

Land cover change in the Desert Channels region 2011–12

Summary

In 2011–12, the woody vegetation clearing rate in the Desert Channels region showed a decrease of 3% from the previous era, to 8 814 hectares per year (ha/yr). Of this, approximately 32% was clearing of remnant woody vegetation. South East Queensland Region and this region were the only regions with decreases from the 2010–11 reported rates.

As with all previous eras, woody vegetation clearing was predominantly to the replacement land cover class of pasture, and in 2011–12 this accounted for 98% of total clearing.

Woody vegetation clearing in the Desert Channels region was primarily in the catchment of the Barcoo River, with 69% of the total clearing, even though five of the other catchments in the region are larger in area.

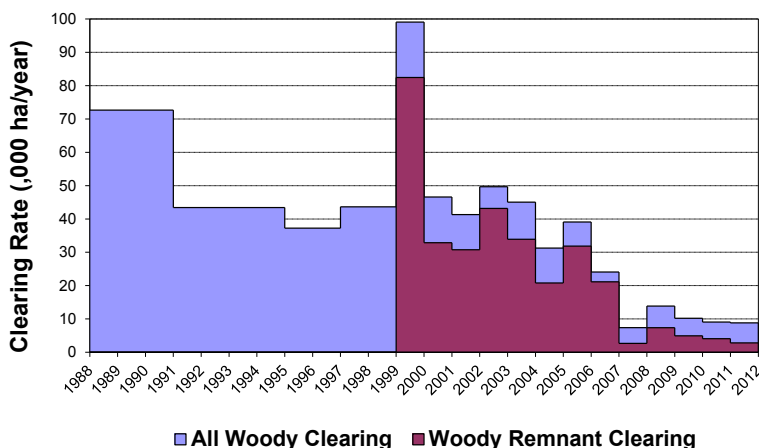


Figure 1. Woody vegetation clearing for each change period.

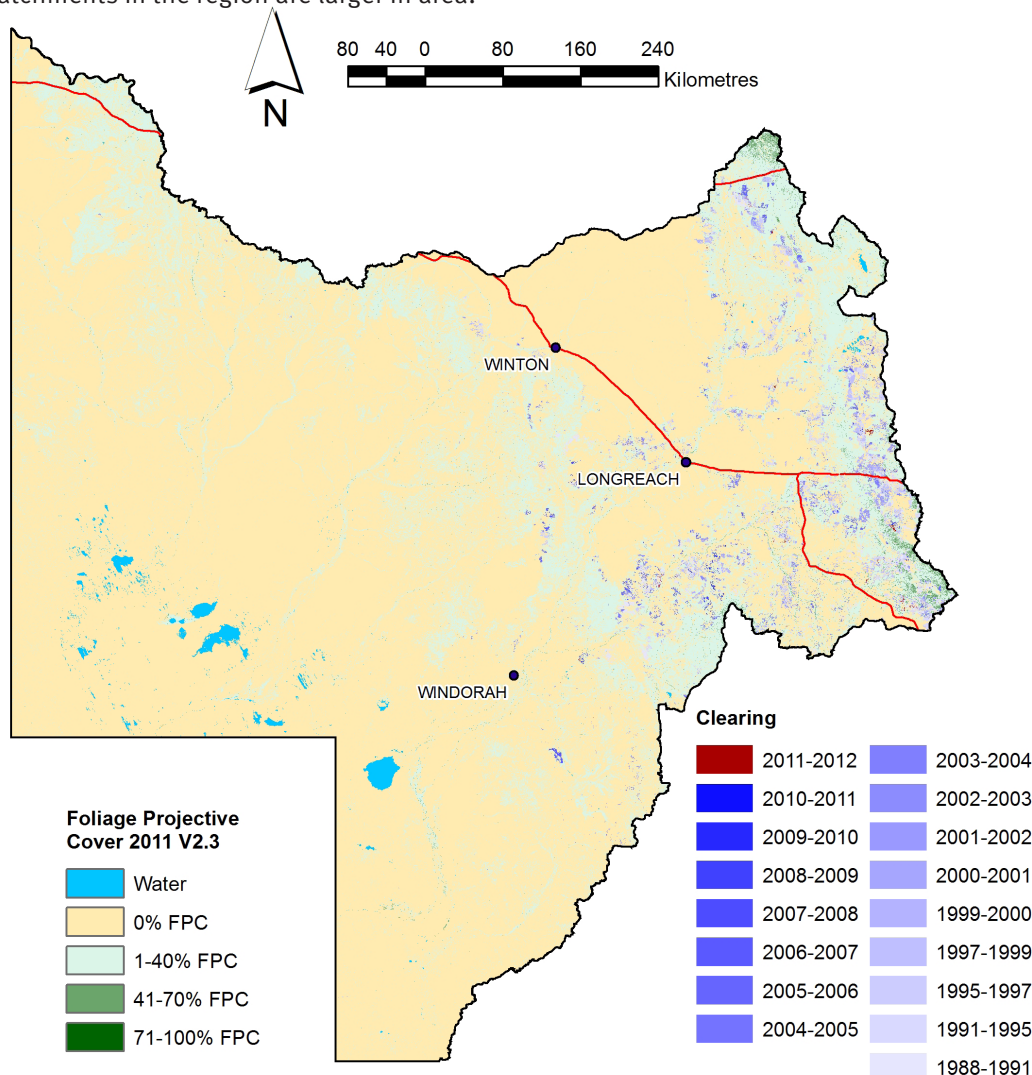


Figure 2. Woody vegetation clearing rates in the Desert Channels region.

Woody vegetation clearing by remnant status

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

Period	Woody vegetation clearing rate (,000 ha/yr) of		
	Non-remnant woody	Remnant woody*	Total woody
1999–00	16.623	82.450	99.073
2000–01	13.717	32.868	46.585
2001–02	10.552	30.758	41.310
2002–03	6.507	43.161	49.668
2003–04	11.137	33.903	45.040
2004–05	10.469	20.790	31.258
2005–06	7.233	31.851	39.084
2006–07	2.938	21.137	24.076
2007–08	4.720	2.662	7.382
2008–09	6.489	7.367	13.856
2009–10	5.266	4.929	10.195
2010–11	4.989	4.072	9.061
2011–12	6.005	2.809	8.814

* 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 Desert Channels region by tenure.

Period	Woody vegetation clearing rate (,000 ha/yr) on				
	Freehold	Leasehold	Reserves	Other tenures	Total
1988–91	24.281	48.312	0.046	0.018	72.658
1991–95	15.143	28.249	0.014	0.002	43.407
1995–97	15.999	21.170	0.068	0.004	37.240
1997–99	19.752	23.765	0.002	0.112	43.631
1999–00	69.674	29.372	0.004	0.023	99.073
2000–01	14.824	31.750	0.008	0.003	46.585
2001–02	20.923	20.351	0.036	0.000	41.310
2002–03	17.221	32.447	0.000	0.000	49.668
2003–04	20.096	24.920	0.015	0.000	45.030
2004–05	6.906	24.332	0.020	0.000	31.258
2005–06	10.555	28.512	0.017	0.000	39.084
2006–07	3.654	20.388	0.033	0.000	24.076
2007–08	1.569	5.813	0.000	0.000	7.382
2008–09	2.647	11.206	0.004	0.000	13.856
2009–10	4.897	5.283	0.014	0.000	10.195
2010–11	5.042	4.018	0.001	0.000	9.061
2011–12	4.092	4.721	0.001	0.000	8.814

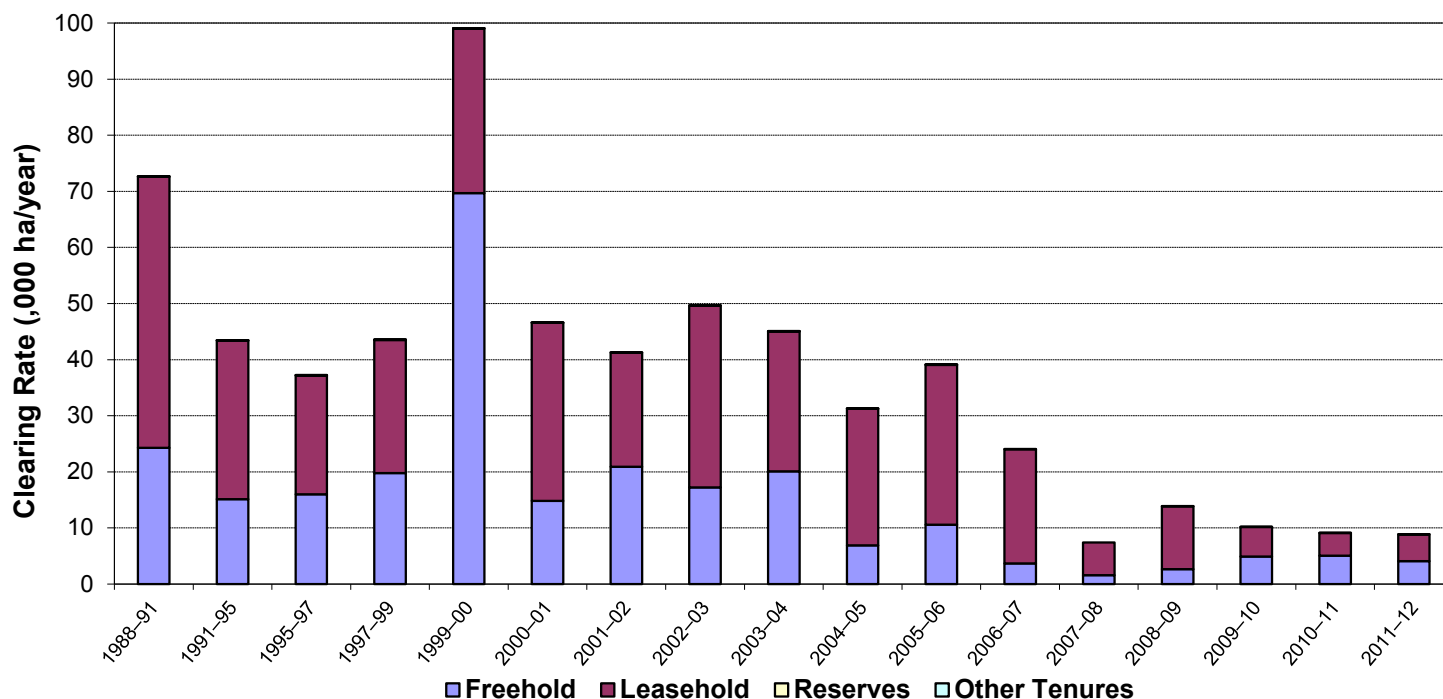


Figure 3. Woody vegetation clearing rates in the Desert Channels region by tenure.

Woody vegetation clearing by subcatchment

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

Woody vegetation clearing rate (,000 ha/yr) for	Period				
	2007–08	2008–09	2009–10	2010–11	2011–12
Barcoo River	4.512	11.362	7.163	5.803	6.111
Cooper Creek	0.220	0.622	0.099	0.869	0.404
Diamantina River	0.060	0.012	0.034	0.065	0.025
Eyre Creek	0.005	0.004	0.013	0.003	0.008
Georgina River	0.009	0.095	0.034	0.011	0.026
Hay	0.000	0.000	0.000	0.000	0.000
Thomson River	2.576	1.761	2.853	2.309	2.240
Total	7.382	13.856	10.195	9.060	8.814

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 Desert Channels region by subcatchment.

	Catchment area (,000 ha)	Area woody 2011 V2.3 (,000 ha)	% of catchment woody in 2011
Barcoo River	5322	2375	45
Cooper Creek	9575	1107	12
Diamantina River	11917	1545	13
Eyre Creek	7178	484	7
Georgina River	7208	1688	23
Hay	277	8	3
Thomson River	9493	3088	33
Total	50970	10295	20

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 Desert Channels Queensland NRM region by replacement land cover.

Period	Woody vegetation clearing rate (,000ha/yr) for						Total*
	Pasture	Crop	Forestry	Mining	Infrastructure	Settlement	
1988–91	71.644	0.000	0.000	0.004	1.011	0.000	72.658
1991–95	43.085	0.000	0.000	0.032	0.304	0.000	43.421
1995–97	36.578	0.000	0.000	0.006	0.650	0.007	37.241
1997–99	42.854	0.000	0.000	0.013	0.770	0.000	43.637
1999–00	98.048	0.000	0.000	0.002	1.023	0.000	99.073
2000–01	45.694	0.000	0.000	0.000	0.889	0.002	46.585
2001–02	41.259	0.000	0.000	0.000	0.051	0.000	41.310
2002–03	49.607	0.000	0.000	0.000	0.062	0.000	49.668
2003–04	44.571	0.000	0.000	0.040	0.429	0.000	45.040
2004–05	30.907	0.000	0.000	0.000	0.350	0.001	31.258
2005–06	38.988	0.000	0.000	0.001	0.095	0.000	39.084
2006–07	23.969	0.000	0.000	0.066	0.040	0.000	24.076
2007–08	7.243	0.000	0.000	0.009	0.130	0.000	7.382
2008–09	13.814	0.000	0.000	0.002	0.040	0.000	13.856
2009–10	10.148	0.000	0.000	0.009	0.038	0.000	10.195
2010–11	8.855	0.000	0.000	0.001	0.204	0.001	9.061
2011–12	8.631	0.000	0.000	0.010	0.172	0.001	8.814

* Total excludes natural tree death.

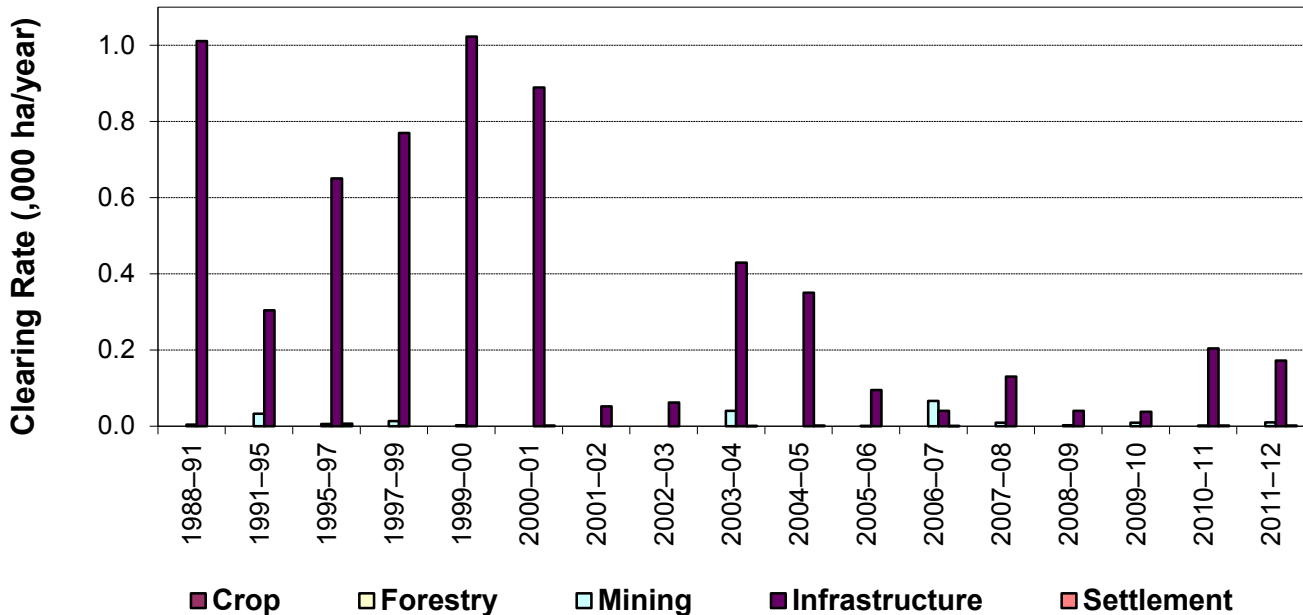
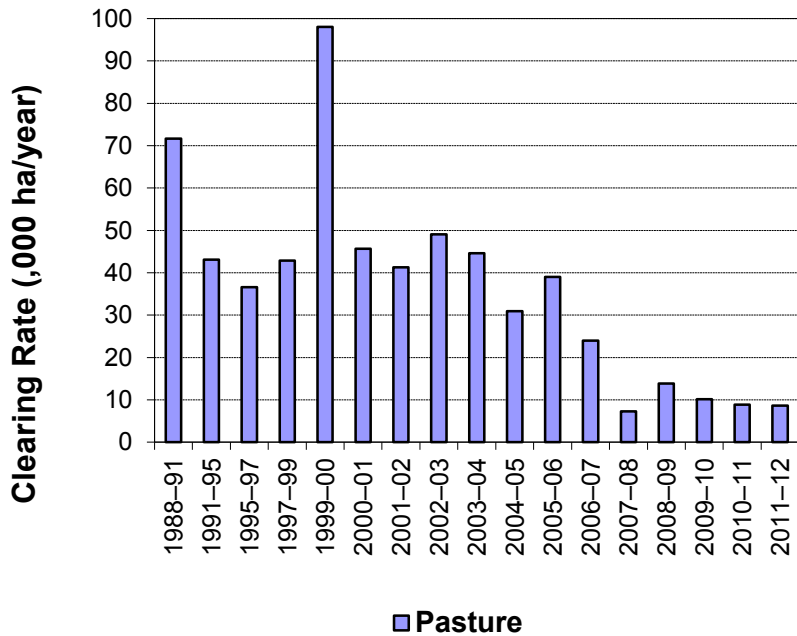


Figure 4. Woody vegetation clearing rates in the Desert Channels region by replacement land cover.

This fact sheet is 4 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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