

Land cover change in the Desert Channels Queensland Natural Resource Management region

2010–11

Summary

In 2010–11 the woody vegetation clearing rate in the Desert Channels region showed a decrease of 11 per cent from the previous era, to 9061 hectares per year (ha/yr). Of this, approximately 45 per cent was clearing of remnant woody vegetation.

As with all previous eras, woody vegetation clearing was predominantly to the replacement land cover class of pasture, and in 2010–11 this accounted for 98 per cent of total clearing.

Woody vegetation clearing in the Desert Channels region was primarily in the catchment of the Barcoo River, with 64 per cent of the total clearing, even though five of the other catchments in the region are larger in area. This is the catchment with the highest woody cover.

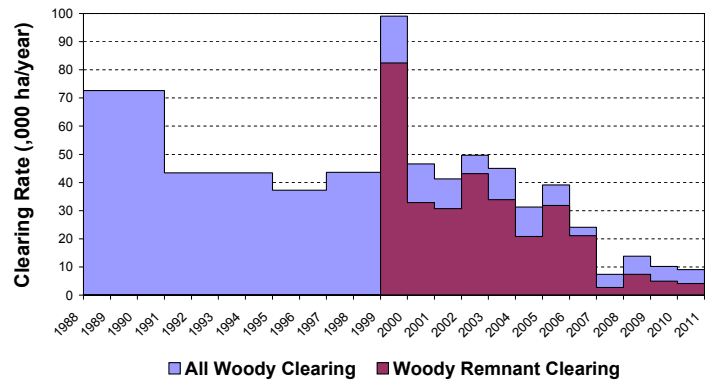


Figure 1. Woody vegetation clearing for each change period.

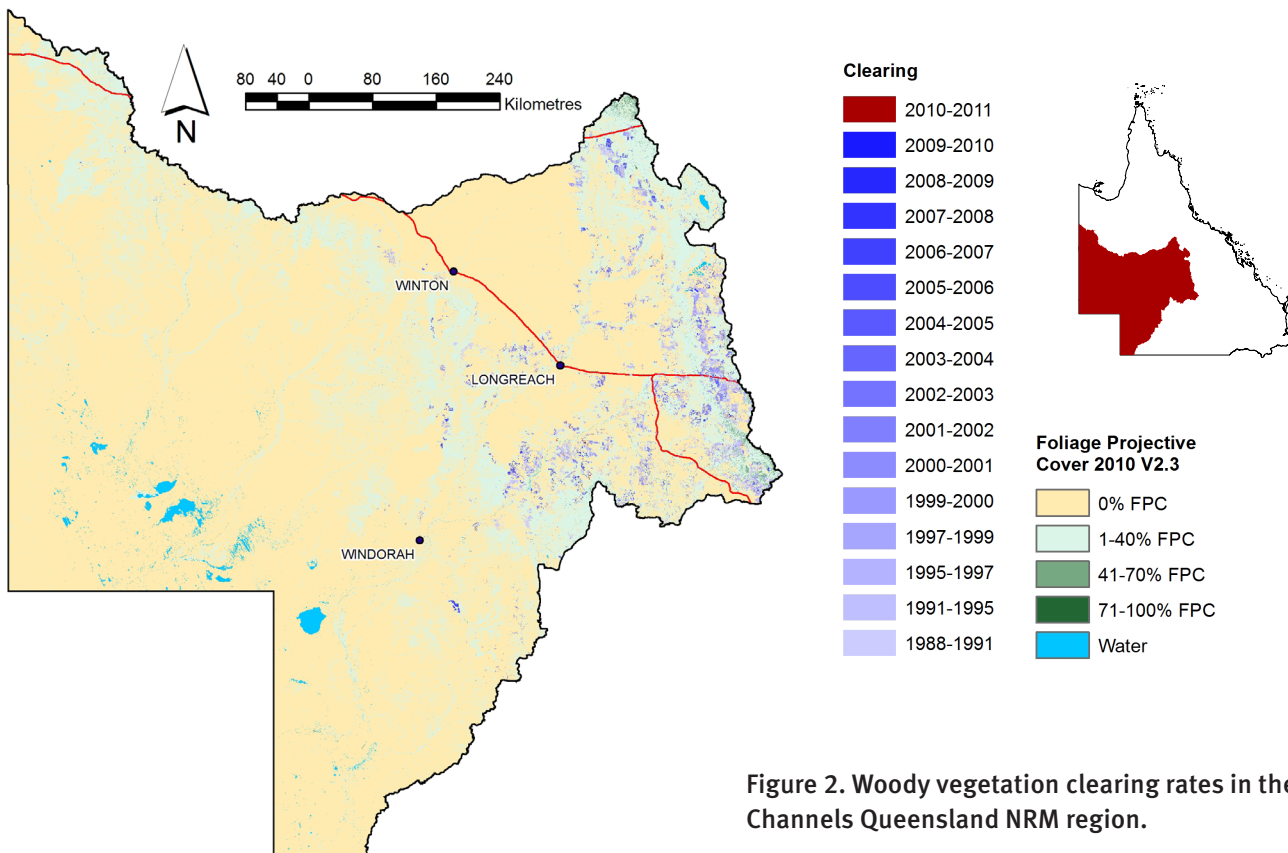


Figure 2. Woody vegetation clearing rates in the Desert Channels Queensland NRM region.

Woody vegetation clearing by remnant status

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

* 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 Queensland NRM 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

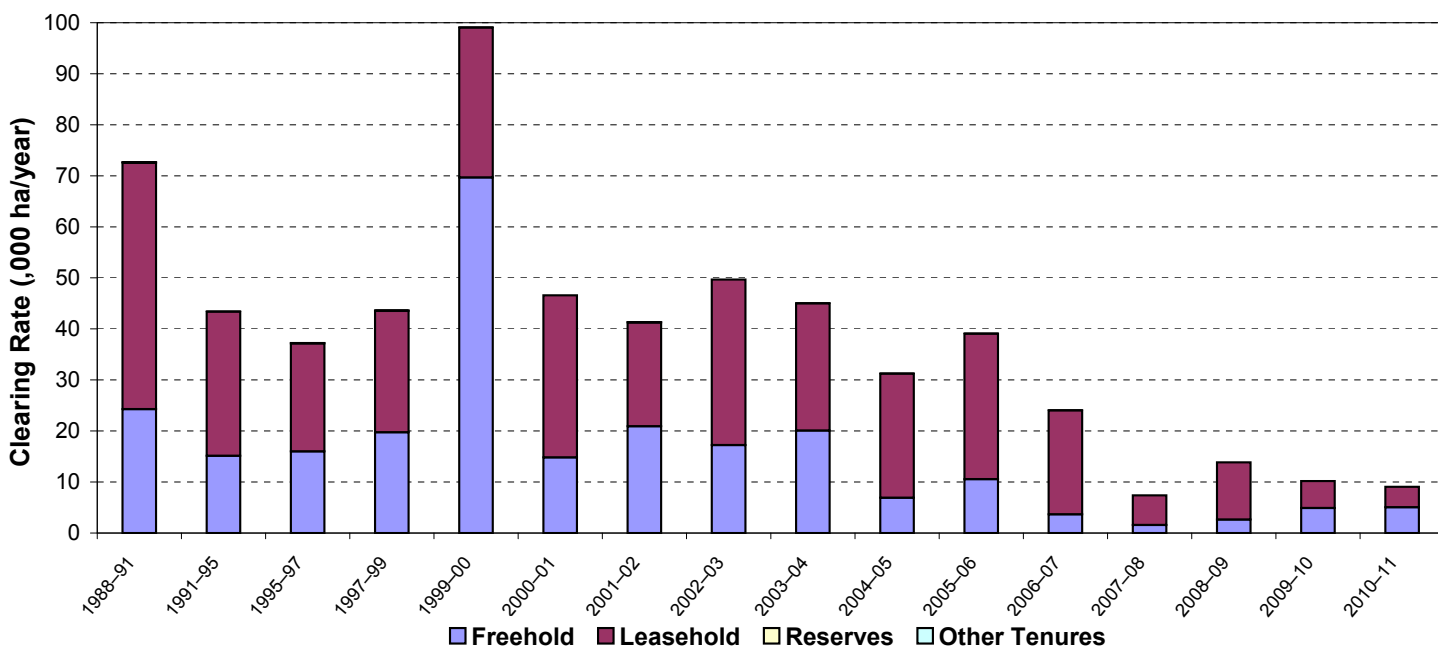


Figure 3. Woody vegetation clearing rates in the Desert Channels Queensland NRM region by tenure.

Woody vegetation clearing by subcatchment

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

Woody vegetation clearing rate (,000 ha/yr) for	Period				
	2006–07	2007–08	2008–09	2009–10	2010–11
Barcoo River	7.371	4.512	11.362	7.163	5.803
Cooper Creek	7.159	0.220	0.622	0.099	0.869
Diamantina River	0.131	0.060	0.012	0.034	0.065
Eyre Creek	0.017	0.005	0.004	0.013	0.003
Georgina River	0.227	0.009	0.095	0.034	0.011
Hay	0.000	0.000	0.000	0.000	0.000
Thomson River	9.171	2.576	1.761	2.853	2.309
Total	24.076	7.382	13.856	10.195	9.060

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 Desert Channels Queensland NRM region by subcatchment.

	Catchment area (,000 ha)	Area woody 2010 V2.3 (,000 ha)	% of catchment woody in 2010
Barcoo River	5323	2386	45
Cooper Creek	9576	1132	12
Diamantina River	11917	1553	13
Eyre Creek	7178	482	7
Georgina River	7208	1685	23
Hay	277	7	3
Thomson River	9507	3088	33
Total	51000	10334	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

* Total excludes natural tree death.

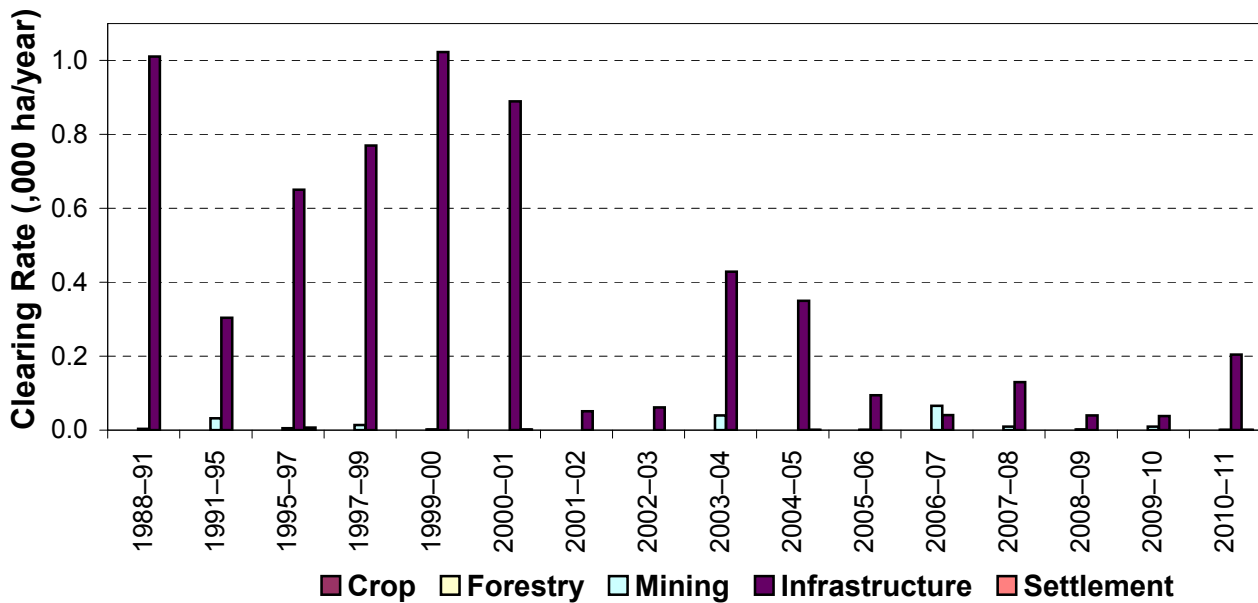
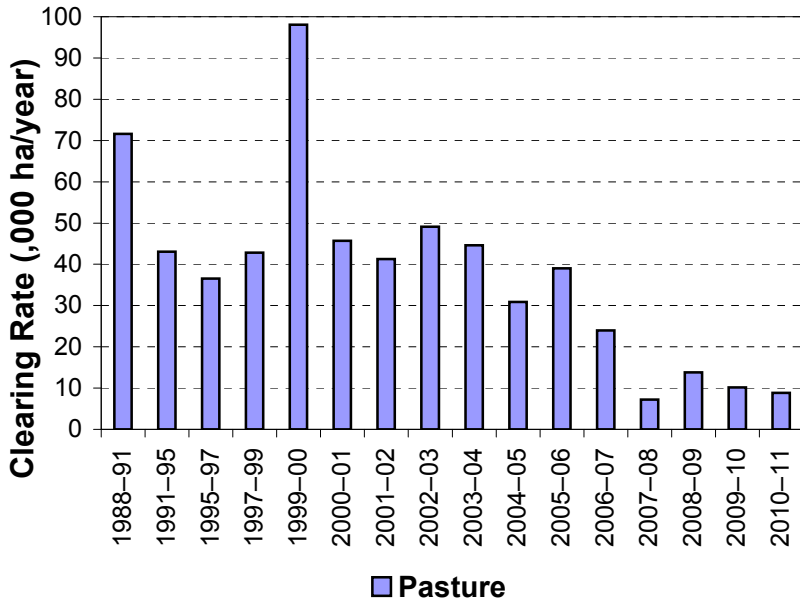


Figure 4. Woody vegetation clearing rates in the Desert Channels Queensland NRM region by replacement land cover.

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 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.

The Queensland Government supports and encourages the dissemination and exchange of information. However, copyright protects this document. The State of Queensland has no objection to this material being reproduced, made available online or electronically, provided it is for your personal, non-commercial use, or use within your organisation; the material remains unaltered; and the State of Queensland is recognised as the owner.

© The State of Queensland 2014.

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