

Land cover change in the South West Natural Resource Management region

2010–11

Summary

The woody vegetation clearing rate in the South West region increased by 18 per cent from 13,691 hectares per year (ha/yr) in the previous era to 16,108 ha/yr in the 2010–11 era. Although there was some missed 2009–10 clearing in this region, it was too small to have a significant impact on the difference in clearing rates.

Woody remnant vegetation clearing rates continued to decline from 6432 ha/yr in 2009–10 to 5350 ha/yr in the 2010–11 era. This represented 33 per cent of total clearing, the lowest proportion of remnant clearing on record in this region.

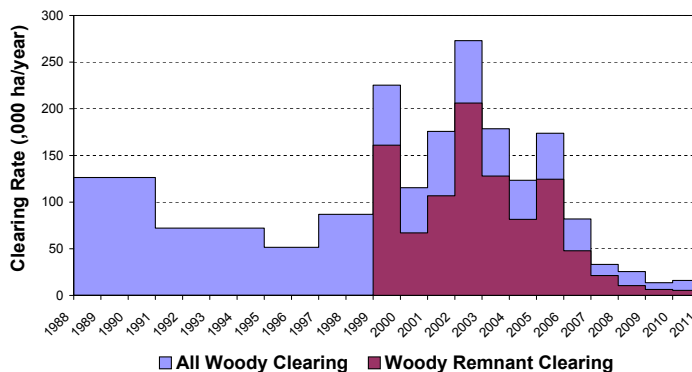


Figure 1. Woody vegetation clearing rates in the South West NRM region.

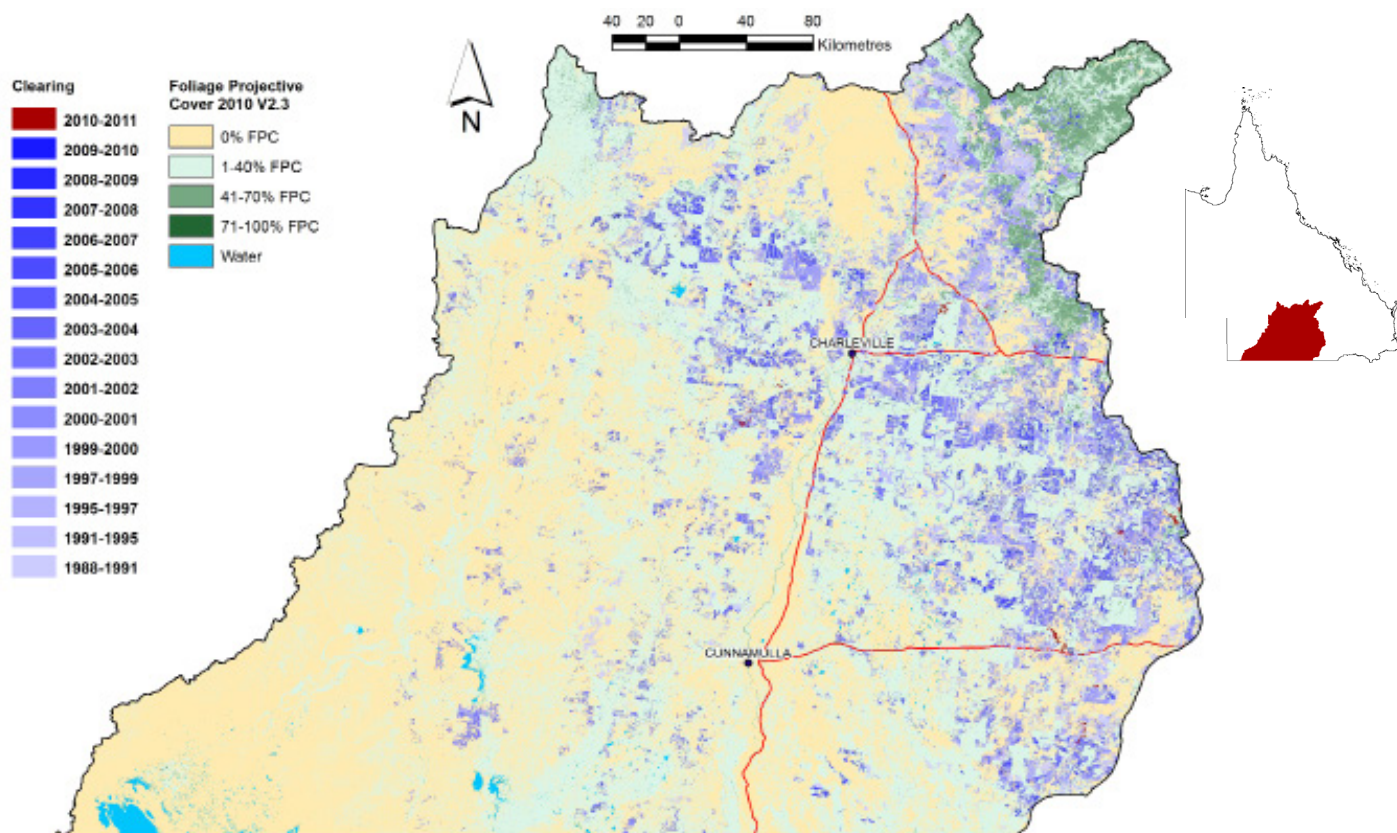


Figure 2. Woody vegetation clearing for each change period.

Woody vegetation clearing by remnant status

Table 1. Remnant and non-remnant woody vegetation clearing rates in the South West NRM region.

Period	Woody vegetation clearing rate (,000 ha/yr) of		
	Non-remnant woody	Remnant woody*	Total woody
1999–00	64.370	160.985	225.355
2000–01	48.437	67.029	115.466
2001–02	68.954	106.747	175.702
2002–03	66.775	206.207	272.982
2003–04	50.715	127.893	178.608
2004–05	41.882	81.498	123.380
2005–06	49.266	124.452	173.718
2006–07	34.120	47.827	81.948
2007–08	11.921	21.364	33.286
2008–09	15.127	10.469	25.596
2009–10	7.259	6.432	13.691
2010–11	10.758	5.350	16.108

* 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 South West NRM region by tenure.

Period	Woody vegetation clearing rate (,000 ha/yr) on				
	Freehold	Leasehold	Reserves	Other tenures	Total
1988–91	50.519	73.691	0.276	1.888	126.374
1991–95	27.428	43.821	0.128	0.790	72.166
1995–97	26.101	23.985	0.068	1.425	51.578
1997–99	41.337	43.989	0.281	1.296	86.902
1999–00	142.170	83.024	0.161	0.000	225.355
2000–01	60.054	55.399	0.012	0.000	115.465
2001–02	79.841	95.501	0.359	0.000	175.702
2002–03	146.555	126.391	0.018	0.000	272.963
2003–04	95.407	83.057	0.145	0.000	178.609
2004–05	58.102	65.192	0.086	0.000	123.380
2005–06	83.653	89.925	0.139	0.000	173.718
2006–07	37.013	44.884	0.051	0.000	81.948
2007–08	14.783	18.478	0.024	0.001	33.286
2008–09	11.480	14.097	0.019	0.000	25.596
2009–10	7.068	6.619	0.004	0.000	13.691
2010–11	7.246	8.861	0.001	0.000	16.108

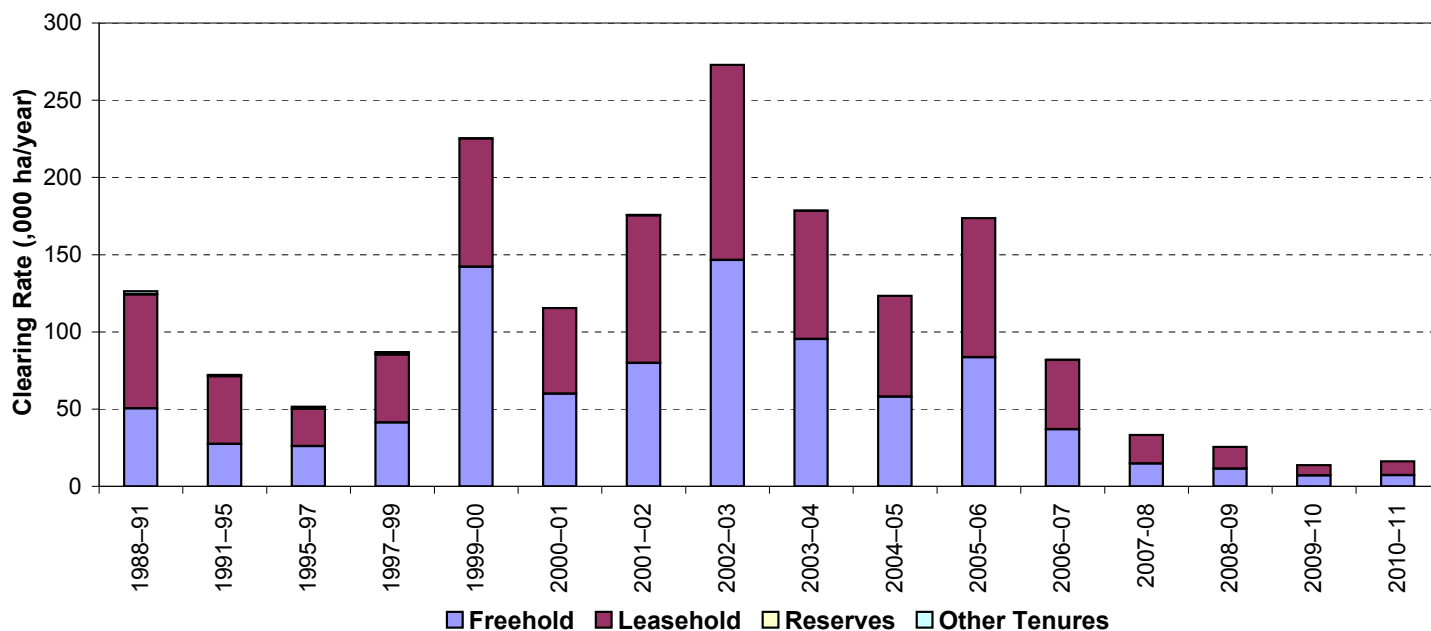


Figure 3. Woody vegetation clearing rates in the South West NRM region by tenure.

Woody vegetation clearing by subcatchment

Table 3. Woody vegetation clearing rates in the South West NRM region by subcatchment #.

Woody vegetation clearing rate (,000 ha/yr) for	Period				
	2006–07	2007–08	2008–09	2009–10	2010–11
Bulloo River	5.009	1.574	2.182	0.812	0.552
Paroo River	6.078	1.005	0.295	0.291	0.944
Wallam Creeks	39.368	22.216	10.799	5.928	8.297
Warrego River	31.493	8.491	12.320	6.660	6.315
Total	81.948	33.286	25.596	13.691	16.108

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 South West NRM region by subcatchment.

	Catchment area (,000 ha)	Area woody 2010 V2.3 (,000 ha)	% of catchment woody in 2010
Bulloo River	5185	1528	30
Paroo River	3654	1810	50
Wallam Creeks	4704	2667	57
Warrego River	5169	2927	57
Total	18711	8932	48

Note: Catchments with a low proportion of woody vegetation cover may contain significant areas of natural grasslands.

Woody vegetation clearing by replacement land cover

Table 5. Woody vegetation clearing rates in the South West NRM region by replacement land cover.

Period	Woody vegetation clearing rate (,000 ha/yr) for						
	Pasture	Crop	Forestry	Mining	Infrastructure	Settlement	Total*
1988–91	123.635	0.000	0.000	0.000	2.749	0.001	126.385
1991–95	71.740	0.000	0.015	0.001	0.432	0.000	72.188
1995–97	50.252	0.000	0.015	0.000	1.323	0.000	51.590
1997–99	85.278	0.095	0.165	0.000	1.362	0.003	86.904
1999–00	223.540	0.000	0.004	0.000	1.810	0.002	225.355
2000–01	114.103	0.011	0.000	0.000	1.352	0.000	115.466
2001–02	175.467	0.000	0.000	0.000	0.235	0.000	175.702
2002–03	272.735	0.000	0.000	0.000	0.247	0.000	272.982
2003–04	178.354	0.000	0.000	0.000	0.254	0.000	178.608
2004–05	122.309	0.000	0.074	0.000	0.997	0.001	123.380
2005–06	173.497	0.000	0.212	0.000	0.009	0.000	173.718
2006–07	81.891	0.000	0.000	0.000	0.034	0.022	81.948
2007–08	33.119	0.000	0.023	0.000	0.144	0.000	33.286
2008–09	25.510	0.000	0.000	0.009	0.064	0.012	25.596
2009–10	13.651	0.000	0.000	0.000	0.039	0.000	13.691
2010–11	15.719	0.000	0.000	0.000	0.380	0.009	16.108

* Total excludes natural tree death.

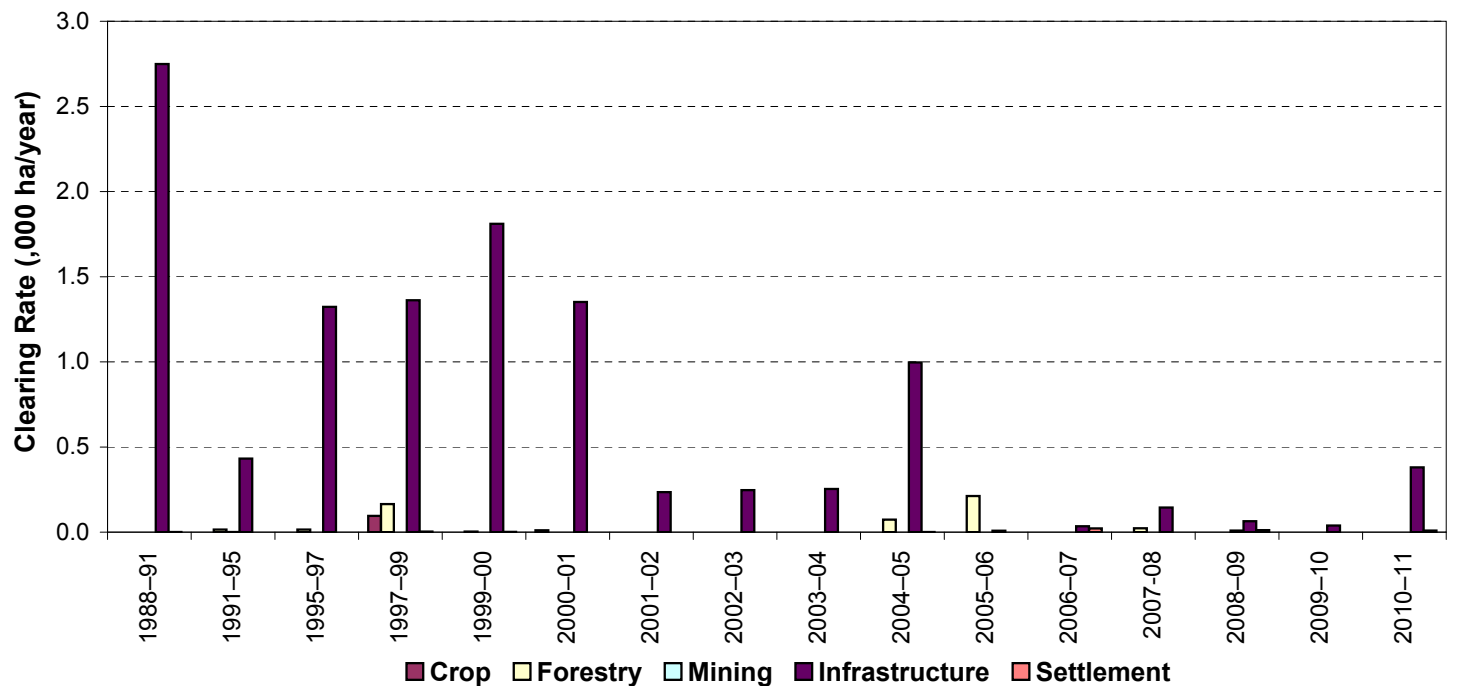
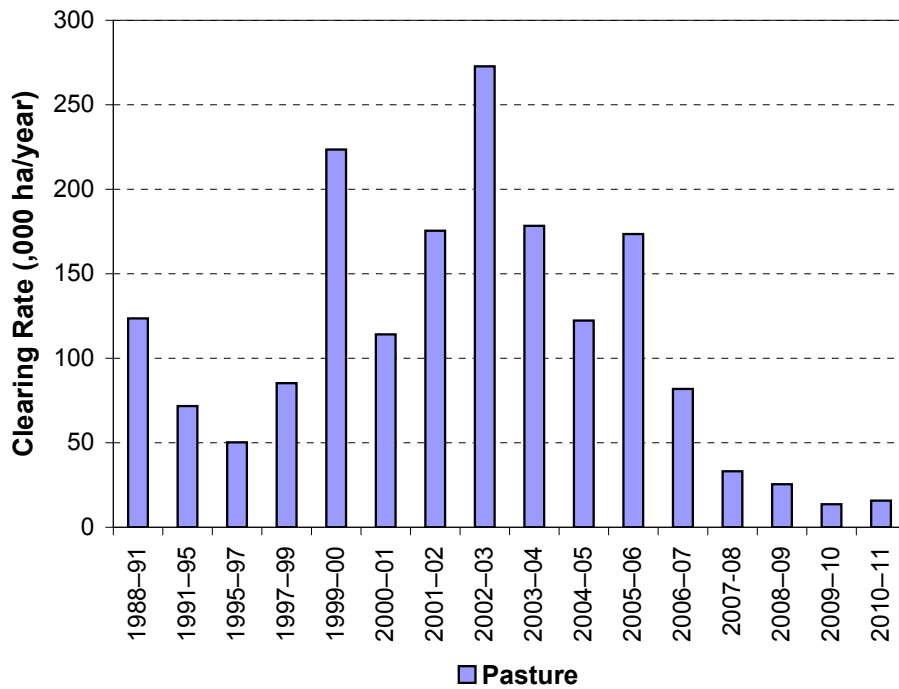


Figure 4. Woody vegetation clearing rates in the South West NRM region by replacement land cover.

This fact sheet is 11 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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