

Land cover change in the Northern Gulf region 2012–14

Introduction

This fact sheet is 1 of 13 in a series detailing land cover change in Queensland's Natural Resource Management regions. These fact sheets are addenda to the report: Queensland Department of Science, Information Technology and Innovation. 2015. *Land cover change in Queensland 2012–13 and 2013–14: a Statewide Landcover and Trees Study (SLATS) report*. DSITI, Brisbane. Please refer to this report for further background, terminology, methods and explanatory notes.

Figure 1 and Table 1 provide an historical overview of the remnant and non-remnant woody vegetation clearing trends within the region. The spatial distribution of the 2012–13, 2013–14 and historical woody vegetation clearing is shown in Figure 2. An overview of woody vegetation clearing rates categorised by tenure is provided in Table 2 and Figure 3. Woody vegetation clearing rates and remaining woody vegetation in each catchment within the region are provided in Tables 3 and 4, respectively, while replacement land cover information is provided in Table 5 and Figure 4.

Summary

In 2012–13, the woody vegetation clearing rate for the Northern Gulf region was 1 385 hectares per year (ha/year), a decrease of 17% from the 2011–12 woody vegetation clearing rate of 1 675 ha/year (Table 2 and Figure 1).

In 2013–14, the woody vegetation clearing rate was 2 467 ha/year, an increase of 78% from the 2012–13 woody vegetation clearing rate (1 385 ha/year) (Table 2 and Figure 1).

In 2012–13, the clearing rate of remnant woody vegetation in the region was 1 167 ha/year, a decrease of 26% from the 1 568 ha/year reported in the 2011–12 period. In 2013–14, the remnant woody vegetation clearing rate was 2 105 ha/year, an increase of 80% from the 2012–13 period (1 167 ha/year). The clearing of remnant woody vegetation accounted for approximately 85% of the total woody vegetation clearing in the region for both periods (Table 1 and Figure 1).

The replacement land cover class of pasture represented 71% and 89% of the region's woody vegetation clearing in the 2012–13 and 2013–14 periods, respectively (Table 5 and Figure 4).

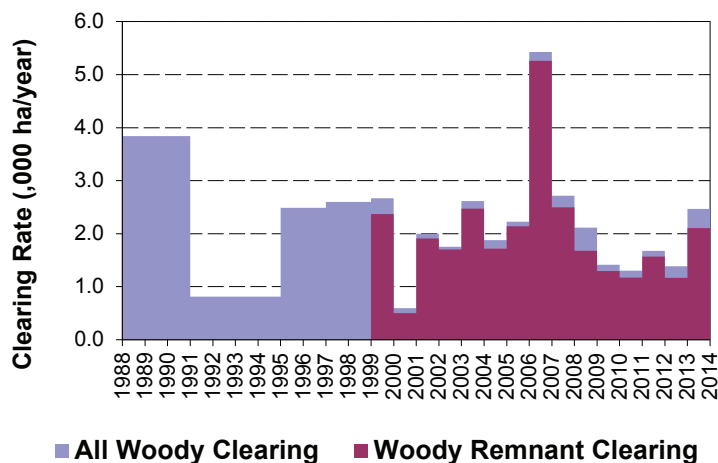


Figure 1. Woody vegetation clearing rates (,000 ha/year) in the Northern Gulf region.

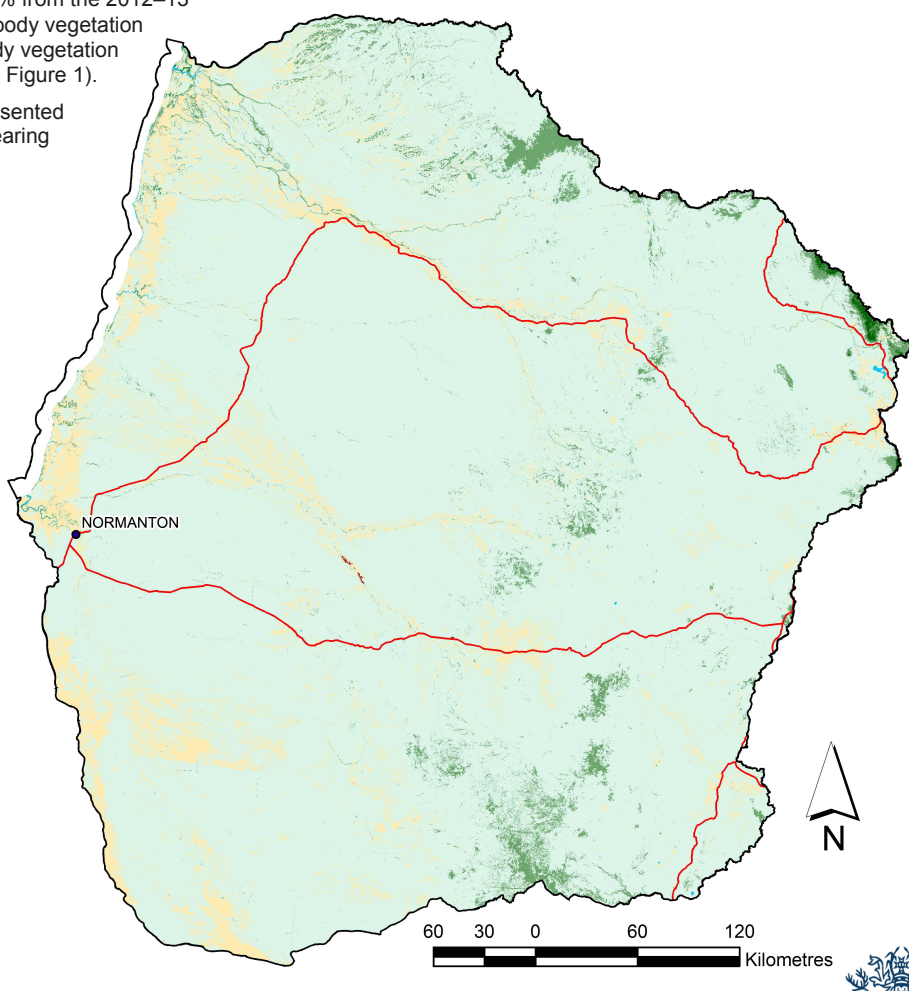
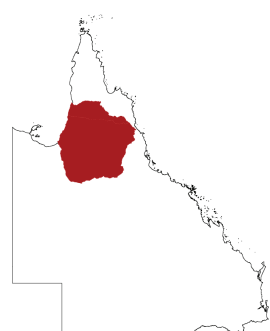


Figure 2. Spatial distribution of current (2012–13 and 2013–14) and historical (1988–12) woody vegetation clearing in the Northern Gulf region.

Woody vegetation clearing by remnant status

Table 1. Remnant and non-remnant woody vegetation clearing rates (,000 ha/year) in the Northern Gulf region.

Period	Non-remnant woody	Remnant woody	Total woody clearing
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
2012–13	0.218	1.167	1.385
2013–14	0.362	2.105	2.467

Woody vegetation clearing by tenure

Table 2. Woody vegetation clearing rates (,000 ha/year) in the Northern Gulf region by tenure.

Period	Freehold	Leasehold	Other tenures	Other reserves	Total
1988–91	1.651	2.138	0.036	0.016	3.841
1991–95	0.514	0.260	0.028	0.008	0.810
1995–97	0.927	1.492	0.025	0.042	2.487
1997–99	0.807	1.739	0.018	0.033	2.596
1999–00	1.012	1.612	0.022	0.022	2.668
2000–01	0.202	0.371	0.006	0.017	0.595
2001–02	0.138	1.854	0.004	0.002	1.998
2002–03	0.129	1.622	0.002	0.000	1.753
2003–04	0.235	2.365	0.000	0.015	2.615
2004–05	0.042	1.835	0.000	0.001	1.878
2005–06	0.386	1.833	0.000	0.007	2.226
2006–07	0.201	5.221	0.004	0.003	5.428
2007–08	0.151	2.558	0.001	0.006	2.716
2008–09	0.497	1.580	0.000	0.037	2.114
2009–10	0.084	1.325	0.000	0.005	1.413
2010–11	0.038	1.264	0.000	0.001	1.303
2011–12	0.090	1.583	0.000	0.003	1.676
2012–13	0.184	1.191	0.001	0.009	1.385
2013–14	0.178	2.273	0.002	0.014	2.467

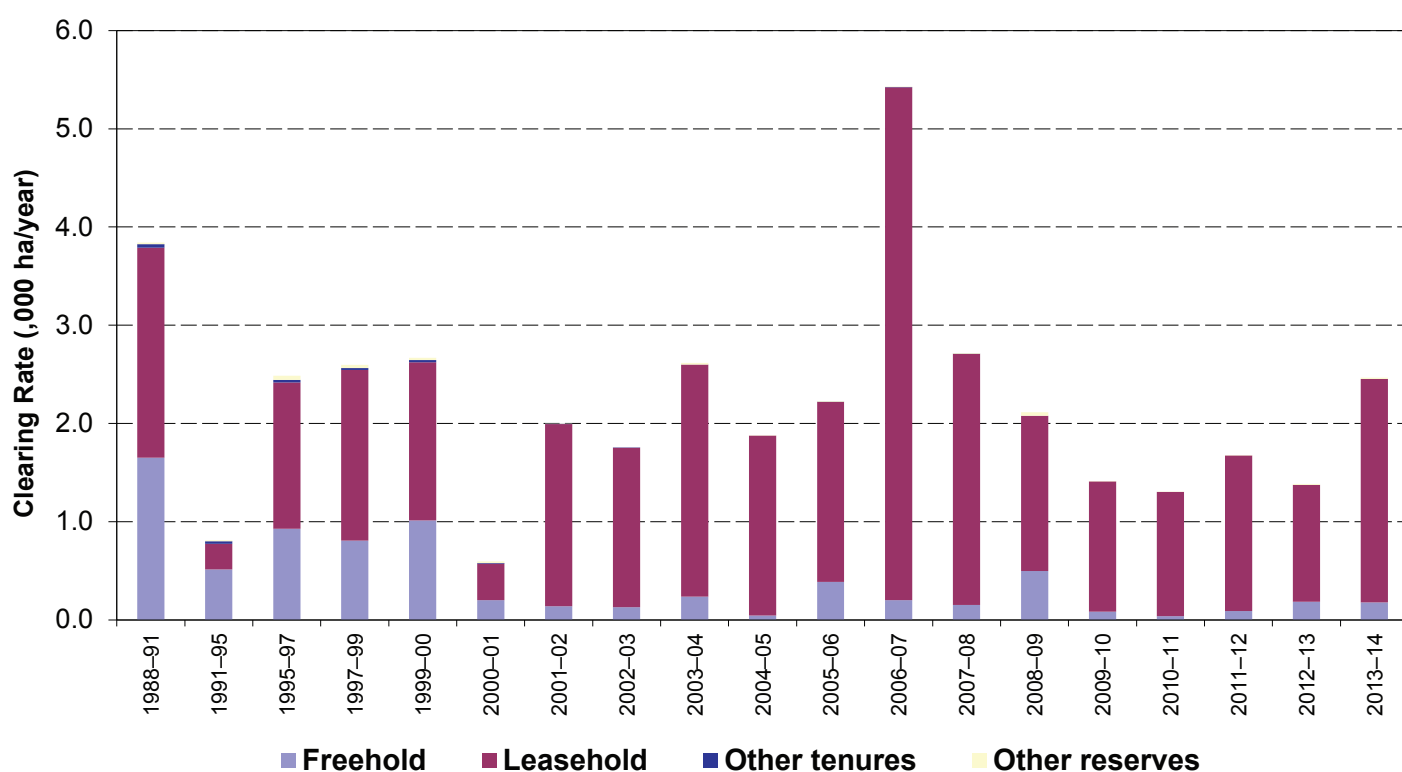


Figure 3. Woody vegetation clearing rates (,000 ha/year) in the Northern Gulf region by tenure.

Woody vegetation clearing by catchment

Remaining woody vegetation

Table 3. Woody vegetation clearing rates (,000 ha/year) in the Northern Gulf region by catchment.

Catchments	2009–10	2010–11	2011–12	2012–13	2013–14
Alice River	0.064	0.072	0.009	0.080	0.031
Einasleigh River	0.172	0.356	0.128	0.370	0.132
Gilbert River	0.121	0.138	0.131	0.174	1.511
Mitchell River	0.259	0.107	0.208	0.286	0.163
Norman River	0.453	0.499	0.82	0.222	0.334
Palmer River	0.125	0.031	0.097	0.091	0.061
Staaten River	0.080	0.015	0.094	0.026	0.028
Walsh River	0.140	0.084	0.189	0.137	0.205
Total	1.413	1.302	1.675	1.385	2.467

Table 4. Remaining woody vegetation in the Northern Gulf region by catchment.

Catchments	Area (,000 ha)	2012 wooded vegetation cover (,000 ha)	% wooded vegetation cover
Alice River	1294	1163	90
Einasleigh River	2437	2210	91
Gilbert River	2203	1880	85
Mitchell River	4142	3568	86
Norman River	5042	4266	85
Palmer River	832	799	96
Staaten River	2556	2383	93
Walsh River	896	800	89
Total	1294	1163	90

Woody vegetation clearing by replacement land cover

Table 5. Woody vegetation clearing rates (,000 ha/year) in the Northern Gulf region by replacement land cover.

Period	Pasture	Crop	Forestry	Mining	Infrastructure	Settlement	Total
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
2012–13	0.979	0.109	0.000	0.048	0.248	0.000	1.385
2013–14	2.191	0.103	0.000	0.026	0.146	0.000	2.467

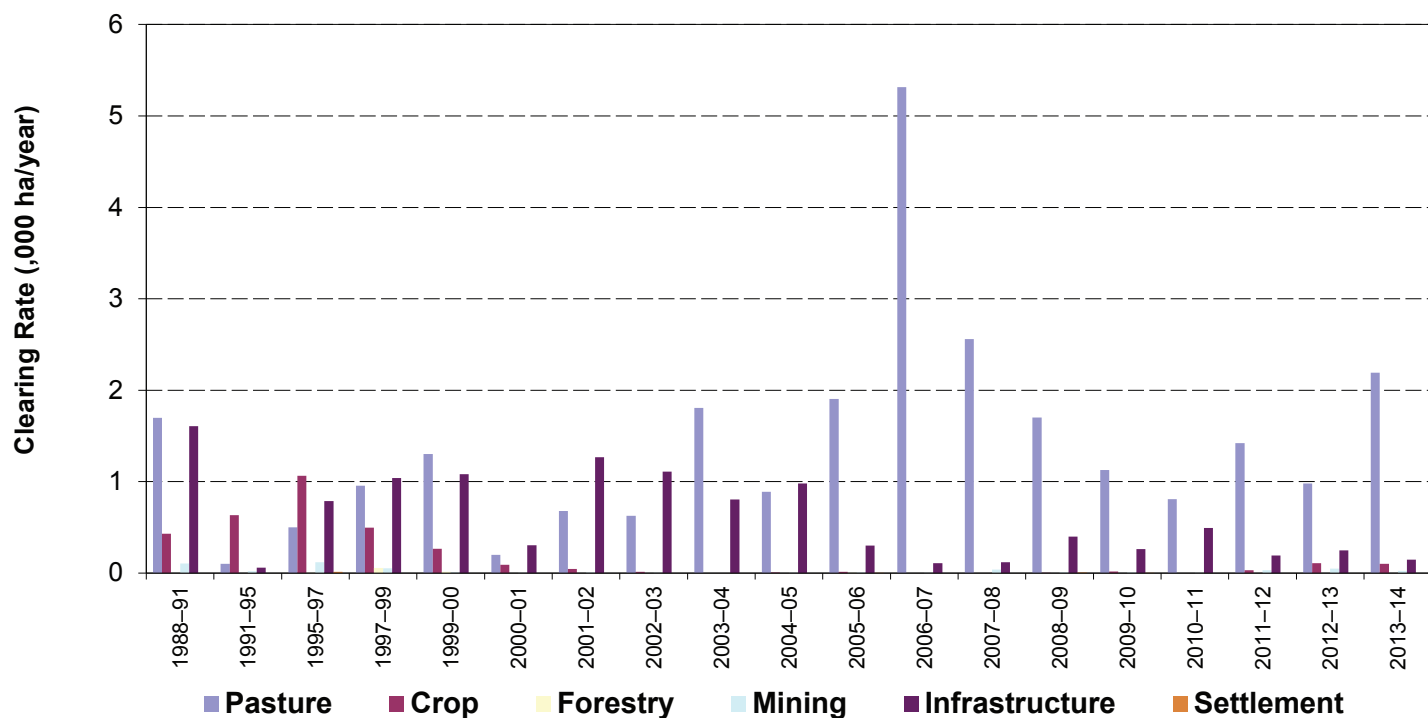


Figure 4. Woody vegetation clearing rates (,000 ha/year) in the Northern Gulf region by replacement land cover.

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