

# Land cover change in the Southern Gulf region 2011–12

## Summary

The 2011–12 era presented an increase in the woody vegetation clearing rate for the Southern Gulf region. The rate increased by 70% from 1 060 hectares per year (ha/yr) in 2010–11 to 1 801 ha/yr.

Clearing of woody remnant vegetation increased from 686 ha/yr in 2010–11 to 816 ha/yr in the 2011–12 era. Remnant vegetation accounted for 55% of total clearing for the region.

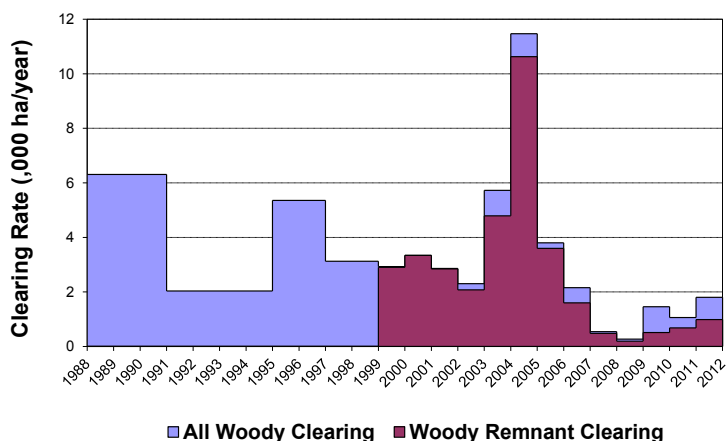


Figure 1. Woody vegetation clearing rates in the Southern Gulf region.

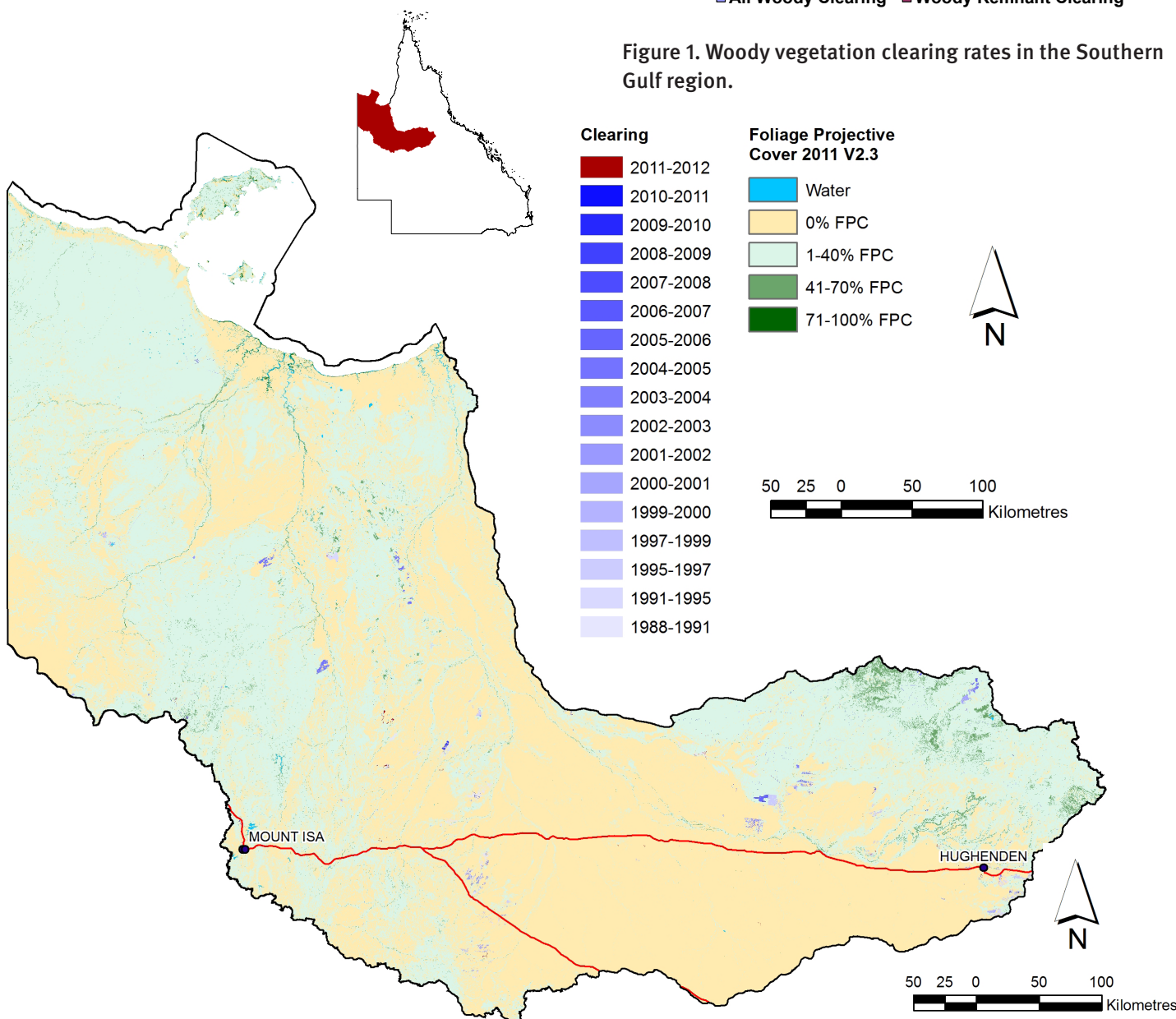


Figure 2. Woody vegetation clearing in each change period.

## Woody vegetation clearing by remnant status

Table 1. Remnant and non-remnant woody vegetation clearing rates in the Southern Gulf 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
2011–12	0.816	0.985	1.801

\* 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 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
2011–12	0.603	1.198	0.000	0.000	1.801

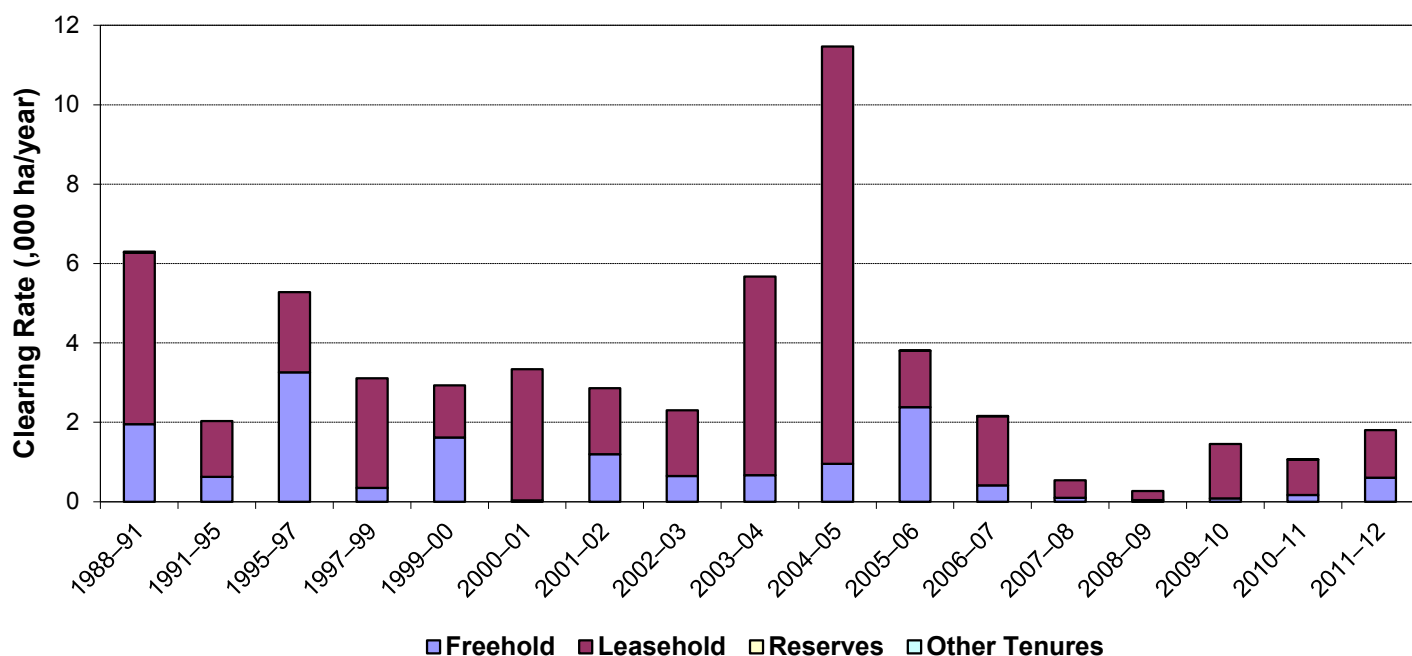


Figure 3. Woody vegetation clearing rates in the Southern Gulf region by tenure.

## Woody vegetation clearing by subcatchment

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

Woody vegetation clearing rate (,000 ha/yr) for	Period				
	2007–08	2008–09	2009–10	2010–11	2011–12
Cliffdale Creek	0.003	0.000	0.000	0.000	0.001
Cloncurry River	0.021	0.104	0.872	0.135	0.783
Eight Mile Creek	0.000	0.000	0.000	0.000	0.002
Flinders River	0.313	0.119	0.318	0.543	0.467
L Creek	0.000	0.000	0.000	0.000	0.000
Lagoon Creek	0.000	0.000	0.000	0.000	0.002
Leichhardt River	0.121	0.018	0.071	0.176	0.226
Misc other Islands	0.000	0.000	0.000	0.000	0.000
Morning Inlet	0.000	0.001	0.000	0.004	0.004
Mornington Island	0.000	0.002	0.000	0.000	0.000
Nicholson River	0.052	0.001	0.029	0.025	0.070
Saxby River	0.033	0.023	0.166	0.166	0.245
Settlement River	0.000	0.000	0.000	0.011	0.002
<b>Total</b>	<b>0.542</b>	<b>0.268</b>	<b>1.456</b>	<b>1.060</b>	<b>1.801</b>

# 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 Southern Gulf region by subcatchment.

	Catchment area (,000 ha)	Area woody 2011 V2.3 (,000 ha)	% of catchment woody in 2011
Cliffdale Creek	618	553	90
Cloncurry River	4734	1275	27
Eight Mile Creek	163	149	91
Flinders River	5188	2030	39
L Creek	194	85	44
Lagoon Creek	283	264	93
Leichhardt River	3287	2189	67
Misc other Islands	22	17	76
Morning Inlet	173	98	56
Mornington Island	98	87	89
Nicholson River	3564	2185	61
Saxby River	1015	536	53
Settlement River	111	97	88
<b>Total</b>	<b>19450</b>	<b>9565</b>	<b>49</b>

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 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
2011–12	1.547	0.000	0.000	0.181	0.073	0.001	1.801

\* Total excludes natural tree death.

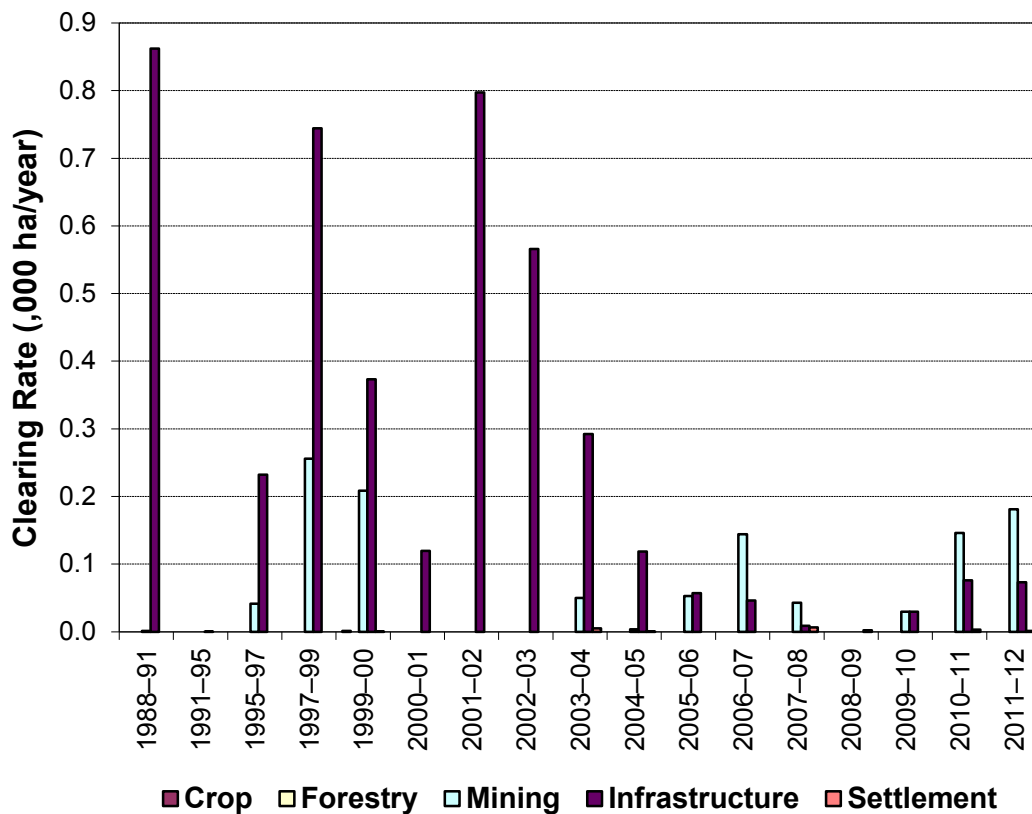
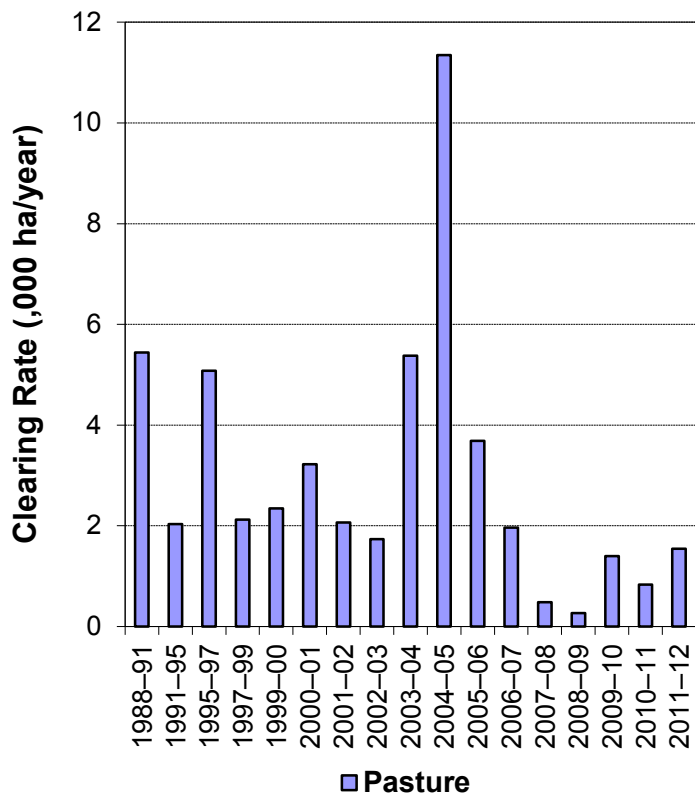


Figure 4. Woody vegetation clearing rates in the Southern Gulf region by replacement land cover.

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 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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