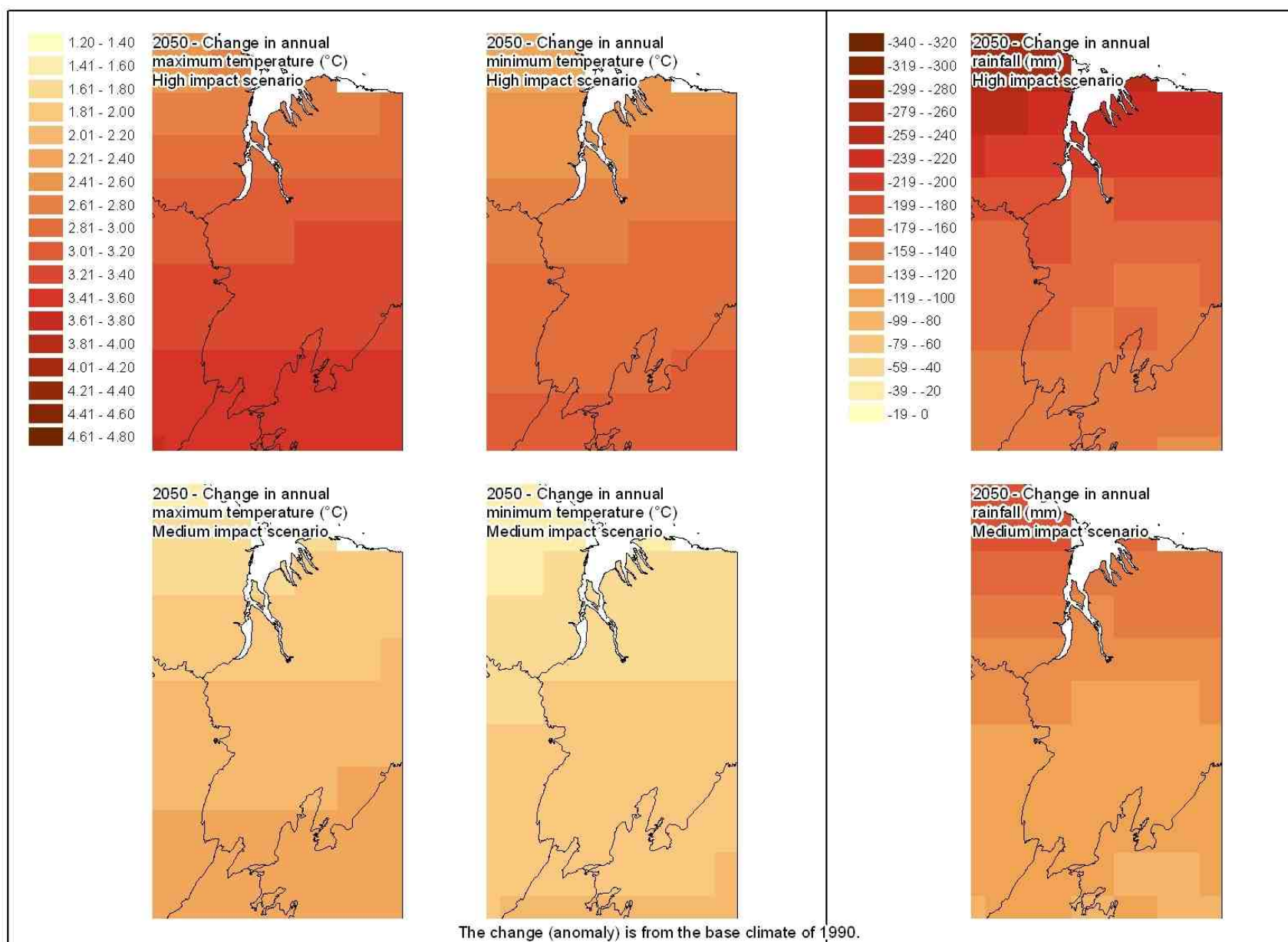
#### Medium Impact Scenario:

- *Emission Scenario:* Medium CO<sub>2</sub> 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 CO<sub>2</sub> from 280 ppm to 560 ppm.

#### High Impact Scenario:

- *Emission Scenario:* High CO<sub>2</sub> 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 CO<sub>2</sub> 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).

Beard's veg assoc no.	Percentage of veg assoc within sub- region (%)	Pre- European extent (ha)	Current extent (ha)	Percentage remaining (%)	Currently remaining on DEC-managed lands (ha)				Currently remaining on other lands (ha)		
					IUCN Ia-IV	Proposed for conservation	IUCN V-VI	Non-IUCN	Public lands	Leasehold lands	Freehold lands
909	99.89	281,415	278,753	99.05	3,022	24,398	0	18,912	15,847	206,970	9,580
812	97.41	254,131	254,034	99.96	32	0	0	4,692	80,882	164,676	3,749
52	71.65	194,528	194,465	99.97	11,202	0	0	65,748	64,181	45,416	7,918
127	23.26	171,574	170,791	99.54	53,038	2,266	0	978	88,388	24,432	396
59	99.42	138,637	120,696	87.06	11,879	0	39	2,293	52,201	38,180	16,091
814	64.52	110,409	110,402	99.99	929	0	0	5,840	8,609	89,161	5,863
916	100.00	82,331	82,287	99.95	451	4,670	0	20,688	2,942	53,327	209
810	99.53	78,665	78,665	100.00	941	0	0	0	3,973	73,652	99
808	5.33	64,036	64,031	99.99	0	0	0	0	25,961	20,962	17,103
820	89.19	53,192	53,187	99.99	0	0	0	0	3,334	49,748	105
4000	31.97	48,227	48,227	100.00	0	0	0	0	48,209	0	18
816	32.66	43,431	43,431	100.00	0	0	0	0	268	43,018	145
911	100.00	41,558	41,521	99.91	14	0	0	0	7,914	33,585	9
914	82.62	41,425	41,117	99.26	3,654	0	25	808	5,107	31,176	247
825	64.48	41,401	41,401	100.00	0	0	0	0	10,839	19,120	11,442

### *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).

Beard's veg assoc no.	Percentage of veg assoc within sub- region (%)	Pre- European extent (ha)	Current extent (ha)	Percentage remaining (%)	Currently remaining on DEC-managed lands (ha)				Currently remaining on other lands (ha)		
					IUCN Ia-IV	Proposed for conservation	IUCN V-VI	Non-IUCN	Public lands	Leasehold lands	Freehold lands
916	100.00	82,331	82,287	99.95	451	4,670	0	20,688	2,942	53,327	209
911	100.00	41,558	41,521	99.91	14	0	0	0	7,914	33,585	9
813	100.00	10,257	10,257	100.00	0	0	0	0	0	10,257	0
908	100.00	8,101	8,101	100.00	55	1,551	0	5,129	14	1,351	0
817	100.00	5,941	5,941	100.00	0	0	0	0	253	5,483	206
918	100.00	1,465	1,465	100.00	0	0	0	0	160	1,300	5
915	100.00	1,429	1,429	100.00	0	0	0	0	0	1,429	0
909	99.89	281,415	278,753	99.05	3,022	24,398	0	18,912	15,847	206,970	9,580
810	99.53	78,665	78,665	100.00	941	0	0	0	3,973	73,652	99
59	99.42	138,637	120,696	87.06	11,879	0	39	2,293	52,201	38,180	16,091
812	97.41	254,131	254,034	99.96	32	0	0	4,692	80,882	164,676	3,749
800	96.53	37,968	37,922	99.88	1,652	0	0	25,854	576	7,008	2,828
820	89.19	53,192	53,187	99.99	0	0	0	0	3,334	49,748	105

### *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.

Beard's veg assoc no.	Percentage of veg assoc within sub- region (%)	Pre- European extent (ha)	Current extent (ha)	Percentage remaining (%)	Currently remaining on DEC-managed lands (ha)				Currently remaining on other lands (ha)		
					IUCN Ia-IV	Proposed for conservation	IUCN V-VI	Non-IUCN	Public lands	Leasehold lands	Freehold lands
126	5.80	1,362	1,362	100.00	15	0	0	0	11	1,336	0
915	100.00	1,429	1,429	100.00	0	0	0	0	0	1,429	0
918	100.00	1,465	1,465	100.00	0	0	0	0	160	1,300	5
4002	26.62	2,311	2,311	100.00	0	0	0	0	2,122	189	0
838	22.91	3,280	3,280	100.00	2,241	0	0	111	616	298	14
817	100.00	5,941	5,941	100.00	0	0	0	0	253	5,483	206
908	100.00	8,101	8,101	100.00	55	1,551	0	5,129	14	1,351	0
813	100.00	10,257	10,257	100.00	0	0	0	0	0	10,257	0