

Land cover change in the South West Queensland region 2011–12

Summary

The woody vegetation clearing rate in the South West Queensland region nearly doubled from 16 108 hectares per year (ha/yr) in 2010–11 to 29 051 ha/yr in the 2011–12 era.

Woody remnant vegetation clearing rates increased from 5 350 ha/yr in the 2010–11 era to 6 997 ha/yr in 2011–12, representing the lowest proportion of remnant clearing (24%) on record in this region.

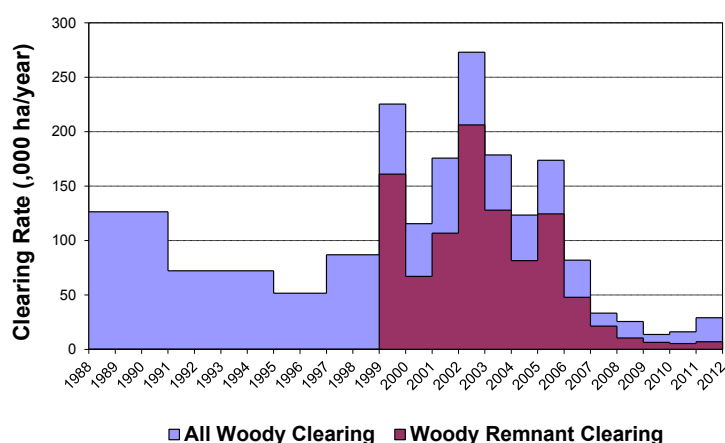


Figure 1. Woody vegetation clearing rates in the South West Queensland region.

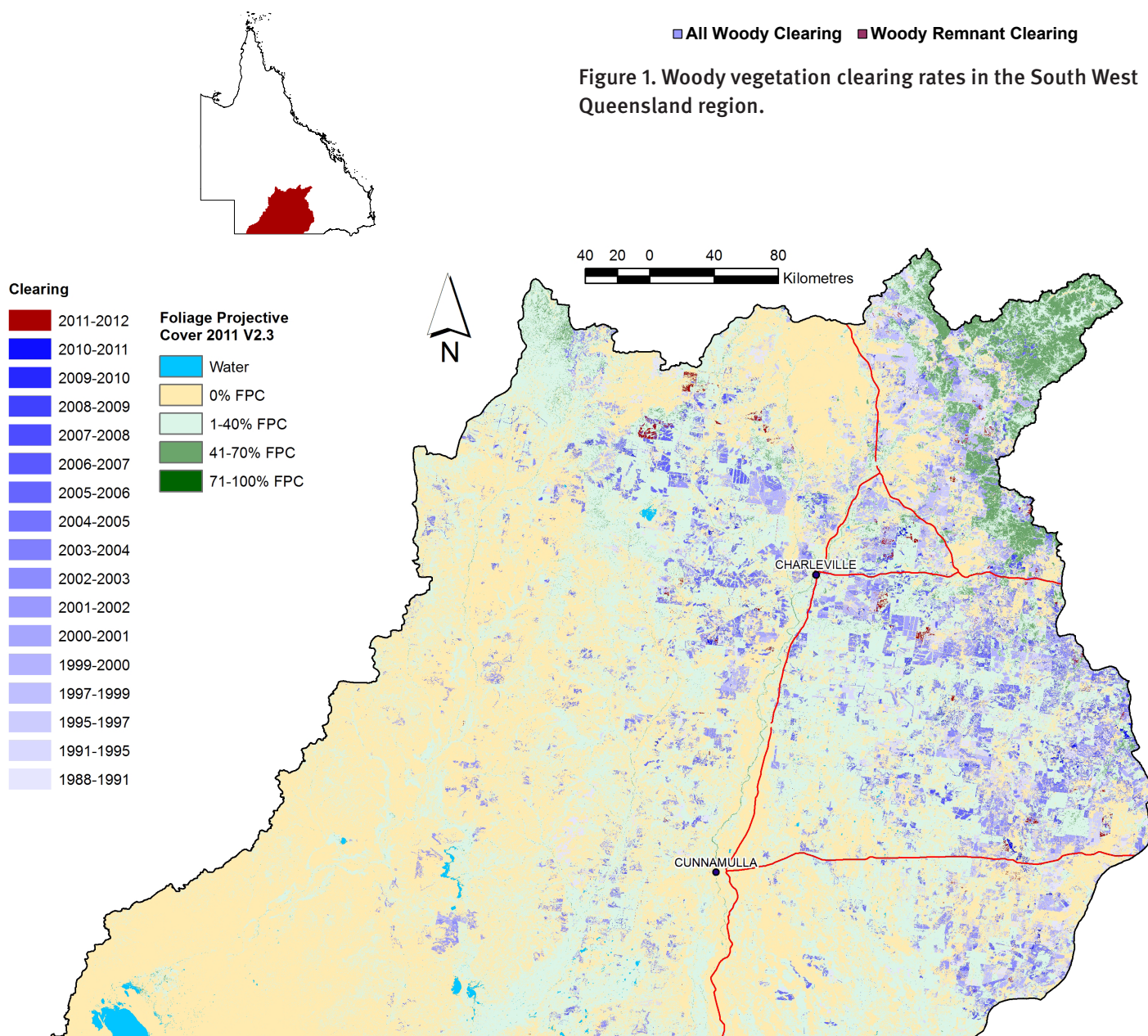


Figure 2. Woody vegetation clearing for each change period.

Woody vegetation clearing by remnant status

Table 1. Remnant and non-remnant woody vegetation clearing rates in the South West Queensland 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
2011–12	22.054	6.997	29.051

* 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 Queensland 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
2011–12	17.940	11.039	0.071	0.000	29.051

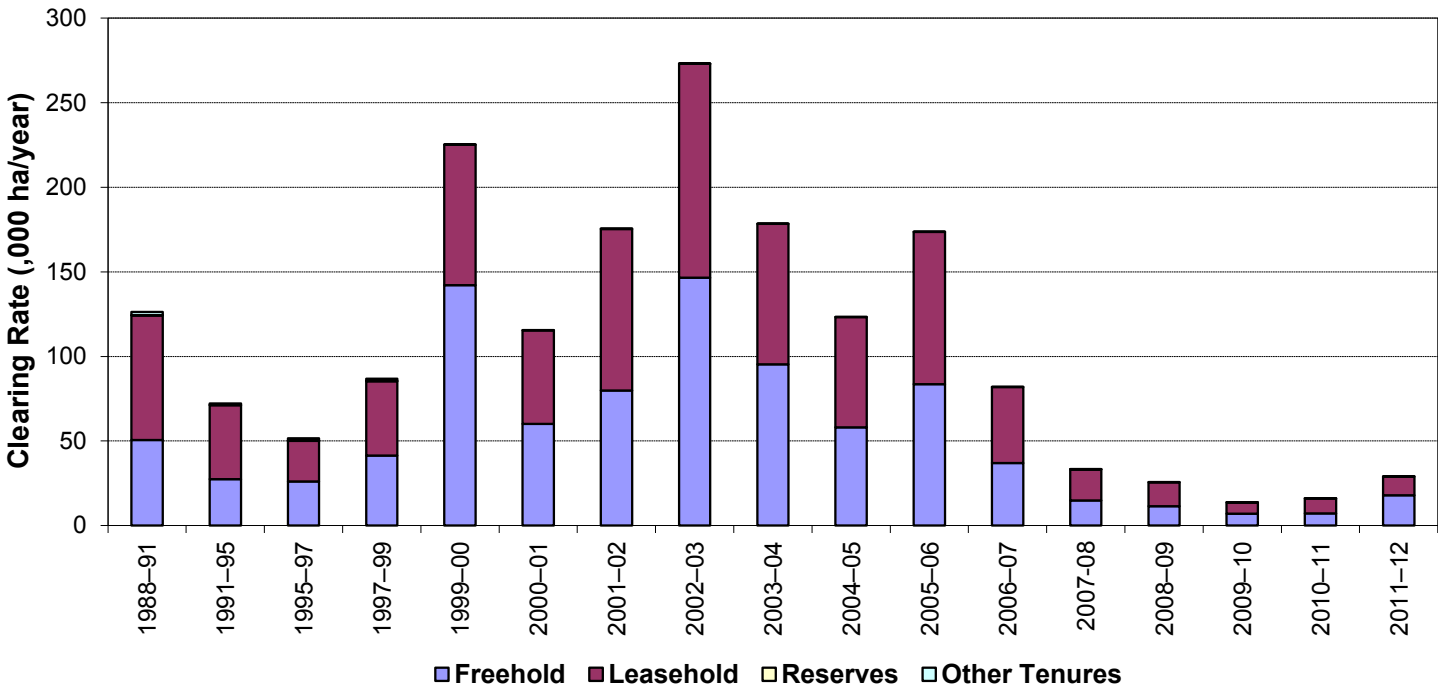


Figure 3. Woody vegetation clearing rates in the South West Queensland region by tenure.

Woody vegetation clearing by subcatchment

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

Woody vegetation clearing rate (,000 ha/yr) for	Period				
	2007–08	2008–09	2009–10	2010–11	2011–12
Bulloo River	1.574	2.182	0.812	0.552	0.670
Paroo River	1.005	0.295	0.291	0.944	1.486
Wallam Creeks	22.216	10.799	5.928	8.297	9.067
Warrego River	8.491	12.320	6.660	6.315	17.828
Total	33.286	25.596	13.691	16.108	29.051

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 South West Queensland region by subcatchment.

	Catchment area (,000 ha)	Area woody 2011 V2.3 (,000 ha)	% of catchment woody in 2011
Bulloo River	5183	1505	29
Paroo River	3515	1724	49
Wallam Creeks	4704	2644	56
Warrego River	5306	2983	56
Total	18709	8856	47

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 Queensland 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
2011–12	28.483	0.000	0.024	0.000	0.541	0.003	29.051

* Total excludes natural tree death.

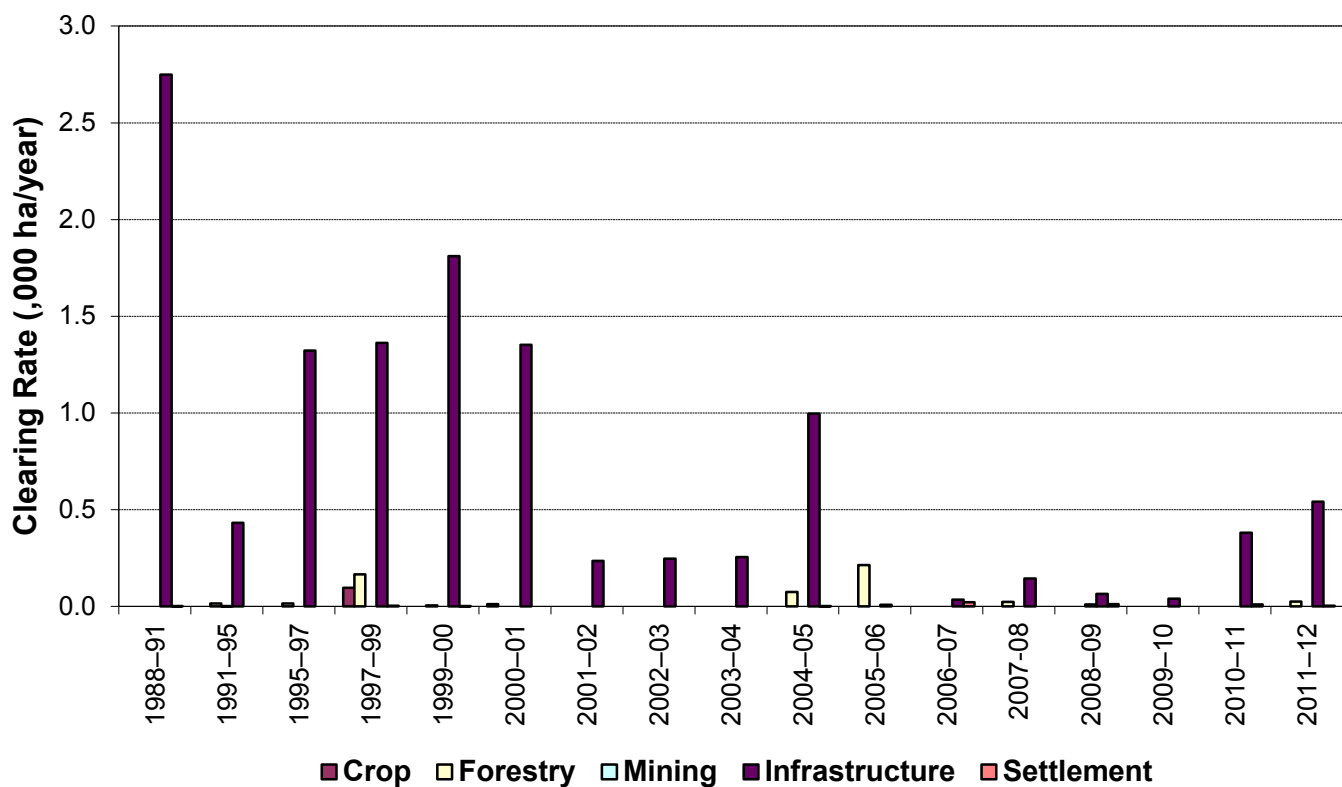
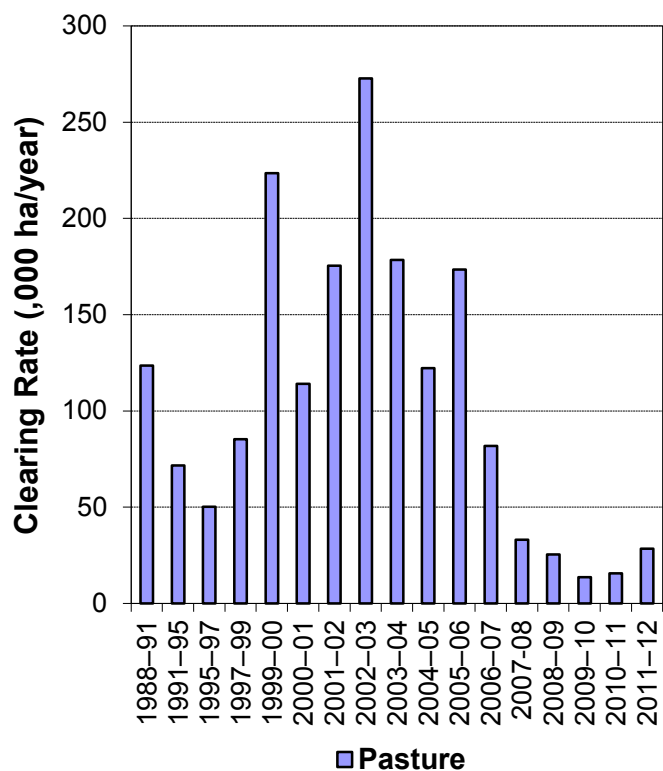


Figure 4. Woody vegetation clearing rates in the South West Queensland region by replacement land cover.

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 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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