

Land cover change in the Burdekin region 2011–12

Summary

The woody vegetation clearing rate for the Burdekin region for the 2011–12 era was 18 900 hectares per year (ha/yr). This was an 88% increase over the 10 060 ha/yr reported for 2010–11.

Remnant woody vegetation clearing (5 918 ha/yr) accounted for 31% of total woody vegetation clearing in the region, a very similar proportion to the 2009–10 and 2010–11 eras.

Clearing to pasture represented 94% of the total woody vegetation clearing in the region for the 2011–12 era.

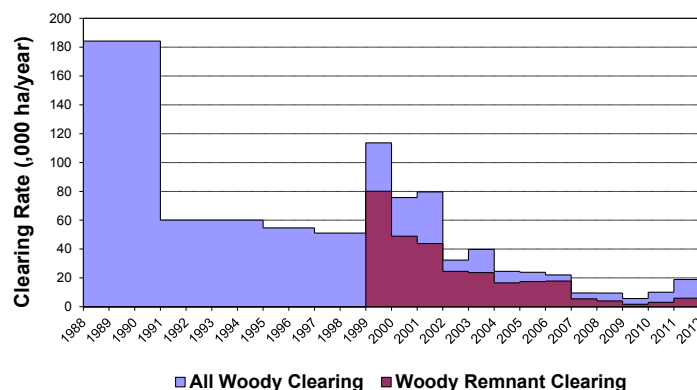


Figure 1. Woody vegetation clearing rates in the Burdekin region.

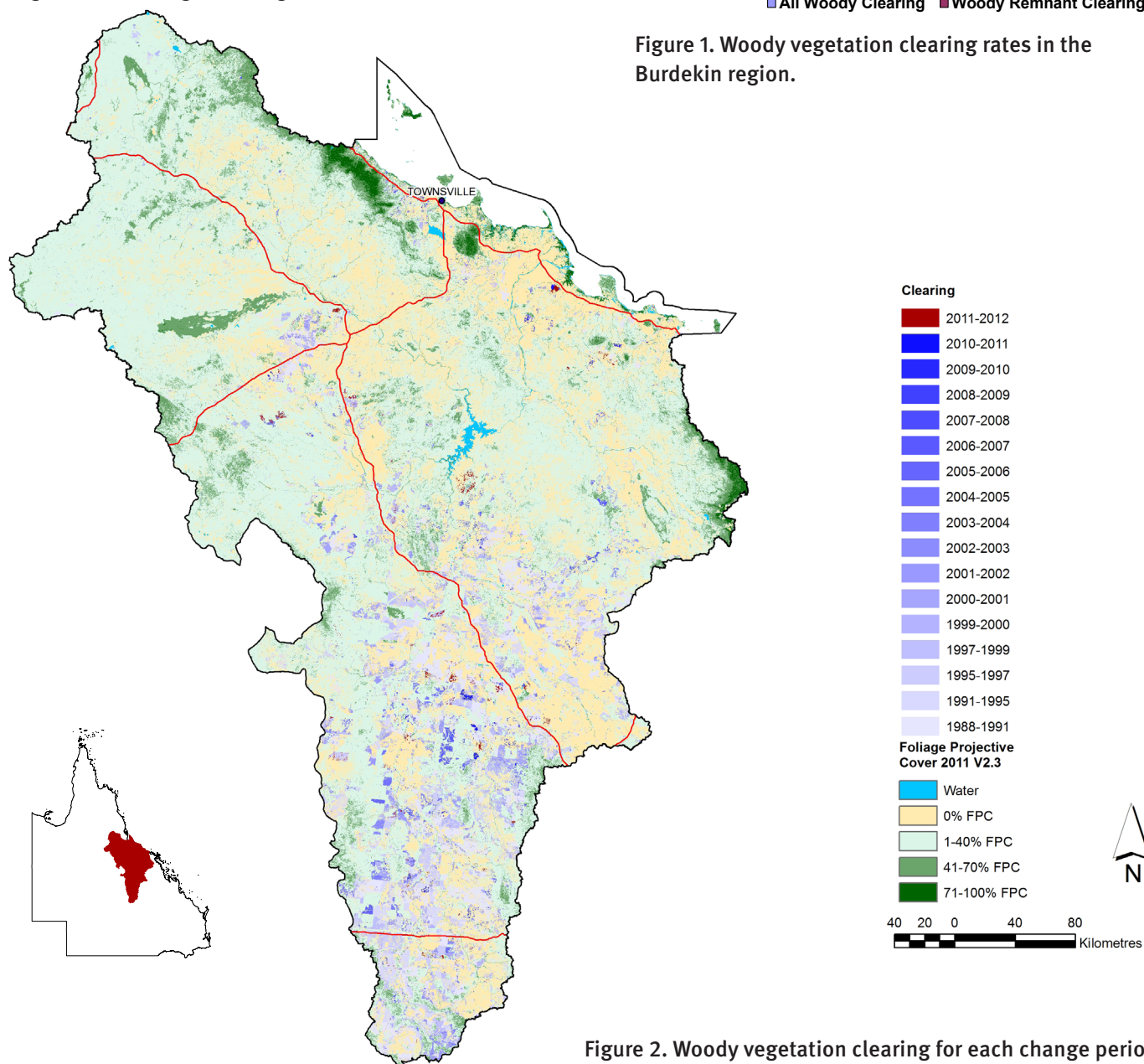


Figure 2. Woody vegetation clearing for each change period.

Woody vegetation clearing by remnant status

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

Period	Woody vegetation clearing rate (,000 ha/yr) of		
	Non-remnant woody	Remnant woody*	Total woody
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

* 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 Burdekin region by tenure.

Period	Woody vegetation clearing rate (,000 ha/yr) on				
	Freehold	Leasehold	Reserves	Other tenures	Total
1988–91	36.812	146.770	0.167	0.414	184.163
1991–95	12.932	47.020	0.015	0.087	60.054
1995–97	12.762	41.575	0.047	0.264	54.649
1997–99	10.722	39.573	0.023	0.765	51.082
1999–00	25.134	88.417	0.064	0.028	113.642
2000–01	5.860	69.865	0.008	0.006	75.739
2001–02	8.468	71.072	0.032	0.051	79.622
2002–03	3.440	28.887	0.010	0.006	32.344
2003–04	5.961	33.662	0.041	0.106	39.770
2004–05	3.619	20.867	0.052	0.001	24.539
2005–06	4.677	19.159	0.051	0.004	23.891
2006–07	3.325	18.710	0.017	0.005	22.057
2007–08	1.922	7.602	0.017	0.004	9.545
2008–09	1.125	8.342	0.013	0.000	9.481
2009–10	0.751	4.940	0.018	0.000	5.709
2010–11	2.907	7.124	0.024	0.004	10.059
2011–12	4.155	14.526	0.217	0.001	18.900

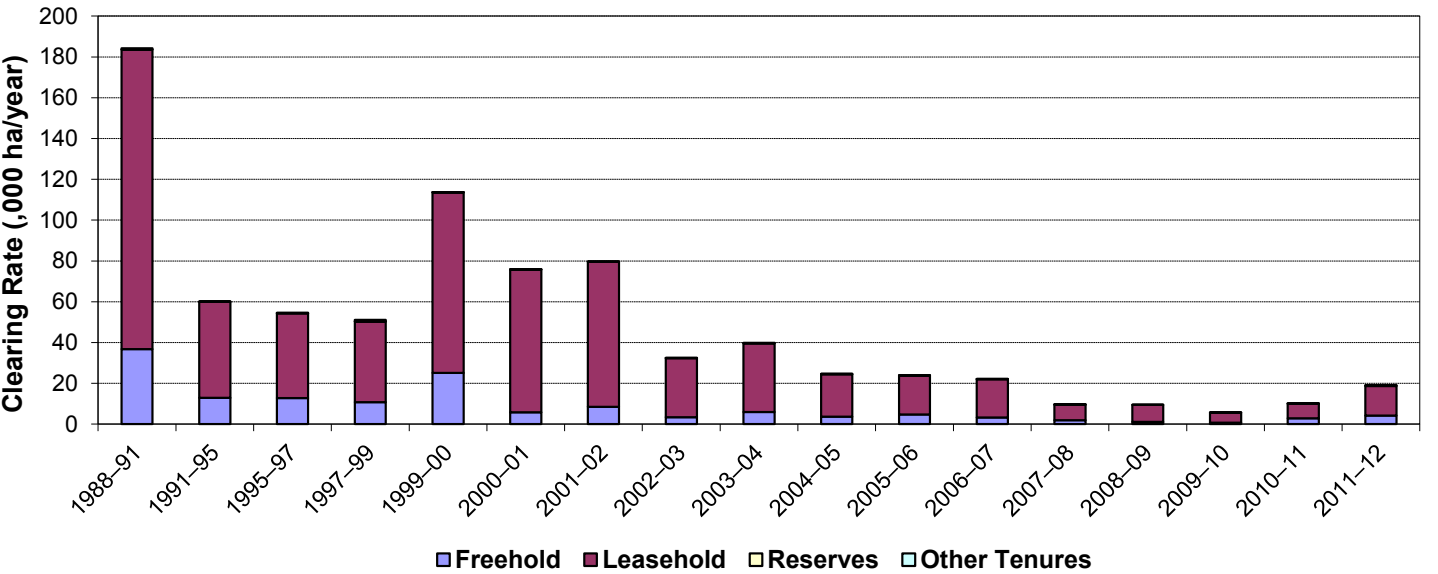


Figure 3. Woody vegetation clearing rates in the Burdekin region by tenure.

Woody vegetation clearing by subcatchment

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

Woody vegetation clearing rate (,000 ha/yr) for	Period				
	2007–08	2008–09	2009–10	2010–11	2011–12
Barratta Creek	0.049	0.622	0.000	0.030	0.037
Black River	0.339	11.362	0.202	0.092	0.091
Bohle River	0.355	0.012	0.136	0.091	0.181
Bowen River	0.405	0.004	0.122	0.149	0.142
Don River	0.319	0.095	0.009	0.830	1.095
Haughton River	0.238	1.761	0.002	0.044	0.044
Lower Burdekin River	0.565	0.871	0.056	0.817	0.918
Proserpine river	0.000	0.003	0.002	0.000	0.003
Ross River	0.123	0.163	0.003	0.032	0.042
Suttor River	6.028	6.929	4.722	7.333	14.959
Upper Burdekin River	1.117	0.681	0.454	0.641	1.383
Total	9.545	9.481	5.709	10.06	18.896

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 Burdekin region by subcatchment.

	Catchment area (,000 ha)	Area woody 2011 V2.3 (,000 ha)	% of catchment woody in 2011
Barratta Creek	183	49	27
Black River	106	90	85
Bohle River	37	17	45
Bowen River	945	671	71
Don River	373	197	53
Haughton River	222	126	57
Lower Burdekin River	1048	590	56
Proserpine river	1	0	59
Ross River	134	82	61
Suttor River	7393	4376	59
Upper Burdekin River	3624	2917	80
Total	14065	9114	65

Woody vegetation clearing by replacement land cover

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

Period	Woody vegetation clearing rate (,000 ha/yr) for						
	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

* Total excludes natural tree death.

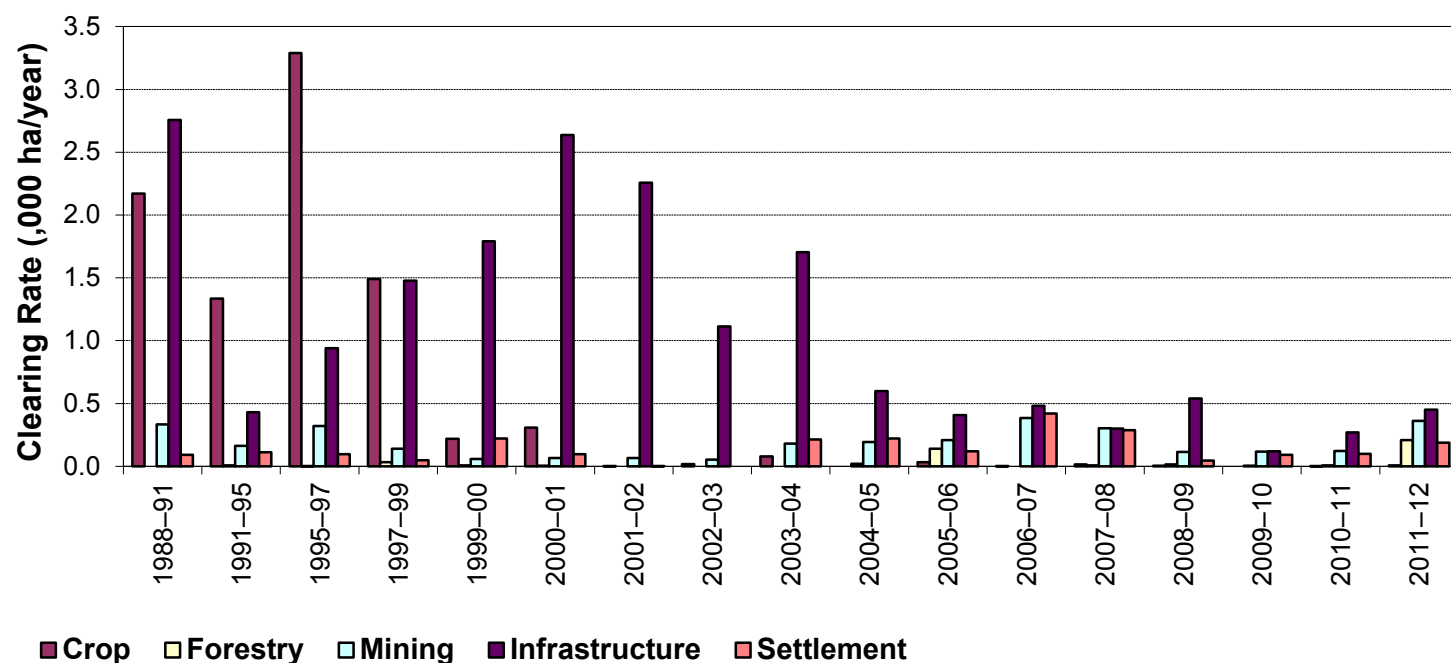
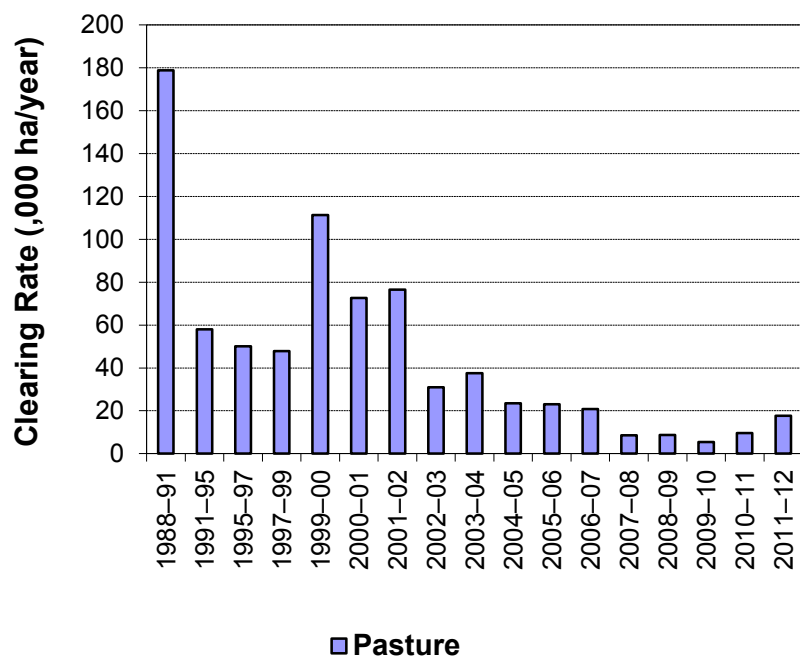


Figure 4. Woody vegetation clearing rates in the Burdekin region by replacement land cover.

This fact sheet is 7 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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