

Land cover change in the South East Queensland 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 South East Queensland region was 3 120 hectares per year (ha/year). This woody vegetation clearing rate was also reported for the 2011–12 period (Table 2 and Figure 1).

In 2013–14, the woody vegetation clearing rate was 4 577 ha/year, an increase of 47% from the 2012–13 woody vegetation clearing rate (3 120 ha/year) (Table 2 and Figure 1).

In 2012–13, the clearing rate of remnant woody vegetation in the region was 641 ha/year, a decrease of 8% from the 698 ha/year reported in the 2011–12 period. In 2013–14, the remnant woody vegetation clearing rate was 857 ha/year, an increase of 34% from the 2012–13 period (641 ha/year). The clearing of remnant woody vegetation accounted for 21% and 19% of the total woody vegetation clearing in the region for the 2012–13 and 2013–14 periods, respectively (Table 1 and Figure 1).

This region had the highest woody vegetation clearing rate for the replacement land cover class of settlement in the state, accounting for 69% and 82% of the state's woody vegetation clearing for this class for the 2012–13 and 2013–14 periods, respectively (Table 5 and Figure 4).

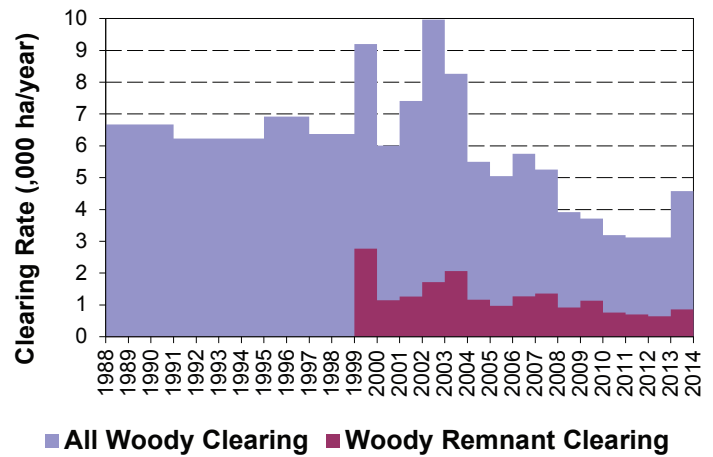
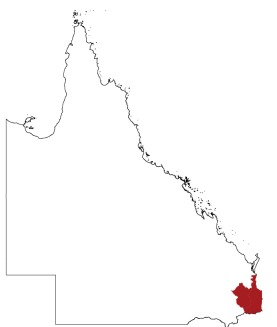
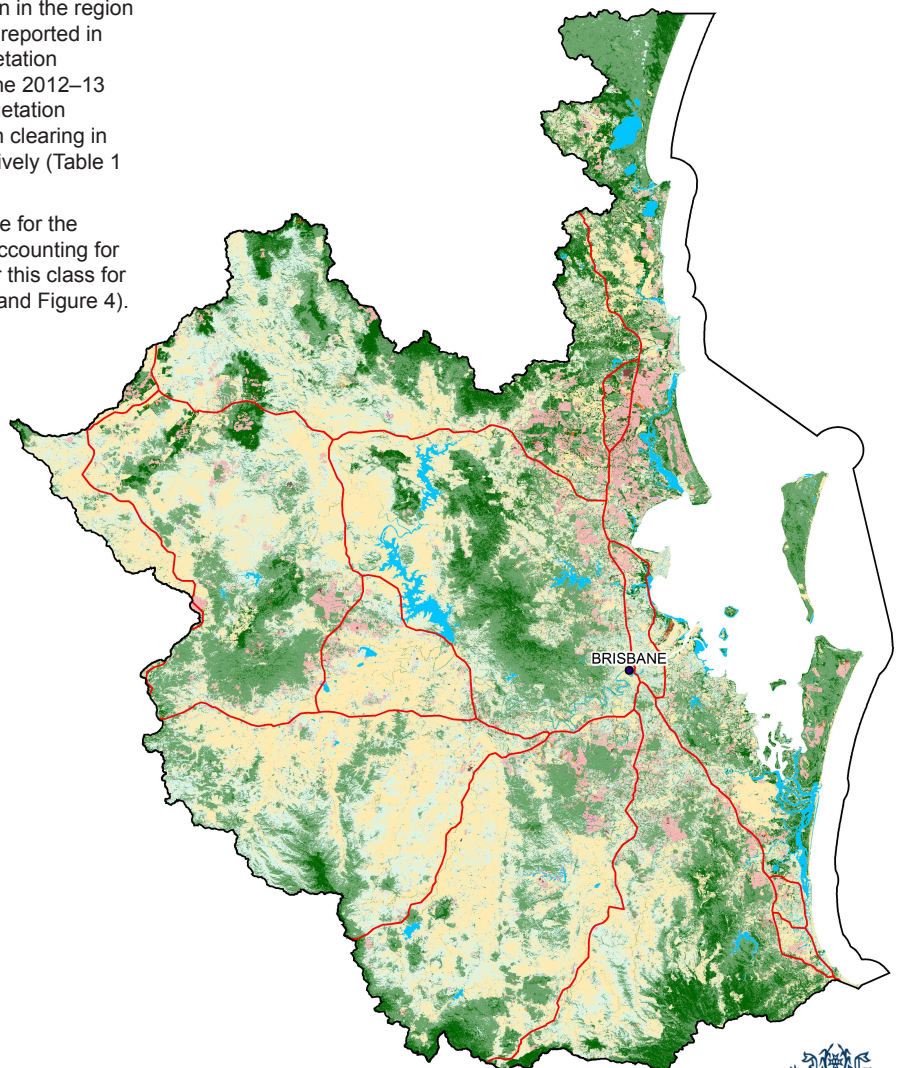
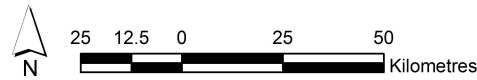


Figure 1. Woody vegetation clearing rates (,000 ha/year) in the South East Queensland region.



Foliage Projective Cover (FPC) 2012 V2.3

- 0% FPC
- 1-40% FPC
- 41-70% FPC
- 71-100% FPC
- Water
- Roads

Clearing

- 2013–14
- 2012–13
- 1988–12

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

Woody vegetation clearing by remnant status

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

Period	Non-remnant woody	Remnant woody	Total woody clearing
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
2012–13	2.479	0.641	3.120
2013–14	3.720	0.857	4.577

Woody vegetation clearing by tenure

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

Period	Freehold	Leasehold	Other tenures	Other reserves	Total
1988–91	5.402	0.522	0.028	0.711	6.663
1991–95	4.192	0.456	0.019	1.540	6.207
1995–97	5.295	0.535	0.016	1.064	6.910
1997–99	4.408	0.856	0.019	1.079	6.361
1999–00	7.450	0.812	0.020	0.918	9.200
2000–01	5.091	0.395	0.026	0.495	6.007
2001–02	5.589	0.318	0.064	1.437	7.408
2002–03	8.128	0.445	0.081	1.315	9.969
2003–04	6.415	0.600	0.020	1.172	8.206
2004–05	4.059	0.585	0.010	0.844	5.498
2005–06	3.481	0.649	0.002	0.917	5.048
2006–07	4.282	0.446	0.002	1.020	5.751
2007–08	3.742	0.627	0.016	0.869	5.254
2008–09	3.009	0.399	0.002	0.507	3.916
2009–10	2.607	0.310	0.001	0.795	3.713
2010–11	2.182	0.210	0.000	0.800	3.192
2011–12	2.203	0.380	0.000	0.537	3.120
2012–13	2.239	0.233	0.001	0.647	3.120
2013–14	3.536	0.210	0.000	0.831	4.577

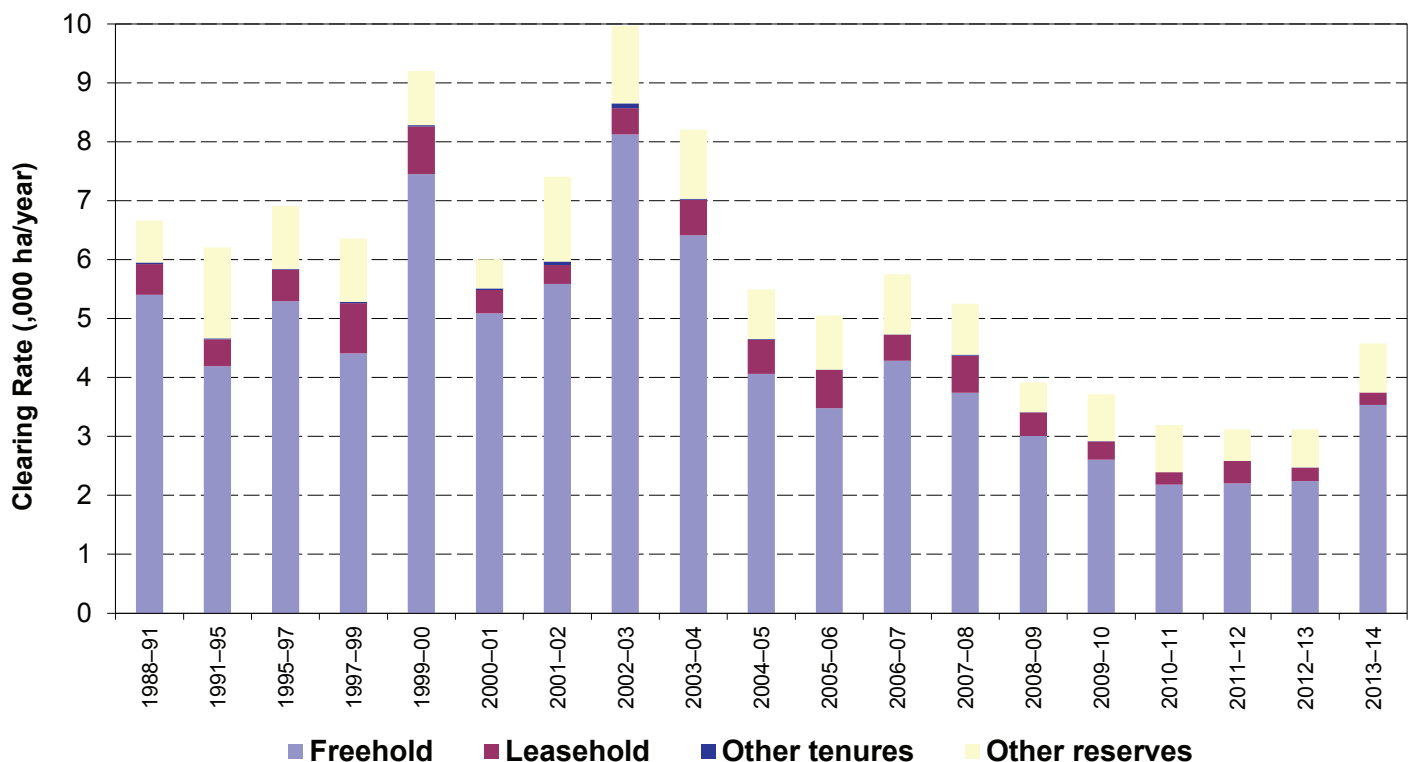


Figure 3. Woody vegetation clearing rates (,000 ha/year) in the South East Queensland region by tenure.

Woody vegetation clearing by catchment

Table 3. Woody vegetation clearing rates (,000 ha/year) in the South East Queensland region by catchment.

Catchments	2009–10	2010–11	2011–12	2012–13	2013–14
Albert River	0.043	0.074	0.030	0.057	0.098
Bremer River	0.088	0.181	0.108	0.139	0.271
Brisbane River	0.819	0.728	0.761	0.865	1.043
Caboolture River	0.159	0.161	0.199	0.106	0.211
Coomera & Nerang Rivers	0.344	0.245	0.139	0.159	0.273
Lockyer Creek	0.392	0.218	0.261	0.219	0.446
Logan River	0.767	0.398	0.500	0.456	0.656
Maroochy River	0.597	0.296	0.368	0.588	0.821
Moreton Island	0.000	0.000	0.000	0.000	0.000
Noosa River	0.065	0.069	0.038	0.067	0.063
North Pine River	0.108	0.136	0.148	0.089	0.210
South Pine River	0.105	0.105	0.049	0.184	0.234
Stanley River	0.125	0.515	0.420	0.096	0.218
Stradbroke Islands	0.100	0.066	0.096	0.089	0.030
Total	3.712	3.192	3.120	3.120	4.577

Remaining woody vegetation

Table 4. Remaining woody vegetation in the South East Queensland region by catchment.

Catchments	Area (,000 ha)	2012 wooded vegetation cover (,000 ha)	% wooded vegetation cover
Albert River	78	56	71
Bremer River	203	112	55
Brisbane River	695	458	66
Caboolture River	47	31	66
Coomera & Nerang Rivers	130	93	72
Lockyer Creek	300	192	64
Logan River	336	226	67
Maroochy River	153	107	70
Moreton Island	17	15	91
Noosa River	96	81	84
North Pine River	60	44	73
South Pine River	42	32	76
Stanley River	154	108	70
Stradbroke Islands	29	24	85
Total	2340	1579	67

Woody vegetation clearing by replacement land cover

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

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
2012–13	1.295	0.019	0.729	0.104	0.238	0.734	3.120
2013–14	1.978	0.094	1.120	0.065	0.375	0.946	4.577

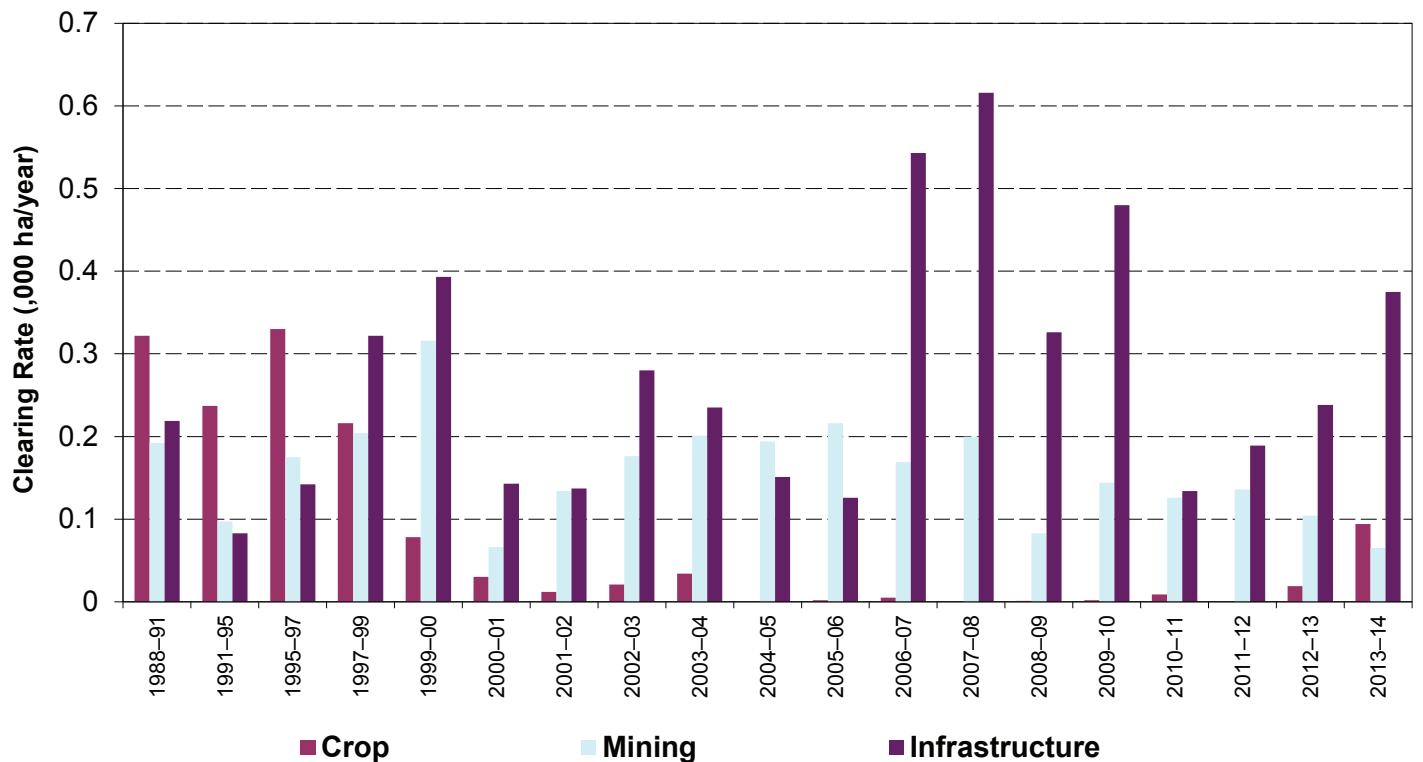
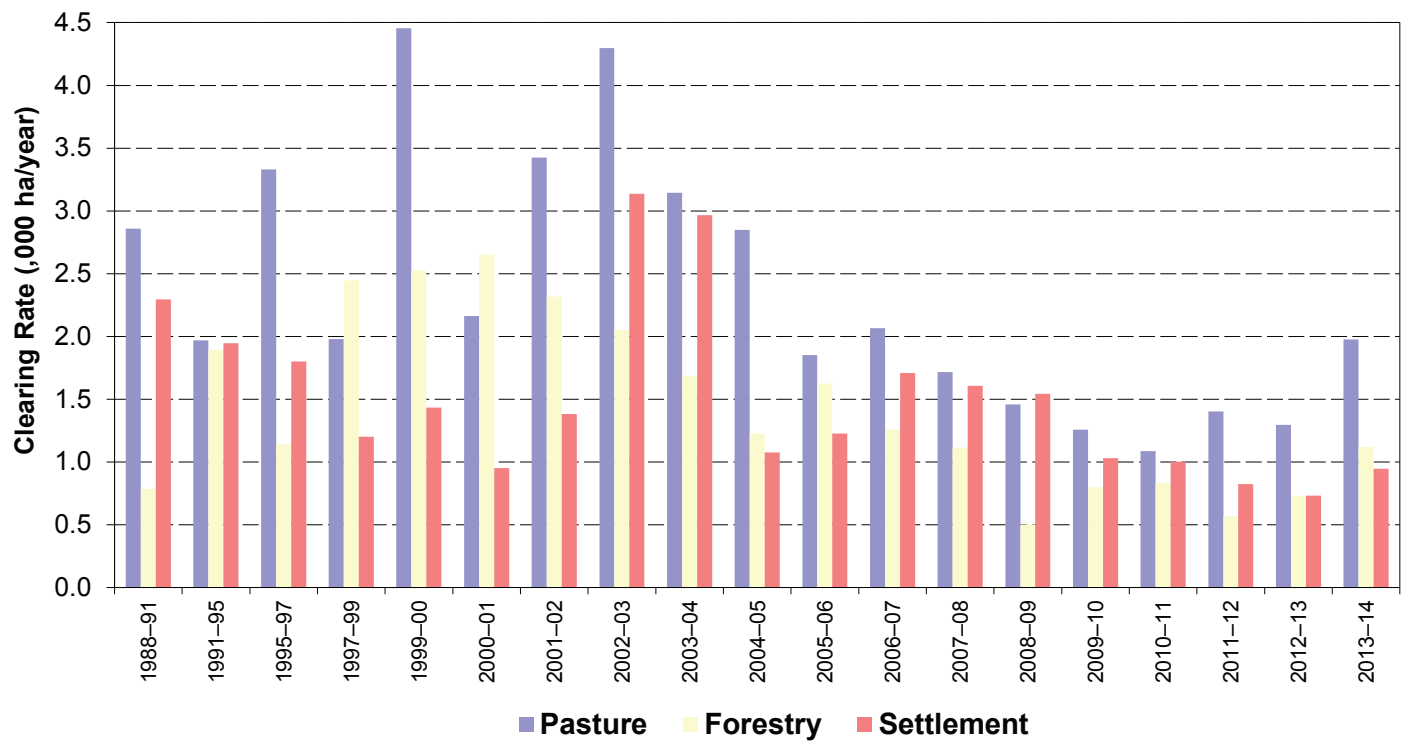


Figure 4. Woody vegetation clearing rates (,000 ha/year) in the South East Queensland region by replacement land cover.

The Queensland Government supports and encourages the dissemination and exchange of information. However, copyright protects this document. The State of Queensland has no objection to this material being reproduced, made available online or electronically, provided it is for your personal, non-commercial use, or use within your organisation; the material remains unaltered; and the State of Queensland is recognised as the owner.
© The State of Queensland 2015.

Prepared by
Remote Sensing Centre
Science Division
Department of Science, Information Technology and Innovation
PO Box 5078
Brisbane Queensland 4001
Phone: 13 QGOV (13 74 68)

The Queensland Government supports and encourages the dissemination and exchange of its information. The copyright in this publication is licensed under a Creative Commons Attribution 3.0 Australia (CC BY) licence



Under this licence you are free, without having to seek permission from DSITI, to use this publication in accordance with the licence terms. You must keep intact the copyright notice and attribute the State of Queensland, Department of Science, Information Technology and Innovation as the source of the publication. For more information on this licence visit <http://creativecommons.org/licenses/by/3.0/au/deed.en>