

Land cover change in the Cape York region 2011–12

Summary

The woody vegetation clearing rate for 2011–12 in the Cape York region was 2 115 hectares per year (ha/yr) – a 90% increase from 2010–11. This is the first increase observed since the 2006–07 era.

Clearing of woody remnant vegetation accounted for 90% of the woody vegetation clearing in the region, at a rate of 1 920 ha/yr, which represented an increase of 88% from 2010–11.

The replacement land cover class of mining surpassed pasture, accounting for 66% of the clearing, while clearing to pasture accounted for 22% of the total clearing in this region.

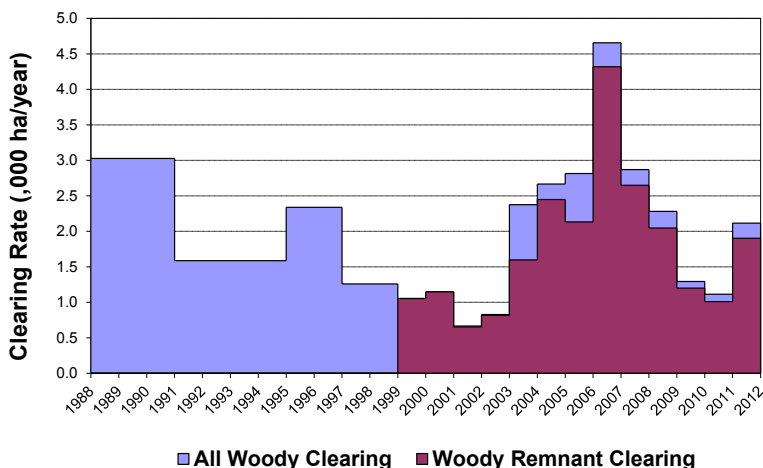


Figure 1. Woody vegetation clearing rates in the Cape York region.

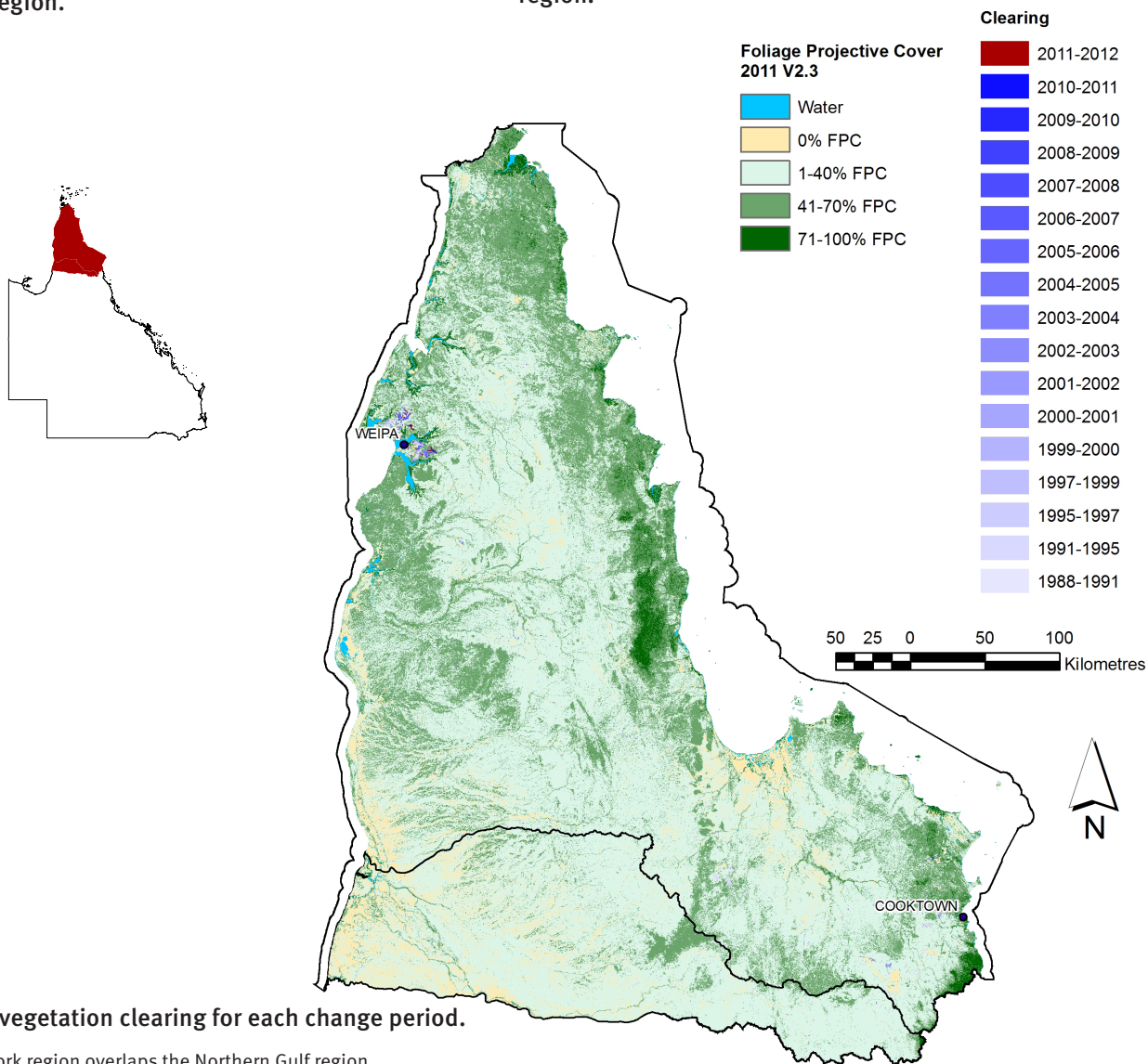


Figure 2. Woody vegetation clearing for each change period.

Note that the Cape York region overlaps the Northern Gulf region.

Woody vegetation clearing by remnant status

Table 1. Remnant and non-remnant woody vegetation clearing rates in the Cape York region.

Period	Woody vegetation clearing rate (,000 ha/yr) of		
	Non-remnant woody	Remnant woody*	Total woody
1999–00	0.002	1.053	1.055
2000–01	0.000	1.147	1.147
2001–02	0.012	0.654	0.666
2002–03	0.013	0.816	0.828
2003–04	0.778	1.598	2.376
2004–05	0.218	2.448	2.666
2005–06	0.682	2.133	2.814
2006–07	0.337	4.319	4.656
2007–08	0.220	2.649	2.870
2008–09	0.234	2.047	2.281
2009–10	0.093	1.200	1.294
2010–11	0.104	1.010	1.114
2011–12	0.213	1.902	2.115

* 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 Cape York region by tenure.

Period	Woody vegetation clearing rate (,000 ha/yr) on				
	Freehold	Leasehold	Reserves	Other tenures	Total
1988–91	0.408	1.528	0.073	1.018	3.027
1991–95	0.282	1.061	0.005	0.284	1.632
1995–97	0.525	0.888	0.034	0.892	2.339
1997–99	0.105	0.484	0.016	0.654	1.259
1999–00	0.181	0.214	0.002	0.658	1.055
2000–01	0.134	0.323	0.009	0.682	1.147
2001–02	0.168	0.480	0.002	0.016	0.666
2002–03	0.190	0.444	0.030	0.164	0.828
2003–04	0.888	0.659	0.072	0.756	2.375
2004–05	0.428	1.380	0.043	0.814	2.665
2005–06	0.139	1.595	0.066	1.015	2.814
2006–07	0.148	2.442	0.121	1.944	4.656
2007–08	0.023	0.942	0.008	1.896	2.870
2008–09	0.124	1.104	0.033	1.020	2.281
2009–10	0.075	0.577	0.019	0.622	1.294
2010–11	0.167	0.588	0.041	0.319	1.114
2011–12	0.142	0.399	0.057	1.518	2.115

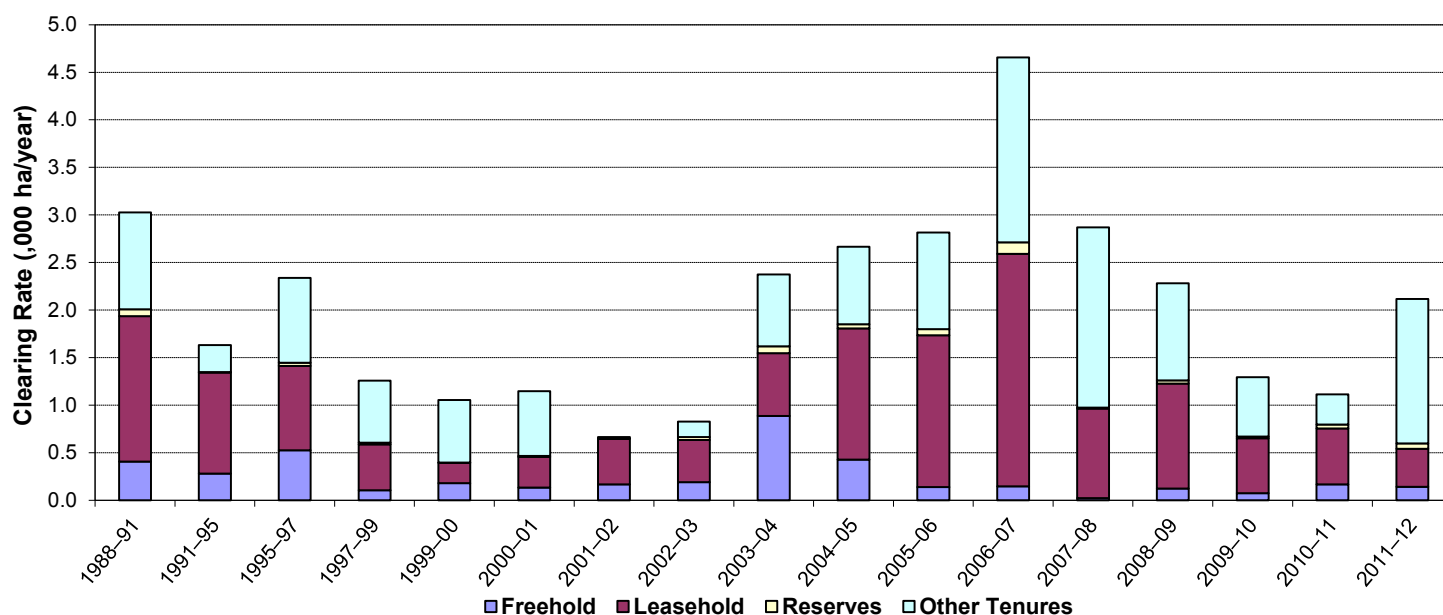


Figure 3. Woody vegetation clearing rates in the Cape York region by tenure.

Woody vegetation clearing by subcatchment

Table 3. Woody vegetation clearing rates in the Cape York region by subcatchment #.

Woody vegetation clearing rate (,000 ha/yr) for	Period				
	2007–08	2008–09	2009–10	2010–11	2011–12
Alice River	0.033	0.258	0.064	0.072	0.009
Archer River	0.121	0.104	0.004	0.095	0.079
Coen River	0.149	0.062	0.031	0.072	0.000
Coleman River	0.165	0.073	0.054	0.059	0.018
Ducie River	0.104	0.003	0.000	0.008	0.001
Edward River	0.040	0.026	0.019	0.040	0.031
Embley River	0.455	0.283	0.040	0.047	0.158
Endeavour River	0.000	0.044	0.019	0.038	0.129
Hann River	0.040	0.067	0.006	0.053	0.089
Holroyd River	0.069	0.063	0.005	0.003	0.006
Jacky Jacky Creek	0.000	0.000	0.000	0.000	0.001
Jardine River	0.011	0.016	0.000	0.000	0.012
Jeannie river	0.000	0.031	0.014	0.115	0.012
Kendall River	0.011	0.092	0.001	0.009	0.002
Lockhart River	0.003	0.000	0.003	0.001	0.000
McDonald River	0.000	0.013	0.000	0.000	0.000
Mission River	1.369	0.628	0.583	0.283	1.272
Mitchell River	0.040	0.007	0.172	0.046	0.004
Normanby River	0.025	0.111	0.137	0.118	0.043
Olive River	0.024	0.000	0.000	0.000	0.000
Palmer River	0.046	0.109	0.125	0.031	0.097
Pascoe River	0.002	0.000	0.003	0.008	0.000
Skardon River	0.000	0.000	0.000	0.000	0.000
Stewart River	0.000	0.007	0.000	0.014	0.000
Watson River	0.153	0.243	0.006	0.001	0.144
Wenlock River	0.009	0.042	0.007	0.003	0.010
Total	2.870	2.281	1.294	1.115	2.115

*includes overlap area

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 Cape York region by subcatchment.

	Catchment area (,000 ha)	Area woody 2011 V2.3 (,000 ha)	% of catchment woody in 2011
Alice River	1294	1159	90
Archer River	1061	1001	94
Coen River	321	310	97
Coleman River	534	497	93
Ducie River	358	346	97
Edward River	751	642	85
Embley River	192	181	94
Endeavour River	210	205	98
Hann River	956	832	87
Holroyd River	544	526	97
Jacky Jacky Creek	296	285	96
Jardine River	328	319	97
Jeannie river	363	341	94
Kendall River	485	480	99
Lockhart River	288	282	98
McDonald River	271	263	97
Mission River	268	244	91
Mitchell River	860	615	72
Normanby River	1484	1400	94
Olive River	205	201	98
Palmer River	812	783	96
Pascoe River	212	211	99
Skardon River	44	41	94
Stewart River	274	264	96
Watson River	468	454	97
Wenlock River	752	727	97
Total	13642	12619	93

Woody vegetation clearing by replacement land cover

Table 5. Woody vegetation clearing rates in the Cape York region by replacement land cover.

Period	Woody vegetation clearing rate (,000 ha/yr) for						Total*
	Pasture	Crop	Forestry	Mining	Infrastructure	Settlement	
1988-91	1.090	0.000	0.000	0.597	1.339	0.002	3.027
1991-95	0.520	0.608	0.000	0.368	0.089	0.001	1.587
1995-97	0.044	0.599	0.000	0.697	0.991	0.007	2.338
1997-99	0.154	0.655	0.000	0.018	0.431	0.002	1.260
1999-00	0.810	0.004	0.002	0.000	0.235	0.003	1.055
2000-01	0.918	0.000	0.000	0.000	0.229	0.000	1.147
2001-02	0.488	0.000	0.000	0.000	0.176	0.003	0.666
2002-03	0.718	0.000	0.000	0.005	0.105	0.000	0.828
2003-04	1.360	0.000	0.000	0.634	0.379	0.003	2.376
2004-05	0.735	0.000	0.000	0.833	1.086	0.012	2.666
2005-06	1.382	0.000	0.000	0.979	0.450	0.003	2.814
2006-07	2.309	0.000	0.000	1.841	0.491	0.015	4.656
2007-08	0.915	0.000	0.000	1.918	0.033	0.004	2.870
2008-09	0.891	0.000	0.000	0.732	0.656	0.002	2.281
2009-10	0.479	0.000	0.000	0.616	0.190	0.008	1.294
2010-11	0.535	0.000	0.000	0.328	0.248	0.003	1.114
2011-12	0.469	0.000	0.000	1.394	0.250	0.002	2.115

* Total excludes natural tree death.

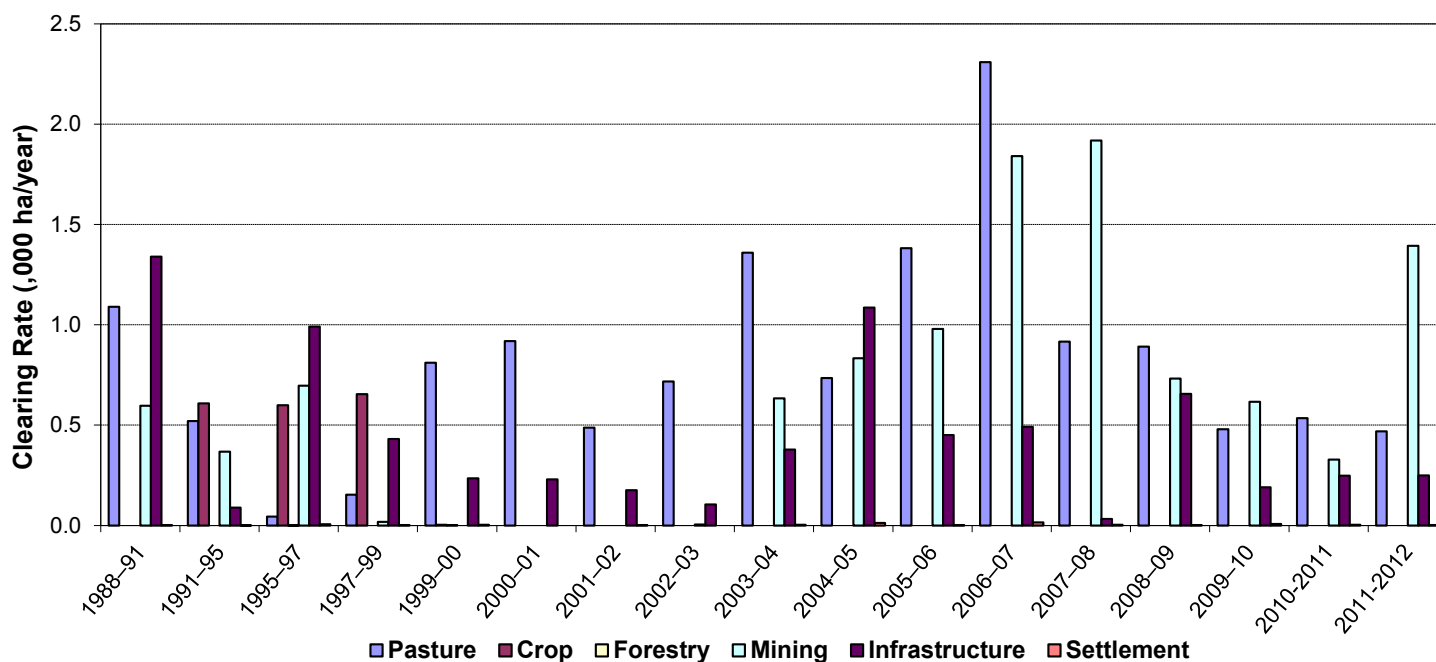


Figure 4. Woody vegetation clearing rates in the Cape York region by replacement land cover.

This fact sheet is 2 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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