

Land cover change in the Fitzroy 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 Fitzroy region was 54 747 hectares per year (ha/year), an increase of 32% from the 2011–12 woody vegetation clearing rate of 41 605 ha/year (Table 2 and Figure 1).

In 2013–14, the woody vegetation clearing rate was 58 617 ha/year, an increase of 7% from the 2012–13 woody vegetation clearing rate (54 747 ha/year) (Table 2 and Figure 1). This is the highest clearing rate since 2004 for the Fitzroy region.

In 2012–13, the clearing rate of remnant woody vegetation in the region was 7 285 ha/year, an increase of 26% from the 5 800 ha/year reported in the 2011–12 period. In 2013–14, the remnant woody vegetation clearing rate was 7 956 ha/year, an increase of 9% from the 2012–13 period (7 285 ha/year). The clearing of remnant woody vegetation accounted for 13% and 14% of the total woody vegetation clearing in the region for the 2012–13 and 2013–14 periods, respectively (Table 1 and Figure 1).

The Fitzroy region had the highest woody vegetation clearing rate for the replacement land cover class of mining in the state for the 2012–13 period. This accounted for 46% of the state's woody vegetation clearing for this class. The region also had the highest woody vegetation clearing rate for infrastructure in the state for the 2013–14 period. This accounted for 30% of the state's woody vegetation clearing for this class (Table 5 and Figure 4).

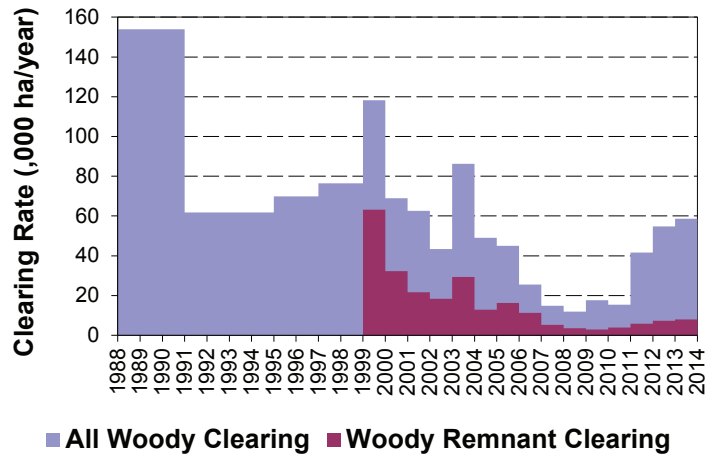


Figure 1. Woody vegetation clearing rates (,000 ha/year) in the Fitzroy region.

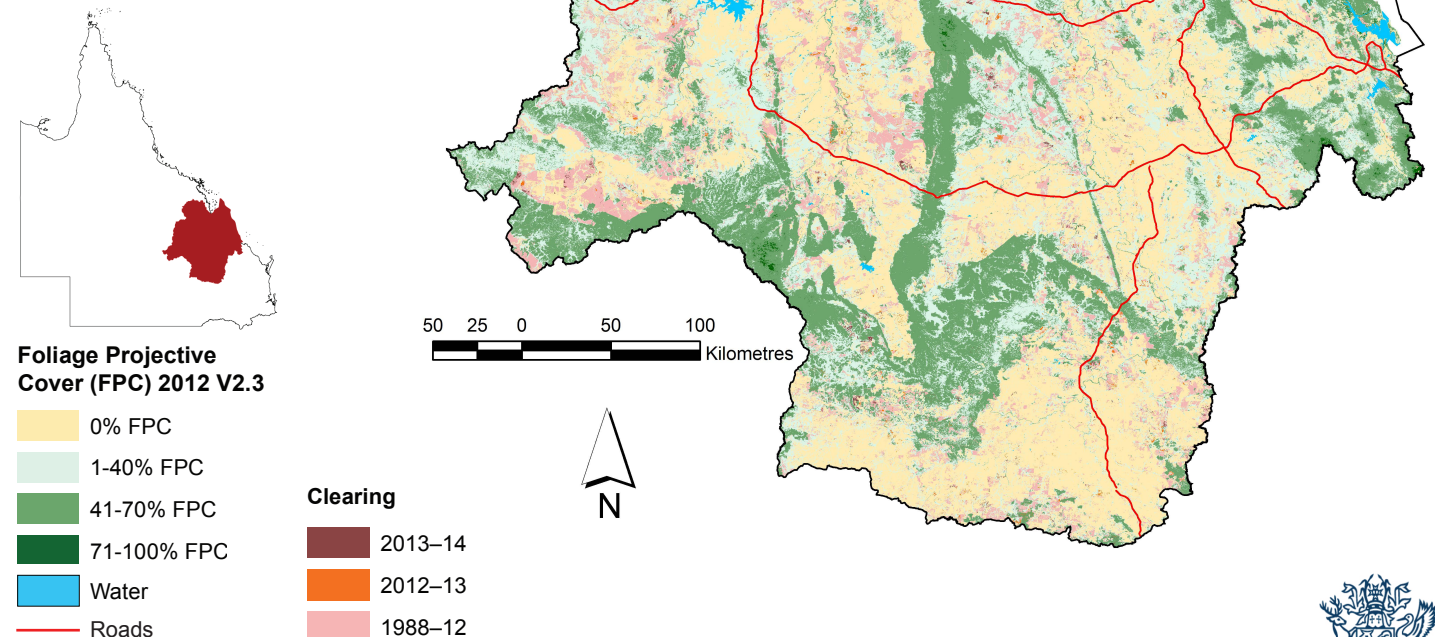


Figure 2. Spatial distribution of current (2012–13 and 2013–14) and historical (1988–12) woody vegetation clearing in the Fitzroy region.

Woody vegetation clearing by remnant status

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

| Period | Non-remnant woody | Remnant woody | Total woody clearing |
|---------|-------------------|---------------|----------------------|
| 1999-00 | 55.063 | 63.169 | 118.232 |
| 2000-01 | 36.685 | 32.246 | 68.931 |
| 2001-02 | 40.955 | 21.632 | 62.587 |
| 2002-03 | 25.025 | 18.345 | 43.371 |
| 2003-04 | 56.923 | 29.321 | 86.244 |
| 2004-05 | 36.170 | 12.851 | 49.020 |
| 2005-06 | 28.739 | 16.243 | 44.982 |
| 2006-07 | 14.235 | 11.269 | 25.504 |
| 2007-08 | 9.592 | 5.232 | 14.825 |
| 2008-09 | 8.352 | 3.532 | 11.884 |
| 2009-10 | 14.723 | 2.896 | 17.618 |
| 2010-11 | 11.482 | 3.889 | 15.371 |
| 2011-12 | 35.805 | 5.800 | 41.605 |
| 2012-13 | 47.462 | 7.285 | 54.747 |
| 2013-14 | 50.661 | 7.956 | 58.617 |

Woody vegetation clearing by tenure

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

| Period | Freehold | Leasehold | Other tenures | Other reserves | Total |
|---------|----------|-----------|---------------|----------------|---------|
| 1988-91 | 85.325 | 65.837 | 1.303 | 1.419 | 153.884 |
| 1991-95 | 37.633 | 22.824 | 0.326 | 0.969 | 61.752 |
| 1995-97 | 43.537 | 24.971 | 0.358 | 0.955 | 69.821 |
| 1997-99 | 56.027 | 19.630 | 0.097 | 0.634 | 76.389 |
| 1999-00 | 87.516 | 29.484 | 0.007 | 1.224 | 118.232 |
| 2000-01 | 37.899 | 29.137 | 0.013 | 1.882 | 68.931 |
| 2001-02 | 33.868 | 27.654 | 0.043 | 1.022 | 62.587 |
| 2002-03 | 27.610 | 15.190 | 0.02 | 0.551 | 43.371 |
| 2003-04 | 53.670 | 31.689 | 0.362 | 0.522 | 86.242 |
| 2004-05 | 35.922 | 11.914 | 0.144 | 1.041 | 49.020 |
| 2005-06 | 30.144 | 13.661 | 0.523 | 0.621 | 44.949 |
| 2006-07 | 17.443 | 7.439 | 0.612 | 0.01 | 25.504 |
| 2007-08 | 8.241 | 5.618 | 0.057 | 0.921 | 14.838 |
| 2008-09 | 6.156 | 4.836 | 0.000 | 0.891 | 11.884 |
| 2009-10 | 12.452 | 4.755 | 0.001 | 0.41 | 17.618 |
| 2010-11 | 11.097 | 3.824 | 0.000 | 0.447 | 15.371 |
| 2011-12 | 30.010 | 10.800 | 0.001 | 0.794 | 41.605 |
| 2012-13 | 40.620 | 13.053 | 0.000 | 1.073 | 54.747 |
| 2013-14 | 44.499 | 13.079 | 0.003 | 1.036 | 58.617 |

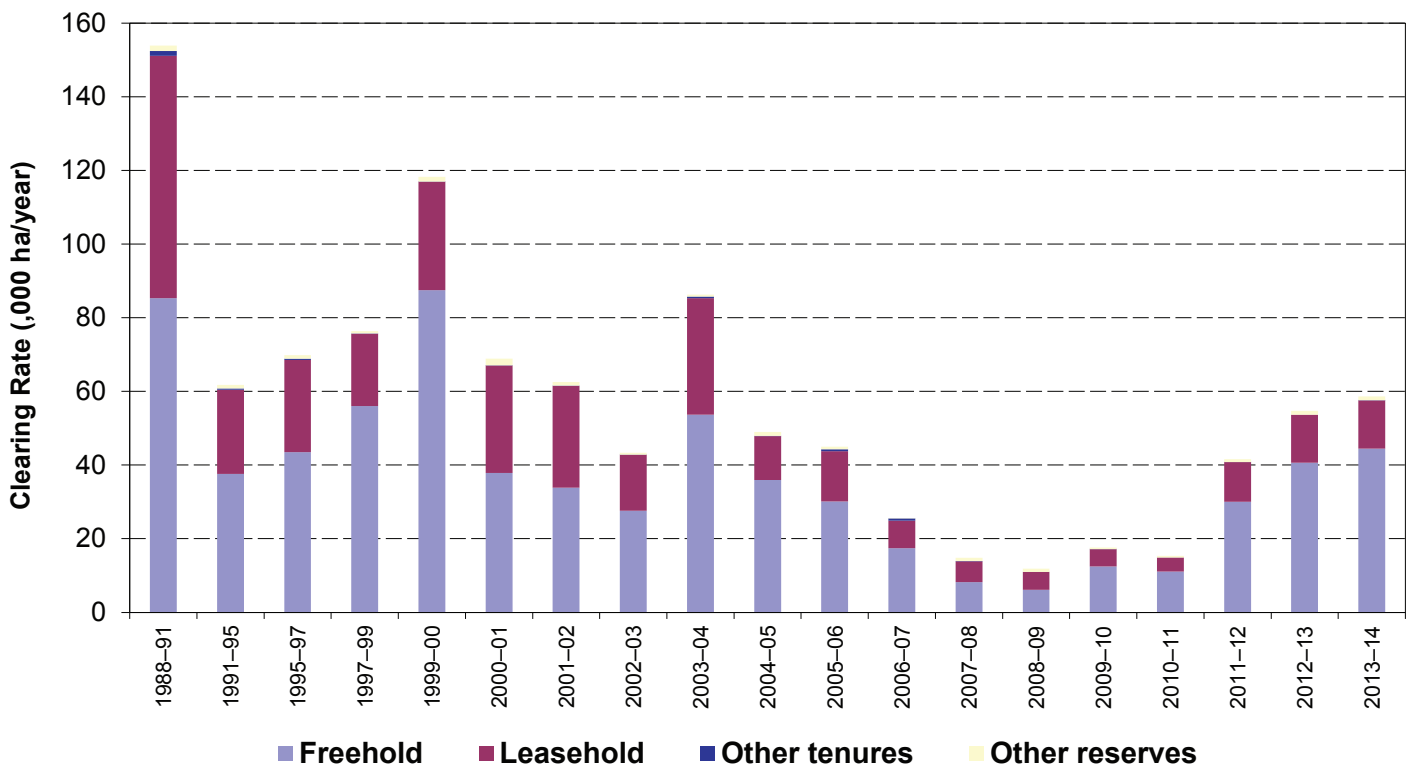


Figure 3. Woody vegetation clearing rates (,000 ha/year) in the Fitzroy region by tenure.

Woody vegetation clearing by catchment

Remaining woody vegetation

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

Table 4. Remaining woody vegetation in the Fitzroy region by catchment.

| Catchments | 2009–10 | 2010–11 | 2011–12 | 2012–13 | 2013–14 |
|--------------------|---------------|---------------|---------------|---------------|---------------|
| Boyne River | 0.134 | 0.102 | 0.225 | 0.385 | 0.293 |
| Calliope River | 0.128 | 0.332 | 0.533 | 0.559 | 0.612 |
| Comet River | 2.780 | 1.108 | 3.569 | 6.599 | 4.831 |
| Curtis Island | 0.000 | 0.284 | 0.259 | 0.002 | 0.038 |
| Dawson River | 4.518 | 3.156 | 12.107 | 16.598 | 18.589 |
| Fitzroy River | 0.875 | 1.280 | 2.182 | 1.588 | 2.216 |
| Isaac River | 2.768 | 1.834 | 10.620 | 11.204 | 15.015 |
| Mackenzie River | 3.644 | 2.757 | 4.382 | 7.354 | 7.845 |
| Misc other islands | 0.000 | 0.000 | 0.000 | 0.000 | 0.001 |
| Nogoa River | 2.175 | 3.767 | 7.038 | 9.902 | 7.663 |
| Shoalwater River | 0.084 | 0.276 | 0.167 | 0.232 | 0.504 |
| Styx River | 0.247 | 0.307 | 0.454 | 0.188 | 0.845 |
| Waterpark Creek | 0.265 | 0.166 | 0.058 | 0.131 | 0.161 |
| Total | 17.618 | 15.369 | 41.595 | 54.742 | 58.617 |

| Catchments | Area (,000 ha) | 2012 wooded vegetation cover (,000 ha) | % wooded vegetation cover |
|--------------------|----------------|--|---------------------------|
| Boyne River | 0 | 0 | 95 |
| Calliope River | 224 | 135 | 60 |
| Comet River | 1730 | 970 | 56 |
| Curtis Island | 58 | 47 | 82 |
| Dawson River | 5077 | 2626 | 52 |
| Fitzroy River | 1143 | 669 | 59 |
| Isaac River | 2236 | 1295 | 58 |
| Mackenzie River | 1299 | 605 | 47 |
| Misc other islands | 35 | 27 | 79 |
| Nogoa River | 2769 | 1623 | 59 |
| Shoalwater River | 360 | 261 | 73 |
| Styx River | 301 | 169 | 56 |
| Waterpark Creek | 183 | 159 | 87 |
| Total | 15414 | 8586 | 56 |

Woody vegetation clearing by replacement land cover

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

| Period | Pasture | Crop | Forestry | Mining | Infrastructure | Settlement | Total |
|---------|---------|-------|----------|--------|----------------|------------|---------|
| 1988–91 | 146.617 | 3.733 | 0.146 | 1.199 | 2.075 | 0.157 | 153.928 |
| 1991–95 | 57.946 | 1.617 | 0.691 | 0.836 | 0.607 | 0.074 | 61.772 |
| 1995–97 | 59.667 | 7.388 | 0.624 | 1.222 | 0.868 | 0.092 | 69.861 |
| 1997–99 | 67.683 | 5.772 | 0.556 | 1.338 | 1.030 | 0.055 | 76.433 |
| 1999–00 | 112.450 | 2.274 | 1.026 | 0.777 | 1.683 | 0.022 | 118.232 |
| 2000–01 | 63.914 | 0.073 | 1.422 | 1.619 | 1.823 | 0.081 | 68.931 |
| 2001–02 | 59.275 | 0.032 | 0.428 | 1.340 | 1.444 | 0.068 | 62.587 |
| 2002–03 | 41.100 | 0.017 | 0.292 | 1.240 | 0.594 | 0.128 | 43.371 |
| 2003–04 | 82.097 | 0.112 | 0.000 | 2.144 | 1.822 | 0.068 | 86.244 |
| 2004–05 | 45.522 | 0.429 | 1.038 | 1.347 | 0.591 | 0.094 | 49.020 |
| 2005–06 | 41.474 | 0.104 | 0.610 | 1.826 | 0.714 | 0.253 | 44.982 |
| 2006–07 | 23.284 | 0.000 | 0.000 | 1.450 | 0.547 | 0.223 | 25.504 |
| 2007–08 | 12.152 | 0.009 | 1.062 | 1.129 | 0.372 | 0.100 | 14.825 |
| 2008–09 | 10.003 | 0.035 | 0.772 | 0.941 | 0.115 | 0.018 | 11.884 |
| 2009–10 | 14.928 | 0.009 | 0.331 | 2.005 | 0.281 | 0.064 | 17.618 |
| 2010–11 | 12.629 | 0.105 | 0.340 | 1.645 | 0.548 | 0.104 | 15.371 |
| 2011–12 | 36.595 | 0.016 | 0.825 | 2.862 | 1.112 | 0.195 | 41.605 |
| 2012–13 | 49.403 | 0.093 | 0.685 | 2.762 | 1.667 | 0.137 | 54.747 |
| 2013–14 | 53.656 | 0.254 | 1.538 | 1.861 | 1.265 | 0.043 | 58.617 |

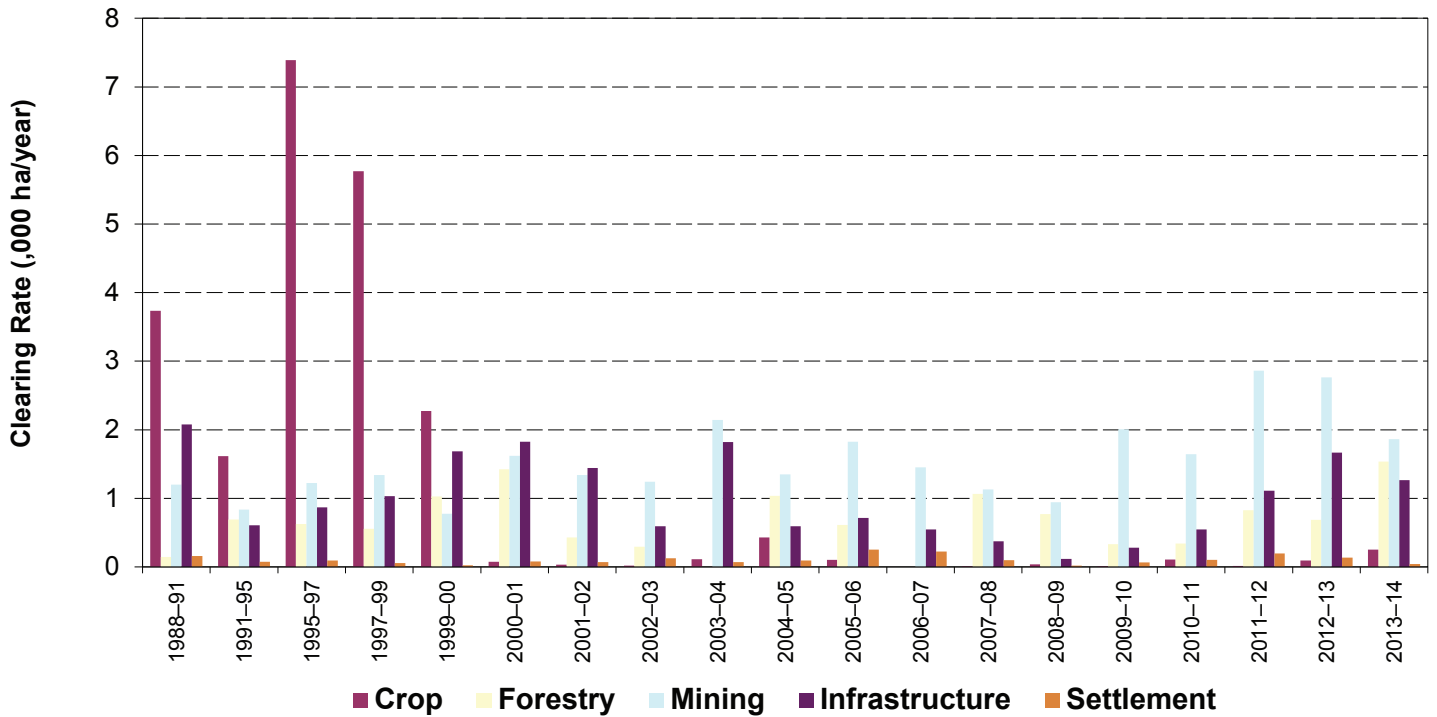
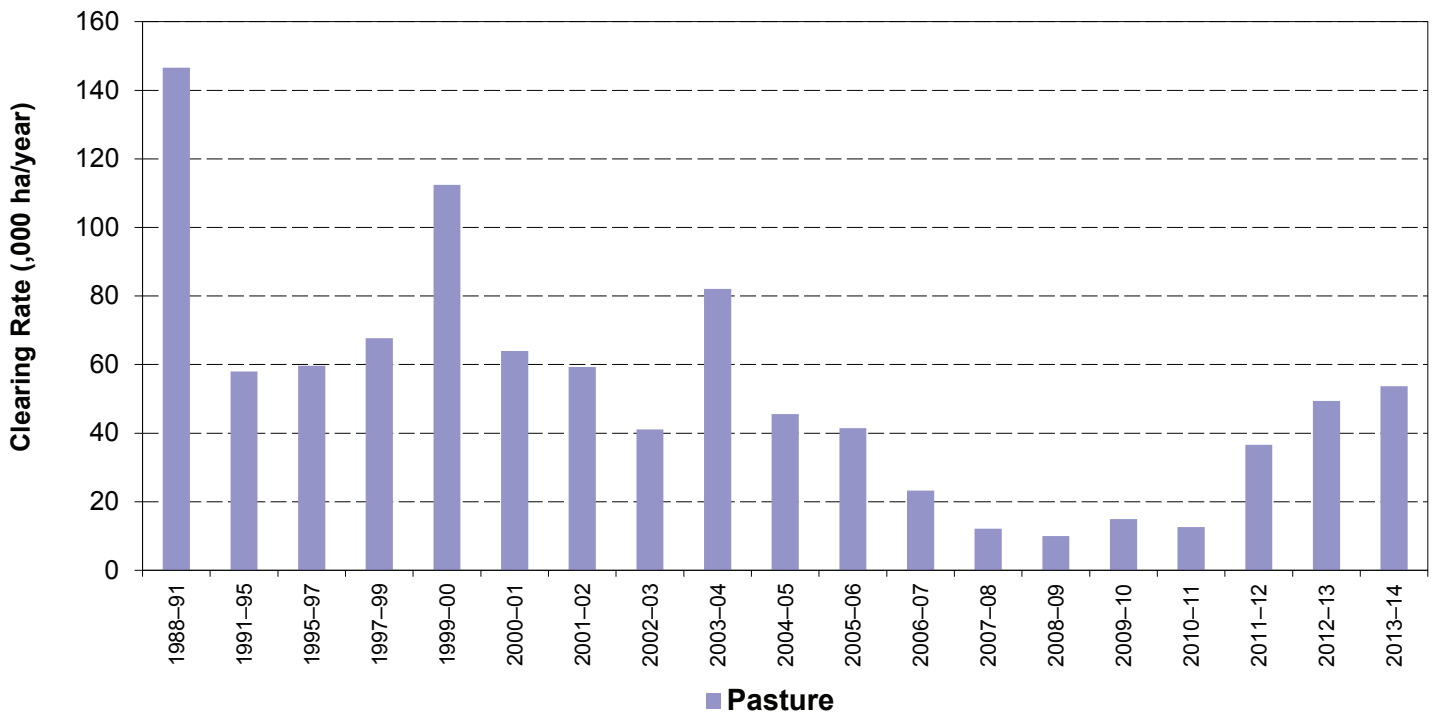


Figure 4. Woody vegetation clearing rates (,000 ha/year) in the Fitzroy region by replacement land cover.

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