Land cover change in the Burdekin 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 Burdekin region was 38 655 hectares per year (ha/year), an increase of 105% from the 2011–12 woody vegetation clearing rate of 18 900 ha/year (Table 2 and Figure 1).

In 2013–14, the woody vegetation clearing rate was 29 818 ha/year, a decrease of 23% from the 2012–13 woody vegetation clearing rate (38 655 ha/year) (Table 2 and Figure 1).

In 2012–13, the clearing rate of remnant woody vegetation in the region was 7 189 ha/year, an increase of 21% from the 5 918 ha/year reported in the 2011–12 period. In 2013–14, the remnant woody vegetation clearing rate was 4 980 ha/year, a decrease of 31% from the 2012–13 period (7 189 ha/year). The clearing of remnant woody vegetation accounted for 19% and 17% of the total woody vegetation clearing in the region for the 2012–13 and 2013–14 periods, respectively (Table 1 and Figure 1).

The replacement land cover class for pasture represented 98% of the region's woody vegetation clearing for both periods (Table 5 and Figure 4)





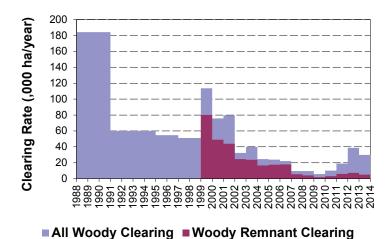


Figure 1. Woody vegetation clearing rates (,000 ha/year) in the Burdekin region.

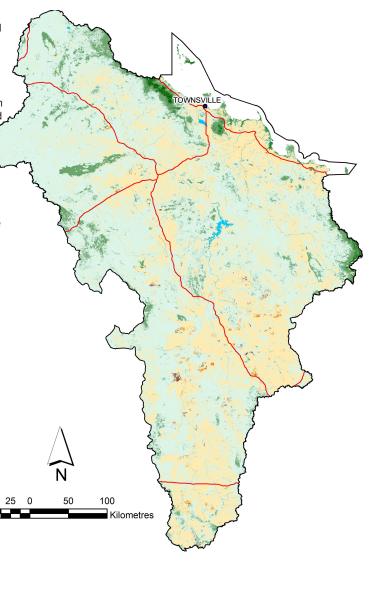


Figure 2. Spatial distribution of current (2012–13 and 2013–14) and historical (1988–12) woody vegetation clearing in the Burdekin region.



Woody vegetation clearing by remnant status

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

Period	Non-remnant woody	Remnant woody	Total woody clearing
1999–00	33.557	80.086	113.642
2000–01	26.807	48.933	75.739
2001–02	35.783	43.840	79.622
2002–03	7.821	24.523	32.344
2003–04	16.091	23.679	39.770
2004–05	7.985	16.554	24.539
2005–06	6.423	17.468	23.891
2006–07	4.228	17.829	22.057
2007–08	4.069	5.476	9.545
2008–09	5.442	4.039	9.481
2009–10	3.991	1.717	5.709
2010–11	6.981	3.079	10.060
2011–12	12.981	5.918	18.900
2012–13	31.466	7.189	38.655
2013–14	24.838	4.980	29.818

Woody vegetation clearing by tenure

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

Period	Freehold Leasehold		Other tenures	Other reserves	Total	
1988–91	36.812	146.770	0.414	0.167	184.163	
1991–95	12.932	47.020	0.087	0.015	60.054	
1995–97	12.762	41.575	0.264	0.047	54.649	
1997–99	10.722	39.573	0.765	0.023	51.082	
1999–00	25.134	88.417	0.028	0.064	113.642	
2000–01	5.860	69.865	0.006	0.008	75.739	
2001–02	8.468	71.072	0.051	0.032	79.622	
2002–03	3.440	28.887	0.006	0.010	32.344	
2003–04	5.961	33.662	0.106	0.041	39.770	
2004–05	3.619	20.867	0.001	0.052	24.539	
2005–06	4.677	19.159	0.004	0.051	23.891	
2006–07	3.325	18.710	0.005	0.017	22.057	
2007–08	1.922	7.602	0.004	0.017	9.545	
2008–09	1.125	8.342	0.000	0.013	9.481	
2009–10	0.751	4.940	0.000	0.018	5.709	
2010–11	2.907	7.124	0.004	0.024	10.059	
2011–12	4.155	14.526	0.001	0.217	18.900	
2012–13	12.134	26.499	0.000	0.022	38.655	
2013–14	4.273	25.530	0.000	0.014	29.818	

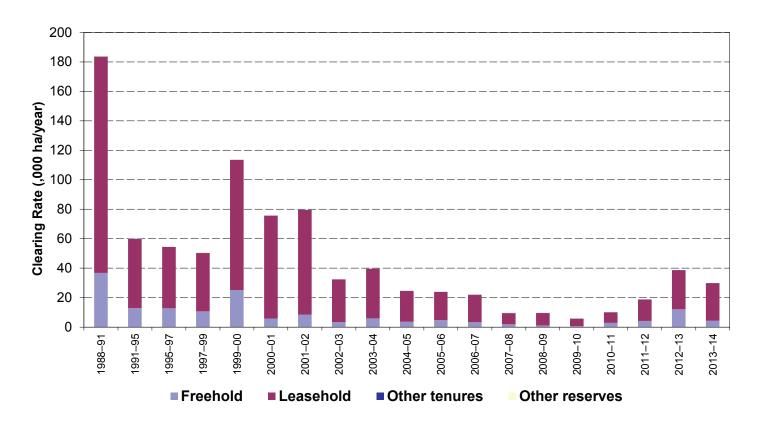


Figure 3. Woody vegetation clearing rates (,000 ha/year) in the Burdekin region by tenure.

Woody vegetation clearing by catchment

Remaining woody vegetation

in the Burdekin region by catchment.

Table 3. Woody vegetation clearing rates (,000 ha/year) Table 4. Remaining woody vegetation in the Burdekin region by catchment.

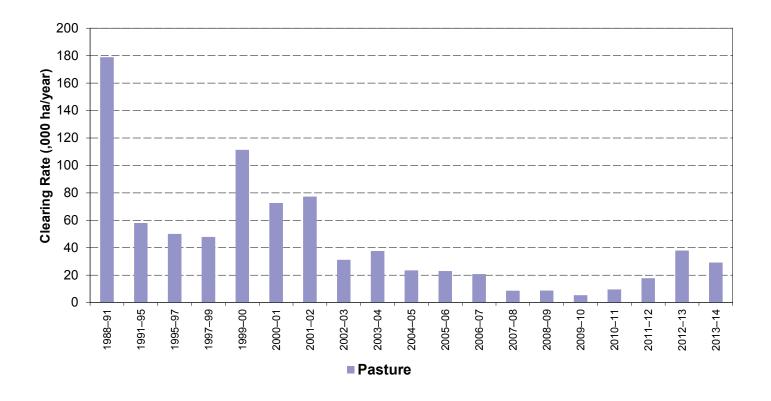
Catchments	2009–10	2010–11	2011–12	2012–13	2013–14
Barratta Creek	0.000	0.030	0.037	0.063	0.290
Black River	0.202	0.092	0.091	0.106	0.112
Bohle River	0.136	0.091	0.181	0.091	0.055
Bowen River	0.122	0.149	0.142	0.347	0.347
Don River	0.009	0.830	1.095	0.679	0.187
Haughton River	0.002	0.044	0.044	0.096	0.040
Lower Burdekin River	0.056	0.817	0.918	0.714	0.250
Proserpine river	0.002	0.000	0.003	0.001	0.001
Ross River	0.003	0.032	0.042	0.148	0.062
Suttor River	4.722	7.333	14.959	34.398	27.881
Upper Burdekin River	0.454	0.641	1.383	2.003	0.585
Total	5.709	10.060	18.896	38.655	29.818

Catchments	Area (,000 ha)	2012 wooded vegetation cover (,000 ha)	% wooded vegetation cover	
Barratta Creek	183	50	27	
Black River	106	91	86	
Bohle River	37	17	46	
Bowen River	945	672	71	
Don River	373	198	53	
Haughton River	222	127	57	
Lower Burdekin River	1048	595	57	
Proserpine river	1	0	57	
Ross River	134	82	61	
Suttor River	7393	4393	59	
Upper Burdekin River	3624	2927	81	
Total	13120	8480	65	

Woody vegetation clearing by replacement land cover

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

Period	Pasture	Crop	Forestry	Mining	Infrastructure	Settlement	Total
1988–91	178.877	2.170	0.000	0.335	2.756	0.091	184.229
1991–95	58.008	1.335	0.007	0.162	0.431	0.112	60.055
1995–97	50.011	3.288	0.001	0.321	0.941	0.096	54.658
1997–99	47.893	1.490	0.033	0.139	1.478	0.050	51.083
1999–00	111.344	0.218	0.009	0.059	1.791	0.221	113.642
2000–01	72.627	0.309	0.004	0.067	2.636	0.096	75.739
2001–02	77.296	0.002	0.000	0.065	2.256	0.002	79.622
2002–03	31.159	0.019	0.000	0.053	1.113	0.000	32.344
2003–04	37.590	0.080	0.000	0.182	1.704	0.214	39.770
2004–05	23.506	0.000	0.019	0.193	0.598	0.223	24.539
2005–06	22.982	0.033	0.140	0.208	0.407	0.120	23.891
2006–07	20.770	0.002	0.000	0.384	0.482	0.419	22.057
2007–08	8.630	0.016	0.008	0.303	0.300	0.288	9.545
2008–09	8.760	0.005	0.014	0.114	0.540	0.047	9.481
2009–10	5.376	0.000	0.005	0.116	0.119	0.092	5.709
2010–11	9.562	0.001	0.007	0.122	0.270	0.098	10.060
2011–12	17.684	0.007	0.209	0.361	0.451	0.188	18.900
2012–13	37.879	0.152	0.008	0.366	0.183	0.067	38.655
2013–14	29.123	0.260	0.012	0.218	0.176	0.029	29.818



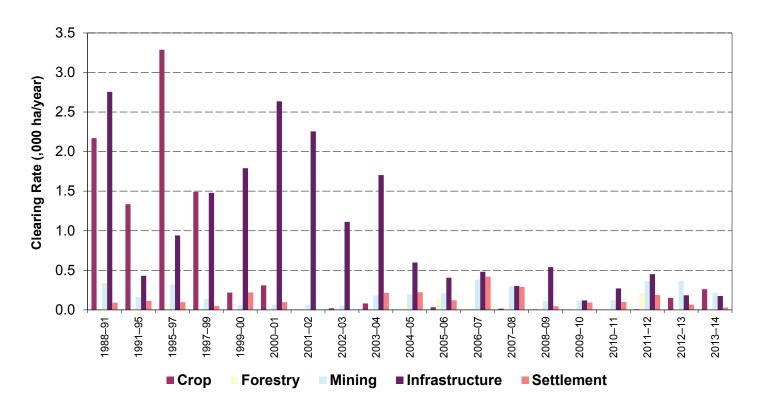


Figure 4. Woody vegetation clearing rates (,000 ha/year) in the Burdekin region by replacement land cover.

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