

Land cover change in the **Border Rivers, Maranoa–Balonne** region 2011–12

Summary

In the 2011–12 era, woody vegetation clearing in the Border Rivers, Maranoa-Balonne region saw a 24% increase to 27 570 hectares per year (ha/yr) from 22 334 ha/yr in the 2010–11 era. In 2011–12, clearing to the replacement land cover class of pasture accounted for 94% of total clearing.

Clearing of remnant woody vegetation comprised 13% of the total woody vegetation clearing for the region.

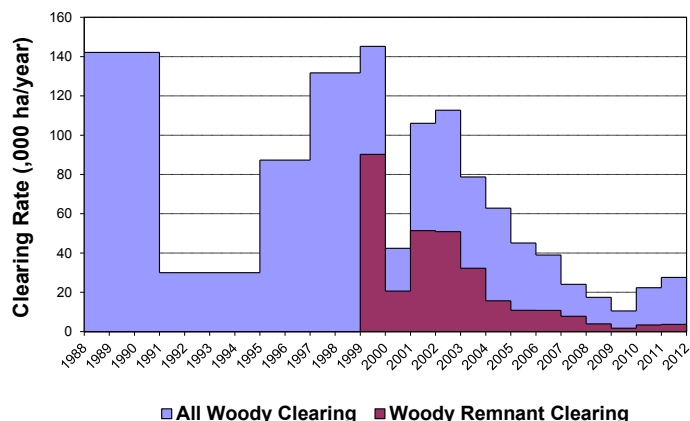


Figure 1. Woody vegetation clearing rates in the Border Rivers, Maranoa–Balonne region.

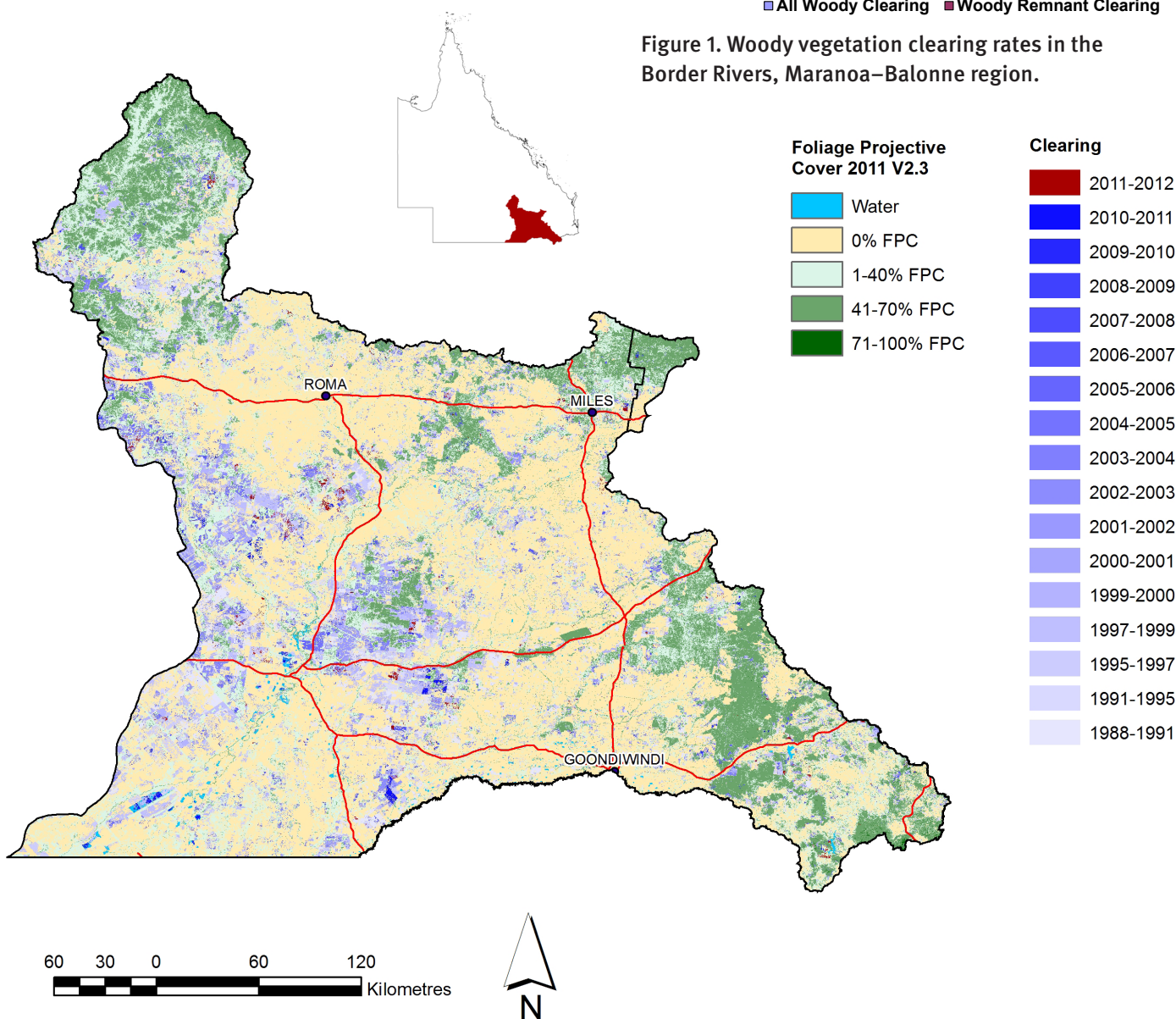


Figure 2. Woody vegetation clearing for each change period.

Woody vegetation clearing by remnant status

Table 1. Remnant and non-remnant woody vegetation clearing rates in the Border Rivers, Maranoa–Balonne region.

Period	Woody vegetation clearing rate (,000 ha/yr) of		
	Non-remnant woody	Remnant woody*	Total woody
1999–00	54.996	90.226	145.223
2000–01	21.781	20.613	42.395
2001–02	54.631	51.410	106.041
2002–03	61.808	50.896	112.704
2003–04	46.484	32.243	78.727
2004–05	47.172	15.665	62.837
2005–06	34.273	10.822	45.095
2006–07	28.202	10.772	38.974
2007–08	16.267	7.782	24.048
2008–09	13.512	3.914	17.426
2009–10	8.794	1.709	10.503
2010–11	18.967	3.366	22.333
2011–12	23.917	3.653	27.570

* 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 Border Rivers, Maranoa–Balonne region by tenure.

Period	Woody vegetation clearing rate (,000 ha/yr) on				
	Freehold	Leasehold	Reserves	Other tenures	Total
1988–91	102.555	38.486	0.807	0.279	142.126
1991–95	20.474	9.247	0.246	0.021	29.988
1995–97	70.028	16.788	0.392	0.093	87.300
1997–99	103.214	27.277	1.148	0.065	131.704
1999–00	127.425	17.326	0.455	0.016	145.221
2000–01	31.092	11.105	0.188	0.000	42.385
2001–02	87.163	18.636	0.238	0.001	106.038
2002–03	97.796	14.211	0.694	0.000	112.702
2003–04	55.993	21.893	0.838	0.000	78.723
2004–05	49.387	12.036	1.414	0.000	62.836
2005–06	35.318	9.481	0.297	0.000	45.095
2006–07	29.612	8.801	0.380	0.181	38.974
2007–08	17.876	3.899	2.273	0.000	24.048
2008–09	10.897	6.034	0.495	0.000	17.426
2009–10	8.043	2.151	0.309	0.000	10.503
2010–11	19.908	1.797	0.629	0.000	22.334
2011–12	24.369	2.788	0.411	0.003	27.570

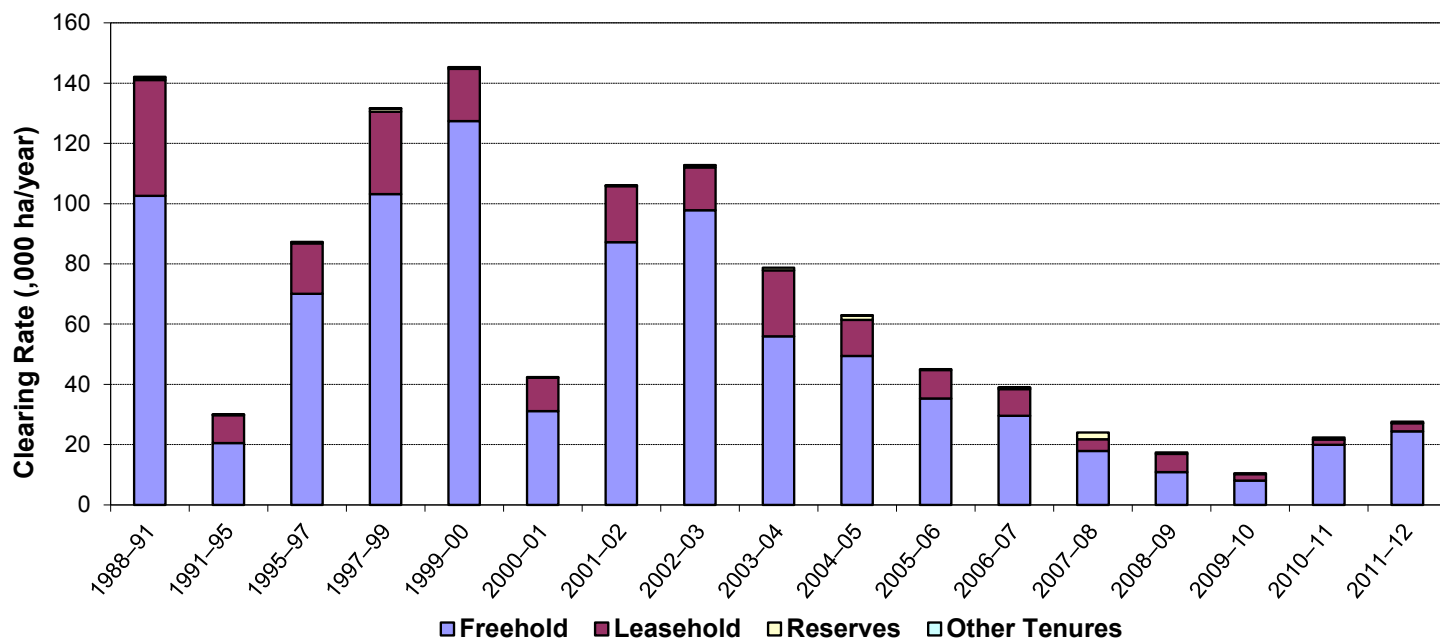


Figure 3. Woody vegetation clearing rates in the Border Rivers, Maranoa–Balonne region by tenure.

Woody vegetation clearing by subcatchment

Table 3. Woody vegetation clearing rates in the Border Rivers, Maranoa–Balonne region by subcatchment #.

Woody vegetation clearing rate (,000 ha/yr) for	Period				
	2007–08	2008–09	2009–10	2010–11	2011–12
Balonne River	9.277	6.705	2.126	10.732	12.558
Condamine River	0.312	0.417	0.215	0.140	1.229
Dumaresq River	1.713	0.406	0.612	0.814	1.266
Macintyre & Weir Rivers	2.633	2.292	1.232	4.056	1.612
Macintyre Brook	1.542	0.777	0.396	0.286	1.735
Maranoa River	5.517	5.646	4.924	1.906	4.460
Moonie River	3.054	1.184	0.998	4.399	4.710
Total	24.048	17.426	10.503	22.333	27.570

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 Border Rivers, Maranoa–Balonne region by subcatchment.

	Catchment area (,000 ha)	Area woody 2011 V2.3 (,000 ha)	% of catchment woody in 2011
Balonne River	3735	1296	35
Condamine River	599	121	20
Dumaresq River	431	279	65
Macintyre & Weir Rivers	1519	598	39
Macintyre Brook	432	260	60
Maranoa River	2004	1303	65
Moonie River	1456	473	33
Total	10175	4329	43

Woody vegetation clearing by replacement land cover

Table 5. Woody vegetation clearing rates in the Border Rivers, Maranoa–Balonne region by replacement land cover.

Period	Woody vegetation clearing rate (,000 ha/yr) for						
	Pasture	Crop	Forestry	Mining	Infrastructure	Settlement	Total*
1988–91	97.719	42.968	0.000	0.001	1.457	0.002	142.148
1991–95	25.264	4.224	0.251	0.000	0.244	0.006	29.990
1995–97	76.681	8.285	0.335	0.002	1.978	0.027	87.309
1997–99	102.292	26.694	0.904	0.000	1.813	0.022	131.725
1999–00	129.605	13.334	0.328	0.000	1.946	0.010	145.223
2000–01	39.502	2.048	0.056	0.007	0.777	0.005	42.395
2001–02	105.777	0.082	0.000	0.000	0.037	0.000	105.897
2002–03	112.282	0.125	0.000	0.003	0.029	0.000	112.438
2003–04	78.082	0.052	0.000	0.000	0.579	0.013	78.727
2004–05	60.202	1.042	1.413	0.000	0.178	0.001	62.837
2005–06	43.719	0.005	1.339	0.007	0.025	0.001	45.095
2006–07	38.736	0.014	0.117	0.011	0.094	0.002	38.974
2007–08	21.257	0.000	2.523	0.015	0.239	0.014	24.048
2008–09	16.742	0.016	0.573	0.002	0.038	0.054	17.426
2009–10	10.118	0.000	0.312	0.001	0.072	0.000	10.503
2010–11	16.143	0.184	0.646	0.296	5.063	0.001	22.333
2011–12	25.956	0.147	0.407	0.542	0.501	0.017	27.570

* Total excludes natural tree death.

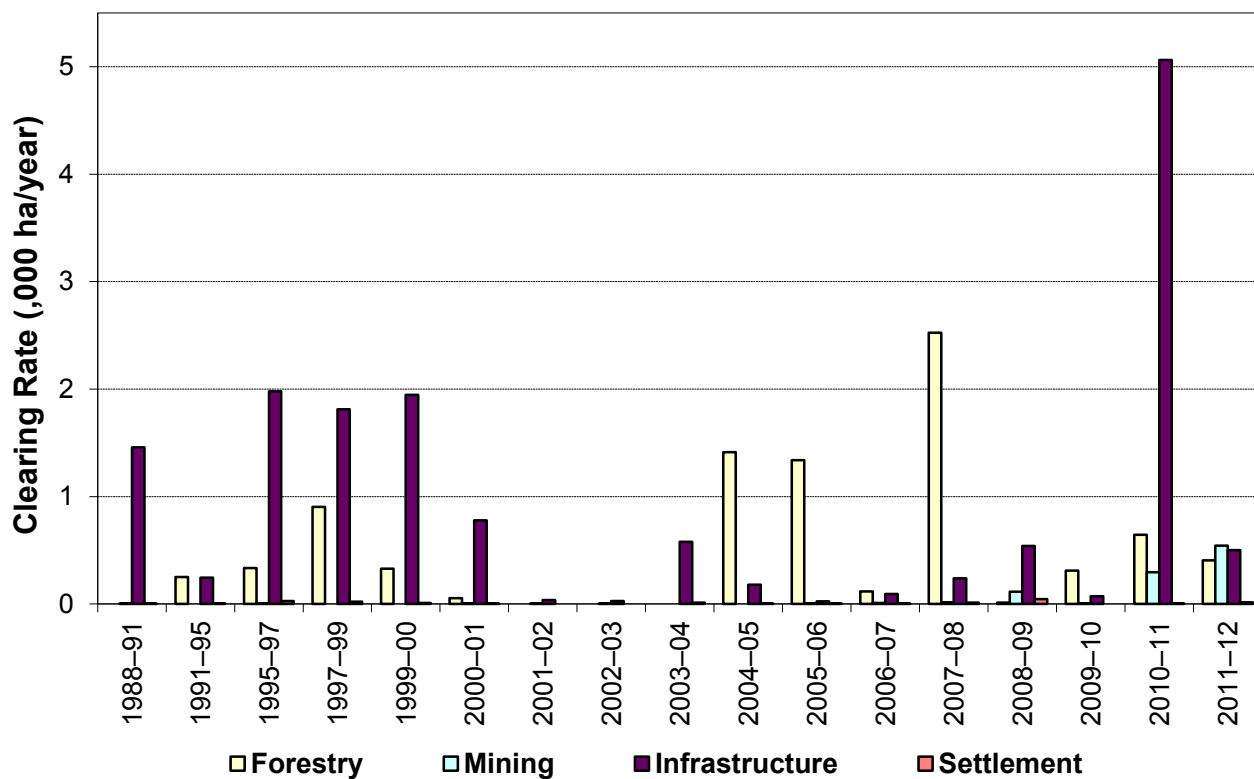
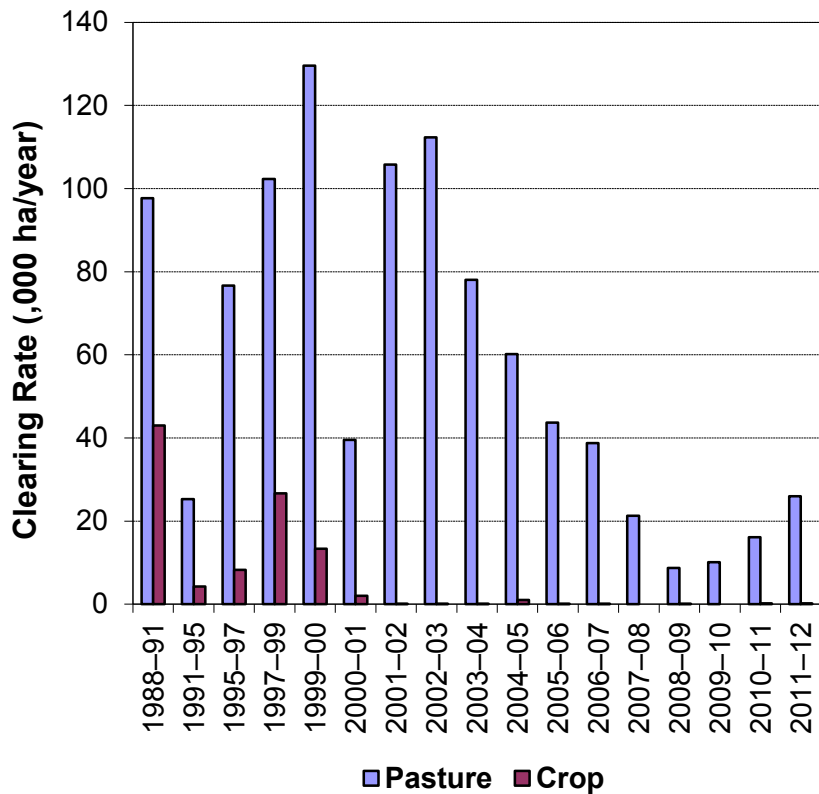


Figure 4. Woody vegetation clearing rates in the Border Rivers, Maranoa–Balonne region by replacement land cover.

This fact sheet is 8 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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