

Land cover change in the Fitzroy Basin Association Natural Resource Management region

2010–11

Summary

For the 2010–11 era the woody vegetation clearing rate was 15,371 hectares per year (ha/yr), a decrease of 13 per cent compared to the 2009–10 era.

Clearing of remnant woody vegetation in the 2010–11 era increased to 3889ha/yr from 2896 ha/yr in the previous era. Remnant vegetation accounted for 25 per cent of the total clearing in this era.

The dominant replacement land cover classes continued to be pasture followed by mining, with pasture representing 82 per cent of the total woody vegetation clearing in the region. The Fitzroy Basin Association region had the highest clearing rate of mining in the state, accounting for 59 per cent of the state’s mining replacement cover class.

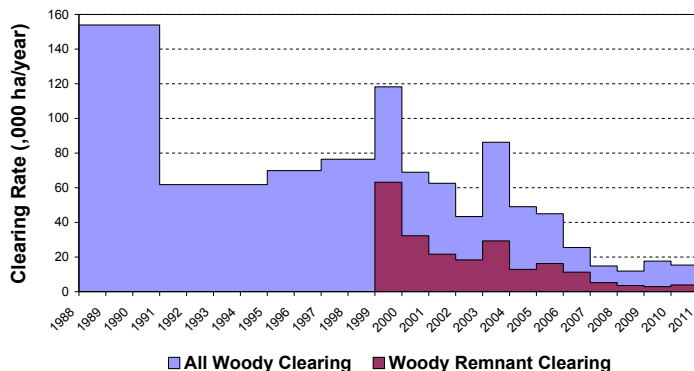


Figure 1. Woody vegetation clearing rates in the Fitzroy Basin Association NRM region.

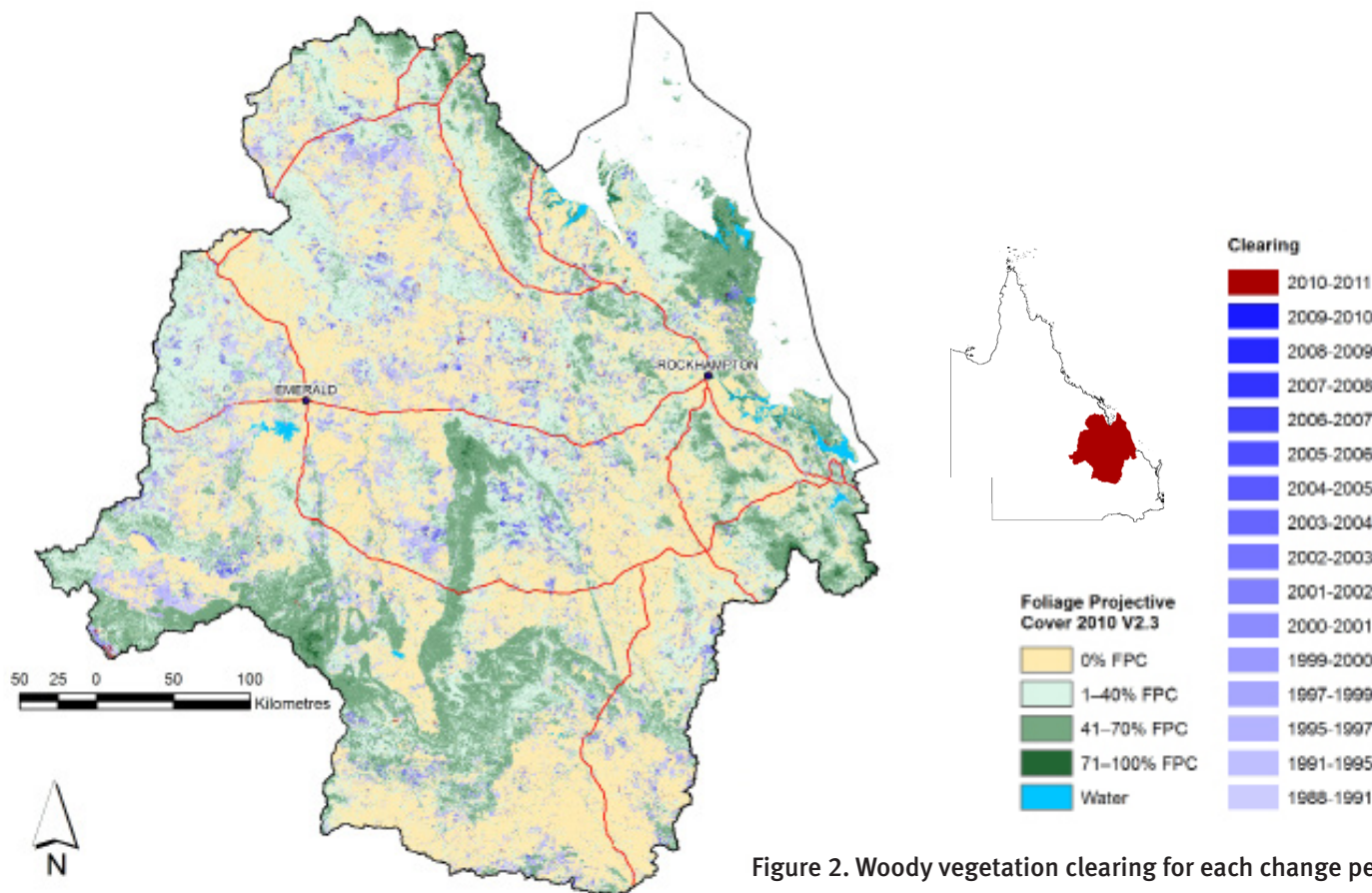


Figure 2. Woody vegetation clearing for each change period.

Woody vegetation clearing by remnant status

Table 1. Remnant and non-remnant woody vegetation clearing rates in the Fitzroy Basin Association NRM 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

* 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 Basin Association NRM 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	15.37

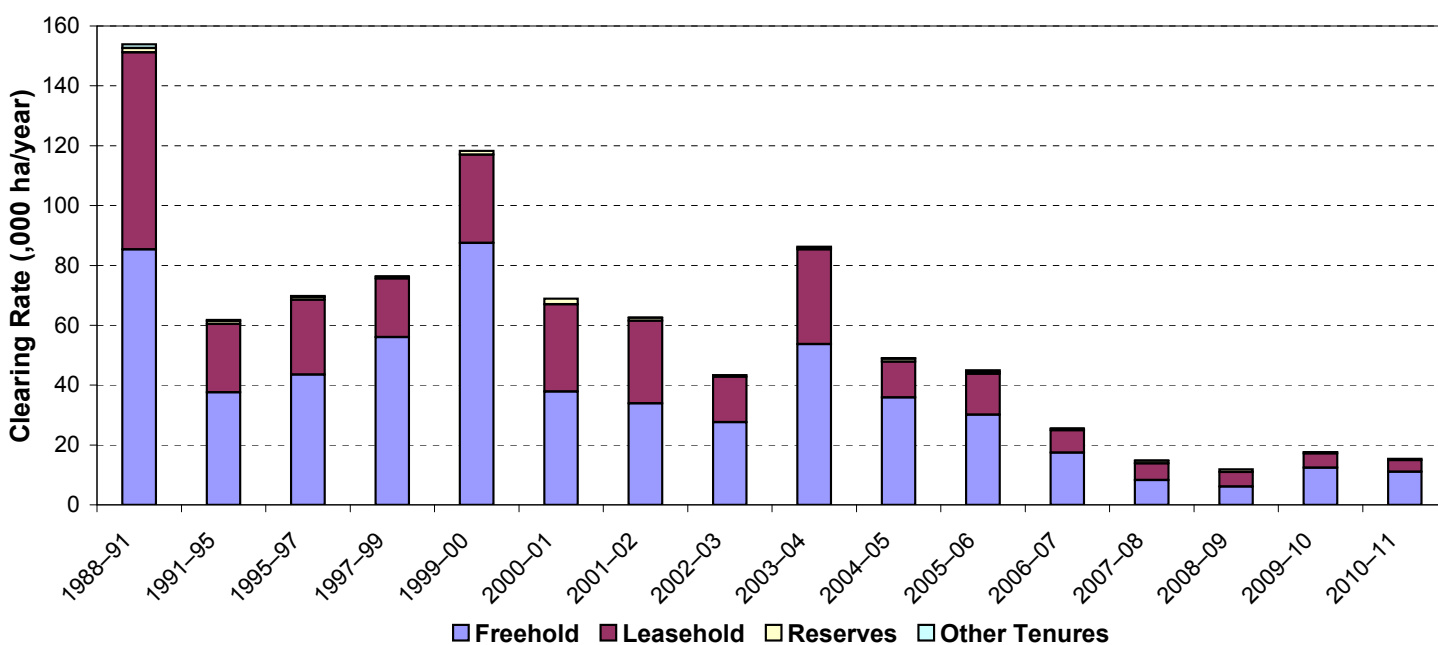


Figure 3. Woody vegetation clearing rates in the Fitzroy Basin Association NRM region by tenure.

Woody vegetation clearing by subcatchment

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

Woody vegetation clearing rate (,000 ha/yr) for	Period				
	2006–07	2007–08	2008–09	2009–10	2010–11
Boyne River	0.467	0.071	0.117	0.134	0.102
Calliope River	0.594	0.195	0.158	0.128	0.332
Comet River	2.122	1.104	1.043	2.780	1.108
Curtis Island	0.152	0.000	0.000	0.000	0.284
Dawson River	8.551	7.081	3.912	4.518	3.156
Fitzroy River	2.434	0.983	0.967	0.875	1.280
Isaac River	3.679	2.634	1.851	2.768	1.834
Mackenzie River	1.989	0.707	1.655	3.644	2.757
Misc other islands	0.039	0.000	0.000	0.000	0.000
Nogoa River	2.358	1.154	1.389	2.175	3.767
Shoalwater River	2.093	0.138	0.254	0.084	0.276
Styx River	0.451	0.342	0.084	0.247	0.307
Waterpark Creek	0.574	0.417	0.454	0.265	0.166
Total	25.504	14.825	11.884	17.618	15.369

Please refer to Figure 26 of the main report (DSITIA, 2014) for the location of each subcatchment.

Remaining woody vegetation

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

	Catchment area (,000 ha)	Area woody 2010 V2.3 (,000 ha)	% of catchment woody in 2010
Boyne River	250	207	83
Calliope River	224	134	60
Comet River	1730	958	55
Curtis Island	58	48	84
Dawson River	5076	2585	51
Fitzroy River	1143	664	58
Isaac River	2237	1281	57
Mackenzie River	1299	597	46
Misc other islands	35	28	80
Nogoa River	2770	1601	58
Shoalwater River	360	263	73
Styx River	301	169	56
Waterpark Creek	183	159	87
Total	15664	8692	55

Woody vegetation clearing by replacement land cover

Table 5. Woody vegetation clearing rates in the Fitzroy Basin Association NRM 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

* Total excludes natural tree death.

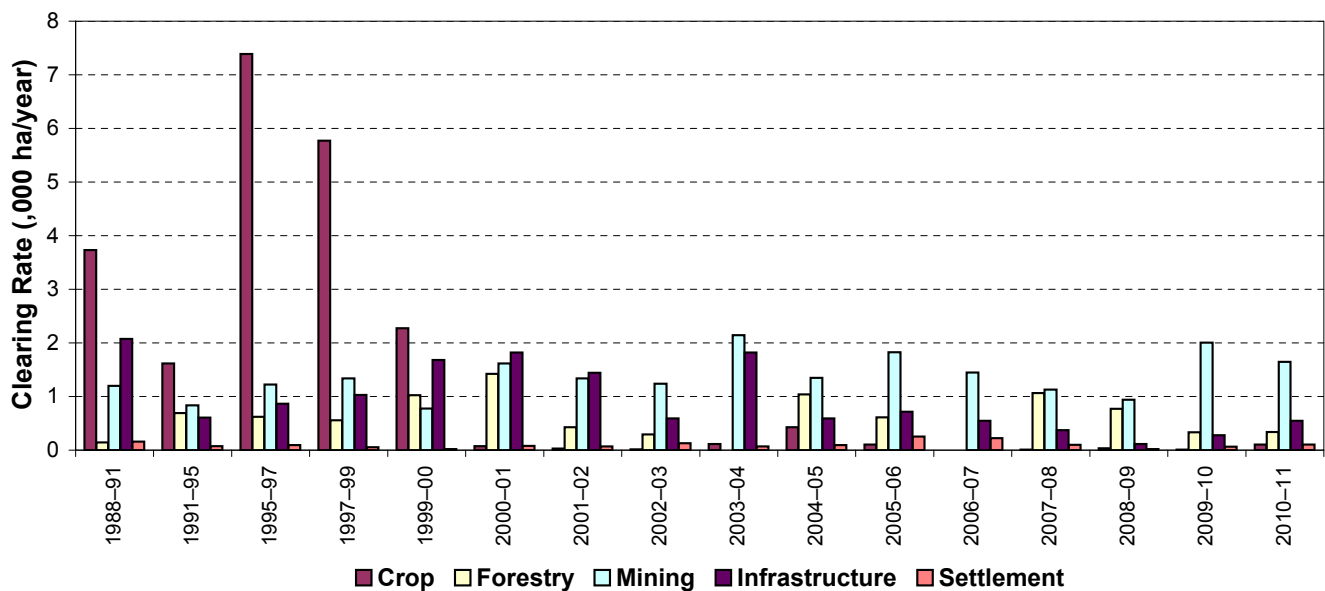
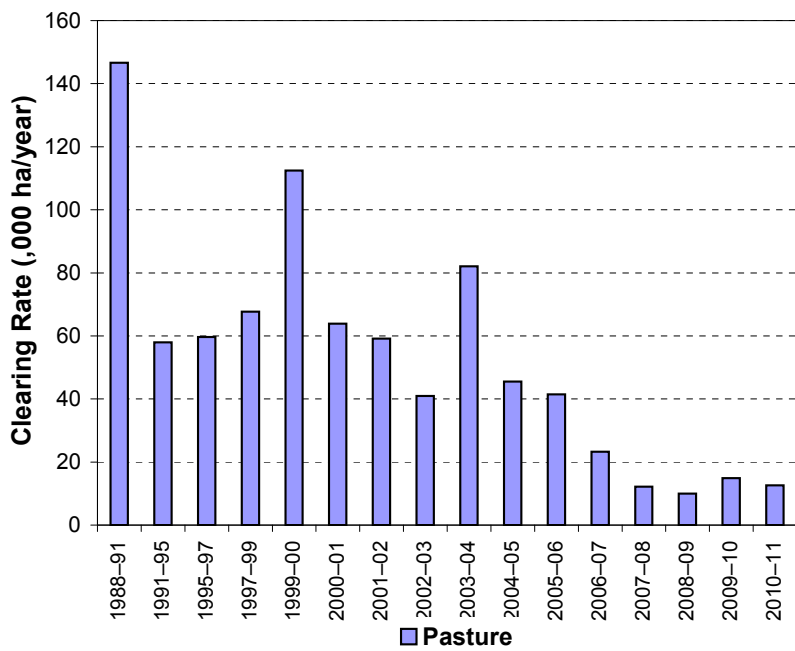


Figure 4. Woody vegetation clearing rates in the Fitzroy Basin Association NRM region by replacement land cover.

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 2010-11: 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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For further information:
 Statewide Landcover and Trees Study
 41 Boggo Road
 Dutton Park QLD 4102
 Phone: 61 7 3170 5686
 Email: siproductdelivery@dnrm.qld.gov.au