Benerembah 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 Benerembah prior to Basin Plan water recovery was 206.5 GL. 25 GL (12.1% of available water) was recovered up to October 2016. 16.6 GL was recovered through purchase (of which 61% was purchased up to June 2011). 8.4 GL was recovered through on-farm infrastructure investment. The net reduction in water available for production is 13 GL (6.3% of available water).

Trends in social and economic conditions

**AREA POPULATION**
Decreased from 516 to 493 persons (4.5%) between 2001 and 2016
→ 11.8% decrease between 2001 and 2006, before increasing again after 2006

**WORKFORCE**

**Total area workforce**
Decreased from 375 to 336 FTE (10.4%) between 2001 and 2016
→ Decreasing 15.1% between 2001 and 2011, increasing 4.7% since 2011
→ Workforce participation fell from 72.7 to 68.1 FTE per 100 persons

**Agricultural workforce**
Decreased 21.5% (52 FTE) between 2001 and 2016
→ Mostly between 2001 and 2006
→ Employment in irrigated production decreased 18.8% overall (decreasing 23.7% between 2001 and 2011, increasing 5% between 2011 and 2016)

**Government services workforce**
Remained relatively constant (around 10% of the workforce)

**Agricultural manufacturing workforce**
Remained a small part of the local economy

**Non-agriculture private workforce**
Decreased 15% (13 FTE) between 2001 and 2016
→ Mostly between 2001 and 2006
**ECONOMIC STRUCTURE**
Percentage FTE in key sectors:
- **2001**: 64% agriculture, 23% non-agriculture private, 8% government services
- **2016**: 56% agriculture, 22% non-agriculture private, 11% government services

**TOWN POPULATION**
There are no towns within the Benerembah community area

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**Land use**

- Dryland farming
- Irrigated production
- Grazing

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**Water recovery programs**
Water recovery relied on purchasing between 2010 and 2013. Water recovery shifted to infrastructure investments from 2014 onwards, with the Australian Government's On-Farm Irrigation Efficiency Program (Rounds 1, 3 and 5). Water users in the region also benefitted from investments in off-farm water delivery infrastructure in the Murrumbidgee Irrigation District under the Private irrigation infrastructure operators program.
Basin Plan impact on irrigated agriculture

With general security entitlements being the predominant water rights, the main crops grown are annuals with a small proportion of the land utilized for grapevines, fruit trees and vegetables. The annuals include summer and winter cereals and oils, pasture, rice and more recently the increasing substitution of land from growing rice to cotton. These annuals crops are grouped together as a rice-equivalent estimate of irrigated production. Basin Plan water recovery was estimated to reduce the rice-equivalent area irrigated by approximately 6% to 7%.

Other sources of environmental water recovery together with the Basin Plan water recovery were estimated to reduce the rice equivalent hectares by around 11% to 12%. However, significant investment through the Basin Plan on-farm and off-farm infrastructure investment, together with the changes made to the farming production systems have contributed to an identifiable increase in productivity. These productivity gains have effectively resulted in farmers more than overcoming the effects of water recovery with the area of crops being irrigated (in rice equivalent hectares) increasing by around 11% above the area irrigated without the Basin Plan.

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

In 2001, farm employment was approximately 228 FTE (including seasonal workers). Farm employment fell by around 19% between 2001–16. Non-Basin Plan factors alone would have led to a larger decrease of around 22%. Basin Plan water recovery is estimated to have decreased employment by 1.5% to 2%. Other environmental water recovery is estimated to have reduced farm employment by 0.5% to 1.5%. However, the productivity benefits associated with on-farm and off-farm infrastructure investment (3% improvement in employment) have more than off-set the effects of environmental water recovery, leading to the overall decrease in farm employment of 19%.

Effect of Basin Plan on farm employment 2001–16

![Graph showing the effect of Basin Plan on farm employment from 2001 to 2016. The graph illustrates the percentage change in farm employment each year, with lines representing different scenarios including Basin Plan, Basin Plan plus other e-water recovery, and Basin Plan plus infrastructure productivity. The data indicates a reduction in employment in the early years, with the effect of the Basin Plan being more pronounced in some years.]
Basin Plan impact on total employment

In 2001, total employment was approximately 375 FTE (including seasonal workers). Total employment fell by around 10% between 2001–16. Non-Basin Plan factors alone would have led to a larger decrease in employment of around 12%. Basin Plan water recovery is estimated to have decreased employment by 1% to 1.5%. Other environmental water recovery is estimated to have reduced total employment by a further 1%. However, the productivity benefits associated with the combined on-total and off-total infrastructure investment (4% to 5% improvement in employment) has more than off-set the effects of the environmental water recovery, leading to the overall decrease in total employment of 10%.

Effect of Basin Plan on total employment 2001–16

[Graph showing the percentage change in total employment from 2000-01 to 2015-16, with lines indicating different scenarios: With Basin Plan, Basin Plan plus other e-water recovery, and Basin Plan plus infrastructure productivity.]