

Land cover change in the Northern Gulf region 2011–12

Summary

In the 2011–12 era, the woody vegetation clearing rate in the Northern Gulf region increased by 28% compared to 2010–11, to a rate of 1 675 hectares per year (ha/yr).

Clearing of remnant woody vegetation comprised 94% of the woody vegetation clearing in the region.

The replacement land cover class for the woody vegetation clearing in 2011–12 was predominantly for pasture (85%).

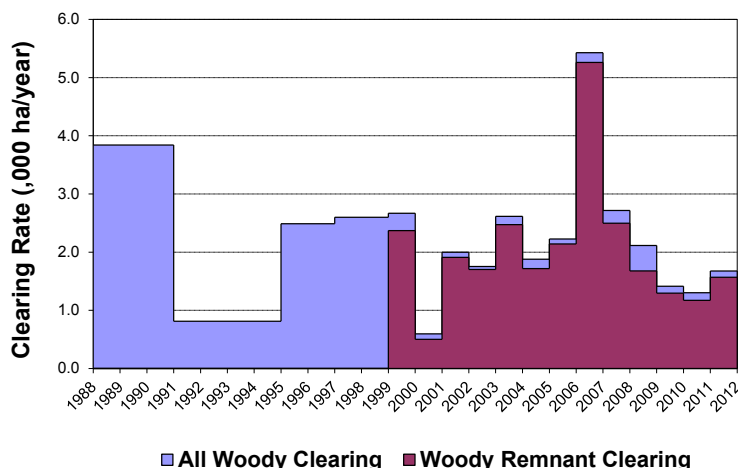


Figure 1. Woody vegetation clearing rates in the Northern Gulf region.

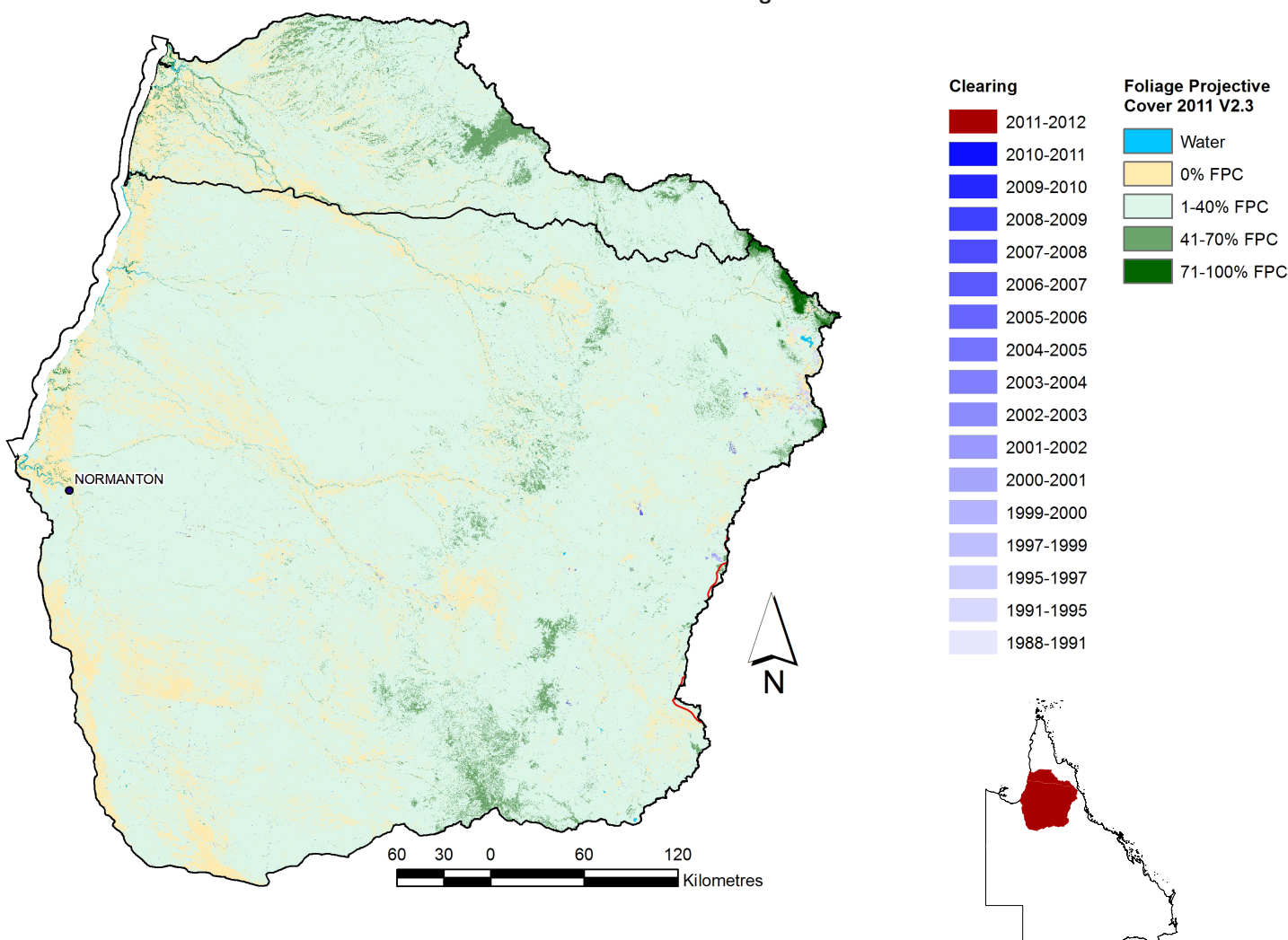


Figure 2. Woody vegetation clearing for each change period.

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

Woody vegetation clearing by remnant status

Table 1. Remnant and non-remnant woody vegetation clearing rates in the Northern Gulf region.

Period	Woody vegetation clearing rate (,000 ha/yr) of		
	Non-remnant woody	Remnant woody*	Total woody
1999–00	0.298	2.370	2.668
2000–01	0.094	0.501	0.595
2001–02	0.089	1.910	1.998
2002–03	0.051	1.702	1.753
2003–04	0.142	2.473	2.615
2004–05	0.161	1.717	1.878
2005–06	0.085	2.140	2.226
2006–07	0.167	5.261	5.428
2007–08	0.219	2.497	2.716
2008–09	0.437	1.677	2.114
2009–10	0.119	1.295	1.413
2010–11	0.131	1.171	1.302
2011–12	0.107	1.568	1.675

* 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 Northern Gulf region by tenure.

Period	Woody vegetation clearing rate (,000 ha/yr) on				
	Freehold	Leasehold	Reserves	Other tenures	Total
1988–91	1.651	2.138	0.016	0.036	3.841
1991–95	0.514	0.260	0.008	0.028	0.810
1995–97	0.927	1.492	0.042	0.025	2.487
1997–99	0.807	1.739	0.033	0.018	2.596
1999–00	1.012	1.612	0.022	0.022	2.668
2000–01	0.202	0.371	0.017	0.006	0.595
2001–02	0.138	1.854	0.002	0.004	1.998
2002–03	0.129	1.622	0.000	0.002	1.753
2003–04	0.235	2.365	0.015	0.000	2.615
2004–05	0.042	1.835	0.001	0.000	1.878
2005–06	0.386	1.833	0.007	0.000	2.226
2006–07	0.201	5.221	0.003	0.004	5.428
2007–08	0.151	2.558	0.006	0.001	2.716
2008–09	0.497	1.580	0.037	0.000	2.114
2009–10	0.084	1.325	0.005	0.000	1.413
2010–11	0.038	1.264	0.001	0.000	1.302
2011–12	0.089	1.583	0.003	0.000	1.675

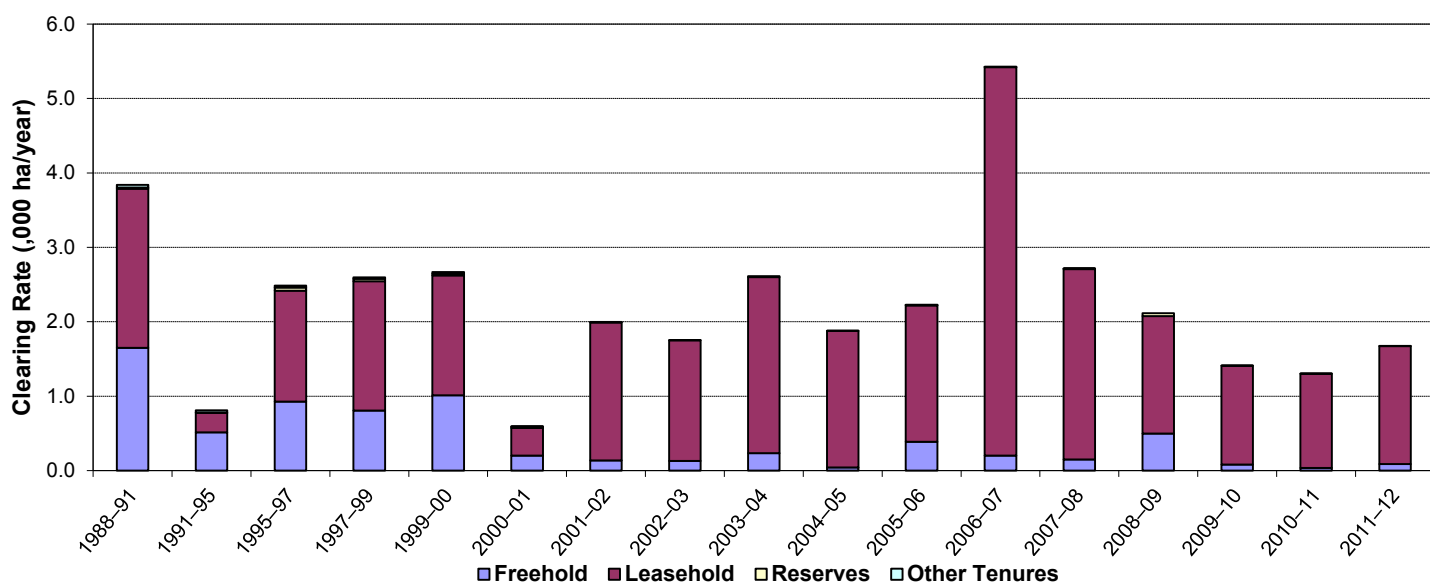


Figure 3. Woody vegetation clearing rates in the Northern Gulf region by tenure.

Woody vegetation clearing by subcatchment

Table 3. Woody vegetation clearing rates in the Northern Gulf 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
Einasteigh River	0.722	0.377	0.172	0.356	0.128
Gilbert River	0.265	0.131	0.121	0.138	0.131
Mitchell River	0.673	0.259	0.259	0.107	0.208
Norman River	0.533	0.378	0.453	0.499	0.820
Palmer River	0.046	0.109	0.125	0.031	0.097
Staaten River	0.171	0.078	0.080	0.015	0.094
Walsh River	0.274	0.525	0.140	0.084	0.189
Total	2.716	2.114	1.413	1.302	1.675

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 Northern Gulf region by subcatchment.

	Catchment area (,000 ha)	Area woody 2011 V2.3 (,000 ha)	% of catchment woody in 2011
Alice River	1294	1159	90
Einasteigh River	2437	2217	91
Gilbert River	2203	1894	86
Mitchell River	4142	3582	86
Norman River	5042	4259	84
Palmer River	832	800	96
Staaten River	2556	2387	93
Walsh River	896	803	90
Total	19403	17101	88

Woody vegetation clearing by replacement land cover

Table 5. Woody vegetation clearing rates in the Northern Gulf region by replacement land cover.

Period	Woody vegetation clearing rate (,000 ha/yr) for						Total*
	Pasture	Crop	Forestry	Mining	Infrastructure	Settlement	
1988–91	1.696	0.432	0.000	0.104	1.608	0.000	3.841
1991–95	0.100	0.633	0.000	0.021	0.058	0.000	0.812
1995–97	0.501	1.065	0.000	0.119	0.787	0.015	2.488
1997–99	0.957	0.495	0.055	0.051	1.041	0.000	2.599
1999–00	1.302	0.264	0.013	0.008	1.081	0.000	2.668
2000–01	0.198	0.089	0.000	0.003	0.305	0.000	0.595
2001–02	0.680	0.046	0.000	0.005	1.268	0.000	1.998
2002–03	0.628	0.013	0.000	0.001	1.111	0.000	1.753
2003–04	1.808	0.000	0.000	0.000	0.807	0.000	2.615
2004–05	0.890	0.005	0.000	0.002	0.981	0.000	1.878
2005–06	1.906	0.013	0.001	0.006	0.300	0.000	2.226
2006–07	5.316	0.000	0.000	0.002	0.110	0.000	5.428
2007–08	2.560	0.000	0.000	0.038	0.118	0.000	2.716
2008–09	1.702	0.001	0.000	0.006	0.398	0.007	2.114
2009–10	1.127	0.017	0.000	0.007	0.262	0.001	1.413
2010–11	0.809	0.000	0.000	0.001	0.492	0.000	1.302
2011–12	1.420	0.030	0.000	0.033	0.192	0.000	1.675

* Total excludes natural tree death.

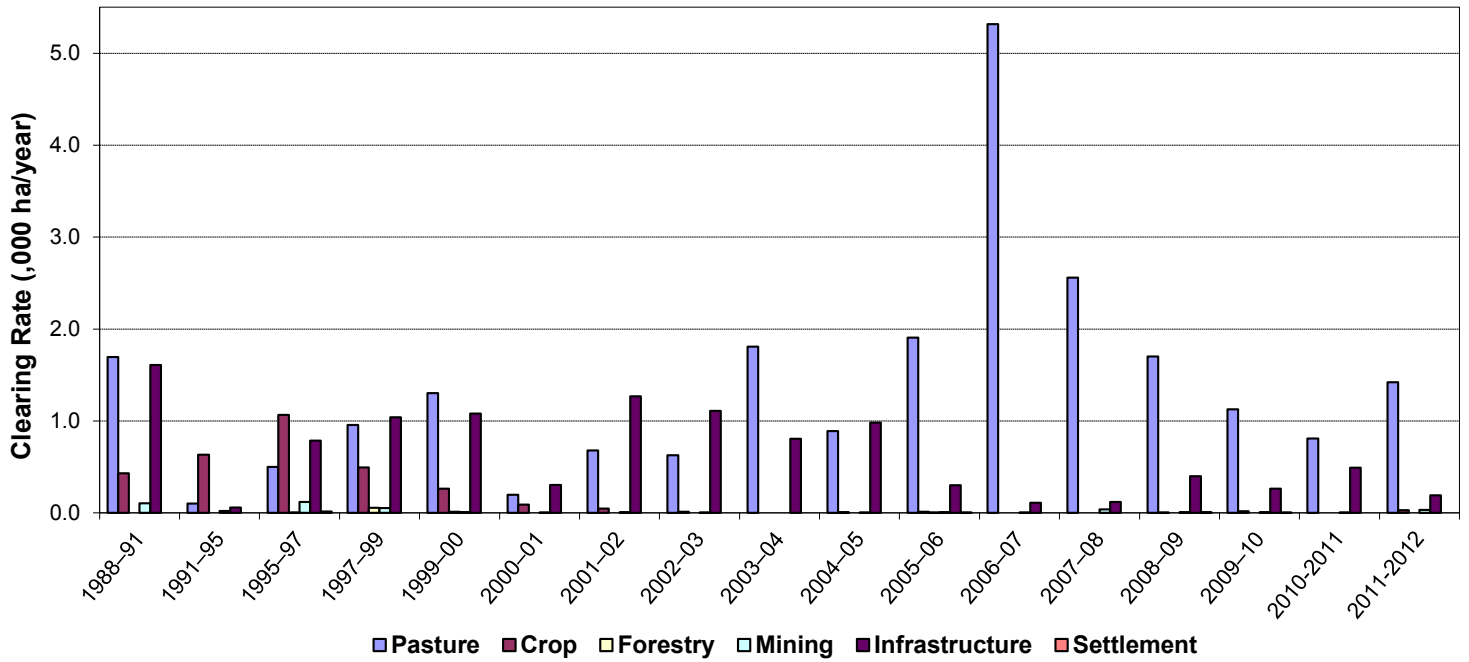


Figure 4. Woody vegetation clearing rates in the Northern Gulf region by replacement land cover.

This fact sheet is 6 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