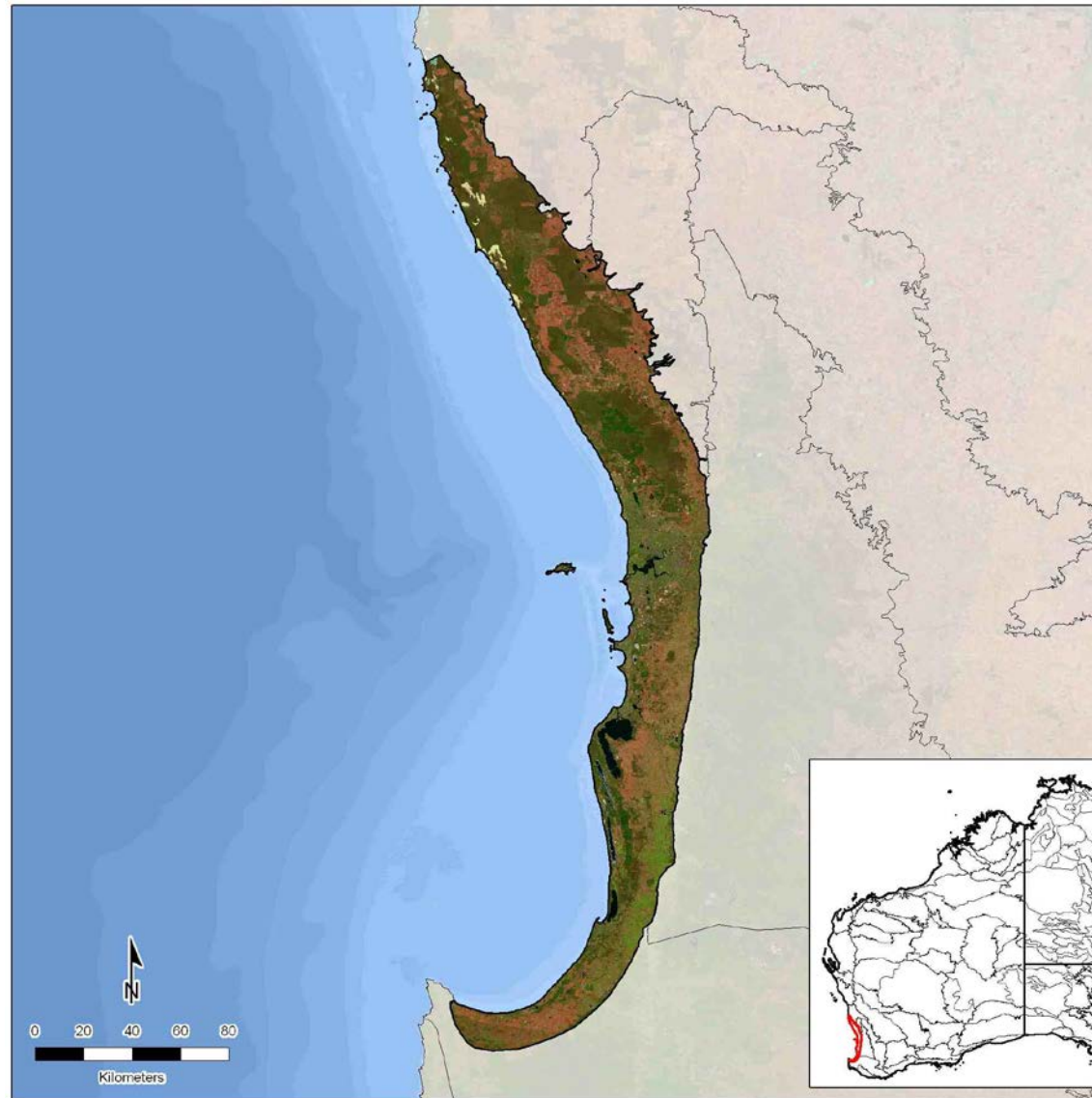


## Swan Coastal Plain 2 Sub-region



*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) (%)
1,142,333	0.45	100	44.91	11.85

\*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)	124,842	10.93	8,327	0.73	133,169	11.66
	DEC-managed lands proposed for conservation	1,858	0.16	24	0.00	1,882	0.16
	Conservation reserves (IUCN V & VI)	89	0.01	343	0.03	432	0.04
	Other DEC-managed lands	47,816	4.19	40	0.00	47,856	4.19
Native vegetation on other public lands		114,208	10.00	22,429	1.96	136,637	11.96
Native vegetation on leasehold lands		22,923	2.01	8	0.00	22,931	2.01
Native vegetation on freehold lands		165,738	14.51	4,011	0.35	169,749	14.86
Native vegetation with no tenure category assigned		66	0.01	329	0.03	395	0.03
Cleared areas		-	-	-	-	629,180	55.08
Unmapped islands*		-	-	-	-	102	0.01
<b>Total</b>		<b>477,540</b>	<b>42</b>	<b>35,511</b>	<b>3</b>	<b>1,142,333</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) <sup>1</sup>		128,365	135,333	6,968	11.24	11.85	0.61	123	169	46
	DEC-managed lands proposed for conservation		0	2,067	2,067	0.00	0.18	0.18	0	14	14
	Conservation reserves (IUCN V & VI) <sup>1</sup>		406	583	177	0.04	0.05	0.01	2	14	12
	State forest / timber reserves		73,147	78,689	5,542	6.40	6.89	0.49	10	9	-1
	Other DEC-managed lands		4,478	3,610	-868	0.39	0.32	-0.07	129	103	-26
Other lands	Unallocated crown lands		88,568	71,053	-17,515	7.75	6.22	-1.53	-	-	-
	Other crown reserves		42,723	62,073	19,350	3.74	5.43	1.69	-	-	-
		Crown reserves vested in Aboriginal Lands Trust*	-	188	-	-	0.02	-	-	-	-
	Pastoral leases^		13,452	12,697	-755	1.18	1.11	-0.07	-	-	-
		Pastoral leases held by Aboriginal Lands Trust*	-	0	-	-	0.00	-	-	-	-
	Other leasehold lands^		0	12,518	12,518	0.00	1.10	1.10	-	-	-
		General purpose leases held by Aboriginal Lands Trust*	-	0	-	-	0.00	-	-	-	-
	Freehold lands		717,296	694,719	-22,577	62.79	60.82	-1.97	-	-	-
		Freehold lands held by Aboriginal Lands Trust*	-	57	-	-	0.00	-	-	-	-
	Commonwealth lands (defence)		4,513	4,571	58	0.40	0.40	0.00	-	-	-
	Other public lands (roads and water bodies)		3,390	63,615	60,225	0.30	5.57	5.27	-	-	-
	No tenure category assigned <sup>†</sup>		65,995	804	-65,191	5.78	0.07	-5.71	-	-	-
<b>Total</b>			<b>1,142,333</b>	<b>1,142,332</b>	<b>-</b>	<b>100</b>	<b>100</b>	<b>-</b>	<b>264</b>	<b>309</b>	<b>-</b>

NB: some rounding errors may occur.

<sup>1</sup> The extents shown in this category include parts of marine reserves. This is due to misalignments of coastal boundaries between tenure and IBRA datasets.

\* 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	6	N/A	14	N/A	8	2	0	-2	0	0	0	0	0	0	0	7	7
	Exploration	49	N/A	121	N/A	72	12	36	24	2	8	6	1	1	0	3	18	15
	Mining	203	N/A	204	N/A	1	17	14	-3	0	0	0	0	0	0	31	35	4
	Other	1	N/A	0	N/A	-1	1	0	-1	0	0	0	0	0	0	0	0	0
Number of petroleum (active) titles	Exploration	8	N/A	13	N/A	5	8	12	4	5	3	-2	2	7	5	5	9	4
	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	115,527	10.11	337,223	29.52	19.41	7,488	9,560	2,072	903	656	-247	3	3	0	3,329	31,108	27,779
	Petroleum (active) titles	645,479	56.51	464,638	40.67	-15.84	48,479	46,191	-2,288	570	65	-505	180	247	67	44,261	32,508	-11,753
	Mining (live) tenements and petroleum (active) titles*	704,175	61.64	646,467	56.59	-5.05	54,922	53,127	-1,795	1,473	675	-798	180	251	71	45,061	46,774	1,713

\*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
Agriculture (intensive use)	321,208	481,026	159,818	28.12	42.11	13.99
Miscellaneous (non-intensive use)*	90,035	181,900	91,865	7.88	15.92	8.04
Urban	128,276	157,904	29,628	11.23	13.82	2.59
Conservation	148,301	150,402	2,101	12.98	13.17	0.19
Pastoralism	344,809	56,381	-288,428	30.18	4.94	-25.24
Plantation forestry	36,254	44,402	8,148	3.17	3.89	0.72
Native forestry	33,851	29,377	-4,474	2.96	2.57	-0.39
Water (not classified)	15,399	12,849	-2,550	1.35	1.12	-0.23
Mining	1,112	1,633	521	0.10	0.14	0.04
Water (man-made/man modified)	0	1,300	1,300	0.00	0.11	0.11
Traditional indigenous use	0	0	0	0.00	0.00	0.00
No data	23,087	25,158	2,071	2.02	2.20	0.18
<b>Total</b>	<b>1,142,332</b>	<b>1,142,332</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)	6,920	1,142,333	0.0061
Roads (Strategic Survey Roads in national parks, conservation parks and nature reserves)	668	135,068	0.0049
Railways (sub-region)	698	1,142,333	0.0006

## 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	33	1,464	1,431	0.00	0.13	0.13
Land for Wildlife properties	1,367	4,555	3,188	0.12	0.40	0.28
Combined total*	1,398	5,780	4,382	0.12	0.51	0.39

\* 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	0	0	0.00	0.00	0.00
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)	13.41	14.72	16.24	1.21	2.51	4.04	1.02 - 1.31	2.11 - 2.73	3.41 - 4.39
Maximum Temperature (degrees C)	25.04	26.45	28.11	1.31	2.72	4.37	1.07 - 1.44	2.23 - 2.99	3.58 - 4.81
Precipitation (mm)	695.11	643.82	597.76	-60.20	-111.50	-157.57	-80.30 - -52.10	-143.20 - -98.00	-209.50 - -140.30
	Medium impact scenario								
Minimum Temperature (degrees C)	13.17	13.84	14.49	0.96	1.63	2.28	0.81 - 1.04	1.38 - 1.78	1.93 - 2.48
Maximum Temperature (degrees C)	24.77	25.50	26.21	1.04	1.77	2.48	0.85 - 1.14	1.45 - 1.95	2.03 - 2.72
Precipitation (mm)	706.28	676.90	651.79	-49.05	-78.43	-103.54	-65.90 - -42.30	-103.30 - -68.30	-133.80 - -90.80

\* 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>

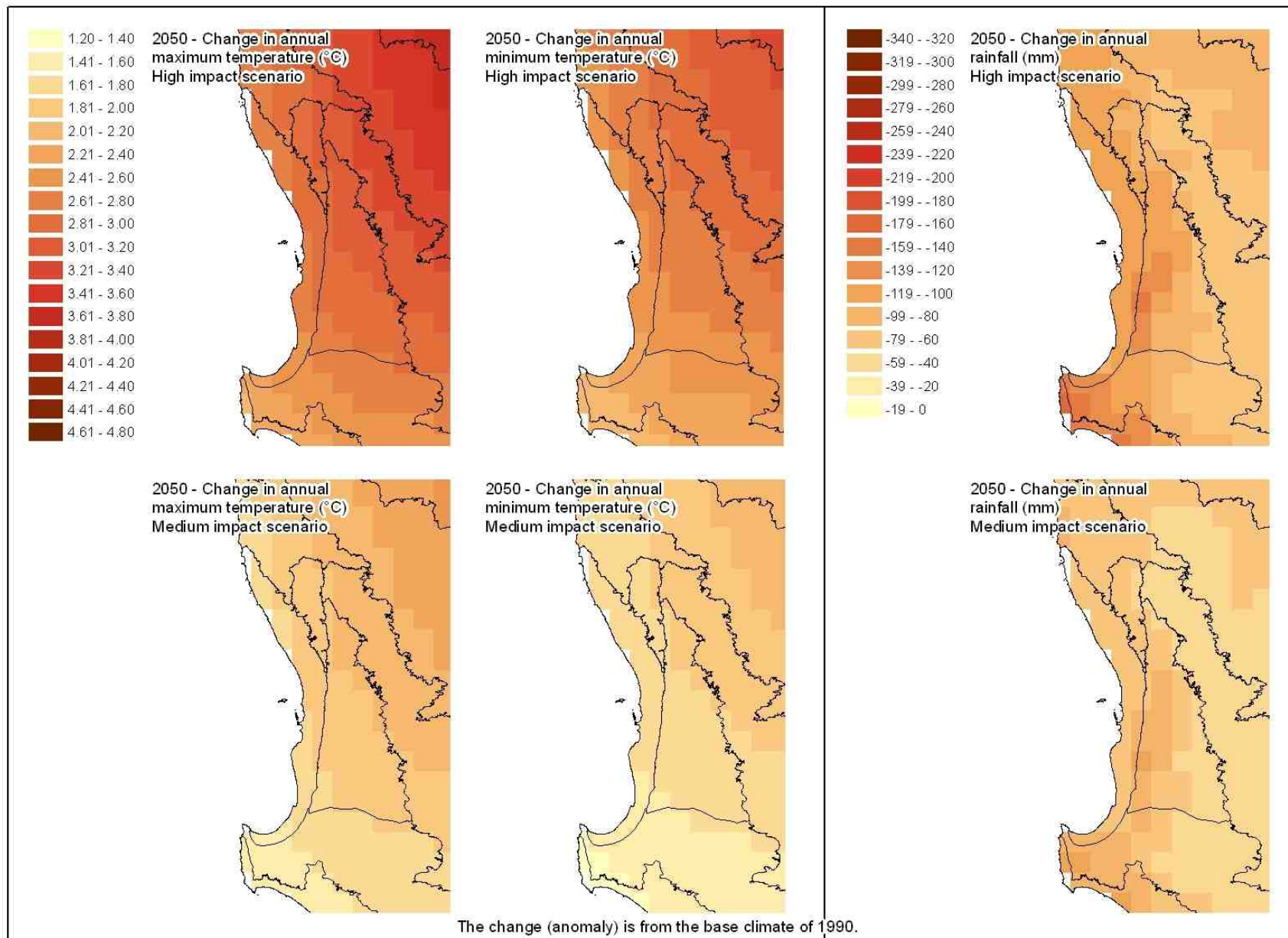
#### Medium Impact Scenario:

- *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
949	84.55	184,476	105,108	56.98	27,450	578	0	32,125	18,312	3,631	23,011
968	45.87	136,188	9,796	7.19	1,528	28	15	2	1,556	7	6,660
1030	82.16	114,216	79,653	69.74	11,031	45	0	0	46,713	1,577	20,287
1000	94.33	94,175	25,093	26.65	1,834	83	12	2,334	1,885	0	18,907
1029	96.19	68,329	48,903	71.57	16,962	0	0	1,537	11,631	2,808	15,964
1026	82.63	58,419	54,979	94.11	30,147	0	1	0	6,960	11,677	6,194
1001	100.00	57,410	14,152	24.65	653	0	7	141	1,909	0	11,443
6	100.00	56,343	14,019	24.88	1,876	0	6	3,113	2,343	0	6,679
998	99.71	50,867	19,373	38.09	6,114	0	41	1,782	3,338	1	8,097
1136	99.99	48,118	3,819	7.94	49	3	0	82	852	0	2,832
1014	99.49	40,856	22,915	56.09	8,669	677	0	2,865	1,833	0	8,871
1007	99.02	30,110	21,415	71.12	2,501	0	0	10	5,528	784	12,591
1009	99.76	18,183	2,974	16.36	3	0	0	61	612	0	2,298
3	0.63	16,755	2,852	17.02	211	0	3	136	549	2	1,951

### *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
1001	100.00	57,410	14,152	24.65	653	0	7	141	1,909	0	11,443
6	100.00	56,343	14,019	24.88	1,876	0	6	3,113	2,343	0	6,679
1011	100.00	1,266	766	60.51	263	0	0	125	11	0	366
1010	100.00	1,210	95	7.85	0	0	0	0	20	0	74
1028	100.00	703	317	45.09	123	0	0	0	65	0	130
1012	100.00	508	125	24.61	0	0	0	0	6	0	119
1013	100.00	455	62	13.63	0	0	0	0	4	0	57
1136	99.99	48,118	3,819	7.94	49	3	0	82	852	0	2,832
2	99.78	3,142	1,897	60.38	1,427	0	0	302	42	0	125
1009	99.76	18,183	2,974	16.36	3	0	0	61	612	0	2,298
998	99.71	50,867	19,373	38.09	6,114	0	41	1,782	3,338	1	8,097
1014	99.49	40,856	22,915	56.09	8,669	677	0	2,865	1,833	0	8,871
1018	99.20	13,946	2,587	18.55	102	0	0	0	228	3	2,255
1007	99.02	30,110	21,415	71.12	2,501	0	0	10	5,528	784	12,591
997	98.80	3,444	2,363	68.61	1,496	0	0	0	302	0	565
1016	98.29	1,497	418	27.92	0	0	0	0	0	0	417
1008	96.49	4,431	1,187	26.79	0	0	0	0	88	0	1,099
1029	96.19	68,329	48,903	71.57	16,962	0	0	1,537	11,631	2,808	15,964
1000	94.33	94,175	25,093	26.65	1,834	83	12	2,334	1,885	0	18,907
3048	86.09	10,418	3,317	31.84	833	0	2	0	655	86	1,739

### *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
1185	0.07	10	7	70.00	0	0	0	5	1	0	1
1017	2.38	418	186	44.50	0	0	0	0	0	0	186
1013	100.00	455	62	13.63	0	0	0	0	4	0	57
1012	100.00	508	125	24.61	0	0	0	0	6	0	119
1028	100.00	703	317	45.09	123	0	0	0	65	0	130
1010	100.00	1,210	95	7.85	0	0	0	0	20	0	74
1011	100.00	1,266	766	60.51	263	0	0	125	11	0	366
1016	98.29	1,497	418	27.92	0	0	0	0	0	0	417
965	18.46	1,727	1,463	84.71	72	0	0	1,304	15	0	71
990	10.44	1,952	361	18.49	37	0	0	1	199	0	123
15	83.32	1,978	1,568	79.27	0	0	0	0	1,568	0	0
973	50.19	2,511	564	22.46	179	0	0	0	77	0	308
2	99.78	3,142	1,897	60.38	1,427	0	0	302	42	0	125
126	14.55	3,420	770	22.51	280	0	0	0	149	0	340
997	98.80	3,444	2,363	68.61	1,496	0	0	0	302	0	565
1015	18.84	3,685	404	10.96	44	0	0	0	45	0	316
1008	96.49	4,431	1,187	26.79	0	0	0	0	88	0	1,099
1181	48.08	9,239	3,700	40.05	18	10	0	1,479	379	0	1,814
3048	86.09	10,418	3,317	31.84	833	0	2	0	655	86	1,739
1182	52.52	12,309	1,493	12.13	37	0	0	49	515	0	892
1018	99.20	13,946	2,587	18.55	102	0	0	0	228	3	2,255
1009	99.76	18,183	2,974	16.36	3	0	0	61	612	0	2,298