Hay community

In interpreting this information, it is important to understand that there are many drivers of the socio-economic trends reflected in the data. Therefore, the socioeconomic changes outlined here cannot simply be attributed to the Basin Plan – it is just one of a number of factors that affect communities.

This information should be read in conjunction with Understanding change in Basin communities on the Southern Basin community profiles page at mdba.gov.au.

Total surface water entitlements available in Hay prior to Basin Plan water recovery was 247.2 GL. 70.7 GL (28.6% of available water) was recovered up to October 2016. 54.3 GL was recovered through purchase (of which 69% was purchased up to June 2011). 16.4 GL was recovered through on-farm infrastructure investment. The net reduction in water available for production is 47.2 GL (20% of available water).

Trends in social and economic conditions

**AREA POPULATION**
Decreased from 4,538 to 3,986 persons (12.2%) between 2001 and 2016
   → Mostly between 2006 and 2011, no change between 2011 and 2016

**WORKFORCE**

**Total area workforce**
Decreased from 1,624 to 1,221 FTE (24.8%) between 2001 and 2016
   → Over half the decrease occurred between 2011 and 2016
   → Workforce participation fell from 35.8 to 30.6 FTE per 100 persons

**Agricultural workforce**
Decreased 41.9% (313 FTE) between 2001 and 2016
   → Rate of decrease was relatively constant across the period
   → Employment in irrigated production decreased 41.4% (over half between 2001 and 2006)

**Agricultural manufacturing workforce**
Increased 50.6% (39 FTE) between 2001 and 2016
   → Mostly between 2001 and 2006

**Non-agriculture private workforce**
Decreased 35.7% (188 FTE) between 2001 and 2016
   → Half the decrease occurred between 2011 and 2016

**Government services workforce**
Was relatively constant (300 FTE) between 2001 and 2016
   → Increasing 20% between 2001 and 2011, decreasing 18.3% between 2011 and 2016
ECONOMIC STRUCTURE
Percentage FTE in key sectors:

→ **2001**: 46% agriculture, 32% non-agriculture private, 17% government services
→ **2016**: 36% agriculture, 28% non-agriculture private, 23% government services

TOWN POPULATION
Decreased from 3,701 to 3,254 persons (12.1%) between 2001 and 2016

→ Mostly between 2006 and 2011 (9.3%)

51% of the town population was 45 and over in 2016, up from 37% in 2001

→ 22% increase in 45 years and over, 32% decrease in under 45s

EMPLOYMENT

<table>
<thead>
<tr>
<th>Full-time employment</th>
<th>Part-time employment</th>
<th>Unemployment in the town</th>
</tr>
</thead>
<tbody>
<tr>
<td>25% of town population in 2016 down from 27% in 2001</td>
<td>Constant around 12% to 13% of town population</td>
<td>Constant around 2% of town population</td>
</tr>
</tbody>
</table>

SEIFA FOR TOWN: (DECILE RANKINGS)

→ **2001**: disadvantage = 4, advantage/disadvantage = 5, wealth = 6, education = 6
→ **2016**: disadvantage = 4, advantage/disadvantage = 4, wealth = 3, education = 4

Land use

<table>
<thead>
<tr>
<th>Irrigated production</th>
<th>Dryland farming</th>
<th>Grazing</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 20 40 60 80 100</td>
<td>% land use in Hay</td>
<td></td>
</tr>
</tbody>
</table>

Water recovery programs

Water purchase accounted for much of the water recovered between 2009 and 2017. The remaining water recovery was through the On-Farm Irrigation Efficiency program between 2011 and 2017. Irrigation system modernisation planning assisted with upgrades to water delivery through the Private Infrastructure Irrigation Operators Program Round 3 between 2016 to 2017. The Hay Shire council also received funding between 2010 and 2013 to develop a drought management strategy.
Basin Plan impact on irrigated agriculture

The main irrigated crops grown are annuals (rice, cotton, wheat, represented as rice equivalent hectares) and some pasture. Across the period examined, there has been a significant decrease in the area of rice production (maximum production falling from around 15,000 hectares in 2000-01 to approximately 3,500 hectares in 2012-13) while the area of cotton production expanded from just over 1,000 hectares in 2002-03 to more than 20,000 hectares in 2014-15. The timing of the changes in the major forms of irrigation has had a significant flow through effect on the rest of the community.

While the maximum area of production (measured as rice equivalent hectares) has been increasing, it is estimated the Basin Plan water recovery has reduced the maximum potential area of production by around 20% to 30%. The recent increase in irrigated area has been supported by the permanent trade of water from other locations, particularly the Coleambally community. As a consequence, part of the effects of Basin Plan water recovery in Hay has been transferred to the Coleambally community.

Area of irrigated production (rice-equivalent hectares) 2001–16
Basin Plan impact on farm sector

In 2001, farm employment was approximately 547 FTE (including seasonal workers). Farm employment fell by around 41% between 2001–16. Non-Basin Plan factors resulted in 29% to 31.5% of this change, while the Basin Plan water recovery contributed approximately 9.5% to 12%. There has been a recent expansion in the area developed for growing cotton and other annual crops, however, farm employment has continued to fall. Part of that expansion in the developed irrigation area is supported by water acquired from farmers in the Coleambally community, thereby transferring part of the effect of the Basin Plan from Hay to Coleambally.

Effect of Basin Plan on farm employment 2001–16
Basin Plan impact on total employment

In 2001, total employment was approximately 1,625 FTE (including seasonal workers). Total employment fell by around 25% between 2001–16. Non-Basin Plan factors led to 17.5% of this change, while the Basin Plan water recovery contributed the remaining 7.5%.

Effect of Basin Plan on total employment 2001–16

[Graph showing the percentage change in total employment from 2000/2001 to 2015/2016 with marked changes due to the Basin Plan.]