

Land cover change in the Terrain Natural Resource Management region

2010–11

Summary

The woody vegetation clearing rate in the Terrain region increased by 360 per cent from 174 hectares per year (ha/yr) in 2009–10 to 802 ha/yr in the 2010–11 era, very similar to the clearing rate in 2008–09.

Despite the increase in total clearing, the proportion of woody remnant vegetation clearing rates declined to 33 per cent of total clearing for 2010–11.

For the first time in this region, woody vegetation clearing to the replacement land cover class of forestry exceeded pasture, representing 56 per cent and 35 per cent of total clearing respectively.

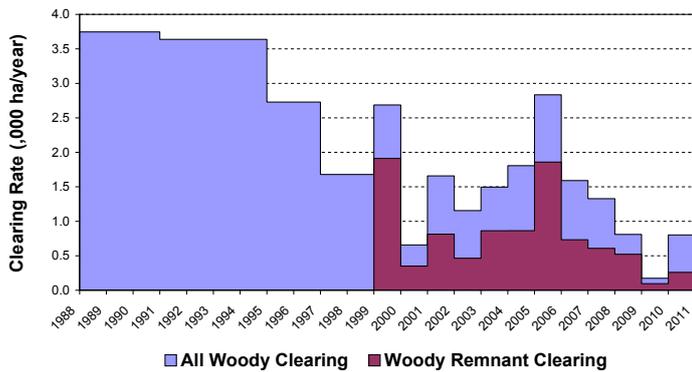


Figure 1. Woody vegetation clearing rates in the Terrain NRM region.

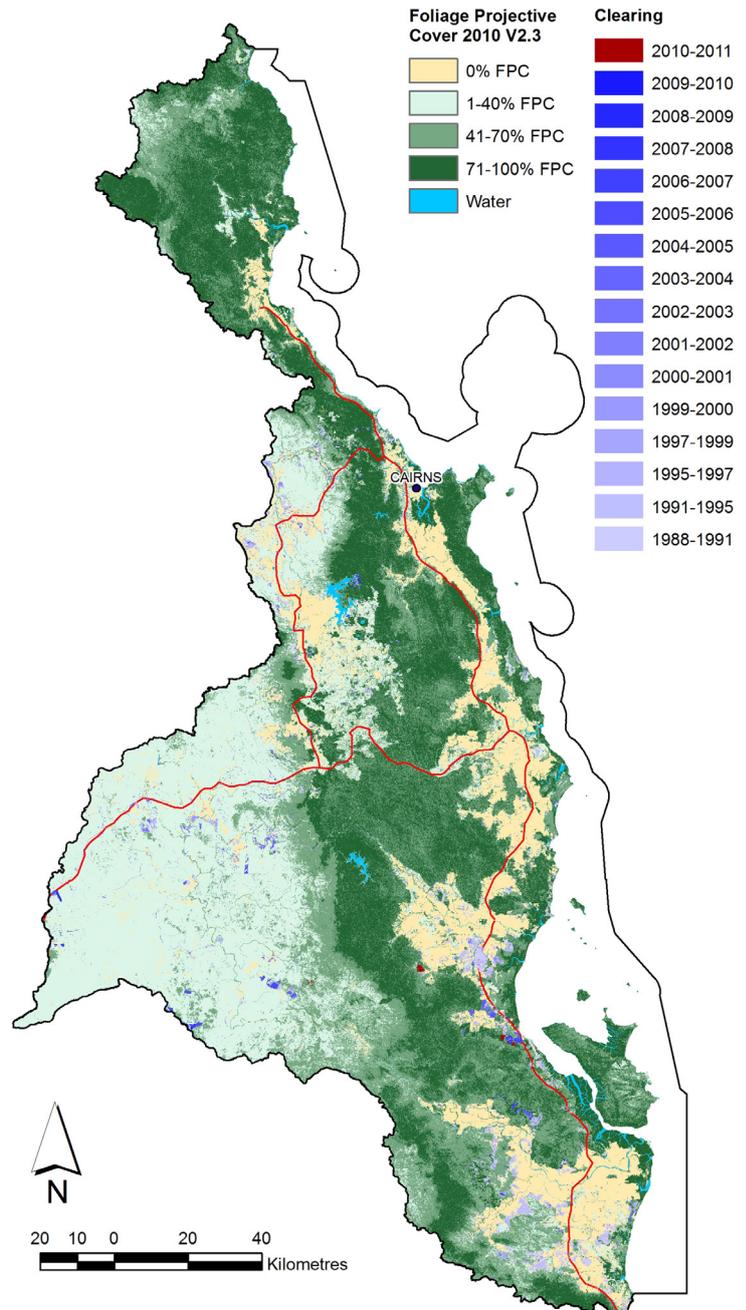
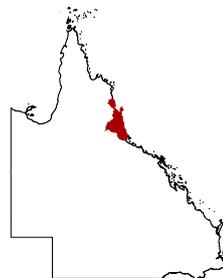


Figure 2. Woody vegetation clearing for each change period.

Woody vegetation clearing by remnant status

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

Period	Woody vegetation clearing rate (,000 ha/yr) of		
	Non-remnant woody	Remnant woody*	Total woody
1999–00	0.776	1.911	2.687
2000–01	0.306	0.351	0.657
2001–02	0.845	0.814	1.659
2002–03	0.691	0.464	1.155
2003–04	0.633	0.862	1.496
2004–05	0.943	0.863	1.806
2005–06	0.976	1.858	2.834
2006–07	0.858	0.733	1.591
2007–08	0.720	0.608	1.328
2008–09	0.288	0.522	0.810
2009–10	0.079	0.096	0.174
2010–11	0.538	0.263	0.801

* 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 Terrain NRM region by tenure.

Period	Woody vegetation clearing rate (,000 ha/yr) on				
	Freehold	Leasehold	Reserves	Other tenures	Total
1988–91	2.533	0.711	0.469	0.021	3.733
1991–95	2.712	0.613	0.291	0.005	3.620
1995–97	2.234	0.396	0.082	0.006	2.719
1997–99	1.156	0.451	0.059	0.008	1.675
1999–00	1.966	0.585	0.136	0.000	2.687
2000–01	0.476	0.119	0.061	0.001	0.657
2001–02	0.889	0.662	0.107	0.000	1.659
2002–03	0.606	0.336	0.208	0.004	1.155
2003–04	0.965	0.154	0.377	0.000	1.496
2004–05	0.935	0.385	0.486	0.000	1.806
2005–06	0.938	1.328	0.561	0.007	2.834
2006–07	0.837	0.192	0.561	0.001	1.591
2007–08	0.508	0.427	0.393	0.000	1.328
2008–09	0.486	0.243	0.080	0.000	0.810
2009–10	0.108	0.058	0.008	0.000	0.174
2010–11	0.162	0.173	0.465	0.000	0.801

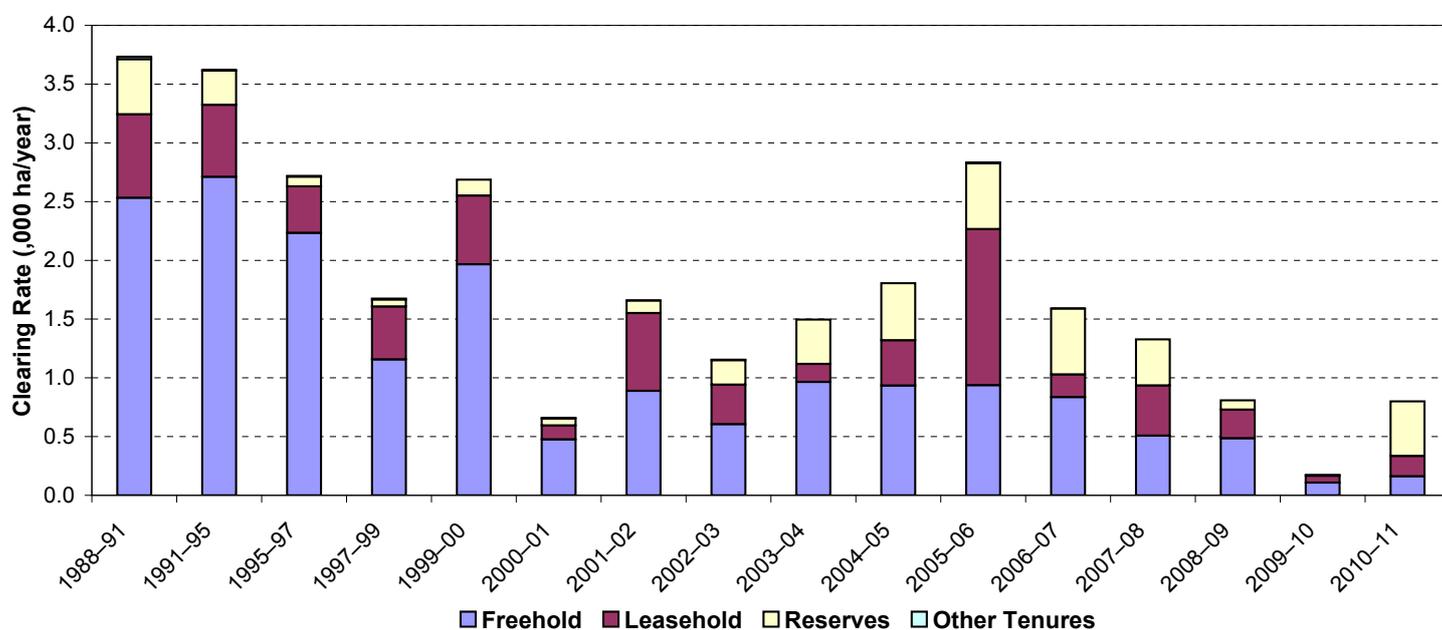


Figure 3. Woody vegetation clearing rates in the Terrain NRM region by tenure.

Woody vegetation clearing by subcatchment

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

Woody vegetation clearing rate (,000 ha/yr) for	Period				
	2006–07	2007–08	2008–09	2009–10	2010–11
Barron River	0.209	0.242	0.145	0.033	0.024
Daintree River	0.000	0.001	0.014	0.005	0.005
Endeavour River	0.001	0.000	0.006	0.002	0.001
Herbert River	1.041	0.695	0.502	0.117	0.211
Hinchinbrook Island	0.000	0.000	0.000	0.000	0.000
Mossman River	0.037	0.011	0.021	0.001	0.003
Mulgrave River	0.030	0.026	0.009	0.005	0.012
Murray River	0.223	0.273	0.047	0.004	0.508
North Johnstone River	0.003	0.024	0.023	0.000	0.009
Russell River	0.024	0.006	0.020	0.000	0.008
South Johnstone River	0.012	0.008	0.008	0.003	0.008
Tully River	0.010	0.041	0.016	0.004	0.011
Total	1.591	1.328	0.810	0.174	0.800

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 Terrain NRM region by subcatchment.

	Catchment area (,000 ha)	Area woody 2010 V2.3 (,000 ha)	% of catchment woody in 2010
Barron River	219	173	79
Daintree River	210	204	97
Endeavour River	8	8	97
Herbert River	984	859	87
Hinchinbrook Island	39	38	98
Mossman River	47	41	86
Mulgrave River	131	109	83
Murray River	111	86	78
North Johnstone River	103	85	83
Russell River	67	53	79
South Johnstone River	129	90	70
Tully River	168	134	80
Total	2221	1883	85

Woody vegetation clearing by replacement land cover

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

Period	Woody vegetation clearing rate (,000 ha/yr) for						Total*
	Pasture	Crop	Forestry	Mining	Infrastructure	Settlement	
1988–91	1.050	1.973	0.313	0.003	0.310	0.097	3.746
1991–95	0.221	3.036	0.294	0.000	0.040	0.048	3.638
1995–97	0.552	1.885	0.073	0.006	0.105	0.108	2.728
1997–99	0.689	0.852	0.042	0.000	0.069	0.027	1.679
1999–00	2.006	0.210	0.078	0.000	0.381	0.012	2.687
2000–01	0.392	0.089	0.051	0.000	0.103	0.024	0.657
2001–02	1.286	0.236	0.060	0.023	0.027	0.026	1.659
2002–03	0.750	0.165	0.191	0.006	0.023	0.020	1.155
2003–04	0.961	0.002	0.381	0.001	0.044	0.106	1.496
2004–05	1.011	0.012	0.655	0.004	0.052	0.072	1.806
2005–06	1.611	0.018	0.990	0.015	0.118	0.081	2.834
2006–07	0.920	0.079	0.550	0.007	0.009	0.026	1.591
2007–08	0.771	0.008	0.398	0.033	0.069	0.050	1.328
2008–09	0.688	0.000	0.070	0.001	0.025	0.026	0.810
2009–10	0.133	0.020	0.007	0.003	0.010	0.002	0.174
2010–11	0.280	0.014	0.450	0.000	0.040	0.018	0.801

* Total excludes natural tree death.

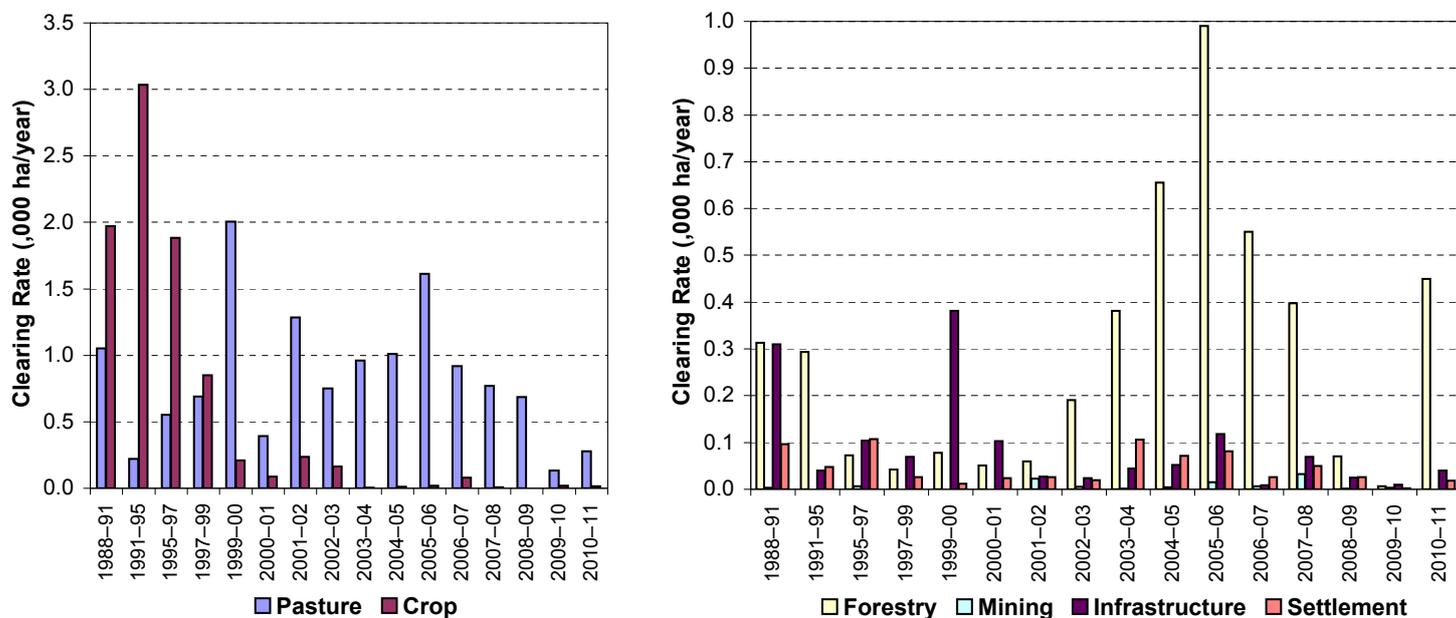


Figure 4. Woody vegetation clearing rates in the Terrain NRM region by replacement land cover.

This fact sheet is 13 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