

Land cover change in the **Wet Tropics** region 2011–12

Summary

The woody vegetation clearing rate in the Wet Tropics region increased by 75% from 802 hectares per year (ha/yr) in 2010–11 to 1 406 ha/yr in the 2011–12 era.

Despite the increase in total clearing, the proportion of woody remnant vegetation clearing rates continued to decline to 18% of total clearing for 2011–12.

Woody vegetation clearing to the replacement land cover class of forestry exceeded pasture, for the second consecutive era, representing 78% and 17% of total clearing respectively. The significant increase in forestry clearing is largely due to the clean-up and timber salvage from the damage caused by Cyclone Yasi to forestry plantations in 2011.

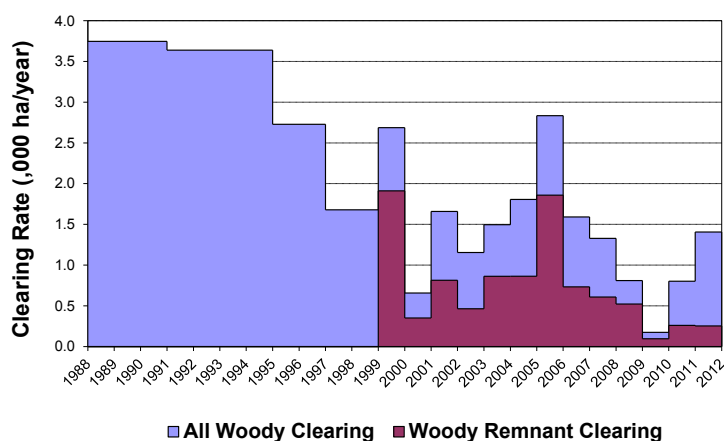


Figure 1. Woody vegetation clearing rates in the Wet Tropics region.

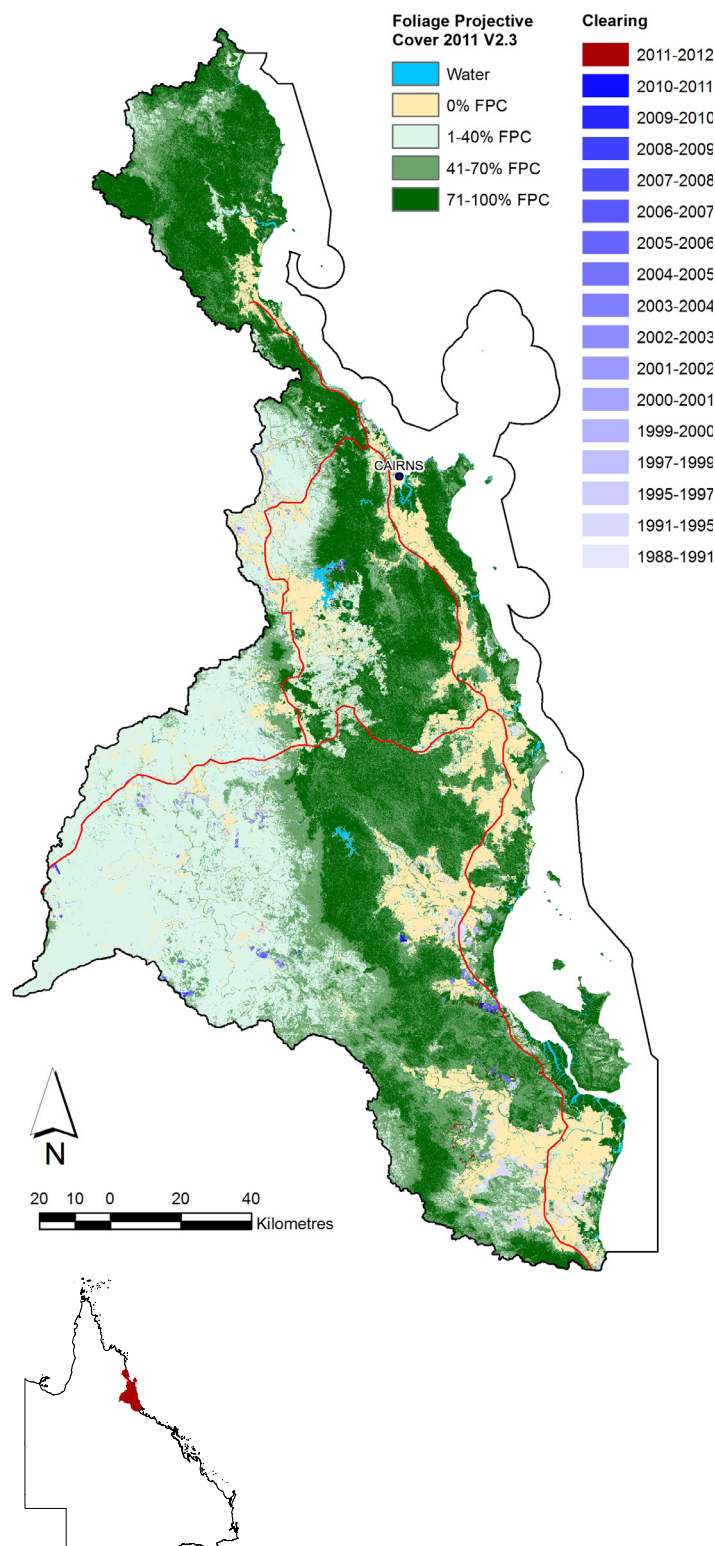


Figure 2. Woody vegetation clearing for each change period.

Woody vegetation clearing by remnant status

Table 1. Remnant and non-remnant woody vegetation clearing rates in the Wet Tropics 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
2011–12	1.153	0.253	1.406

* 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 Wet Tropics 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
2011–12	0.213	0.092	1.101	0.000	1.406

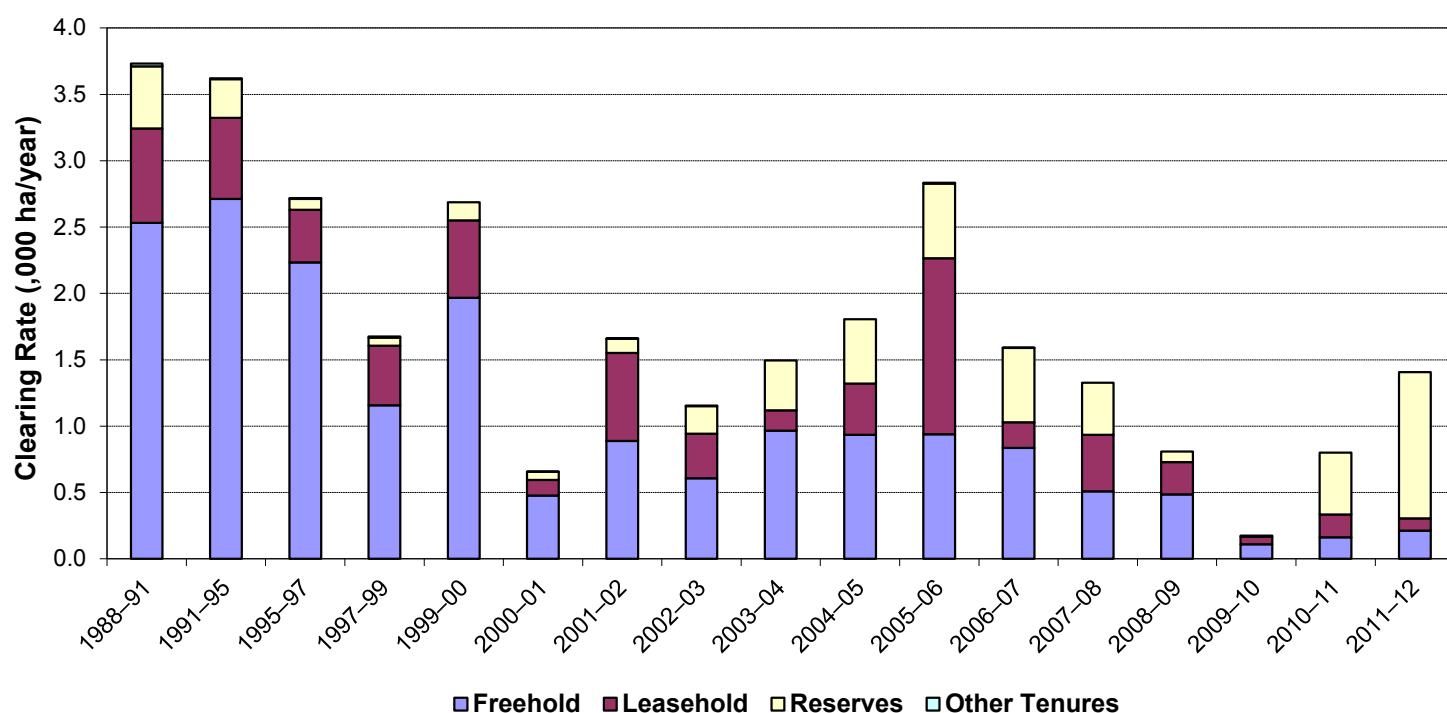


Figure 3. Woody vegetation clearing rates in the Wet Tropics region by tenure.

Woody vegetation clearing by subcatchment

Table 3. Woody vegetation clearing rates in the Wet Tropics region by subcatchment #.

Woody vegetation clearing rate (,000 ha/yr) for	Period				
	2007–08	2008–09	2009–10	2010–11	2011–12
Barron River	0.242	0.145	0.033	0.024	0.142
Daintree River	0.001	0.014	0.005	0.005	0.002
Endeavour River	0.000	0.006	0.002	0.001	0.003
Herbert River	0.695	0.502	0.117	0.211	0.776
Hinchinbrook Island	0.000	0.000	0.000	0.000	0.000
Mossman River	0.011	0.021	0.001	0.003	0.007
Mulgrave River	0.026	0.009	0.005	0.012	0.002
Murray River	0.273	0.047	0.004	0.508	0.448
North Johnstone River	0.024	0.023	0.000	0.009	0.016
Russell River	0.006	0.020	0.000	0.008	0.000
South Johnstone River	0.008	0.008	0.003	0.008	0.005
Tully River	0.041	0.016	0.004	0.011	0.006
Total	1.328	0.810	0.174	0.800	1.406

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 Wet Tropics region by subcatchment.

	Catchment area (,000 ha)	Area woody 2011 V2.3 (,000 ha)	% of catchment woody in 2011
Barron River	219	173	79
Daintree River	210	204	97
Endeavour River	8	7	96
Herbert River	983	854	87
Hinchinbrook Island	39	38	98
Mossman River	47	41	86
Mulgrave River	131	109	83
Murray River	111	84	76
North Johnstone River	103	85	82
Russell River	67	52	79
South Johnstone River	129	90	69
Tully River	168	134	79
Total	2216	1871	84

Woody vegetation clearing by replacement land cover

Table 5. Woody vegetation clearing rates in the Wet Tropics region by replacement land cover.

Period	Woody vegetation clearing rate (,000 ha/yr) for						
	Pasture	Crop	Forestry	Mining	Infrastructure	Settlement	Total*
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
2011–12	0.238	0.044	1.108	0.002	0.010	0.003	1.406

* Total excludes natural tree death.

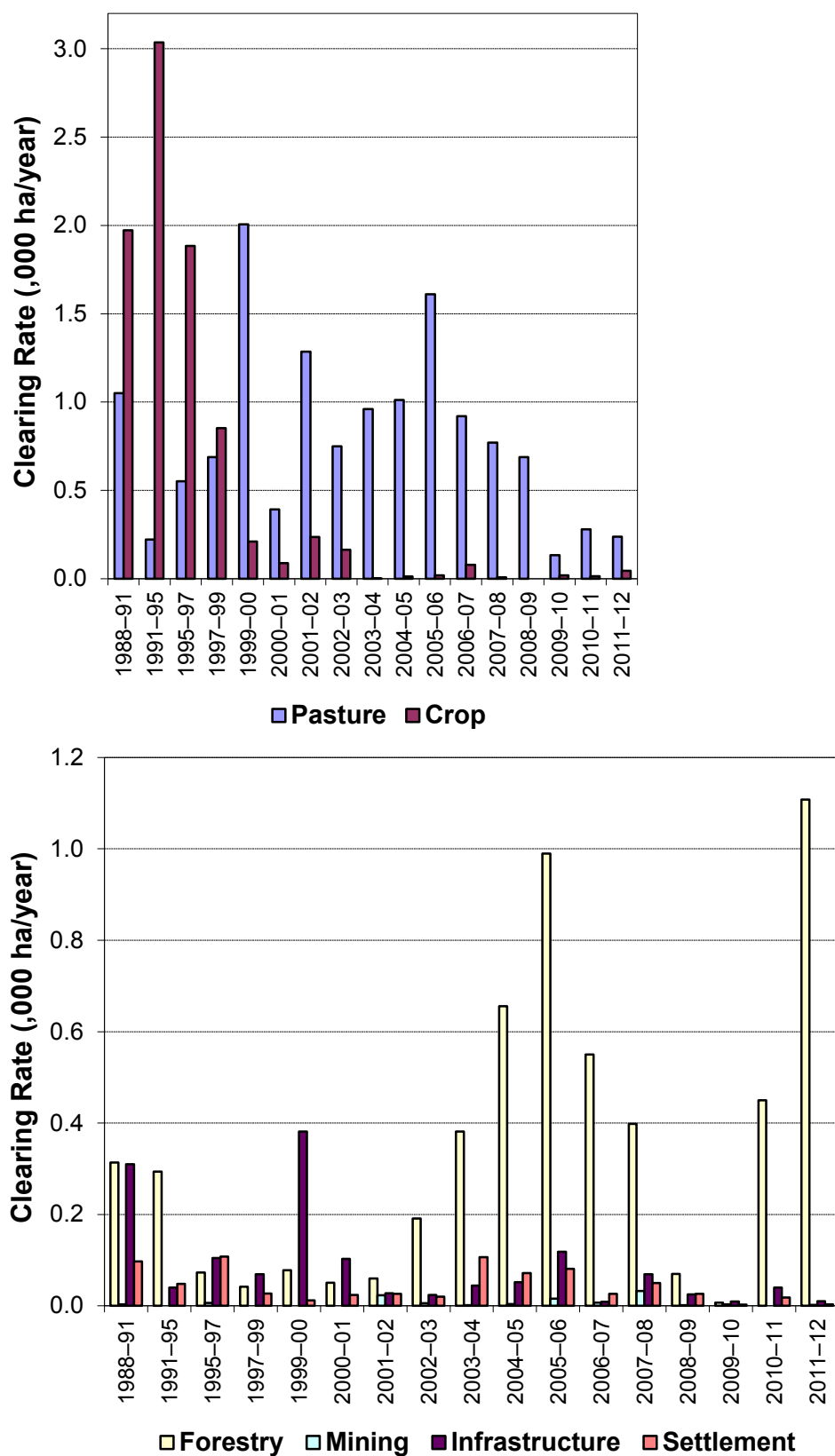


Figure 4. Woody vegetation clearing rates in the Wet Tropics region by replacement land cover.

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 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.

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: dave.harris@dsitia.qld.gov.au