Land cover change in the South East Queensland region 2011–12

Summary

The woody vegetation clearing rate for the SEQ region dropped slightly from to 3 193 hectares per year (ha/yr) in 2010–11 to 3 120 ha/yr for 2011–12.

Clearing rates of remnant woody vegetation decreased in 2011–12 to 698 ha/yr, 8% lower than the previous era.

Pasture remained the dominant replacement land cover class at 45% of total clearing, with the replacement of settlement as second highest at 26% of total clearing. The replacement land cover class of forestry decreased this era and represented 18% of the total woody vegetation clearing rate in the region.

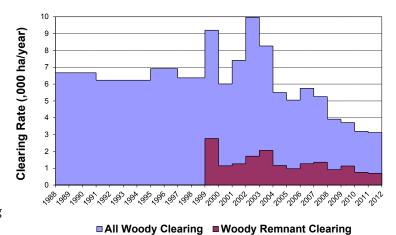
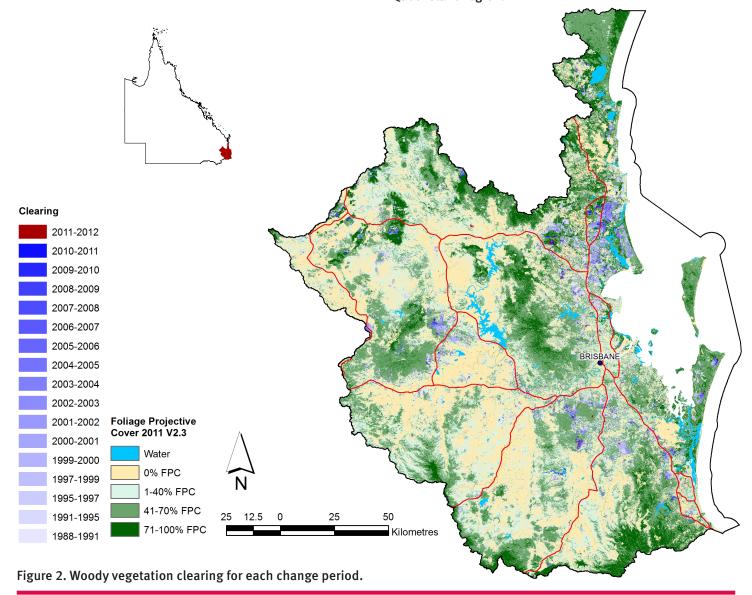


Figure 1. Woody vegetation clearing rates in the South East Queensland region.





Woody vegetation clearing by remnant status

Table 1. Remnant and non-remnant woody vegetation clearing rates in the South East Queensland region.

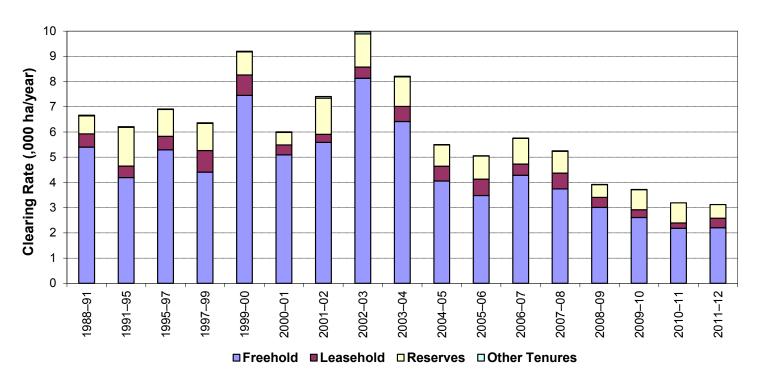
	Woody vegetation clearing rate (,000 ha/yr) of				
Period	Non-remnant woody	Remnant woody*	Total woody		
1999-00	6.433	2.767	9.201		
2000-01	4.863	1.145	6.008		
2001-02	6.150	1.262	7.411		
2002-03	8.254	1.715	9.969		
2003-04	6.203	2.063	8.265		
2004-05	4.336	1.162	5.498		
2005-06	4.078	0.970	5.048		
2006-07	4.483	1.267	5.751		
2007-08	3.898	1.356	5.254		
2008-09	2.999	0.917	3.916		
2009–10	2.582	1.131	3.713		
2010-11	2.435	0.758	3.193		
2011–12	2.421	0.698	3.120		

^{*} 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 South East Queensland region by tenure.

	Woody vegetation clearing rate (,000 ha/yr) on					
Period	Freehold	Leasehold	Reserves	Other tenures	Total	
1988-91	5.402	0.522	0.711	0.028	6.663	
1991–95	4.192	0.456	1.540	0.019	6.207	
1995-97	5.295	0.535	1.064	0.016	6.910	
1997-99	4.408	0.856	1.079	0.019	6.361	
1999-00	7.450	0.812	0.918	0.020	9.200	
2000-01	5.091	0.395	0.495	0.026	6.007	
2001-02	5.589	0.318	1.437	0.064	7.408	
2002-03	8.128	0.445	1.315	0.081	9.969	
2003-04	6.415	0.600	1.172	0.020	8.206	
2004-05	4.059	0.585	0.844	0.010	5.498	
2005-06	3.481	0.649	0.917	0.002	5.048	
2006-07	4.282	0.446	1.020	0.002	5.751	
2007-08	3.742	0.627	0.869	0.016	5.254	
2008-09	3.009	0.399	0.507	0.002	3.916	
2009-10	2.607	0.310	0.795	0.001	3.713	
2010-11	2.182	0.210	0.800	0.000	3.192	
2011–12	2.203	0.380	0.537	0.000	3.120	



Almost all the clearing on reserves is for forestry purposes.

Woody vegetation clearing by subcatchment

Table 3. Woody vegetation clearing rates in the South East Queensland region by subcatchment *.

Woody vegetation	Period				
clearing rate (,000 ha/yr) for	2007- 08	2008- 09	2009- 10	2010- 11	2011- 12
Albert River	0.120	0.051	0.043	0.074	0.030
Bremer River	0.266	0.314	0.088	0.181	0.108
Brisbane River	1.398	0.718	0.819	0.728	0.761
Caboolture River	0.361	0.451	0.159	0.161	0.199
Coomera & Nerang Rivers	0.357	0.328	0.344	0.245	0.139
Lockyer Creek	0.428	0.352	0.392	0.218	0.261
Logan River	0.870	0.685	0.767	0.398	0.500
Maroochy River	0.847	0.542	0.597	0.296	0.368
Moreton Island	0.012	0.000	0.000	0.000	0.000
Noosa River	0.166	0.043	0.065	0.069	0.038
North Pine River	0.072	0.126	0.108	0.136	0.148
South Pine River	0.110	0.083	0.105	0.105	0.049
Stanley River	0.082	0.134	0.125	0.515	0.420
Stradbroke Islands	0.157	0.089	0.100	0.066	0.096
Total	5.245	3.916	3.712	3.192	3.120

[#] 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 South East Queensland region by subcatchment.

	Catchment area (,000 ha)	Area woody 2011 V2.3 (,000 ha)	% of catchment woody in 2011
Albert River	78	55	71
Bremer River	203	111	55
Brisbane River	695	455	65
Caboolture River	47	30	65
Coomera and Nerang Rivers	130	94	72
Lockyer Creek	300	190	63
Logan River	336	225	67
Maroochy River	153	107	69
Moreton Island	17	15	91
Noosa River	96	81	84
North Pine River	60	43	72
South Pine River	42	31	75
Stanley River	154	107	70
Stradbroke Islands	29	24	85
Total	2340	1569	67

Woody vegetation clearing by replacement land cover

Table 5. Woody vegetation clearing rates in the South East Queensland region by replacement land cover.

	Woody vegetation clearing rate (,000 ha/yr) for						
Period	Pasture	Crop	Forestry	Mining	Infrastructure	Settlement	Total*
1988-91	2.858	0.322	0.786	0.192	0.219	2.295	6.673
1991–95	1.970	0.237	1.894	0.097	0.083	1.946	6.228
1995-97	3.330	0.330	1.143	0.175	0.142	1.800	6.920
1997-99	1.980	0.216	2.447	0.204	0.322	1.203	6.373
1999-00	4.455	0.078	2.525	0.316	0.393	1.433	9.201
2000-01	2.164	0.030	2.653	0.066	0.143	0.952	6.008
2001-02	3.426	0.012	2.319	0.134	0.137	1.383	7.411
2002-03	4.296	0.021	2.050	0.176	0.280	3.138	9.960
2003-04	3.145	0.034	1.685	0.201	0.235	2.965	8.265
2004-05	2.849	0.000	1.228	0.194	0.151	1.076	5.498
2005-06	1.852	0.002	1.625	0.216	0.126	1.227	5.048
2006-07	2.065	0.005	1.260	0.169	0.543	1.708	5.751
2007-08	1.716	0.000	1.114	0.200	0.616	1.608	5.254
2008-09	1.459	0.001	0.503	0.083	0.326	1.544	3.916
2009-10	1.258	0.002	0.799	0.144	0.480	1.031	3.713
2010-11	1.086	0.009	0.835	0.126	0.134	1.003	3.193
2011-12	1.403	0.000	0.566	0.136	0.189	0.825	3.120

^{*} Total excludes natural tree death.

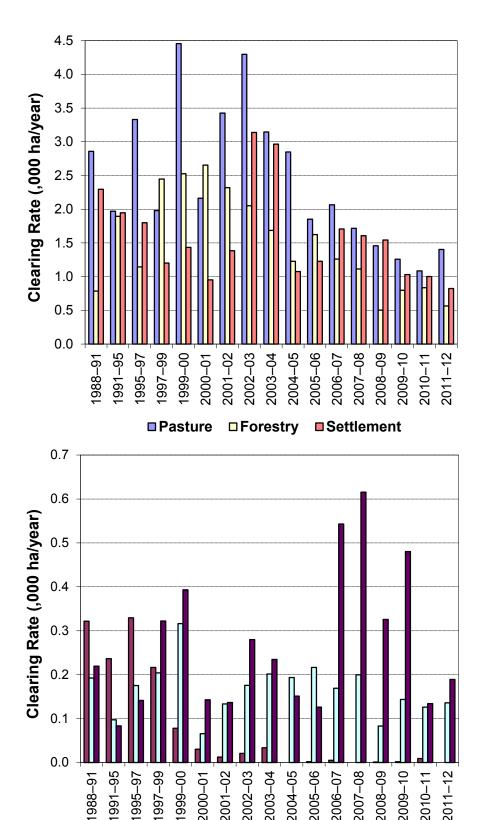


Figure 4. Woody vegetation clearing rates in the South East Queensland region by replacement land cover.

■Crop □ Mining ■Infrastructure

This fact sheet is 10 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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For further information: Statewide Landcover and Trees Study 41 Boggo Road Dutton Park QLD 4102

Phone: 61 7 3170 5686

Email: dave.harris@dsitia.qld.gov.au