

Land cover change in the Southern Gulf Catchments Natural Resource Management region

2010–11

Summary

The 2010–11 era presented a decrease in the woody vegetation clearing rate for the Southern Gulf region. The rate decreased by 27 per cent from 1456 hectares per year (ha/yr) in 2009–10 to 1060 ha/yr.

Whilst overall woody vegetation clearing decreased, clearing of remnant vegetation increased in 2010–11 to 686 ha/yr – up from 510 ha/yr in the 2009–10 era.

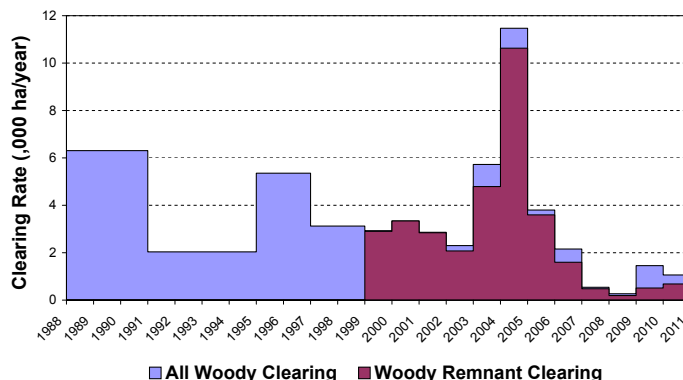


Figure 1. Woody vegetation clearing rates in the Southern Gulf Catchments NRM region.

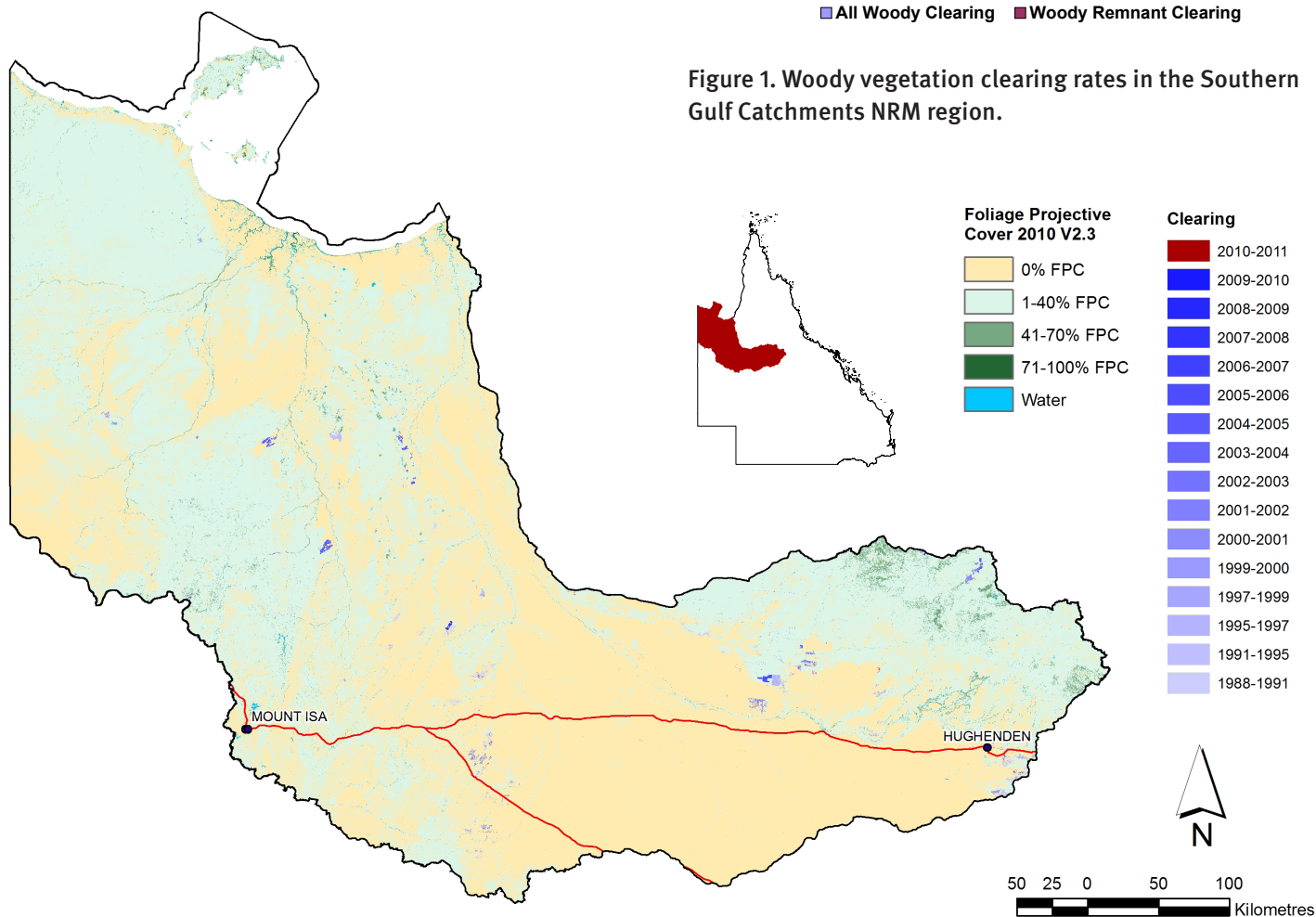


Figure 2. Woody vegetation clearing in each change period.

Woody vegetation clearing by remnant status

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

Period	Woody vegetation clearing rate (,000 ha/yr) of		
	Non-remnant woody	Remnant woody*	Total woody
1999–00	0.027	2.901	2.929
2000–01	0.000	3.340	3.340
2001–02	0.017	2.843	2.861
2002–03	0.227	2.075	2.302
2003–04	0.935	4.790	5.725
2004–05	0.842	10.628	11.470
2005–06	0.203	3.597	3.800
2006–07	0.557	1.598	2.155
2007–08	0.062	0.480	0.542
2008–09	0.075	0.193	0.268
2009–10	0.946	0.510	1.456
2010–11	0.374	0.686	1.060

* 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 Southern Gulf Catchments NRM region by tenure.

Period	Woody vegetation clearing rate (,000 ha/yr) on				
	Freehold	Leasehold	Reserves	Other tenures	Total
1988–91	1.954	4.325	0.006	0.014	6.299
1991–95	0.626	1.408	0.000	0.000	2.034
1995–97	3.257	2.025	0.000	0.000	5.282
1997–99	0.349	2.762	0.000	0.000	3.111
1999–00	1.616	1.313	0.000	0.000	2.929
2000–01	0.032	3.308	0.000	0.000	3.340
2001–02	1.193	1.667	0.000	0.000	2.861
2002–03	0.645	1.657	0.000	0.000	2.302
2003–04	0.669	5.006	0.000	0.000	5.675
2004–05	0.952	10.518	0.000	0.000	11.470
2005–06	2.380	1.420	0.001	0.000	3.800
2006–07	0.410	1.744	0.001	0.000	2.155
2007–08	0.095	0.447	0.000	0.000	0.542
2008–09	0.041	0.227	0.000	0.000	0.268
2009–10	0.081	1.375	0.000	0.000	1.456
2010–11	0.166	0.892	0.000	0.002	1.060

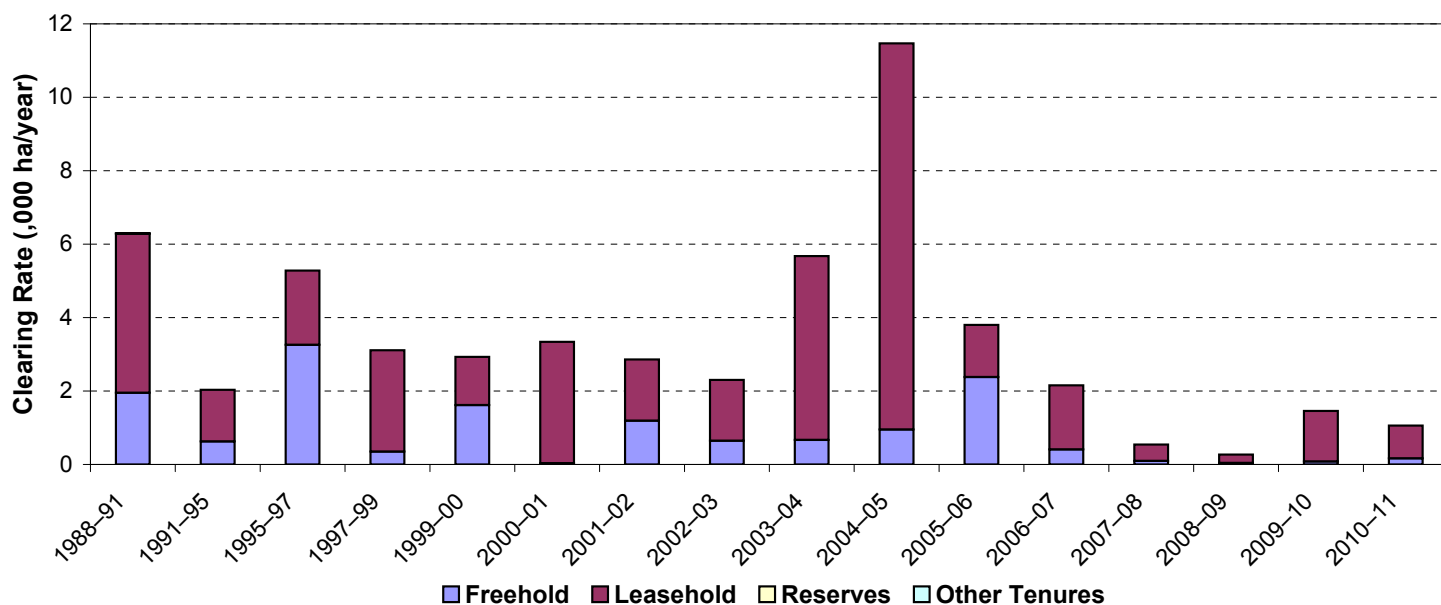


Figure 3. Woody vegetation clearing rates in the Southern Gulf Catchments NRM region by tenure.

Woody vegetation clearing by subcatchment

Table 3. Woody vegetation clearing rates in the Southern Gulf Catchments NRM region by subcatchment #.

Woody vegetation clearing rate (,000 ha/yr) for	Period				
	2006–07	2007–08	2008–09	2009–10	2010–11
Cliffdale Creek	0.567	0.003	0.000	0.000	0.000
Cloncurry River	0.000	0.021	0.104	0.872	0.135
Eight Mile Creek	0.000	0.000	0.000	0.000	0.000
Flinders River	1.112	0.313	0.119	0.318	0.543
L Creek	0.000	0.000	0.000	0.000	0.000
Lagoon Creek	0.000	0.000	0.000	0.000	0.000
Leichhardt River	0.349	0.121	0.018	0.071	0.176
Misc other Islands	0.000	0.000	0.000	0.000	0.000
Morning Inlet	0.004	0.000	0.001	0.000	0.004
Mornington Island	0.000	0.000	0.002	0.000	0.000
Nicholson River	0.018	0.052	0.001	0.029	0.025
Saxby River	0.107	0.033	0.023	0.166	0.166
Settlement River	0.000	0.000	0.000	0.000	0.011
Total	2.155	0.542	0.268	1.456	1.060

Please refer to Figure 26 of the main report (DSITIA, 2014) for the location of each subcatchment.

Remaining woody vegetation

Table 4. Remaining woody vegetation in the Southern Gulf Catchments NRM region by subcatchment.

	Catchment area (,000 ha)	Area woody 2010 V2.3 (,000 ha)	% of catchment woody in 2010
Cliffdale Creek	618	555	90
Cloncurry River	4734	1265	27
Eight Mile Creek	163	150	92
Flinders River	5188	2031	39
L Creek	195	84	43
Lagoon Creek	283	264	93
Leichhardt River	3288	2182	66
Misc other Islands	24	18	75
Morning Inlet	173	97	56
Mornington Island	100	88	88
Nicholson River	3564	2193	62
Saxby River	1015	541	53
Settlement River	111	98	88
Total	19456	9565	49

Note: Catchments with a low proportion of woody vegetation cover may contain significant areas of natural grasslands.

Woody vegetation clearing by replacement land cover

Table 5. Woody vegetation clearing rates in the Southern Gulf Catchments NRM region by replacement land cover.

Period	Wood vegetation clearing rate (,000 ha/yr) for						
	Pasture	Crop	Forestry	Mining	Infrastructure	Settlement	Total*
1988–91	5.445	0.000	0.000	0.001	0.862	0.000	6.308
1991–95	2.034	0.000	0.000	0.000	0.000	0.000	2.034
1995–97	5.082	0.000	0.000	0.041	0.232	0.000	5.356
1997–99	2.124	0.000	0.000	0.256	0.744	0.000	3.125
1999–00	2.346	0.001	0.000	0.208	0.373	0.000	2.929
2000–01	3.221	0.000	0.000	0.000	0.120	0.000	3.340
2001–02	2.063	0.000	0.000	0.000	0.797	0.000	2.861
2002–03	1.736	0.000	0.000	0.000	0.566	0.000	2.302
2003–04	5.378	0.000	0.000	0.050	0.292	0.005	5.725
2004–05	11.347	0.000	0.000	0.004	0.119	0.000	11.470
2005–06	3.690	0.000	0.000	0.053	0.057	0.000	3.800
2006–07	1.965	0.000	0.000	0.144	0.046	0.000	2.155
2007–08	0.484	0.000	0.000	0.043	0.009	0.006	0.542
2008–09	0.266	0.000	0.000	0.000	0.000	0.002	0.268
2009–10	1.397	0.000	0.000	0.029	0.030	0.000	1.456
2010–11	0.835	0.000	0.000	0.146	0.076	0.003	1.060

* Total excludes natural tree death.

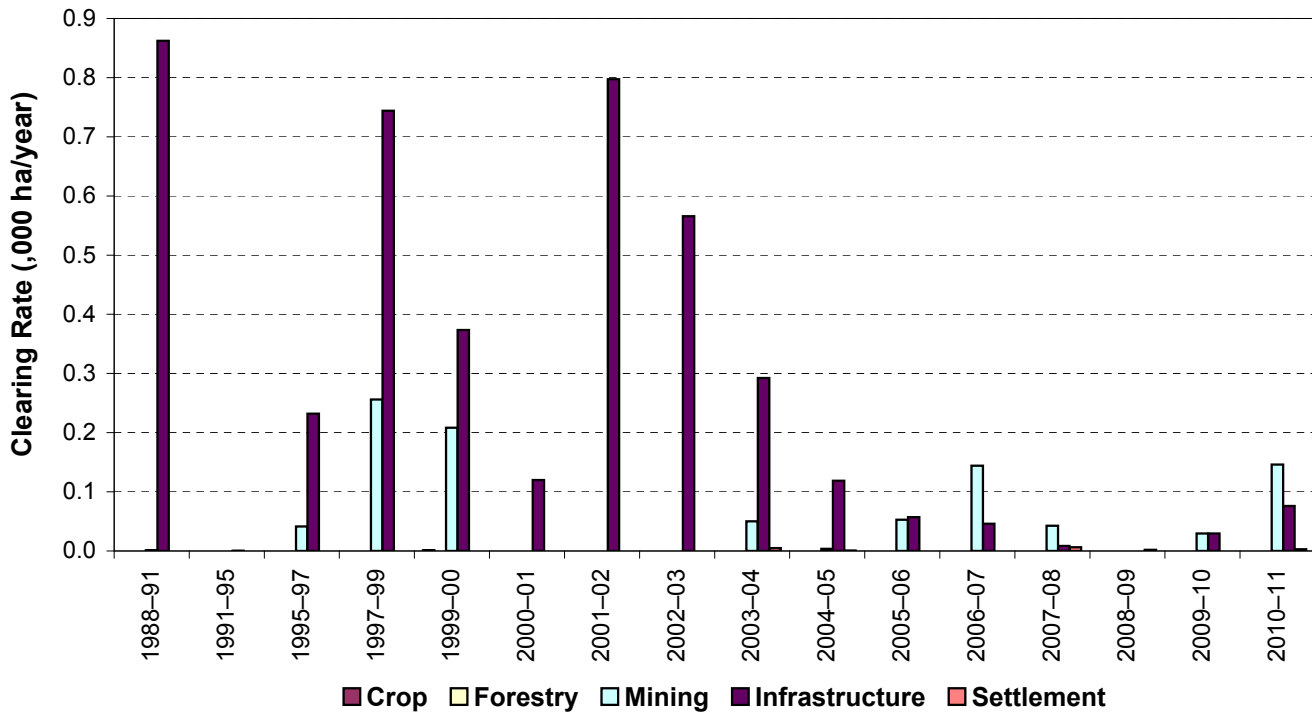
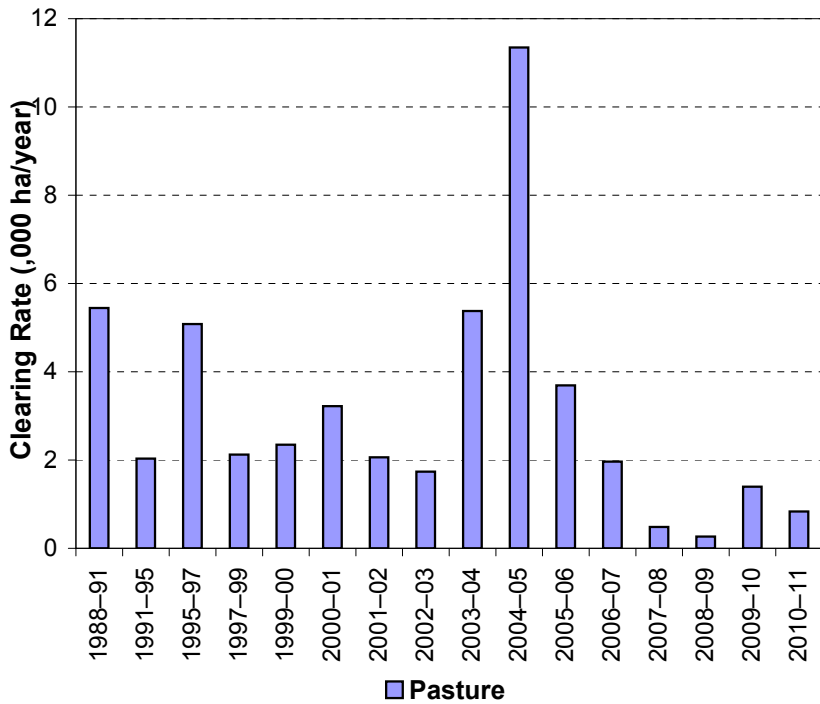


Figure 4. Woody vegetation clearing rates in the Southern Gulf Catchments NRM region by replacement land cover.

This fact sheet is 12 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 2010-11: 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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