

Land cover change in the **Fitzroy** region 2011–12

Summary

Across all NRM regions, for the 2011–12 era, the Fitzroy region had the highest woody vegetation clearing rate of 41 605 hectares per year (ha/yr) – almost three times the clearing rate of the 2010–11 era.

Clearing of remnant woody vegetation in the 2011–12 era increased to 5 800 ha/yr from 3 889 ha/yr in the previous era, although the proportion of remnant vegetation dropped to 14% of the total clearing in this era.

The dominant replacement land cover classes continued to be pasture followed by mining, with pasture representing 88% of the total woody vegetation clearing in the region. The Fitzroy region had the highest clearing rate of mining in the state, accounting for 49% of the state’s mining replacement cover class.

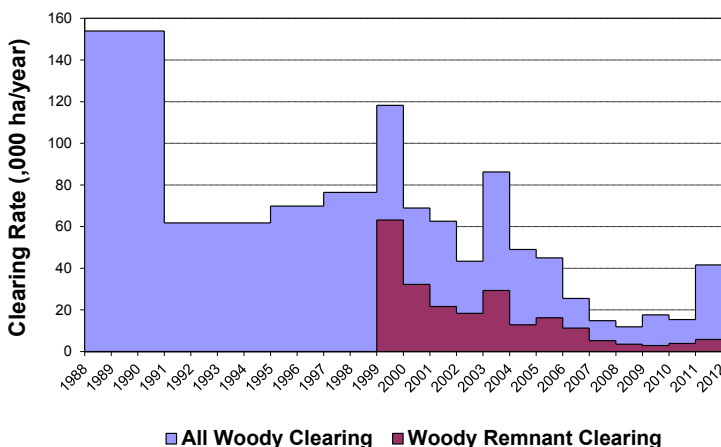


Figure 1. Woody vegetation clearing rates in the Fitzroy region.

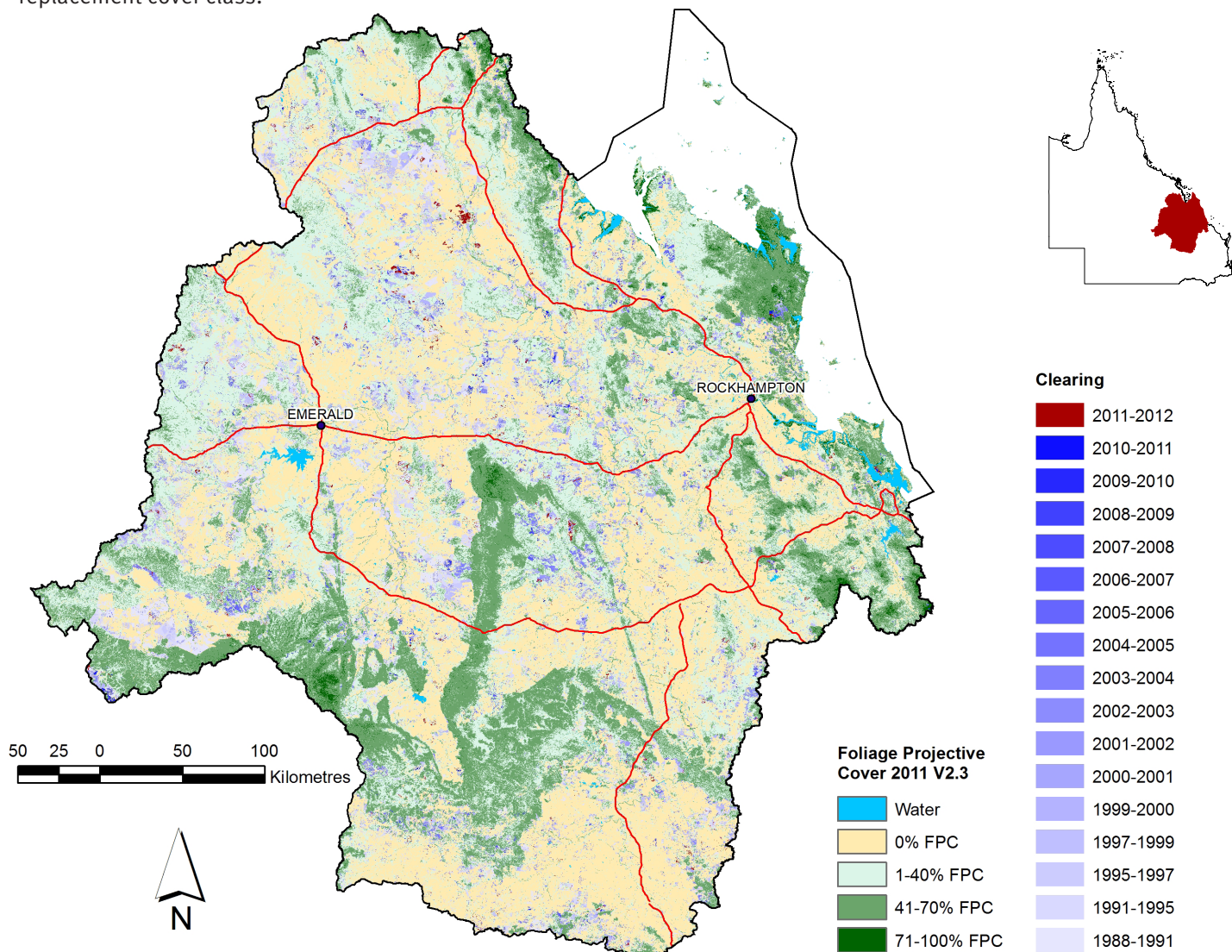


Figure 2. Woody vegetation clearing for each change period.

Woody vegetation clearing by remnant status

Table 1. Remnant and non-remnant woody vegetation clearing rates in the Fitzroy region.

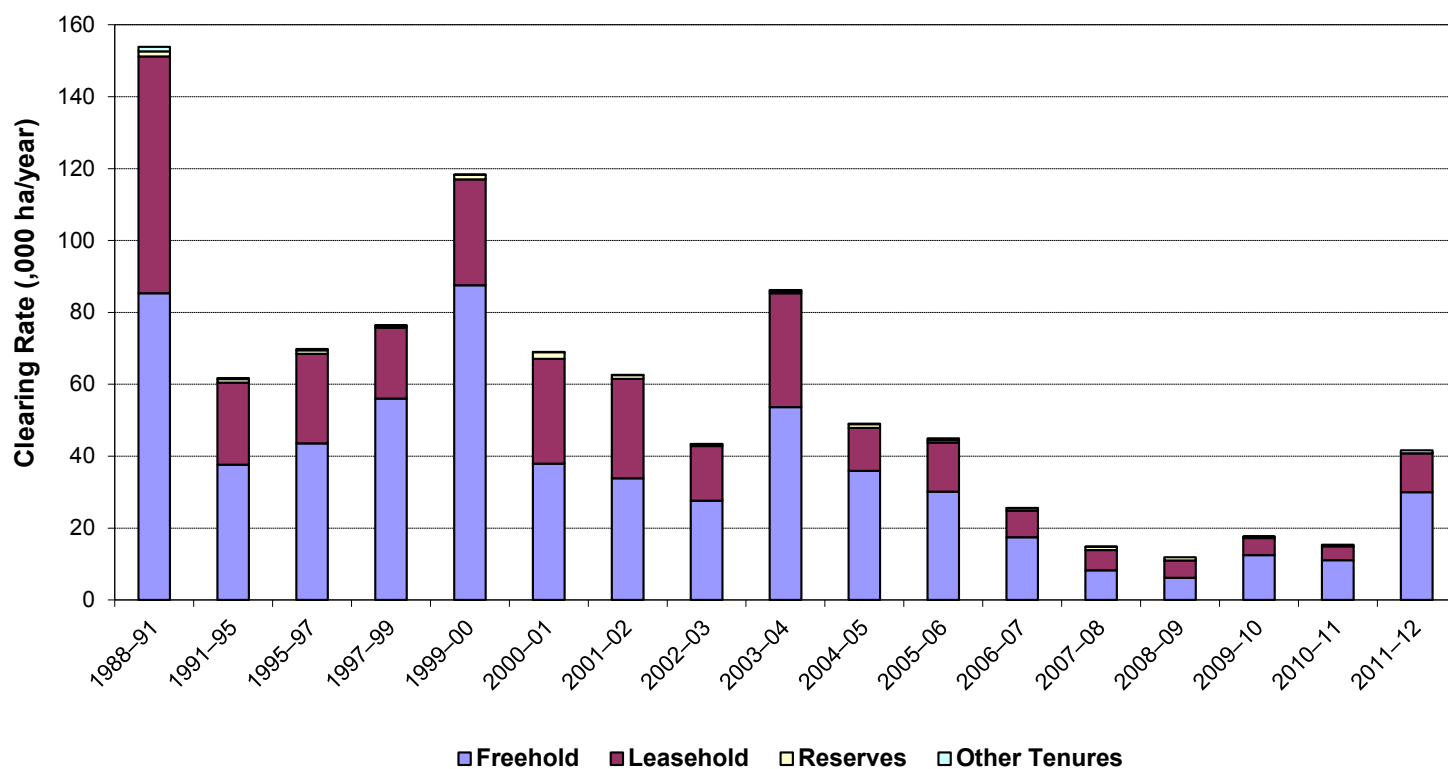
Period	Woody vegetation clearing rate (,000 ha/yr) of		
	Non-remnant woody	Remnant woody*	Total woody
1999–00	55.063	63.169	118.232
2000–01	36.685	32.246	68.931
2001–02	40.955	21.632	62.587
2002–03	25.025	18.345	43.371
2003–04	56.923	29.321	86.244
2004–05	36.170	12.851	49.020
2005–06	28.739	16.243	44.982
2006–07	14.235	11.269	25.504
2007–08	9.592	5.232	14.825
2008–09	8.352	3.532	11.884
2009–10	14.723	2.896	17.618
2010–11	11.482	3.889	15.371
2011–12	35.805	5.800	41.605

* Regional ecosystem remnant mapping prior to 1999 not used in this analysis.

Woody vegetation clearing by tenure

Table 2. Woody vegetation clearing rates in the Fitzroy region by tenure.

Period	Woody vegetation clearing rate (,000 ha/yr) on				
	Freehold	Leasehold	Reserves	Other tenures	Total
1988–91	85.325	65.837	1.419	1.303	153.884
1991–95	37.633	22.824	0.969	0.326	61.752
1995–97	43.537	24.971	0.955	0.358	69.821
1997–99	56.027	19.630	0.634	0.097	76.389
1999–00	87.516	29.484	1.224	0.007	118.232
2000–01	37.899	29.137	1.882	0.013	68.931
2001–02	33.868	27.654	1.022	0.043	62.587
2002–03	27.610	15.190	0.551	0.020	43.371
2003–04	53.670	31.689	0.522	0.362	86.242
2004–05	35.922	11.914	1.041	0.144	49.020
2005–06	30.144	13.661	0.621	0.523	44.949
2006–07	17.443	7.439	0.010	0.612	25.504
2007–08	8.241	5.618	0.921	0.057	14.838
2008–09	6.156	4.836	0.891	0.000	11.884
2009–10	12.452	4.755	0.410	0.001	17.618
2010–11	11.097	3.824	0.447	0.000	15.370
2011–12	30.010	10.800	0.794	0.001	41.605



Woody vegetation clearing by subcatchment

Table 3. Woody vegetation clearing rates in the Fitzroy region by subcatchment #.

Woody vegetation clearing rate (,000 ha/yr) for	Period				
	2007–08	2008–09	2009–10	2010–11	2011–12
Boyne River	0.071	0.117	0.134	0.102	0.225
Calliope River	0.195	0.158	0.128	0.332	0.533
Comet River	1.104	1.043	2.780	1.108	3.569
Curtis Island	0.000	0.000	0.000	0.284	0.259
Dawson River	7.081	3.912	4.518	3.156	12.107
Fitzroy River	0.983	0.967	0.875	1.280	2.182
Isaac River	2.634	1.851	2.768	1.834	10.620
Mackenzie River	0.707	1.655	3.644	2.757	4.382
Misc other islands	0.000	0.000	0.000	0.000	0.000
Nogoa River	1.154	1.389	2.175	3.767	7.038
Shoalwater River	0.138	0.254	0.084	0.276	0.167
Styx River	0.342	0.084	0.247	0.307	0.454
Waterpark Creek	0.417	0.454	0.265	0.166	0.058
Total	14.825	11.884	17.618	15.369	41.595

Please refer to Figure 25 and Table 19 of the main report (DSITIA, 2014) for the location of each subcatchment.

Remaining woody vegetation

Table 4. Remaining woody vegetation in the Fitzroy region by subcatchment.

	Catchment area (,000 ha)	Area woody 2011 V2.3 (,000 ha)	% of catchment woody in 2011
Boyne River	249	207	83
Calliope River	224	135	60
Comet River	1730	961	56
Curtis Island	58	48	84
Dawson River	5077	2596	51
Fitzroy River	1143	667	58
Isaac River	2236	1290	58
Mackenzie River	1299	602	46
Misc other islands	35	28	80
Nogoa River	2769	1608	58
Shoalwater River	360	264	73
Styx River	301	170	57
Waterpark Creek	183	159	87
Total	15664	8736	56

Woody vegetation clearing by replacement land cover

Table 5. Woody vegetation clearing rates in the Fitzroy region by replacement land cover.

Period	Woody vegetation clearing rate (,000ha/yr) for						
	Pasture	Crop	Forestry	Mining	Infrastructure	Settlement	Total*
1988–91	146.617	3.733	0.146	1.199	2.075	0.157	153.928
1991–95	57.946	1.617	0.691	0.836	0.607	0.074	61.772
1995–97	59.667	7.388	0.624	1.222	0.868	0.092	69.861
1997–99	67.683	5.772	0.556	1.338	1.030	0.055	76.433
1999–00	112.450	2.274	1.026	0.777	1.683	0.022	118.232
2000–01	63.914	0.073	1.422	1.619	1.823	0.081	68.931
2001–02	59.275	0.032	0.428	1.340	1.444	0.068	62.587
2002–03	41.100	0.017	0.292	1.240	0.594	0.128	43.371
2003–04	82.097	0.112	0.000	2.144	1.822	0.068	86.244
2004–05	45.522	0.429	1.038	1.347	0.591	0.094	49.020
2005–06	41.474	0.104	0.610	1.826	0.714	0.253	44.982
2006–07	23.284	0.000	0.000	1.450	0.547	0.223	25.504
2007–08	12.152	0.009	1.062	1.129	0.372	0.100	14.825
2008–09	10.003	0.035	0.772	0.941	0.115	0.018	11.884
2009–10	14.928	0.009	0.331	2.005	0.281	0.064	17.618
2010–11	12.629	0.105	0.340	1.645	0.548	0.104	15.371
2011–12	36.595	0.016	0.825	2.862	1.112	0.195	41.605

* Total excludes natural tree death.

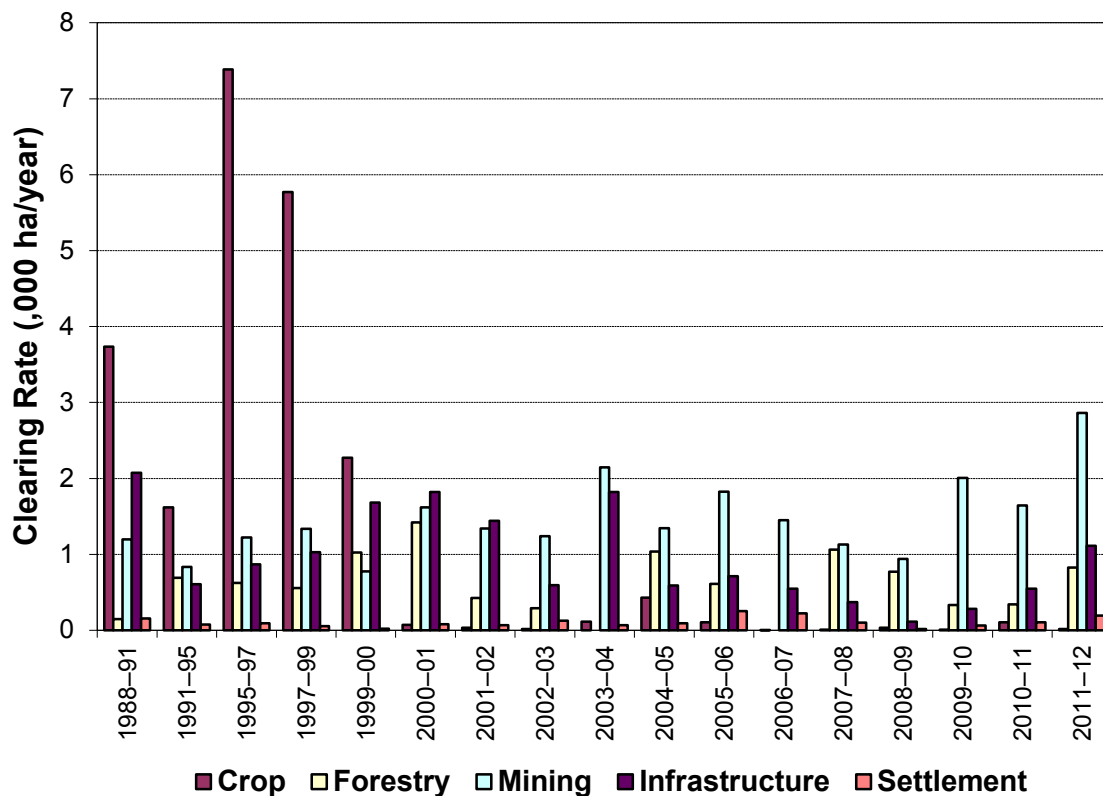
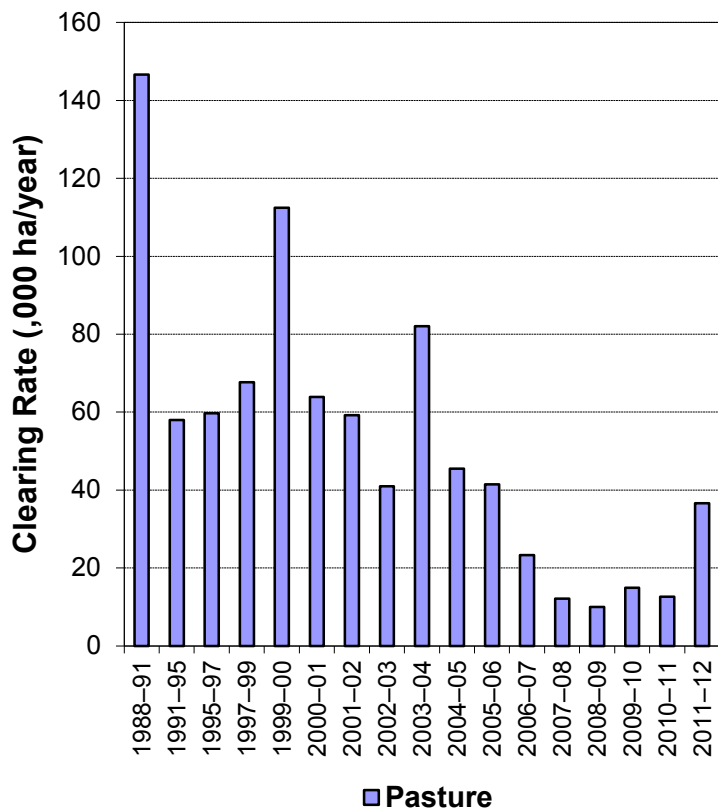


Figure 4. Woody vegetation clearing rates in the Fitzroy region by replacement land cover.

This fact sheet is 5 of 13 in a series detailing land cover change in Queensland's Natural Resource Management Regions. These fact sheets are addenda to the report: Department of Science, Information Technology, Innovation and the Arts (2014). *Land cover change in Queensland 2011-12: a Statewide Landcover and Trees Study (SLATS) Report, 2014*. Department of Science, Information Technology, Innovation and the Arts, Brisbane.

Please refer to this report for further background, methods and explanatory notes.

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