

Understanding change in Basin communities

How to interpret the indicators of social and economic condition

Through working with communities, industry and Basin governments, the MDBA has identified those indicators which best define how communities are changing over time. Reflecting on the drivers of change in each community, together with the timing and scale of change in the social and economic indicators, provides the context for understanding how the Basin Plan water recovery has contributed to those changes. The profiles also provide the means for examining how, when and at what pace communities are changing relative to one another.

The MDBA's social and economic profiles are largely based on information collected through the Australian Bureau of Statistics (ABS) across the 2001, 2006, 2011 and 2016 census. Information covers changes in the total population of the communities and main towns or urban centres, the workforce and economic structure, and indicators of social condition. No one piece of information (from within the profiles) is a sufficient measure of change at the community level. All the indicators together help to describe the social and economic conditions of Basin communities.

The 45 southern Basin community profiles complement similar profiles published in 2016 for 21 communities in the northern Basin. The timeframe covered in the profiles means the observed changes incorporate shifts in agricultural production, technology and the climate, in addition to the changes in water available for irrigated production.

What geographical scale is used to produce the community profiles?

The community areas used by the MDBA to inform part of the social and economic analysis are based on irrigation areas where possible and/or distinctive reaches of the rivers based around particular types of irrigated production. For some of the communities (eg. Benerembah) there may be no town or urban centre identified. But for most communities, there are one or two urban centres included. From this information, it is possible to examine the relationships between water availability and what is happening in both the farming areas and in the towns which rely on the farm production. It is recognised that the communities may have social and economic linkages with each other. This is taken into account when the MDBA is using the information contained within the profiles.

What's happening with irrigation water availability?

At the community level, it is necessary to account for the volume of entitlements held in each community before the water recovery occurred, the volume of water recovered, the types of entitlement recovered, and whether it has been through buyback or infrastructure investment. Information presented includes the starting volume of

entitlements and water recovered, expressed in long-term diversion limit equivalent (LTDLE) terms. Entitlement types held in each community might include high security, general security, high reliability, low reliability or supplementary licences. The Basin Plan water recovery may be additional to other sources of environmental water recovery.

Where the water recovery has been through on-farm infrastructure investment, the water savings retained by farmers are used to estimate the net change in water available for production. Where the recovery has included the rationalisation or closure of particular parts of the irrigation districts, that water recovery is treated as if the entitlements had been purchased for the purposes of the MDBA community-level social and economic analysis.

What's happening with social and economic condition

This section of the profiles identifies changes in social and economic conditions at the community and town (urban centre) scales. The information provided below allows a comparison of the rates and timing of changing between each community and against the average change across the 40 irrigation-dependent communities.

Why does the MDBA look at the population and age distribution?

Population numbers are provided for the whole community and for the main town, towns or urban centres. Examining the rates and timing of population change builds an understanding of when people are leaving or moving into the towns and/or the farming area of each community.

Across the period 2001 to 2016, the average change in community population was a decrease of 8.7%. A decrease of 2.7% between 2001 and 2006, and of 7.5% between 2006 and 2011 was followed by an average increase of 1.5% between 2011 and 2016.

When considering changes to the population, further information is provided on the changes to the number of mums, dads and kids (people under 45) or people over 45 years of age within the towns and urban centres. Across the rural areas of the basin, those communities appearing to be doing reasonably well show a decrease in people under 45 of around 8-9% between 2001 and 2016 and a similar rate of increase for those over 45.

Why does the MDBA look at changes in the total area workforce and workforce by industry?

The mix of employment in the community provides an indication of economic diversity and how the economic make-up of the community is changing over time. Data presented relies on assigning the 720 job classifications within the census to industry sectors then aggregating part-time and full-time employment to provide an estimate of total employment as full-time equivalents for the whole community. Within the towns or urban centres, it is possible to look at the mix of full and part-time employment for the residents.

Across the period 2001 to 2016, the average change in total employment across the 40 irrigation- dependent communities was a decrease of 24.1%. This was comprised of decreases of 2.8% between 2001 and 2006, 8.1% between 2006 and 2011, 13.1% between 2011 and 2016.

Employment information for each sector is relevant to understanding how a change in water can work its way through the agriculture and non-agriculture sectors of each community. In these profiles, the agriculture sector covers farm employment (including the farmers themselves), services to agriculture and the wholesaling of agricultural outputs. Value-adding to agricultural output is considered as a separate sector. The non-agriculture private sector represents the support network for the community and includes industries such as retailing, accommodation and housing construction. Government services are presented in a single grouping as employment in industries such as health and education are determined by a range of other general policy decisions from multiple layers of government.

The ABS data does not include a large proportion of the seasonal workers employed in rural communities. MDBA is preparing estimates of seasonal workers employed in the various irrigation sectors and the changes in demand for the seasonal workers across time.

Combining information on changes in total employment and the population provides an estimate of labour force participation. In 2001, average participation rates across the irrigation-dependent communities was 34.6 full-time equivalents per 100 people. In 2016, the average participation rate had fallen to 28.7 full-time equivalents per 100 people.

For the urban centres within the communities, on average 25% of people were in full-time employment in 2001, falling to 22% of people in full-time employment in 2016. With part-time work, an average of 13% of the town population was employed in 2001 and 2016.

Why does the MDBA consider ABS SEIFA indices?

Decile scores are used to represent the four ABS socio-economic indexes for areas (SEIFA, prepared by the Australian Bureau of Statistics from the census data)) at the town scale for 2001, 2006 and 2011. The 2016 data will become available later in 2018. The four SEIFA measures compare the relative levels of disadvantage, advantage, wealth and qualifications/occupations across all communities in Australia.

A decile score of 1 for a community indicates it is amongst the 10% most challenged locations across Australia for that measure. A decile score of 10 index indicates the community is ranked amongst the top 10% of communities for that measure.

While it is not possible to compare the decile scores across time in any quantitative way, the SEIFA indices can be used to indicate how the social conditions of each community are shifting relative to the index decile scores observed in other places. A change in relative ranking of 2 deciles or more between 2001 and 2011 indicates a considerable degree of change. If there is such a change to three or four of the indices across time, it provides further evidence for the strength of the changing social conditions experienced within a community.

For some communities, there is more than one major urban centre to consider, such as in Kyabram-Tatura. With those communities, the SEIFA scores are provided for the two major urban centres of Kyabram and Tatura. For example, both urban centres of a decile score of 7 for disadvantage in 2001. However in 2011, the decile scores for Kyabram/Tatura are given as 4/6. That is, a decile score for disadvantage of 4 in Kyabram and 6 in Tatura.

Rural communities experiencing relatively good social and economic conditions tend to have decile scores around 4, 5 or 6 across the four indices. Communities with lower decile scores or scores declining by at least 2 deciles are likely to have a reduced capacity to initiate change than communities with higher decile scores. When used in combination with other data in the profiles, the SEIFA scores and changes provide insights to the overall adaptive capacity of communities.

What's happening in agriculture?

Why does the MDBA look at the mix of land uses?

Land use data was sourced from ABARES ACLUMP 2016 to estimate the mix of agricultural landuses at the community scale. Estimates are provided on the maximum area of development for irrigated agriculture, the area developed for dryland farming (cropping), and for the area of grazing in each community. This information combined with climate data is used to estimate the relative contribution of the different types of agriculture to each community across the period from 1999/2000 to 2015/16.

The mix of land uses between cropping, grazing and irrigation provides information to be used in conjunction with the farm and agriculture supply sector employment data to describe the particular demands for goods, services and employees across the sectors of each community. For more information on the ACLUMP dataset, see ABARES Guidelines for land use mapping in Australia: principles, procedures and definitions (2011).

Benalla (control) community

These community profiles are a preliminary part of the work we are doing to analyse the reasons for social and economic changes that Basin communities have experienced over the last 15 years—work which we aim to release in full in April 2018. We are releasing this preliminary and foundational work now to give people the opportunity to examine the data for themselves, and so we can be confident about the data we are using to inform our socio-economic analysis.

We have captured data for 40 irrigation-dependent communities, and 5 that are not dependent on irrigation. These 5 ‘control’ communities have been included as a point of comparison to help us assess the impact of the Basin Plan’s water recovery.

Community data only available for 2006, 2011 and 2016 census.
Limited irrigated production, no Basin Plan water recovery.

Trends in social and economic conditions

AREA POPULATION

Increased from 13,524 to 13,863 people (2.5%) between 2006 and 2016

- Small increases across the period

WORKFORCE

Total area workforce

Increased from 4,373 to 5,265 FTE (64.8%) between 2006 and 2016

- Increase was relatively constant across the period
- Workforce participation rose from 32.3 to 38 FTE per 100 persons

Agricultural workforce

Increased 7% (48 FTE) between 2006 and 2016

- Most of the increase occurred between 2011 and 2016
- Employment in irrigated production was constant at around 60 FTE

Non-agriculture private workforce

- Increased 21.1% (430 FTE) between 2006 and 2016
- Most of the increase occurred between 2006 and 2011

Government services workforce

- Increased 31.7% (385 FTE) between 2006 and 2016
- Most of the increase occurred between 2011 and 2016

ECONOMIC STRUCTURE

Percentage FTE in key sectors:

- **2006:** 16% agriculture, 47% non-agriculture private, 28% government services
- **2016:** 14% agriculture, 47% non-agriculture private, 30% government services

TOWN POPULATION

Increased from 8,614 to 9,296 persons (7.9%) between 2001 and 2016

- Increasing 8.3% between 2001 and 2011, decreasing 0.4% between 2011 and 2016

55% of the town population was 45 and over in 2016, up from 42% in 2001

- 42% increase in 45 years and over, 16.5% decrease in under 45s

EMPLOYMENT

Full-time employment

21% of town population in 2016
down from 24% in 2001

Part-time employment

Constant around 13% to 14% of
town population

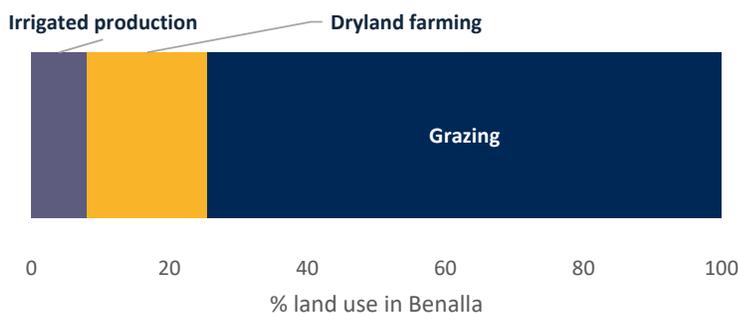
Unemployment in the town

Fell from 4% in 2001 to 2% in
2016

SEIFA FOR TOWN: (DECILE RANKINGS)

- **2001:** disadvantage = 4, advantage/disadvantage = 5, wealth = 5, education = 6
- **2011:** disadvantage = 4, advantage/disadvantage = 4, wealth = 3, education = 6

Land use



Benerembah community

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

Total surface water entitlements available in Benerembah prior to Basin Plan water recovery was 305.1GL. 25GL (8.2% 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). 8.4GL was recovered through on-farm infrastructure investment. The net reduction in water available for production is 13GL (4.6% 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)

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

Government services workforce

Remained relatively constant (around 10% of the workforce)

ECONOMIC STRUCTURE

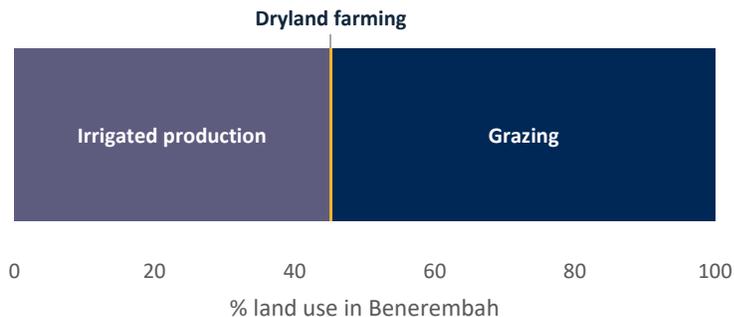
Percentage FTE in key sectors:

- **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

Land use



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.

Berri community

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

Total surface water entitlements available in Berri prior to Basin Plan water recovery was 41.4GL. 12.9GL (31.2% of available water) was recovered up to October 2016. 10.6 GL was recovered through purchase (of which 63% was purchased up to June 2011). 2.3GL was recovered through on-farm infrastructure investment. The net reduction in water available for production is 9.6GL (23.8% of available water).

Trends in social and economic conditions

AREA POPULATION

Decreased from 7,739 to 7,032 persons (9.1%) between 2001 and 2016

- Decrease has been constant across time

WORKFORCE

Total area workforce

Decreased from 2,828 to 2,003 FTE (29.2%) between 2001 and 2016

- Half of the decrease occurred between 2011 and 2016
- Workforce participation fell from 36.5 to 28.5 FTE per 100 persons

Agricultural workforce

Decreased 54.8% (399 FTE) between 2001 and 2016

- Half of the decrease occurred between 2001 and 2006
- Employment in irrigated production decreased 62.1% (32.7% between 2001 and 2006)

Agricultural manufacturing workforce

Decreased 41.5% (149 FTE) between 2001 and 2016

- Mostly between 2006 and 2011

Non-agriculture private workforce

Decreased 33.4% (394 FTE) between 2001 and 2016

- Mostly between 2011 and 2016

Government services workforce

Increased 8% (44 FTE) between 2001 and 2016

- Increasing 30% between 2001 and 2011, decreasing 22% between 2011 and 2016

ECONOMIC STRUCTURE

Percentage FTE in key sectors:

- **2001:** 26% agriculture, 42% non-agriculture private, 20% government services
- **2016:** 16% agriculture, 39% non-agriculture private, 30% government services

TOWN POPULATION

Decreased from 4,240 to 4,086 persons (3.6%) between 2001 and 2016

- Mostly between 2001 and 2006

47% of the town population was 45 and over in 2016, up from 39% in 2001

- 16% increase in 45 years and over, 16% decrease in under 45s

EMPLOYMENT

Full-time employment

23% of town population in 2016
down from 28% in 2001

Part-time employment

Constant around 12% to 13% of
town population

Unemployment in the town

Constant around 3% to 4% of
town population

SEIFA FOR TOWN: (DECILE RANKINGS)

- **2001:** disadvantage = 4, advantage/disadvantage = 6, wealth = 7, education = 6
- **2011:**, disadvantage = 2, advantage/disadvantage = 2, wealth = 2, education = 5

Land use



Water recovery programs

Water recovery occurred between 2009 and 2015, with most of the recovery through purchase. The On-Farm Irrigation Efficiency Program recovered water between 2011 and 2016. The Private Infrastructure Irrigation Program in South Australia contributed to modernising and increasing the efficiency of water delivery systems. Berri Barmera Council received funding under the Strengthening Basin Communities program for the Berri Stormwater Recycling Scheme.

Berrigan-Finley community

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

Total surface water entitlements available in Berrigan-Finley prior to Basin Plan water recovery was 621GL. 64.3GL (10.4% of available water) was recovered up to October 2016. 41.5 GL was recovered through purchase (of which 64% was purchased up to June 2011). 22.8GL was recovered through on-farm infrastructure investment. The net reduction in water available for production is 31.7GL (5.6% of available water).

Trends in social and economic conditions

AREA POPULATION

Decreased from 7,116 to 5,665 persons (20.4%) between 2001 and 2016

- Decrease has been constant across time

WORKFORCE

Total area workforce

Decreased from 2,626 to 1,579 FTE (39.9%) between 2001 and 2016

- 22.9% of the decrease occurred between 2011 and 2016
- Workforce participation fell from 36.9 to 27.9 FTE per 100 persons

Agricultural workforce

Decreased 40.4% (396 FTE) between 2001 and 2016

- 21.8% of the decrease occurred between 2011 and 2016
- Employment in irrigated production decreased 35.4% (around half between 2001 and 2006, other half between 2011 and 2016)

Agricultural manufacturing workforce

Decreased 32.1% (43 FTE) between 2001 and 2016

- Decreasing 2001 to 2006, increasing 2006 to 2011, decreasing 2011 to 2016

Non-agriculture private workforce

Decreased 57.7% (626 FTE) between 2001 and 2016

- Constantly decreasing across the whole period

Government services workforce

Decreased 8.8% (37 FTE) between 2001 and 2016

- Increasing 14.5% between 2001 and 2006, decreasing 19.7% between 2011 and 2016

ECONOMIC STRUCTURE

Percentage FTE in key sectors:

- **2001**: 37% agriculture, 41% non-agriculture private, 16% government services
- **2016**: 37% agriculture, 29% non-agriculture private, 24% government services

TOWN POPULATION

Remained around 2,850 persons between 2001 and 2016

- Small increases and decreases across the period

58% of the town population was 45 and over in 2016, up from 47% in 2001

- 22% increase in 45 years and over, 21% decrease in under 45s

EMPLOYMENT

Full-time employment

21% of town population in 2016
down from 28% in 2001

Part-time employment

Constant around 12% to 13% of
town population

Unemployment in the town

Constant around 2% of town
population

SEIFA FOR TOWN: (DECILE RANKINGS, BERRIGAN/FINLEY)

- **2001**: disadvantage = 5/7, advantage/disadvantage = 4/7, wealth = 4/7, education = 3/7
- **2011**: disadvantage = 3, advantage/disadvantage = 2/4, wealth = 2/3, education = 2/5

Land use



Water recovery programs

Water recovery through purchase occurred between 2009 and 2013. Further water recovery has come through infrastructure investments through the Australian Government's On-Farm Irrigation Efficiency Program (Rounds 1 through 5), mostly from 2013 onwards. Improvements to off-farm water delivery infrastructure benefitted water users in the Murray Irrigation District. Berrigan Shire Council received funding through the Strengthening Basin Communities program to identify a range of water savings opportunities.

Blanchetown community

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Total surface water entitlements available in Blanchetown prior to Basin Plan water recovery was 3GL. 0.5GL (17.4% of available water) was recovered up to October 2016. 0.5 GL was recovered through purchase (of which 100% was purchased up to June 2011). A small volume was recovered through on-farm infrastructure investment. The net reduction in water available for production is around 0.5GL.

Trends in social and economic conditions

AREA POPULATION

Decreased from 386 to 251 persons (35%) between 2001 and 2016
→ Two-thirds of the decrease occurred between 2011 and 2016

WORKFORCE

Total area workforce

Decreased from 107 to 39 FTE (63.8%) between 2001 and 2016
→ Most of the decrease occurred between 2011 and 2016
→ Workforce participation fell from 27.8 to 15.5 FTE per 100 persons

Agricultural workforce

Decreased 59.1% (32 FTE) between 2001 and 2016
→ Most of the decrease occurred between 2011 and 2016
→ Employment in irrigated production remained quite small

Agricultural manufacturing workforce

There has been limited employment in this sector

Non-agriculture private workforce

Decreased 77.5% (29 FTE) between 2001 and 2016
→ Nearly all between 2011 and 2016

Government services workforce

There has been limited employment in this sector

ECONOMIC STRUCTURE

Percentage FTE in key sectors:

- **2001:** 51% agriculture, 36% non-agriculture private, 11% government services
- **2016:** 57% agriculture, 22% non-agriculture private, 15% government services

TOWN POPULATION

Increased from 188 to 240 persons (33.3%) between 2001 and 2016

- The population has varied considerably across time

67% of the town population was 45 and over across the period from 2001 to 2016

- 27% increase in 45 years and over, 45% increase in under 45s

EMPLOYMENT

Full-time employment

14% of town population in 2016
down from 20% in 2001

Part-time employment

Constant around 9% of town
population

Unemployment in the town

Constant around 1% to 3% of
town population

SEIFA FOR TOWN: (DECILE RANKINGS)

- **2001:** disadvantage = 3, advantage/disadvantage = 2, wealth = 1, education = 3
- **2011:** disadvantage = 1, advantage/disadvantage = 1, wealth = 2, education = 3

Land use

Irrigated production



Water recovery programs

A small amount of water recovery occurred through round 3 of the On-Farm Irrigation Efficiency Program in 2014.

Buloke (control) community

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We have captured data for 40 irrigation-dependent communities, and 5 that are not dependent on irrigation. These 5 ‘control’ communities have been included as a point of comparison to help us assess the impact of the Basin Plan’s water recovery.

Limited irrigated production, no Basin Plan water recovery.

Trends in social and economic conditions

AREA POPULATION

Decreased from 6,981 to 6,201 persons (11.2%) between 2001 and 2016

- Mostly between 2006 and 2011

WORKFORCE

Total area workforce

Decreased from 2,465 to 2,278 FTE (7.6%) between 2001 and 2016

- Decreasing 11.7% between 2001 and 2011, increasing 4.1% between 2011 and 2016
- Workforce participation rose from 35.3 to 36.7 FTE per 100 persons

Agricultural workforce

Decreased 33.2% (426 FTE) between 2001 and 2016

- Two-thirds of the decrease occurred between 2001 and 2006
- Employment in irrigated production was less than 20 FTE

Non-agriculture private workforce

Decreased 2.4% (16 FTE) between 2001 and 2016

- Increasing and decreasing across time

Government services workforce

Increased 42.1% (187 FTE) between 2001 and 2016

- Increasing more than 20% between 2001 and 2006, and between 2011 and 2016

ECONOMIC STRUCTURE

Percentage FTE in key sectors:

- **2001:** 52% agriculture, 28% non-agriculture private, 18% government services
- **2016:** 38% agriculture, 29% non-agriculture private, 28% government services

TOWN POPULATION

Remained around 2,350 people between 2001 and 2016

→ Increasing 6.4% between 2001 and 2006, decreasing 7.8% between 2006 and 2011

62% of the town population was 45 and over in 2016, up from 52% in 2001

→ 19% increase in 45 years and over, 21% decrease in under 45s

EMPLOYMENT

Full-time employment

20% of town population in 2016
down from 26% in 2001

Part-time employment

Constant around 13% of town
population

Unemployment in the town

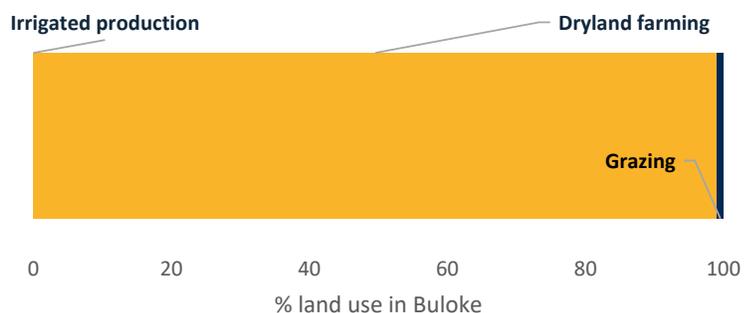
Increased from 2% of town
population in 2001 to 3% in
2016

SEIFA FOR TOWN: (DECILE RANKINGS, CHARLTON/DONALD)

→ **2001:** disadvantage = 8, advantage/disadvantage = 6/5, wealth = 4/3, education = 7/5

→ **2011:** disadvantage = 5, advantage/disadvantage = 5, wealth = 4, education = 7

Land use



Cobdogla-Barmera community

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Total surface water entitlements available in Cobdogla-Barmera prior to Basin Plan water recovery was 41.4GL. 22GL (53.1% of available water) was recovered up to October 2016. 17.6 GL was recovered through purchase (of which 43% was purchased up to June 2011). 4.4GL was recovered through on-farm infrastructure investment. The net reduction in water available for production is 15.7GL (39.3% of available water).

Trends in social and economic conditions

AREA POPULATION

Decreased from 5,407 to 5,014 persons (7.3%) between 2001 and 2016

- Most of the decrease was between 2001 and 2006

WORKFORCE

Total area workforce

Decreased from 1,796 to 1,270 FTE (29.3%) between 2001 and 2016

- Half of the decrease occurred between 2011 and 2016
- Workforce participation fell from 33.2 to 25.3 FTE per 100 persons

Agricultural workforce

Decreased 54.8% (349 FTE) between 2001 and 2016

- 46% of the decrease occurred between 2001 and 2011
- Employment in irrigated production decreased 57% (54.6% between 2001 and 2011)

Agricultural manufacturing workforce

Decreased 26.5% (57 FTE) between 2001 and 2016

- Mostly between 2006 and 2016

Non-agriculture private workforce

Decreased 28.8% (184 FTE) between 2001 and 2016

- Mostly between 2011 and 2016

Government services workforce

Increased 7.7% (23 FTE) between 2001 and 2016

- Increasing 20.4% between 2001 and 2011, decreasing 12.7% between 2011 and 2016

ECONOMIC STRUCTURE

Percentage FTE in key sectors:

- **2001:** 35% agriculture, 36% non-agriculture private, 17% government services
- **2016:** 23% agriculture, 36% non-agriculture private, 26% government services

TOWN POPULATION

Decreased from 2,198 to 2,138 persons (2.7%) between 2001 and 2016

- Mostly between 2001 and 2006

57% of the town population was 45 and over in 2016, up from 49% in 2001

- 13% increase in 45 years and over, 18% decrease in under 45s

EMPLOYMENT

Full-time employment

18% of town population in 2016
down from 22% in 2001

Part-time employment

Varied between 11% and 13% of
town population

Unemployment in the town

Constant around 3% to 4% of
town population

SEIFA FOR TOWN: (DECILE RANKINGS, COBDOLGA/BARMERA)

- **2001:** disadvantage = 4/2, advantage/disadvantage = 3, wealth = 5/4, education = 2/4
- **2011:** disadvantage = 5/2, advantage/disadvantage = 4/2, wealth = 6/1, education = 1/3

Land use



Water recovery programs

Most water was recovered through purchase between 2009 and 2013. Water recovery via the infrastructure programs occurred through the On-Farm Irrigation Efficiency program between 2011 to 2016 and the Private Infrastructure Irrigation Program South Australia in 2012. Irrigation system modernisation planning occurring through the Central Irrigation Trust. The community received funding for the Riverine Recovery project which involved investment in wetland and floodplain management and infrastructure.

Cobram community

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

Total surface water entitlements available in Cobram prior to Basin Plan water recovery was 284.8GL. 70.1GL (24.6% of available water) was recovered up to October 2016. 61.3 GL was recovered through purchase (of which 59% was purchased up to June 2011). 8.8GL was recovered through on-farm infrastructure investment. The net reduction in water available for production is 57.5GL (20.6% of available water).

Trends in social and economic conditions

AREA POPULATION

Increased from 15,794 to 16,948 persons (7.3%) between 2001 and 2016

- Nearly all of the increase occurred between 2006 and 2011

WORKFORCE

Total area workforce

Decreased from 5,547 to 4,946 FTE (10.8%) between 2001 and 2016

- 2.3% increase in 2001 to 2011 was followed by a 13.1% decrease up to 2016
- Workforce participation fell from 35.1 to 29.2 FTE per 100 persons

Agricultural workforce

Decreased 32% (616 FTE) between 2001 and 2016

- Three-quarters of the decrease occurred between 2001 and 2011
- Employment in irrigated production decreased 40.1% (37.1% between 2001 and 2011)

Agricultural manufacturing workforce

Decreased 22.2% (176 FTE) between 2001 and 2016

- 17.3% between 2011 and 2016

Non-agriculture private workforce

Decreased 15.4% (323 FTE) between 2001 and 2016

- Increased 10% between 2001 to 2011, decreased 25.5% between 2011 and 2016

Government services workforce

Increased 42.6% (315 FTE) between 2001 and 2016

- All of the increase occurred between 2001 and 2011

ECONOMIC STRUCTURE

Percentage FTE in key sectors:

- **2001:** 35% agriculture, 38% non-agriculture private, 13% government services
- **2016:** 26% agriculture, 36% non-agriculture private, 21% government services

TOWN POPULATION

Increased from 10,014 to 11,253 persons (12.4%) between 2001 and 2016

- All of the increase occurred between 2001 and 2011

52% of the town population was 45 and over in 2016, up from 44% in 2001

- 32% increase in 45 years and over, 4% decrease in under 45s

EMPLOYMENT

Full-time employment

22% of town population in 2016
down from 25% in 2001

Part-time employment

Constant around 12% of town
population

Unemployment in the town

Constant around 2% to 3% of
town population

SEIFA FOR TOWN: (DECILE RANKINGS, COBRAM/NUMERKAH)

- **2001:** disadvantage = 4/7, advantage/disadvantage = 4/6, wealth = 5/6, education = 4/5
- **2011:** disadvantage = 3/4, advantage/disadvantage = 3/4, wealth = 3/4, education = 3/4

Land use



Water recovery programs

Water recovery through purchase occurred between 2009 and 2014. Water recovery from on-farm infrastructure investment occurred through the first 4 rounds of the On-Farm Irrigation Efficiency program. Water users benefitted from improvements to the water delivery infrastructure managed by Goulburn Murray Water.

Coleambally community

These community profiles are a preliminary part of the work we are doing to analyse the reasons for social and economic changes that Basin communities have experienced over the last 15 years—work which we aim to release in full in April 2018. We are releasing this preliminary and foundational work now to give people the opportunity to examine the data for themselves, and so we can be confident about the data we are using to inform our socio-economic analysis.

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

Total surface water entitlements available in Coleambally prior to Basin Plan water recovery was 316GL. 25.1GL (7.9% of available water) was recovered up to October 2016. 14.5 GL was recovered through purchase (of which 73% was purchased up to June 2011). 10.6GL was recovered through on-farm infrastructure investment. The net reduction in water available for production is 9.9GL (3.6% of available water).

Trends in social and economic conditions

AREA POPULATION

Decreased from 1,226 to 1,192 persons (5.8%) between 2001 and 2016

- Decrease of 8% between 2001 and 2011, increase of 2.2% between 2011 and 2016

WORKFORCE

Total area workforce

Decreased from 514 to 406 FTE (21%) between 2001 and 2016

- Three-quarters of the decrease occurred between 2011 and 2016
- Workforce participation fell from 40.6 to 34.1 FTE per 100 persons

Agricultural workforce

Decreased 23.2% (64 FTE) between 2001 and 2016

- Large increases and decreases are observed across time
- Employment in irrigated production decreased 25% across the period

Agricultural manufacturing workforce

Decreased 11.3% between 2001 and 2016

- Large increases and decreases observed between 2001 and 2011

Non-agriculture private workforce

Decreased 45.1% (68 FTE) between 2001 and 2016

- Large decreases between 2001 and 2006, and between 2011 and 2016

Government services workforce

Increased 21.7% (13 FTE) between 2001 and 2016

- Increased 27.8% between 2001 and 2011, decreasing 6.1% between 2011 and 2016

ECONOMIC STRUCTURE

Percentage FTE in key sectors:

- **2001:** 54% agriculture, 29% non-agriculture private, 12% government services
- **2016:** 53% agriculture, 20% non-agriculture private, 18% government services

TOWN POPULATION

Decreased from 674 to 663 persons (1.6%) between 2001 and 2016

- Decrease of 6.5% between 2001 and 2011, increase of 4.9% since 2011

47% of the town population was 45 and over in 2016, up from 41% in 2001

- 14% increase in 45 years and over, 12% decrease in under 45s

EMPLOYMENT

Full-time employment

27% of town population in 2016, down from 33% in 2001

Part-time employment

Variable around 11% to 16% of town population

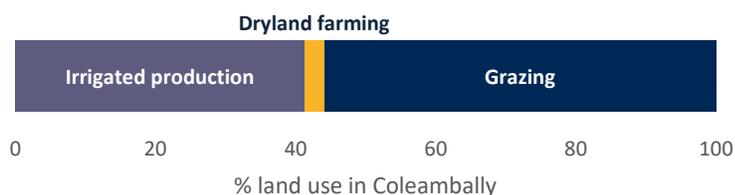
Unemployment in the town

Constant around 1% to 2% of town population

SEIFA FOR TOWN: (DECILE RANKINGS)

- **2001:** disadvantage = 7, advantage/disadvantage = 8, wealth = 9, education = 6
- **2011:** disadvantage = 4, advantage/disadvantage = 4, wealth = 4, education = 5

Land use



Water recovery programs

Water recovery through purchase occurred between 2010 and 2012. Water recovery from on-farm infrastructure investment came through Rounds 1 to 5 of the On-Farm Irrigation Efficiency program and the Water Smart Australia program. The region benefitted from irrigation system modernisation planning and subsequent improvements to the water delivery system of the Coleambally Irrigation Cooperative.

Colignan community

These community profiles are a preliminary part of the work we are doing to analyse the reasons for social and economic changes that Basin communities have experienced over the last 15 years—work which we aim to release in full in April 2018. We are releasing this preliminary and foundational work now to give people the opportunity to examine the data for themselves, and so we can be confident about the data we are using to inform our socio-economic analysis.

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

Total surface water entitlements available in Colignan prior to Basin Plan water recovery was 68.6GL. 10.7GL (15.6% of available water) was recovered up to October 2016. 10.5 GL was recovered through purchase (of which 90% was purchased up to June 2011). 0.2GL was recovered through on-farm infrastructure investment. The net reduction in water available for production is 10.4GL (15.2% of available water).

Trends in social and economic conditions

AREA POPULATION

Decreased from 1,463 to 1,026 persons (29.9%) between 2001 and 2016

- Most of the decrease occurred between 2006 and 2011

WORKFORCE

Total area workforce

Decreased from 518 to 322 FTE (37.7%) between 2001 and 2016

- Three-quarters of the decrease occurred between 2001 and 2011
- Workforce participation fell from 35.4 to 31.4 FTE per 100 persons

Agricultural workforce

Decreased 26.5% (55 FTE) between 2001 and 2016

- Mostly between 2006 and 2011
- Employment in irrigated production decreased 28.5% mostly between 2006 and 2011

Agricultural manufacturing workforce

A small and diminishing part of the local economy

Non-agriculture private workforce

Decreased 54.9% (107 FTE) between 2001 and 2016

- Constantly decreasing across the period

Government services workforce

Decreased 46.7% (36 FTE) between 2001 and 2016

- Constantly decreasing across the period

ECONOMIC STRUCTURE

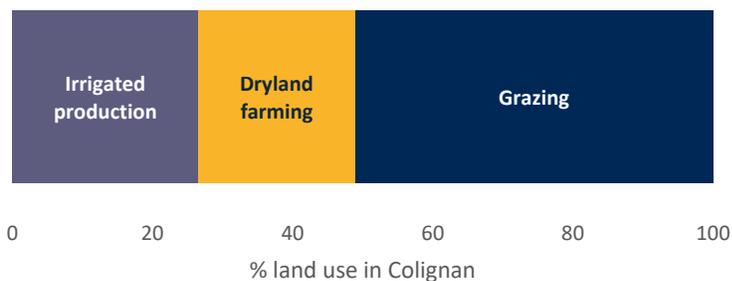
Percentage FTE in key sectors:

- **2001**: 40% agriculture, 38% non-agriculture private, 15% government services
- **2016**: 47% agriculture, 27% non-agriculture private, 13% government services

TOWN POPULATION

There are no towns within the Colignan community area

Land use



Water recovery programs

The bulk of water recovery occurred through purchase, and mostly in 2011. A small volume of water was recovered through the On-Farm Irrigation Efficiency program.

Coomealla community

These community profiles are a preliminary part of the work we are doing to analyse the reasons for social and economic changes that Basin communities have experienced over the last 15 years—work which we aim to release in full in April 2018. We are releasing this preliminary and foundational work now to give people the opportunity to examine the data for themselves, and so we can be confident about the data we are using to inform our socio-economic analysis.

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

Total surface water entitlements available in Coomealla prior to Basin Plan water recovery was 88.4GL. 6.5GL (7.3% of available water) was recovered up to October 2016. 6.3 GL was recovered through purchase (of which 10% was purchased up to June 2011). 0.2GL was recovered through on-farm infrastructure investment. The net reduction in water available for production is 6.2GL (7.1% of available water).

Trends in social and economic conditions

AREA POPULATION

Increased from 2,147 to 2,190 persons (2%) between 2001 and 2016

- Decrease of 7.9% between 2001 and 2006, increase of 15% for 2006 to 2011

WORKFORCE

Total area workforce

Decreased from 691 to 453 FTE (34.5%) between 2001 and 2016

- Increase of 8.9% between 2001 and 2011, decrease of 43.5% between 2011 and 2016
- Workforce participation fell from 32.2 to 20.7 FTE per 100 persons

Agricultural workforce

Decreased 56.1% (175 FTE) between 2001 and 2016

- Decrease occurred across the period with half the decline between 2011 and 2016
- Employment in irrigated production decreased 59.3% (133 FTE) falling consistently across the period

Agricultural manufacturing workforce

Decreased 51.4% (22 FTE) between 2001 and 2016

- Mostly between 2011 and 2016

Non-agriculture private workforce

Decreased 25% (54 FTE) between 2001 and 2016

- Increased 34.4% between 2001 and 2011, decreased 59.4% between 2011 and 2016

Government services workforce

Decreased 7.1% (36 FTE) between 2001 and 2016

- Increasing 53.9% between 2001 and 2011, decreasing 61% between 2011 and 2016

ECONOMIC STRUCTURE

Percentage FTE in key sectors:

- **2001:** 45% agriculture, 31% non-agriculture private, 18% government services
- **2016:** 30% agriculture, 36% non-agriculture private, 25% government services
-

TOWN POPULATION

Decreased from 633 to 505 persons (20.2%) between 2001 and 2016

- Mostly between 2001 and 2011

50% of the town population was 45 and over in 2016, up from 45% in 2001

- 11% decrease in 45 years and over, 27% decrease in under 45s

EMPLOYMENT

Full-time employment

12% of town population in 2016
down from 17% in 2001

Part-time employment

7% of town population in 2016
down from 9% in 2001

Unemployment in the town

Varied around 2% to 5% of town
population

SEIFA FOR TOWN: (DECILE RANKINGS)

- **2001:** disadvantage = 3, advantage/disadvantage = 4, wealth = 3, education = 6
- **2011:** disadvantage = 1, advantage/disadvantage = 1, wealth = 1, education = 3

Land use



Water recovery programs

Most water purchase occurred within the early years of the program. The remaining recovery occurred through round 4 of the On-Farm Irrigation Efficiency Program. An irrigation system modernisation planning assessment was carried out by Western Murray Irrigation to highlight water needs in the area.

Cullulleraine community

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Total surface water entitlements available in Cullulleraine prior to Basin Plan water recovery was 6.6GL. 2.4GL (35.6% of available water) was recovered up to October 2016. 2.3 GL was recovered through purchase (of which 0% was purchased up to June 2011). 0.1GL was recovered through on-farm infrastructure investment. The net reduction in water available for production is 2.3GL (34.2% of available water).

Trends in social and economic conditions

AREA POPULATION

Decreased from 63 to 53 persons (15.9%) between 2001 and 2016

- 19% decrease between 2001 and 2006, increase of 3.1% since 2006

WORKFORCE

Total area workforce

Decreased from 19 to 14 FTE between 2001 and 2016

- Mostly between 2001 and 2006
- Workforce participation fell from 30.5 to 26.1 FTE per 100 persons

Agricultural workforce

Remained relatively small (less than 10 FTE)

- Employment in irrigated production remained quite small

Agricultural manufacturing workforce

Remained a small part of the local economy

Non-agriculture private workforce

Remained relatively constant (around 7 FTE)

Government services workforce

Remained relatively constant (around 3 FTE)

ECONOMIC STRUCTURE

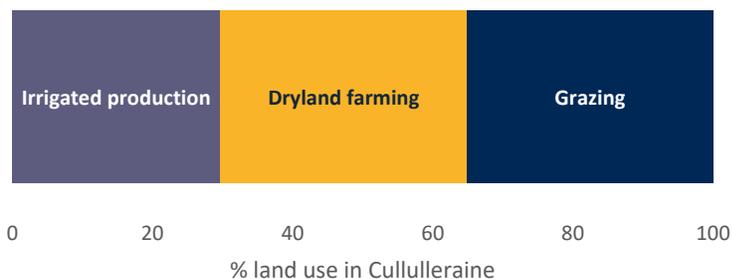
Percentage FTE in key sectors:

- 2001: 45% agriculture, 34% non-agriculture private, 15% government services
- 2016: 22% agriculture, 43% non-agriculture private, 21% government services

TOWN POPULATION

There are no towns within the Cullulleraine community area

Land use



Water recovery programs

Water Purchase accounted for most of the water recovery. A small volume was recovered through Round 3 of the On-Farm Irrigation Efficiency Program.

Deniboota community

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Total surface water entitlements available in Deniboota prior to Basin Plan water recovery was 175GL. 49.5GL (28.3% of available water) was recovered up to October 2016. 44.2 GL was recovered through purchase (of which 83% was purchased up to June 2011). 5.3GL was recovered through on-farm infrastructure investment. The net reduction in water available for production is 41.9GL (24.3% of available water).

Trends in social and economic conditions

AREA POPULATION

Decreased from 2,106 to 1,774 persons (15.8%) between 2001 and 2016

→ Decrease of 20.5% between 2001 and 2011, increase of 4.7% since 2011

WORKFORCE

Total area workforce

Decreased from 754 to 559 FTE (25.8%) between 2001 and 2016

→ 22.1% between 2001 and 2011, 3.7% between 2011 and 2016

→ Workforce participation fell from 35.8 to 31.5 FTE per 100 persons

Agricultural workforce

Decreased 51.1% (129 FTE) between 2001 and 2016

→ 29.5% between 2001 and 2006, 3.1% between 2011 and 2016

→ Employment in irrigated production decreased 61% (all between 2001 and 2011)

Agricultural manufacturing workforce

Remained constant (34 FTE) between 2001 and 2016

Non-agriculture private workforce

Decreased 29.1% (99 FTE) between 2001 and 2016

→ Rate of decrease was relatively constant between 2001 and 2016

Government services workforce

Increased 11.3% (14 FTE) between 2001 and 2016

→ Rate of increase was relatively constant between 2001 and 2016

ECONOMIC STRUCTURE

Percentage FTE in key sectors:

- **2001**: 34% agriculture, 45% non-agriculture private, 17% government services
- **2016**: 22% agriculture, 43% non-agriculture private, 26% government services

TOWN POPULATION

Increased from 645 to 661 persons (2.5%) between 2001 and 2016

- Relatively constant increase over the period

62% of the town population was 45 and over in 2016, up from 50% in 2001

- 26% increase in 45 years and over, 21% decrease in under 45s

EMPLOYMENT

Full-time employment

21% of town population in 2016
up from 18% in 2001

Part-time employment

Constant around 11% of town
population

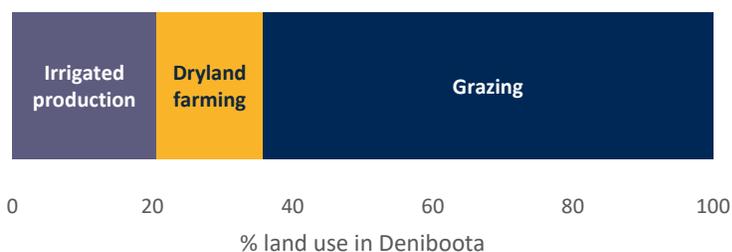
Unemployment in the town

Varied around 2% to 5% of town
population

SEIFA FOR TOWN: (DECILE RANKINGS)

- **2001**: disadvantage = 2, advantage/disadvantage = 1, wealth = 2, education = 1
- **2011**: disadvantage = 2, advantage/disadvantage = 2, wealth = 2, education = 1

Land use



Water recovery programs

The majority of water recovery was through purchase, and mostly occurring in 2010. Water recovery through the On-Farm Irrigation Efficiency Program occurred through rounds 1, 2, 4 and 5.

Denimein community

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Total surface water entitlements available in Denimein prior to Basin Plan water recovery was 72.7GL. 16.1GL (22.2% of available water) was recovered up to October 2016. 11.2 GL was recovered through purchase (of which 73% was purchased up to June 2011). 4.9GL was recovered through on-farm infrastructure investment. The net reduction in water available for production is 9.1GL (13.4% of available water).

Trends in social and economic conditions

AREA POPULATION

Decreased from 636 to 429 persons (32.5%) between 2001 and 2016

→ 31.4% of the decrease occurred between 2006 and 2011

WORKFORCE

Total area workforce

Decreased from 227 to 137 FTE (39.6%) between 2001 and 2016

- 32% of the decrease occurred between 2006 and 2011
- Workforce participation fell from 35.7 to 32 FTE per 100 persons

Agricultural workforce

Decreased 60.4% (52 FTE) between 2001 and 2016

→ All between 2001 and 2011

→ Employment in irrigated production decreased 69% (all between 2001 and 2011)

Agricultural manufacturing workforce

Remained a small part of the local economy

Non-agriculture private workforce

Decreased 40.1% (37 FTE) between 2001 and 2016

→ 25.6% of the decrease occurred between 2006 and 2011

Government services workforce

Declined by 15.2% (7 FTE) between 2001 and 2016

ECONOMIC STRUCTURE

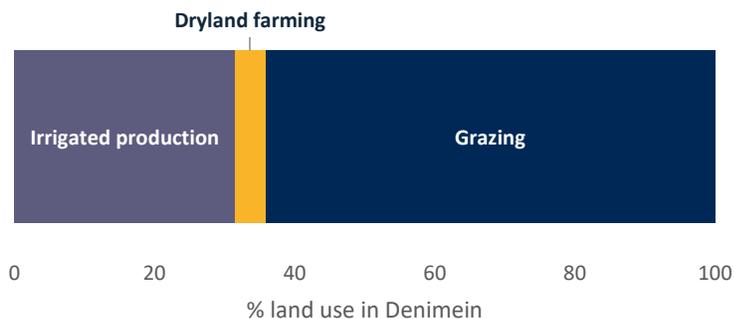
Percentage FTE in key sectors:

- **2001**: 38% agriculture, 41% non-agriculture private, 18% government services
- **2016**: 25% agriculture, 41% non-agriculture private, 26% government services

TOWN POPULATION

There are no towns within the Denimein community area

Land use



Water recovery programs

Most water recovery occurred through purchase with the largest volume recovered during 2011. The remaining water recovery occurred through rounds 1, 2, 4 and 5 of the On-Farm Irrigation Efficiency program (after 2010).

Hay community

These community profiles are a preliminary part of the work we are doing to analyse the reasons for social and economic changes that Basin communities have experienced over the last 15 years—work which we aim to release in full in April 2018. We are releasing this preliminary and foundational work now to give people the opportunity to examine the data for themselves, and so we can be confident about the data we are using to inform our socio-economic analysis.

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

Total surface water entitlements available in Hay prior to Basin Plan water recovery was 247.2GL. 70.7GL (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). 16.4GL was recovered through on-farm infrastructure investment. The net reduction in water available for production is 47.2GL (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

Full-time employment

25% of town population in 2016
down from 27% in 2001

Part-time employment

Constant around 12% to 13% of
town population

Unemployment in the town

Constant around 2% of town
population

SEIFA FOR TOWN: (DECILE RANKINGS)

- **2001:** disadvantage = 4, advantage/disadvantage = 5, wealth = 6, education = 6
- **2011:** disadvantage = 3, advantage/disadvantage = 3, wealth = 3, education = 4

Land use



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.

Hillston community

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

Total surface water entitlements available in Hillston prior to Basin Plan water recovery was 105.6GL. 31.3GL (29.7% of available water) was recovered up to October 2016. 30.5 GL was recovered through purchase (of which 100% was purchased up to June 2011). 0.8GL was recovered through on-farm infrastructure investment. The net reduction in water available for production is 30.2GL (28.7% of available water).

Trends in social and economic conditions

AREA POPULATION

Decreased from 1,633 to 1,298 persons (20.5%) between 2001 and 2016

- Decrease of 27% between 2001 and 2011, increase of 6.6% between 2011 and 2016

WORKFORCE

Total area workforce

Decreased from 678 to 410 FTE (39.5%) between 2001 and 2016

- Half the decrease occurred between 2001 and 2006
- Workforce participation fell from 41.5 to 31.6 FTE per 100 persons

Agricultural workforce

Decreased 41.5% (160 FTE) between 2001 and 2016

- Over half between 2001 and 2006
- Employment in irrigated production decreased 31.1% (17.8% between 2001 and 2006)

Agricultural manufacturing workforce

Remained relatively constant between 2001 and 2016

- Around 28 FTE

Non-agriculture private workforce

Decreased 62.6% (110 FTE) between 2001 and 2016

- Over half between 2001 and 2006

Government services workforce

Decreased 16.4% (15 FTE) between 2001 and 2016

- Increased 19.4% between 2001 and 2006, decreased by 32.6% between 2011 and 2016

ECONOMIC STRUCTURE

Percentage FTE in key sectors:

- **2001:** 57% agriculture, 26% non-agriculture private, 13% government services
- **2016:** 55% agriculture, 16% non-agriculture private, 18% government services

TOWN POPULATION

Decreased from 1,226 to 1,093 persons (10.8%) between 2001 and 2016

- Decreased by 14.4% between 2001 and 2006, increased by 8.1 between 2011 and 2016

44% of the town population was 45 and over in 2016, up from 37% in 2001

- 6% increase in 45 years and over, 21% decrease in under 45s

EMPLOYMENT

Full-time employment

27% of town population in 2016
down from 34% in 2001

Part-time employment

Varying between 11% and 16%
of town population

Unemployment in the town

Constant around 2% to 3% of
town population

SEIFA FOR TOWN: (DECILE RANKINGS)

- **2001:** disadvantage = 3, advantage/disadvantage = 3, wealth = 6, education = 1
- **2011:** disadvantage = 4, advantage/disadvantage = 4, wealth = 5, education = 3

Land use

Irrigated production



Water recovery programs

Most of the water recovered was through purchase between 2009 and 2013. A small volume was recovered through the On-Farm Irrigation Efficiency Program Pilot and Rounds 1 and 2 of that program.

Kerang-Cohuna community

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

Total surface water entitlements available in Kerang-Cohuna prior to Basin Plan water recovery was 350.7GL. 64.6GL (18.4% of available water) was recovered up to October 2016. 59.8 GL was recovered through purchase (of which 61% was purchased up to June 2011). 4.8GL was recovered through on-farm infrastructure investment. The net reduction in water available for production is 57.8GL (16.6% of available water).

Trends in social and economic conditions

AREA POPULATION

Increased from 9,891 to 10,764 persons (8.8%) between 2001 and 2016

- Increase has been relatively constant across the period

WORKFORCE

Total area workforce

Decreased from 3,379 to 3,041 FTE (10%) between 2001 and 2016

- The decrease occurred between 2011 and 2016
- Workforce participation fell from 34.2 to 28.3 FTE per 100 persons

Agricultural workforce

Decreased 30.8% (437 FTE) between 2001 and 2016

- Half of the decrease occurred between 2006 and 2011
- Employment in irrigated production decreased 43% (all between 2001 and 2011)

Agricultural manufacturing workforce

Decreased 44.3% (101 FTE) between 2001 and 2016

- Mostly between 2011 and 2016

Non-agriculture private workforce

Decreased 10.8% (134 FTE) between 2001 and 2016

- Falling 25.6% between 2011 and 2016 after increasing 14.8% between 2001 and 2011

Government services workforce

Increased 41.8% (211 FTE) between 2001 and 2016

- Increasing 45.3% between 2001 and 2011, decreasing 3.5% between 2011 and 2016

ECONOMIC STRUCTURE

Percentage FTE in key sectors:

- **2001**: 42% agriculture, 36% non-agriculture private, 15% government services
- **2016**: 32% agriculture, 36% non-agriculture private, 24% government services

TOWN POPULATION

Decreased from 5,669 to 5,502 persons (2.9%) between 2001 and 2016

- All between 2006 and 2011

58% of the town population was 45 and over in 2016, up from 47% in 2001

- 19% increase in 45 years and over, 23% decrease in under 45s

EMPLOYMENT

Full-time employment

20% of town population in 2016
down from 24% in 2001

Part-time employment

Constant around 12% to 14% of
town population

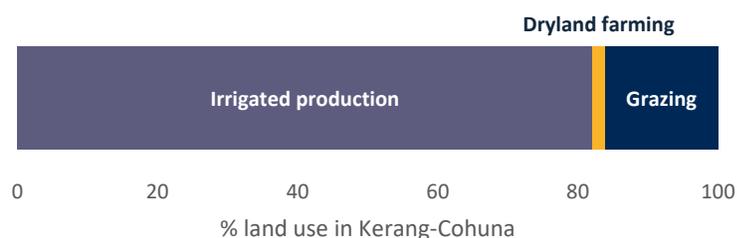
Unemployment in the town

Constant around 2% of town
population

SEIFA FOR TOWN: (DECILE RANKINGS, KERANG/ COHUNA)

- **2001**: disadvantage = 7/8, advantage/disadvantage = 5, wealth = 4, education = 6/4
- **2011**: disadvantage = 4/5, advantage/disadvantage = 4/5, wealth = 3/4, education = 5/6

Land use



Water recovery programs

Water purchase occurred between 2009 and 2013, with the majority between 2010 and 2012. Irrigation system modernisation planning through Goulburn Murray Water led to water delivery improvements. Water recovery from the On-Farm Irrigation Efficiency Program occurred between the years 2011 to 2016. Gannawarra Shire council received funding for development plans to management drainage conditions and recreational facilities.

Kyabram-Tatura community

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Total surface water entitlements available in Kyabram-Tatura prior to Basin Plan water recovery was 400.1GL. 82.7GL (20.7% of available water) was recovered up to October 2016. 75 GL was recovered through purchase (of which 51% was purchased up to June 2011). 7.7GL was recovered through on-farm infrastructure investment. The net reduction in water available for production is 71.7GL (18.2% of available water).

Trends in social and economic conditions

AREA POPULATION

Increased from 23,817 to 24,422 persons (2.5%) between 2001 and 2016

- Population decreasing and increasing by around 3% to 4% between census

WORKFORCE

Total area workforce

Decreased from 8,312 to 7,213 FTE (13.2%) between 2001 and 2016

- Most of the decrease occurred between 2011 and 2016
- Workforce participation fell from 34.9 to 29.5 FTE per 100 persons

Agricultural workforce

Decreased 32.1% (817 FTE) between 2001 and 2016

- Half of the decrease occurred between 2001 and 2006
- Employment in irrigated production decreased 41.6% (all between 2001 and 2011)

Agricultural manufacturing workforce

Decreased 13.6% (146 FTE) between 2001 and 2016

- Mostly between 2011 and 2016

Non-agriculture private workforce

Decreased 22.7% (756 FTE) between 2001 and 2016

- Mostly between 2011 and 2016

Government services workforce

Increased 28.2% (380 FTE) between 2001 and 2016

- Increasing 31.5% between 2001 and 2011, decreasing 3.4% between 2011 and 2016

ECONOMIC STRUCTURE

Percentage FTE in key sectors:

- **2001**: 31% agriculture, 40% non-agriculture private, 16% government services
- **2016**: 24% agriculture, 36% non-agriculture private, 24% government services

TOWN POPULATION

Increased from 9,640 to 11,264 persons (16.8%) between 2001 and 2016

- Half between 2001 and 2006, half between 2011 and 2016

50% of the town population was 45 and over in 2016, up from 40% in 2001

- 49% increase in 45 years and over, 4% decrease in under 45s

EMPLOYMENT

Full-time employment

22% of town population in 2016
down from 25% in 2001

Part-time employment

Constant around 12% to 14% of
town population

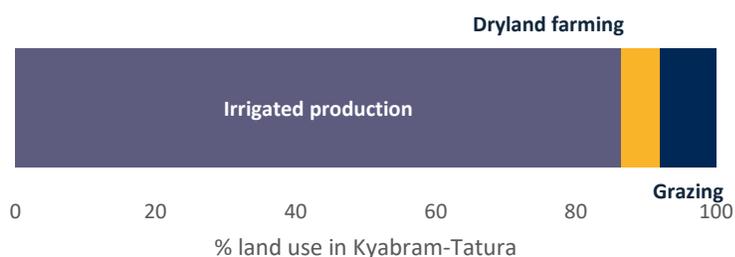
Unemployment in the town

Constant around 2% to 3% of
town population

SEIFA FOR TOWN: (DECILE RANKINGS, KYABRAM/ TATURA)

- **2001**: disadvantage = 7, advantage/disadvantage = 6/7, wealth = 6/7, education = 6/7
- **2011**: disadvantage = 4/6, advantage/disadvantage = 4/6, wealth = 3/6, education = 5/7

Land use



Water recovery programs

Most water recovery occurred through purchase between 2009 and 2013. Infrastructure water recovery from the On-Farm Irrigation Efficiency program occurred between 2011 and 2015. The community benefitted from the Victoria Farm modernisation program between 2015 and 2017.

Lockhart (control) community

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We have captured data for 40 irrigation-dependent communities, and 5 that are not dependent on irrigation. These 5 ‘control’ communities have been included as a point of comparison to help us assess the impact of the Basin Plan’s water recovery.

Limited irrigated production, no Basin Plan water recovery.

Trends in social and economic conditions

AREA POPULATION

Decreased from 3,397 to 3,121 persons (8.1%) between 2001 and 2016

- Decreasing 11.8% between 2001 and 2011, increasing 3.7% between 2011 and 2016

WORKFORCE

Total area workforce

Decreased from 1,131 to 1,075 FTE (5%) between 2001 and 2016

- All the decrease occurred between 2006 and 2011
- Workforce participation rose from 33.3 to 34.4 FTE per 100 persons

Agricultural workforce

Decreased 22.7% (113 FTE) between 2001 and 2016

- Mostly between 2006 and 2011
- Employment in irrigated production was less than 5 FTE

Non-agriculture private workforce

Decreased 27.4% (111 FTE) between 2001 and 2016

- Decreasing 22.5% between 2006 and 2016

Government services workforce

Increased 81% (166 FTE) between 2001 and 2016

- Almost half the increase occurred between 2011 and 2016

ECONOMIC STRUCTURE

Percentage FTE in key sectors:

- **2001:** 44% agriculture, 36% non-agriculture private, 18% government services
- **2016:** 36% agriculture, 27% non-agriculture private, 35% government services

TOWN POPULATION

Decreased from 1,758 to 1,705 persons (3%) between 2001 and 2016

→ Decreasing 5.5% between 2001 and 2011, increasing 2.5% between 2011 and 2016

56% of the town population was 45 and over in 2016, up from 43% in 2001

→ 28% increase in 45 years and over, 26% decrease in under 45s

EMPLOYMENT

Full-time employment

Remained around 23% of town population across the period

Part-time employment

Constant around 12% to 13% of town population

Unemployment in the town

Fell from 4% of town population in 2001 to 2% in 2016

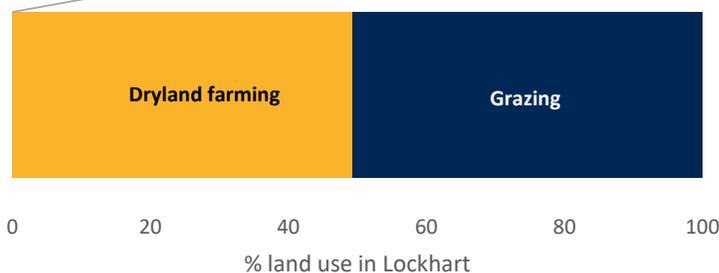
SEIFA FOR TOWN: (DECILE RANKINGS, LOCKHART/THE ROCK)

→ **2001:** disadvantage = 7/5, advantage/disadvantage = 6/3, wealth = 4/3, education = 6/4

→ **2011:** disadvantage = 5/6, advantage/disadvantage = 5/6, wealth = 6/7, education = 6/5

Land use

Irrigated production



Lower Lakes community

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Total surface water entitlements available in Lower Lakes prior to Basin Plan water recovery was 38.2GL. 4.7GL (12.2% of available water) was recovered up to October 2016. 4.1 GL was recovered through purchase (of which 75% was purchased up to June 2011). 0.5GL was recovered through on-farm infrastructure investment. The net reduction in water available for production is 3.9GL (10.4% of available water).

Trends in social and economic conditions

AREA POPULATION

Increased from 3,271 to 3,594 persons (9.9%) between 2001 and 2016

- Most of the increase occurred between 2011 and 2016

WORKFORCE

Total area workforce

Decreased from 1,123 to 839 FTE (25.3%) between 2001 and 2016

- Most of the decrease occurred between 2011 and 2016
- Workforce participation fell from 34.3 to 23.3 FTE per 100 persons

Agricultural workforce

Decreased 38.8% (175 FTE) between 2001 and 2016

- Decrease was fairly constant across the period
- Employment in irrigated production decreased 54.8% (all between 2001 and 2011)

Agricultural manufacturing workforce

Decreased 24.1% (12 FTE) between 2001 and 2016

- Mostly between 2006 and 2011

Non-agriculture private workforce

Decreased 30.9% (135 FTE) between 2001 and 2016

- All between 2011 and 2016

Government services workforce

Increased 6.2% (12 FTE) between 2001 and 2016

- Increasing 22.4% between 2001 and 2011, decreasing 16.2% between 2011 and 2016

ECONOMIC STRUCTURE

Percentage FTE in key sectors:

- **2001:** 40% agriculture, 39% non-agriculture private, 17% government services
- **2016:** 33% agriculture, 36% non-agriculture private, 24% government services

TOWN POPULATION

Increased from 1,332 to 1,611 persons (20.9%) between 2001 and 2016

- Relatively consistent growth across the period

59% of the town population was 45 and over in 2016, up from 47% in 2001

- 51% increase in 45 years and over, 5% decrease in under 45s

EMPLOYMENT

Full-time employment

19% of town population in 2016
down from 25% in 2001

Part-time employment

Varied around 14% to 17% of
town population

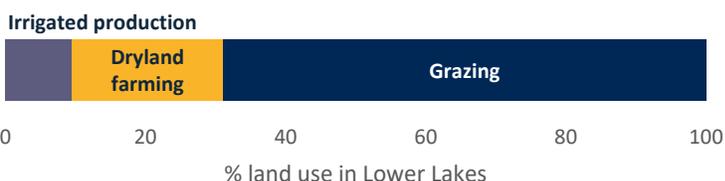
Unemployment in the town

Constant around 2% of town
population

SEIFA FOR TOWN: (DECILE RANKINGS)

- **2001:** disadvantage = 5, advantage/disadvantage = 5, wealth = 4, education = 5
- **2011:** disadvantage = 4, advantage/disadvantage = 4, wealth = 4, education = 3

Land use



Water recovery programs

The Commonwealth has contributed to funding of the construction of three pipelines, including two potable pipelines servicing local communities and one irrigation pipeline servicing local communities. The community also received funding through Coorong District Council to develop a plan for responding to climate change. The Coorong and Lower Lakes and Murray Mouth Recovery Project to support the restoration of this site to a healthy and resilient wetland of international importance is on-going.

Loxton community

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Total surface water entitlements available in Loxton prior to Basin Plan water recovery was 64.1GL. 14.2GL (22.2% of available water) was recovered up to October 2016. 11.6 GL was recovered through purchase (of which 61% was purchased up to June 2011). 2.6GL was recovered through on-farm infrastructure investment. The net reduction in water available for production is 10.5GL (16.9% of available water).

Trends in social and economic conditions

AREA POPULATION

Increased from 4,724 to 5,115 persons (8.3%) between 2001 and 2016

- Most of the increase occurred between 2006 and 2016

WORKFORCE

Total area workforce

Decreased from 1,823 to 1,642 FTE (9.9%) between 2001 and 2016

- Most of the decrease occurred between 2011 and 2016
- Workforce participation fell from 38.6 to 32.1 FTE per 100 persons

Agricultural workforce

Decreased 47.2% (363 FTE) between 2001 and 2016

- Over half the decrease occurred between 2001 and 2006
- Employment in irrigated production decreased 48% (half between 2001 and 2006)

Agricultural manufacturing workforce

Decreased 11.5% (14 FTE) between 2001 and 2016

- Employment varied throughout the period

Non-agriculture private workforce

Decreased 0.5% (3 FTE) between 2001 and 2016

- Increasing 20.8% between 2001 and 2011, decreasing 21.3% between 2011 and 2016

Government services workforce

Increased 51.2% (157 FTE) between 2001 and 2016

- Increasing 55.6% between 2001 and 2011, decreasing 4.4% between 2011 and 2016

ECONOMIC STRUCTURE

Percentage FTE in key sectors:

- **2001**: 42% agriculture, 34% non-agriculture private, 17% government services
- **2016**: 25% agriculture, 38% non-agriculture private, 28% government services

TOWN POPULATION

Increased from 3,355 to 3,843 persons (14.5%) between 2001 and 2016

- Mostly between 2006 and 2011

53% of the town population was 45 and over in 2016, up from 44% in 2001

- 37% increase in 45 years and over, 4% decrease in under 45s

EMPLOYMENT

Full-time employment

24% of town population in 2016
down from 29% in 2001

Part-time employment

Varied around 13% to 15% of
town population

Unemployment in the town

Constant around 2% to 3% of
town population

SEIFA FOR TOWN: (DECILE RANKINGS)

- **2001**: disadvantage = 5, advantage/disadvantage = 5, wealth = 5, education = 5
- **2011**: disadvantage = 4, advantage/disadvantage = 4, wealth = 4, education = 5

Land use



Water recovery programs

Water recovery through purchase occurred between 2009 and 2013, with 2010 being the largest year for water purchasing. The On-Farm Irrigation Efficiency program water recovery occurred between 2011 and 2016, as well as through the Private Infrastructure Irrigation Program for South Australia in 2011-12. The community benefited from investment in the Loxton Waikerie water recycling scheme.

Mannum community

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Total surface water entitlements available in Mannum prior to Basin Plan water recovery was 14.1GL. 4.6GL (32.8% of available water) was recovered up to October 2016. 4.2 GL was recovered through purchase (of which 72% was purchased up to June 2011). 0.4GL was recovered through on-farm infrastructure investment. The net reduction in water available for production is 4GL (28.9% of available water).

Trends in social and economic conditions

AREA POPULATION

Increased from 3,336 to 3,547 persons (6.3%) between 2001 and 2016

- Most of the increase between 2011 and 2016

WORKFORCE

Total area workforce

Decreased from 901 to 862 FTE (4.4%) between 2001 and 2016

- Increasing 11.2% between 2001 and 2006, decreasing 14.4% between 2011 and 2016
- Workforce participation fell from 27 to 24.3 FTE per 100 persons

Agricultural workforce

Decreased 37.7% (118 FTE) between 2001 and 2016

- Mostly between 2001 and 2011
- Employment in irrigated production decreased 66.3% (mostly between 2001 and 2011)

Agricultural manufacturing workforce

Increased 27.3% (8 FTE) between 2001 and 2016

- Large increase between 2001 and 2006, large decline between 2011 and 2016

Non-agriculture private workforce

Decreased 8% (34 FTE) between 2001 and 2016

- Increasing 14.4% between 2001 and 2011, decreasing 22.3% between 2011 and 2016

Government services workforce

Increased 59.2% (76 FTE) between 2001 and 2016

- Increasing 65.6% between 2001 and 2011, decreasing 6.4% between 2011 and 2016

ECONOMIC STRUCTURE

Percentage FTE in key sectors:

- **2001:** 35% agriculture, 48% non-agriculture private, 14% government services
- **2016:** 23% agriculture, 46% non-agriculture private, 24% government services

TOWN POPULATION

Increased from 2,195 to 2,402 persons (9.4%) between 2001 and 2016

- Mostly between 2011 and 2016

60% of the town population was 45 and over in 2016, up from 55% in 2001

- 19% increase in 45 years and over, 2% decrease in under 45s

EMPLOYMENT

Full-time employment

16% of town population in 2016
down from 18% in 2001

Part-time employment

Constant around 13% to 14% of
town population

Unemployment in the town

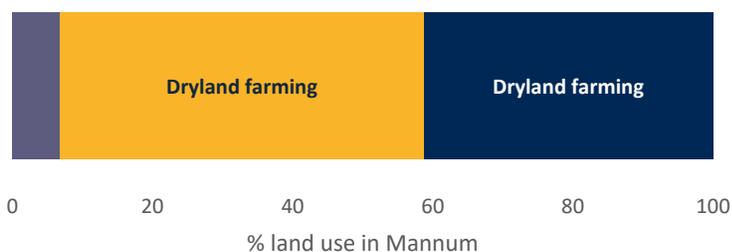
Constant around 3% to 4% of
town population

SEIFA FOR TOWN: (DECILE RANKINGS)

- **2001:** disadvantage = 3, advantage/disadvantage = 2, wealth = 2, education = 3
- **2011:** disadvantage = 3, advantage/disadvantage = 3, wealth = 3, education = 3

Land use

Irrigated production



Water recovery programs

Through the Strengthening Basin Communities program, Mid Murray Council received funding to develop an integrated water management plan covering Palmer and Tungkilo, and Burra and Eudunda.

Merbein community

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Total surface water entitlements available in Merbein prior to Basin Plan water recovery was 30.3GL. 6.2GL (20.5% of available water) was recovered up to October 2016. 6.1 GL was recovered through purchase (of which 77% was purchased up to June 2011). 0.1GL was recovered through on-farm infrastructure investment. The net reduction in water available for production is 6.1GL (20% of available water).

Trends in social and economic conditions

AREA POPULATION

Increased from 3,581 to 3,732 persons (4.2%) between 2001 and 2016

- Mostly between 2011 and 2016

WORKFORCE

Total area workforce

Decreased from 1,250 to 1,112 FTE (11%) between 2001 and 2016

- Mostly between 2011 and 2016
- Workforce participation fell from 34.9 to 29.8 FTE per 100 persons

Agricultural workforce

Decreased 41% (150 FTE) between 2001 and 2016

- Half of the decrease occurred between 2001 and 2006
- Employment in irrigated production decreased 50.4% (constant decrease across time)

Agricultural manufacturing workforce

Decreased 69% (104 FTE) between 2001 and 2016

- Mostly between 2006 and 2011

Non-agriculture private workforce

Decreased 4.2% (22 FTE) between 2001 and 2016

- Increasing 8.1% between 2001 and 2011, decreasing 12.3% between 2011 and 2016

Government services workforce

Increased 45.5% (95 FTE) between 2001 and 2016

- Increasing 49.9% between 2001 and 2011, decreasing 4.4% between 2011 and 2016

ECONOMIC STRUCTURE

Percentage FTE in key sectors:

- **2001**: 29% agriculture, 42% non-agriculture private, 17% government services
- **2016**: 19% agriculture, 45% non-agriculture private, 27% government services

TOWN POPULATION

Increased from 1,822 to 1,984 persons (8.9%) between 2001 and 2016

- Mostly between 2001 and 2006

53% of the town population was 45 and over in 2016, up from 40% in 2001

- 43% increase in 45 years and over, 14% decrease in under 45s

EMPLOYMENT

Full-time employment

20% of town population in 2016
down from 22% in 2001

Part-time employment

Constant around 12% to 13% of
town population

Unemployment in the town

Constant around 3% to 4% of
town population

SEIFA FOR TOWN: (DECILE RANKINGS)

- **2001**: disadvantage = 2, advantage/disadvantage = 2, wealth = 4, education = 1
- **2011**: disadvantage = 2, advantage/disadvantage = 2, wealth = 2, education = 1

Land use



Water recovery programs

Water purchase occurred between 2010 and 2013. The largest portion of water was recovered in 2010.

Infrastructure water recovery occurred through rounds 3 and 4 of the On-Farm Irrigation Efficiency program.

Mildura community

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Total surface water entitlements available in Mildura prior to Basin Plan water recovery was 64.1GL. 11GL (17.2% of available water) was recovered up to October 2016. 10.9 GL was recovered through purchase (of which 71% was purchased up to June 2011). 0.1GL was recovered through on-farm infrastructure investment. The net reduction in water available for production is 10.8GL (16.9% of available water).

Trends in social and economic conditions

Community area adjacent to town area

AREA POPULATION

Increased from 12,600 to 16,880 persons (34%) between 2001 and 2016

- 26.3% between 2001 and 2011

WORKFORCE

Total area workforce

Increased from 4,403 to 5,443 FTE (23.6%) between 2001 and 2016

- 23.2% of the increase occurred between 2001 and 2006
- Workforce participation fell from 34.9 to 32.2 FTE per 100 persons

Agricultural workforce

Decreased 26.6% (261 FTE) between 2001 and 2016

- Over half the decrease occurred between 2001 and 2006
- Employment in irrigated production decreased 38.6% (over half between 2001 and 2006)

Agricultural manufacturing workforce

Decreased 19.1% (56 FTE) between 2001 and 2016

- Mostly between 2006 and 2011 after increasing between 2001 and 2006

Non-agriculture private workforce

Increased 19.4% (445 FTE) between 2001 and 2016

- Increasing 29.9% between 2001 and 2011, decreasing 10.4% between 2011 and 2016

Government services workforce

Increased 84.5% (711 FTE) between 2001 and 2016

- Increasing 68.5% between 2001 and 2011, increasing 16.1% between 2011 and 2016

ECONOMIC STRUCTURE:

Percentage FTE in key sectors:

- **2001:** 22% agriculture, 52% non-agriculture private, 19% government services
- **2016:** 13% agriculture, 50% non-agriculture private, 29% government services

TOWN POPULATION

Increased from 28,062 to 33,445 persons (19.2%) between 2001 and 2016

- Relatively constant across the period

43% of the town population was 45 and over in 2016, up from 37% in 2001

- 40% increase in 45 years and over, 7% increase in under 45s

EMPLOYMENT

Full-time employment

24% of town population in 2016
down from 26% in 2001

Part-time employment

Varied around 12% to 14% of
town population

Unemployment in the town

Constant around 3% to 4% of
town population

SEIFA FOR TOWN: (DECILE RANKINGS)

- **2001:** disadvantage = 6, advantage/disadvantage = 7, wealth = 7, education = 8
- **2011:** disadvantage = 4, advantage/disadvantage = 4, wealth = 2, education = 6

Land use



Water recovery programs

Most water recovery occurred through purchase with the largest volume being recovered in 2010. The balance of water recovery was through rounds 3 and 4 of the On-Farm Irrigation Efficiency Program during 2014 and 2015.

Mirrool community

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Total surface water entitlements available in Mirrool prior to Basin Plan water recovery was 478.6GL. 18.1GL (3.8% of available water) was recovered up to October 2016. 14 GL was recovered through purchase (of which 31% was purchased up to June 2011). 4.2GL was recovered through on-farm infrastructure investment. The net reduction in water available for production is 12.2GL (2.7% of available water).

Trends in social and economic conditions

AREA POPULATION

Increased from 22,823 to 24,938 persons (9.3%) between 2001 and 2016

- Mostly 2011 to 2016

WORKFORCE

Total area workforce

Increased from 8,345 to 8,929 FTE (7%) between 2001 and 2016

- Constant increase between 2006 and 2016
- Workforce participation fell from 36.6 to 35.8 FTE per 100 persons

Agricultural workforce

Decreased 32% (659 FTE) between 2001 and 2016

- Mostly between 2001 and 2006
- Employment in irrigated production decreased 36.8% (mostly between 2001 and 2006)

Agricultural manufacturing workforce

Increased 48.4% (499 FTE) between 2001 and 2016

- Largely between 2001 and 2006, and between 2011 and 2016

Non-agriculture private workforce

Decreased 6.5% (260 FTE) between 2001 and 2016

- Increasing and decreasing across the period

Government services workforce

Increased 53.1% (675 FTE) between 2001 and 2016

- Constant rate of increase across the period

ECONOMIC STRUCTURE

Percentage FTE in key sectors:

- **2001:** 25% agriculture, 48% non-agriculture private, 15% government services
- **2016:** 16% agriculture, 42% non-agriculture private, 22% government services

TOWN POPULATION

Increased from 16,004 to 18,878 persons (18%) between 2001 and 2016

- Mostly between 2006 and 2016

40% of the town population was 45 and over in 2016, up from 33% in 2001

- 42% increase in 45 years and over, 6% increase in under 45s

EMPLOYMENT

Full-time employment

29% of town population in 2016
down from 30% in 2001

Part-time employment

Constant around 12% to 13% of
town population

Unemployment in the town

Constant around 2% to 3% of
town population

SEIFA FOR TOWN: (DECILE RANKINGS)

- **2001:** disadvantage = 5, advantage/disadvantage = 7, wealth = 8, education = 6
- **2011:** disadvantage = 5, advantage/disadvantage = 5, wealth = 5, education = 5

Land use



Water recovery programs

Water purchase accounted for most of the water recovered, peaking during 2012. Infrastructure water recovery occurred through the On-Farm Irrigation Efficiency program between 2012 and 2017. An irrigation system assessment identified, and lead to, funding for improvements to the water delivery infrastructure managed by Murrumbidgee Irrigation. The community received from funding through Giffith City Council to support planning for climate change and water security through the Strengthening Basin Communities program.

Morgan community

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Total surface water entitlements available in Morgan prior to Basin Plan water recovery was 24.8GL. 2.1GL (8.3% of available water) was recovered up to October 2016. 1.7 GL was recovered through purchase (of which 72% was purchased up to June 2011). 0.4GL was recovered through on-farm infrastructure investment. The net reduction in water available for production is 1.5GL (6.4% of available water).

Trends in social and economic conditions

AREA POPULATION

Increased from 975 to 1,018 persons (4.4%) between 2001 and 2016

- Decreasing 8.7% between 2001 and 2006, increasing 12.8% between 2011 and 2016

WORKFORCE

Total area workforce

Decreased from 291 to 197 FTE (32.4%) between 2001 and 2016

- 13.3% decrease between 2001 and 2006 and between 2011 and 2016
- Workforce participation fell from 29.9 to 19.4 FTE per 100 persons

Agricultural workforce

Decreased 40.6% (54 FTE) between 2001 and 2016

- 33.2% of the decrease occurred between 2001 and 2006
- Employment in irrigated production decreased 48.9% (over half between 2001 and 2006)

Agricultural manufacturing workforce

Decreased 49.9% (9 FTE) between 2001 and 2016

- Mostly between 2011 and 2016

Non-agriculture private workforce

Decreased 25.8% (19 FTE) between 2001 and 2016

- Mostly between 2006 and 2011

Government services workforce

Decreased 31.9% (20 FTE) between 2001 and 2016

- Employment was quite variable across the period

ECONOMIC STRUCTURE

Percentage FTE in key sectors:

- 2001: 45% agriculture, 26% non-agriculture private, 22% government services
- 2016: 40% agriculture, 29% non-agriculture private, 22% government services

TOWN POPULATION

Decreased from 410 to 336 persons (18%) between 2001 and 2016

- Mostly between 2006 and 2011

67% of the town population was 45 and over in 2016, up from 52% in 2001

- 5% increase in 45 years and over, 43% decrease in under 45s

EMPLOYMENT

Full-time employment

15% of town population in 2016
down from 24% in 2001

Part-time employment

Varied around 11% to 14% of
town population

Unemployment in the town

Constant around 2% to 4% of
town population

SEIFA FOR TOWN: (DECILE RANKINGS)

- **2001**: disadvantage = 3, advantage/disadvantage = 2, wealth = 3, education = 3
- **2011**: disadvantage = 2, advantage/disadvantage = 2, wealth = 2, education = 3

Land use



Water recovery programs

Most of the water recovery occurred through purchase between 2009 and 2013. Infrastructure water recovery occurred through round 2 of the On-Farm Irrigation Efficiency Program and round 2 the Private Infrastructure Irrigation Program for South Australia.

Murray Bridge community

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Total surface water entitlements available in Murray Bridge prior to Basin Plan water recovery was 27.4GL. 5.5GL (20% of available water) was recovered up to October 2016. 4.4 GL was recovered through purchase (of which 71% was purchased up to June 2011). 1.1GL was recovered through on-farm infrastructure investment. The net reduction in water available for production is 3.9GL (14.7% of available water).

Trends in social and economic conditions

AREA POPULATION

Increased from 14,676 to 18,608 persons (26.8%) between 2001 and 2016

- Over half the increase occurred between 2006 and 2011

WORKFORCE

Total area workforce

Increased from 4,467 to 5,620 FTE (25.8%) between 2001 and 2016

- All of the increase occurred between 2001 and 2011
- Workforce participation fell from 30.4 to 30.2 FTE per 100 persons

Agricultural workforce

Increased 24.3% (198 FTE) between 2001 and 2016

- Decreasing 22.4% between 2001 and 2006, increasing 36.9% between 2011 and 2016
- Employment in irrigated production decreased 24.2% (decrease 36.1% between 2001 and 2006 before increasing 11% between 2006 and 2011)

Agricultural manufacturing workforce

Increased 57.6% (232 FTE) between 2001 and 2016

- Increasing 94.7% between 2001 and 2006, decreasing 37% between 2006 and 2016

Non-agriculture private workforce

Increased 3.9% (93 FTE) between 2001 and 2016

- Increasing 20.5% between 2006 and 2011, decreasing 14.5% between 2011 and 2016

Government services workforce

Increased 55.2% (470 FTE) between 2001 and 2016

- Increasing 55.8% between 2001 and 2011, decreasing 0.6% between 2011 and 2016

ECONOMIC STRUCTURE

Percentage FTE in key sectors:

- **2001:** 18% agriculture, 54% non-agriculture private, 19% government services
- **2016:** 18% agriculture, 44% non-agriculture private, 24% government services

TOWN POPULATION

Increased from 13,016 to 16,803 persons (29.1%) between 2001 and 2016

- Half of the increase occurred between 2006 and 2011

45% of the town population was 45 and over in 2016, up from 39% in 2001

- 49% increase in 45 years and over, 17% increase in under 45s

EMPLOYMENT

Full-time employment

23% of town population in 2016,
no change from 2001

Part-time employment

Constant around 13% to 14% of
town population

Unemployment in the town

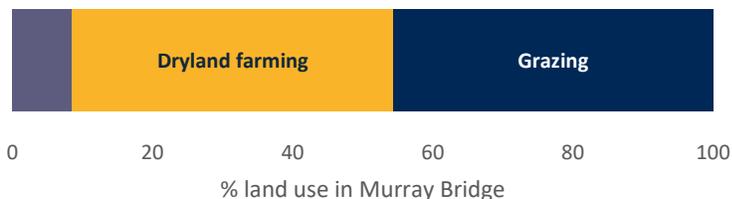
Constant around 3% to 5% of
town population

SEIFA FOR TOWN: (DECILE RANKINGS)

- **2001:** disadvantage = 2, advantage/disadvantage = 2, wealth = 4, education = 2
- **2011:** disadvantage = 2, advantage/disadvantage = 2, wealth = 2, education = 2

Land use

Irrigated production



Water recovery programs

Water recovery occurred through the On-Farm Irrigation efficiency program rounds 2, 3 and 4 and through the Private Irrigation Infrastructure Program for South Australia. The community received funding through the Rural City of Murray Bridge for a feasibility study to provide recycled water for industry and irrigation.

Pyramid Hill-Boort community

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Total surface water entitlements available in Pyramid Hill-Boort prior to Basin Plan water recovery was 229.7GL. 40.8GL (17.8% of available water) was recovered up to October 2016. 36.8 GL was recovered through purchase (of which 55% was purchased up to June 2011). 4.1GL was recovered through on-farm infrastructure investment. The net reduction in water available for production is 35GL (15.5% of available water).

Trends in social and economic conditions

AREA POPULATION

Decreased from 4,050 to 3,120 persons (23%) between 2001 and 2016

- Decrease has been relatively constant across time

WORKFORCE

Total area workforce

Decreased from 1,461 to 792 FTE (45.8%) between 2001 and 2016

- Over half the decrease occurred between 2011 and 2016
- Workforce participation fell from 36.1 to 25.4 FTE per 100 persons

Agricultural workforce

Decreased 47% (413 FTE) between 2001 and 2016

- Decreasing 15.7% between 2001 and 2006, and 27.4% between 2011 and 2016
- Employment in irrigated production decreased 66.5% (constant across the period)

Agricultural manufacturing workforce

Decreased 62.7% (48 FTE) between 2001 and 2016

- Over half the decrease occurred between 2006 and 2011

Non-agriculture private workforce

Decreased 58% (180 FTE) between 2001 and 2016

- Over half the decrease occurred between 2011 and 2016

Government services workforce

Decreased 21.7% (43 FTE) between 2001 and 2016

- Increasing 5.2% between 2001 and 2011, decreasing 26.8% between 2011 and 2016

ECONOMIC STRUCTURE

Percentage FTE in key sectors:

- **2001:** 60% agriculture, 21% non-agriculture private, 13% government services
- **2016:** 59% agriculture, 16% non-agriculture private, 19% government services

TOWN POPULATION

Decreased from 1,250 to 1,179 persons (5.7%) between 2001 and 2016

- Mostly between 2006 and 2011

59% of the town population was 45 and over in 2016, up from 50% in 2001

- 11% increase in 45 years and over, 21% decrease in under 45s

EMPLOYMENT

Full-time employment

18% of town population in 2016
down from 26% in 2001

Part-time employment

Constant around 12% to 13% of
town population

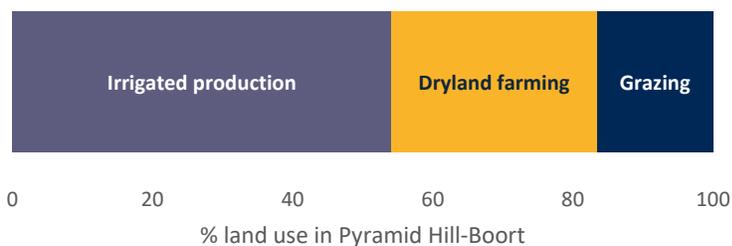
Unemployment in the town

Constant around 2% to 3% of
town population

SEIFA FOR TOWN: (DECILE RANKINGS, PYRAMID HILL/BOORT)

- **2001:** disadvantage = 3/9, advantage/disadvantage = 2/7, wealth = 2/6, education = 2/8
- **2011:** disadvantage = 1/6, advantage/disadvantage = 1/5, wealth = 1/6, education = 1/7

Land use



Water recovery programs

Water purchase accounted for most of the water recovery, mostly occurring between 2010 and 2012.

Infrastructure water recovery recovered through rounds 1 to 4 of the On-Farm Irrigation Efficiency program.

Red Cliffs community

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Total surface water entitlements available in Red Cliffs prior to Basin Plan water recovery was 42.6GL. 9.4GL (21.9% of available water) was recovered up to October 2016. 9.3 GL was recovered through purchase (of which 76% was purchased up to June 2011). 0.1GL was recovered through on-farm infrastructure investment. The net reduction in water available for production is 9.2GL (21.7% of available water).

Trends in social and economic conditions

AREA POPULATION

Decreased from 3,962 to 3,035 persons (23.4%) between 2001 and 2016

- Decreasing 25.7% between 2006 and 2011, increasing 4.6% between 2011 and 2016

WORKFORCE

Total area workforce

Decreased from 1,449 to 894 FTE (38.3%) between 2001 and 2016

- Most of the decrease occurred between 2006 and 2011
- Workforce participation fell from 36.6 to 29.5 FTE per 100 persons

Agricultural workforce

Decreased 65.9% (433 FTE) between 2001 and 2016

- Decreasing 36.3% between 2001 and 2006, and 25.7% between 2006 and 2011
- Employment in irrigated production decreased 76.2% (44.3% between 2001 and 2006)

Agricultural manufacturing workforce

Decreased 43% (48 FTE) between 2001 and 2016

- Increasing 56.3% between 2001 and 2006, decreasing 80.4% between 2006 and 2011

Non-agriculture private workforce

Decreased 22.7% (110 FTE) between 2001 and 2016

- Increasing 8% between 2001 and 2006, decreasing 30.6% between 2006 and 2016

Government services workforce

Decreased 4.6% (9 FTE) between 2001 and 2016

- Increasing 21.9% between 2001 and 2006, decreasing 26.5% between 2006 and 2016

ECONOMIC STRUCTURE

Percentage FTE in key sectors:

- **2001**: 45% agriculture, 34% non-agriculture private, 13% government services
- **2016**: 25% agriculture, 42% non-agriculture private, 21% government services

TOWN POPULATION

Increased from 2,638 to 2,915 persons (10.5%) between 2001 and 2016

- Mostly between 2011 and 2016

48% of the town population was 45 and over in 2016, up from 41% in 2001

- 27% increase in 45 years and over, no change in proportion of under 45s

EMPLOYMENT

Full-time employment

20% of town population in 2016
down from 23% in 2001

Part-time employment

Constant around 10% to 12% of
town population

Unemployment in the town

Constant around 3% of town
population

SEIFA FOR TOWN: (DECILE RANKINGS)

- **2001**: disadvantage = 2, advantage/disadvantage = 2, wealth = 3, education = 2
- **2011**: disadvantage = 2, advantage/disadvantage = 2, wealth = 2, education = 2

Land use



Water recovery programs

Most of the water recovery was obtained through purchase, with the largest part of that water recovery occurring in 2010. Infrastructure water recovery was from rounds 3 and 4 of the On-Farm Irrigation Efficiency program between 2014 and 2016.

Renmark community

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Total surface water entitlements available in Renmark prior to Basin Plan water recovery was 118.3GL. 27.8GL (23.5% of available water) was recovered up to October 2016. 22.7 GL was recovered through purchase (of which 61% was purchased up to June 2011). 5.2GL was recovered through on-farm infrastructure investment. The net reduction in water available for production is 20.5GL (17.9% of available water).

Trends in social and economic conditions

AREA POPULATION

Decreased from 9,484 to 9,069 persons (4.4%) between 2001 and 2016

- Decreasing 7.1% between 2001 and 2011, increasing 2.7% between 2011 and 2016

WORKFORCE

Total area workforce

Decreased from 3,263 to 2,779 FTE (14.8%) between 2001 and 2016

- Decrease occurred between 2006 and 2016
- Workforce participation fell from 34.4 to 30.6 FTE per 100 persons

Agricultural workforce

Decreased 42.7% (555 FTE) between 2001 and 2016

- Over half the decrease occurred between 2001 and 2006
- Employment in irrigated production decreased 44.2% (over half between 2001 and 2006)

Agricultural manufacturing workforce

Decreased 38.5% (125 FTE) between 2001 and 2016

- Over half between 2006 and 2011

Non-agriculture private workforce

Increased 1.4% (15 FTE) between 2001 and 2016

- Increasing 30.1% between 2001 and 2006, decreasing 18.4% between 2011 and 2016

Government services workforce

Increased 17.6% (87 FTE) between 2001 and 2016

- Increasing 27.8% between 2001 and 2011, decreasing 10.2% between 2011 and 2016

ECONOMIC STRUCTURE

Percentage FTE in key sectors:

- **2001:** 40% agriculture, 35% non-agriculture private, 15% government services
- **2016:** 27% agriculture, 42% non-agriculture private, 21% government services

TOWN POPULATION

Increased from 5,286 to 5,624 persons (6.4%) between 2001 and 2016

- Mostly between 2011 and 2016

49% of the town population was 45 and over in 2016, up from 43% in 2001

- 20% increase in 45 years and over, 4% decrease in under 45s

EMPLOYMENT

Full-time employment

22% of town population in 2016
down from 26% in 2001

Part-time employment

Constant around 12% to 14% of
town population

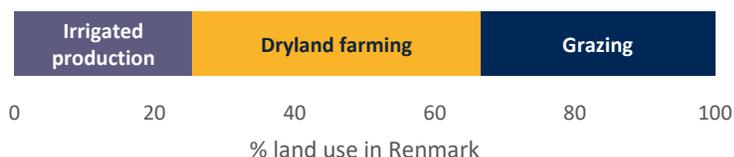
Unemployment in the town

Constant around 2% to 4% of
town population

SEIFA FOR TOWN: (DECILE RANKINGS)

- **2001:** disadvantage = 2, advantage/disadvantage = 3, wealth = 4, education = 3
- **2011:** disadvantage = 2, advantage/disadvantage = 2, wealth = 1, education = 2

Land use



Water recovery programs

Most water recovery was acquired through purchase between 2010 and 2012. Infrastructure water recovery between 2011 and 2016 was split between rounds 1 to 4 of the On-Farm Irrigation Efficiency program, and rounds 1 and 2 of the Private Infrastructure Irrigation Program for South Australia program. Irrigation system modernisation planning assistance was accessed by the Renmark Irrigation Trust. The region received funding for stormwater harvesting upgrade through Renmark Paringa Council.

Robinvale community

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Total surface water entitlements available in Robinvale prior to Basin Plan water recovery was 101.3GL. 44.7GL (44.2% of available water) was recovered up to October 2016. 43.1 GL was recovered through purchase (of which 52% was purchased up to June 2011). 1.6GL was recovered through on-farm infrastructure investment. The net reduction in water available for production is 42.4GL (42.1% of available water).

Trends in social and economic conditions

AREA POPULATION

Decreased from 5,278 to 4,417 persons (16.3%) between 2001 and 2016

- Over half the decrease occurred between 2006 and 2011

WORKFORCE

Total area workforce

Decreased from 1,843 to 1,197 FTE (35.1%) between 2001 and 2016

- Over half the decrease occurred between 2011 and 2016
- Workforce participation fell from 34.9 to 27.1 FTE per 100 persons

Agricultural workforce

Decreased 40.7% (391 FTE) between 2001 and 2016

- Half the decrease occurred between 2006 and 2011
- Employment in irrigated production decreased 39.1% (30.3% between 2001 and 2011)

Agricultural manufacturing workforce

Increased 89.5% (41 FTE) between 2001 and 2016

- Large increase between 2006 and 2011, large decrease between 2011 and 2016

Non-agriculture private workforce

Decreased 57.1% (317 FTE) between 2001 and 2016

- Consistently decreasing across the period

Government services workforce

Decreased 21.9% (62 FTE) between 2001 and 2016

- Generally decreasing across the period

ECONOMIC STRUCTURE

Percentage FTE in key sectors:

- **2001**: 52% agriculture, 30% non-agriculture private, 15% government services
- **2016**: 48% agriculture, 20% non-agriculture private, 18% government services

TOWN POPULATION

Increased from 2,607 to 2,672 persons (2.5%) between 2001 and 2016

- Small increases and decreases across the period

40% of the town population was 45 and over in 2016, up from 33% in 2001

- 23% increase in 45 years and over, 8% decrease in under 45s

EMPLOYMENT

Full-time employment

21% of town population in 2016
down from 25% in 2001

Part-time employment

Varied around 8% to 10% of
town population

Unemployment in the town

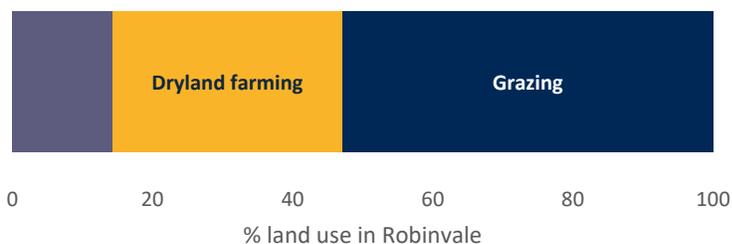
Constant around 3% to 4% of
town population

SEIFA FOR TOWN: (DECILE RANKINGS, EUSTON/ROBINVALE)

- **2001**: disadvantage = 3/1, advantage/disadvantage = 3/2, wealth = 7/4, education = 1/3
- **2011**: disadvantage = 4/1, advantage/disadvantage = 4/1, wealth = 4/1, education = 3/4

Land use

Irrigated production



Water recovery programs

Water recovery by purchase occurred between 2009 and 2013. Infrastructure water recovery occurred under rounds 3 and 4 of the On-Farm Irrigation Efficiency program between 2014 and 2016.

Rochester community

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Total surface water entitlements available in Rochester prior to Basin Plan water recovery was 218.7GL. 51GL (23.3% of available water) was recovered up to October 2016. 43.7 GL was recovered through purchase (of which 56% was purchased up to June 2011). 7.2GL was recovered through on-farm infrastructure investment. The net reduction in water available for production is 40.6GL (19% of available water).

Trends in social and economic conditions

AREA POPULATION

Decreased from 8,797 to 8,093 persons (8%) between 2001 and 2016

- Most of the decrease occurred between 2006 and 2011

WORKFORCE

Total area workforce

Decreased from 3,028 to 2,371 FTE (21.7%) between 2001 and 2016

- Most of the decrease occurred between 2011 and 2016
- Workforce participation fell from 34.4 to 29.3 FTE per 100 persons

Agricultural workforce

Decreased 29.1% (311 FTE) between 2001 and 2016

- Half of the decrease occurred between 2006 and 2011
- Employment in irrigated production decreased 41.8% (40.2% between 2001 and 2011)

Agricultural manufacturing workforce

Decreased 27.8% (76 FTE) between 2001 and 2016

- Mostly between 2011 and 2016

Non-agriculture private workforce

Decreased 32.7% (396 FTE) between 2001 and 2016

- Mostly between 2011 and 2016

Government services workforce

Increased 11.2% (53 FTE) between 2001 and 2016

- Increasing 29.5% between 2001 and 2011, decreasing 18.4% between 2011 and 2016

ECONOMIC STRUCTURE

Percentage FTE in key sectors:

- **2001:** 35% agriculture, 40% non-agriculture private, 16% government services
- **2016:** 32% agriculture, 34% non-agriculture private, 22% government services

TOWN POPULATION

Increased from 2,624 to 2,722 persons (3.7%) between 2001 and 2016

- Population increased and decreased across the period

57% of the town population was 45 and over in 2016, up from 43% in 2001

- 39% increase in 45 years and over, 23% decrease in under 45s

EMPLOYMENT

Full-time employment

21% of town population in 2016
down from 22% in 2001

Part-time employment

Varied around 11% to 14% of
town population

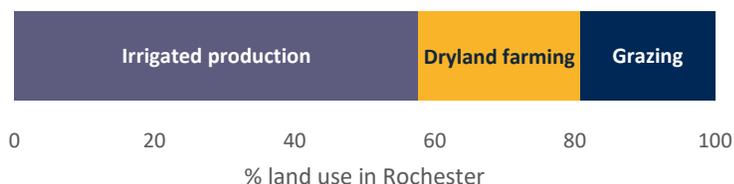
Unemployment in the town

Constant around 1% to 2% of
town population

SEIFA FOR TOWN: (DECILE RANKINGS)

- **2001:** disadvantage = 6, advantage/disadvantage = 5, wealth = 5, education = 4
- **2011:** disadvantage = 5, advantage/disadvantage = 5, wealth = 5, education = 5

Land use



Water recovery programs

Water recovery through purchase occurred between 2009 to 2015, with a large proportion of the water recovered in 2010 and 2012. Infrastructure water recovery through rounds 1 to 4 of the On-Farm Irrigation Efficiency Program occurred between 2011 and 2015. Water users benefitted from improvements to the water delivery infrastructure of Gouburn Murray Water.

Shepparton community

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Total surface water entitlements available in Shepparton prior to Basin Plan water recovery was 211.6GL. 30.8GL (14.6% of available water) was recovered up to October 2016. 27.5 GL was recovered through purchase (of which 58% was purchased up to June 2011). 3.3GL was recovered through on-farm infrastructure investment. The net reduction in water available for production is 26.1GL (12.5% of available water).

Trends in social and economic conditions

AREA POPULATION

Increased from 11,952 to 17,853 persons (49.4%) between 2001 and 2016

- Increase has been relatively constant across time

WORKFORCE

Total area workforce

Increased from 4,608 to 6,158 FTE (33.6%) between 2001 and 2016

- All the increase occurred between 2001 and 2011
- Workforce participation fell from 38.6 to 34.5 FTE per 100 persons

Agricultural workforce

Decreased 18.8% (221 FTE) between 2001 and 2016

- Half the decrease occurred between 2001 and 2006
- Employment in irrigated production decreased 41.6% (24.3% between 2001 and 2006)

Agricultural manufacturing workforce

Decreased 8.1% (30 FTE) between 2001 and 2016

- Increasing 14.1% between 2001 and 2011, decreasing 22.2% between 2011 and 2016

Non-agriculture private workforce

Increased 29% (644 FTE) between 2001 and 2016

- Increasing 43.3% between 2001 and 2011, decreasing 14.4% between 2011 and 2016

Government services workforce

Increased 111.7% (934 FTE) between 2001 and 2016

- Increasing across the period

ECONOMIC STRUCTURE

Percentage FTE in key sectors:

- **2001:** 25% agriculture, 48% non-agriculture private, 18% government services
- **2016:** 15% agriculture, 47% non-agriculture private, 29% government services

TOWN POPULATION

Increased from 747 to 791 persons (5.9%) between 2001 and 2016

- Increasing 11.1% between 2001 and 2006, decreasing 4.3% between 2011 and 2016

47% of the town population was 45 and over in 2016, up from 24% in 2001

- 111% increase in 45 years and over, 26% decrease in under 45s

EMPLOYMENT

Full-time employment

31% of town population in 2016
down from 34% in 2001

Part-time employment

Varied around 15% to 18 % of
town population

Unemployment in the town

Constant around 2% to 3% of
town population

SEIFA FOR TOWN: (DECILE RANKINGS)

- **2001:** disadvantage = 9, advantage/disadvantage = 6, wealth = 7, education = 4
- **2011:** disadvantage = 9, advantage/disadvantage = 8, wealth = 9, education = 3

Land use



Water recovery programs

Water recovery through purchase occurred between 2009 and 2012. Since 2013, all water recovery has been through the On-Farm Irrigation Efficiency program, with round 2 recording the highest water recovery amount out of the 4 rounds. Water users benefitted from improvements to the water delivery infrastructure operated by Gouburn Murray Water.

Swan Hill community

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Total surface water entitlements available in Swan Hill prior to Basin Plan water recovery was 98.1GL. 20GL (20.4% of available water) was recovered up to October 2016. 17.5 GL was recovered through purchase (of which 77% was purchased up to June 2011). 2.6GL was recovered through on-farm infrastructure investment. The net reduction in water available for production is 16.4GL (17% of available water).

Trends in social and economic conditions

AREA POPULATION

Remained around 16,760 people between 2001 and 2016

- Small increases and decreases across time

WORKFORCE

Total area workforce

Decreased from 5,701 to 4,797 FTE (15.9%) between 2001 and 2016

- Increasing 6.2% between 2001 and 2011, decreasing 22% between 2011 and 2016
- Workforce participation fell from 34 to 28.6 FTE per 100 persons

Agricultural workforce

Decreased 42.6% (727 FTE) between 2001 and 2016

- Nearly half the decrease occurred between 2011 and 2016
- Employment in irrigated production decreased 53% (33.6% between 2011 and 2016)

Agricultural manufacturing workforce

Increased 24% (40 FTE) between 2001 and 2016

- Increasing 54.9% between 2001 and 2011, decreasing 31% between 2006 and 2011

Non-agriculture private workforce

Decreased 20.5% (551 FTE) between 2001 and 2016

- Mostly between 2011 and 2016

Government services workforce

Increased 14.5% (165 FTE) between 2001 and 2016

- Increasing 36.3% between 2001 and 2011, decreasing 21.8% between 2011 and 2016

ECONOMIC STRUCTURE

Percentage FTE in key sectors:

- **2001:** 30% agriculture, 47% non-agriculture private, 20% government services
- **2016:** 20% agriculture, 45% non-agriculture private, 27% government services

TOWN POPULATION

Increased from 9,769 to 10,0603 persons (8.5%) between 2001 and 2016

- Mostly between 2011 and 2016

44% of the town population was 45 and over in 2016, up from 37% in 2001

- 29% increase in 45 years and over, 3% decrease in under 45s

EMPLOYMENT

Full-time employment

26% of town population in 2016
down from 27% in 2001

Part-time employment

Constant around 13% to 14% of
town population

Unemployment in the town

Constant around 2% of town
population

SEIFA FOR TOWN: (DECILE RANKINGS)

- **2001:** disadvantage = 8, advantage/disadvantage = 7, wealth = 7, education = 8
- **2011:** disadvantage = 5, advantage/disadvantage = 6, wealth = 4, education = 7

Land use



Water recovery programs

The majority of the water recovered was through purchase, particularly in 2010. Infrastructure water recovery has been through the On-Farm Irrigation Efficiency program. Irrigation system assessments led to improvements to the water delivery infrastructure in the Goodnight irrigation district.

Swan Reach community

These community profiles are a preliminary part of the work we are doing to analyse the reasons for social and economic changes that Basin communities have experienced over the last 15 years—work which we aim to release in full in April 2018. We are releasing this preliminary and foundational work now to give people the opportunity to examine the data for themselves, and so we can be confident about the data we are using to inform our socio-economic analysis.

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

Total surface water entitlements available in Swan Reach prior to Basin Plan water recovery was 5.4GL. 4.3GL (79.9% of available water) was recovered up to October 2016. 4.1 GL was recovered through purchase (of which 100% was purchased up to June 2011). 0.2GL was recovered through on-farm infrastructure investment. The net reduction in water available for production is 4.1GL (75.6% of available water).

Trends in social and economic conditions

AREA POPULATION

Decreased from 1,030 to 698 persons (32.2%) between 2001 and 2016

- Half the decrease occurred between 2001 and 2006

WORKFORCE

Total area workforce

Decreased from 312 to 181 FTE (42.2%) between 2001 and 2016

- Half the decrease occurred between 2001 and 2006
- Workforce participation fell from 30.3 to 25.9 FTE per 100 persons

Agricultural workforce

Decreased 50.1% (75 FTE) between 2001 and 2016

- Mostly between 2001 and 2006
- Employment in irrigated production decreased 64% (59.6% between 2001 and 2006)

Agricultural manufacturing workforce

Decreased 50% (6 FTE) between 2001 and 2016

Non-agriculture private workforce

Decreased 41.4% (45 FTE) between 2001 and 2016

- Mostly between 2006 and 2011

Government services workforce

Decreased 19.7% (8 FTE) between 2001 and 2016

- Increasing 8.3% between 2001 and 2006, decreasing 28% between 2006 and 2016

ECONOMIC STRUCTURE

Percentage FTE in key sectors:

- **2001:** 48% agriculture, 35% non-agriculture private, 13% government services
- **2016:** 42% agriculture, 36% non-agriculture private, 18% government services

TOWN POPULATION

Decreased from 302 to 212 persons (29.8%) between 2001 and 2016

- Mostly between 2001 and 2006

67% of the town population was 45 and over in 2016, up from 51% in 2001

- 8% decrease in 45 years and over, 53% decrease in under 45s

EMPLOYMENT

Full-time employment

18% of town population in 2016
down from 21% in 2001

Part-time employment

Varied around 11% to 15% of
town population

Unemployment in the town

Constant around 2% to 4% of
town population

SEIFA FOR TOWN: (DECILE RANKINGS)

- **2001:** disadvantage = 3, advantage/disadvantage = 2, wealth = 1, education = 4
- **2011:** disadvantage = 3, advantage/disadvantage = 3, wealth = 3, education = 4

Land use

Irrigated production



Water recovery programs

Water recovery occurred in round 3 and 4 of the On-Farm Irrigation Efficiency Program during 2013 and 2014.

Tabbita community

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

Total surface water entitlements available in Tabbita prior to Basin Plan water recovery was 23.5GL. 0.4GL (1.7% of available water) was recovered up to October 2016. 0.4GL was recovered through purchase (of which 0% was purchased up to June 2011). 0GL was recovered through on-farm infrastructure investment. The net reduction in water available for production is 0.4GL (1.7% of available water).

Trends in social and economic conditions

AREA POPULATION

Decreased from 299 to 105 persons (64.9%) between 2001 and 2016

- Mostly between 2006 and 2011

WORKFORCE

Total area workforce

Decreased from 112 to 35 FTE (68.5%) between 2001 and 2016

- All the decrease occurred between 2006 and 2011
- Workforce participation fell from 37.6 to 33.7 FTE per 100 persons

Agricultural workforce

Decreased 84.3% (27 FTE) between 2001 and 2016

- Over half between 2006 and 2011
- Employment in irrigated production decreased 87.4% (81.1% between 2001 and 2011)

Agricultural manufacturing workforce

Remained a small part of the local economy

Non-agriculture private workforce

Decreased 69.7% (35 FTE) between 2001 and 2016

- Nearly all between 2006 and 2011

Government services workforce

Decreased 48.9% between 2001 and 2016

- Mostly between 2006 and 2011

ECONOMIC STRUCTURE

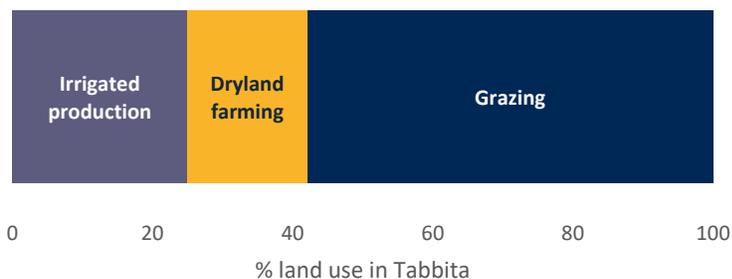
Percentage FTE in key sectors:

- **2001**: 28% agriculture, 46% non-agriculture private, 14% government services
- **2016**: 14% agriculture, 44% non-agriculture private, 23% government services

TOWN POPULATION

There are no towns within the Tabbita community area

Land use



Water recovery programs

Water recovery has been through purchase (in 2013).

Tailem Bend community

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

Total surface water entitlements available in Tailem Bend prior to Basin Plan water recovery was 14.9GL. 1.7GL (11.4% of available water) was recovered up to October 2016. 1.7 GL was recovered through purchase (of which 90% was purchased up to June 2011). 0GL was recovered through on-farm infrastructure investment. The net reduction in water available for production is 1.7GL (11.4% of available water).

Trends in social and economic conditions

AREA POPULATION

Increased from 2,607 to 2,863 persons (9.8%) between 2001 and 2016

- Half the increase occurred between 2011 and 2016

WORKFORCE

Total area workforce

Decreased from 806 to 691 FTE (14.2%) between 2001 and 2016

- Nearly all between 2011 and 2016
- Workforce participation fell from 30.9 to 24.1 FTE per 100 persons

Agricultural workforce

Decreased 32.7% (96 FTE) between 2001 and 2016

- Mostly between 2001 and 2011
- Employment in irrigated production decreased 69.8% (53.2% between 2001 and 2006)

Agricultural manufacturing workforce

Decreased 22.2% (13 FTE) between 2001 and 2016

- Employment increased and decreased across the period

Non-agriculture private workforce

Decreased 17.8% (60 FTE) between 2001 and 2016

- Employment increased and decreased across the period

Government services workforce

Increased 30% (36 FTE) between 2001 and 2016

- Increasing 36% between 2001 and 2011, decreasing 6% between 2011 and 2016

ECONOMIC STRUCTURE

Percentage FTE in key sectors:

- **2001:** 37% agriculture, 41% non-agriculture private, 15% government services
- **2016:** 29% agriculture, 40% non-agriculture private, 23% government services

TOWN POPULATION

Increased from 1,394 to 1,410 persons (1.1%) between 2001 and 2016

- Increasing and decreasing across the period

55% of the town population was 45 and over in 2016, up from 42% in 2001

- 32% increase in 45 years and over, 21% decrease in under 45s

EMPLOYMENT

Full-time employment

19% of town population in 2016
up from 17% in 2001

Part-time employment

Constant around 13% to 14% of
town population

Unemployment in the town

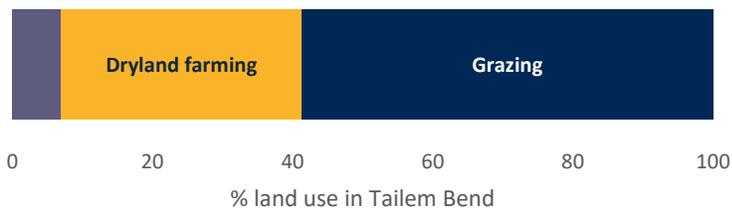
Constant around 4% to 6% of
town population

SEIFA FOR TOWN: (DECILE RANKINGS)

- **2001:** disadvantage = 2, advantage/disadvantage = 1, wealth = 1, education = 1
- **2011:** disadvantage = 2, advantage/disadvantage = 2, wealth = 3, education = 1

Land use

Irrigated production



Temora (control) community

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We have captured data for 40 irrigation-dependent communities, and 5 that are not dependent on irrigation. These 5 ‘control’ communities have been included as a point of comparison to help us assess the impact of the Basin Plan’s water recovery.

Limited irrigated production, no Basin Plan water recovery.

Trends in social and economic conditions

AREA POPULATION

Increased from 5,972 to 6,110 persons (2.3%) between 2001 and 2016

- Decreasing 3.3% between 2001 and 2011, increasing 5.6% between 2011 and 2016

WORKFORCE

Total area workforce

Increased from 1,888 to 2,197 FTE (16.3%) between 2001 and 2016

- All the increase occurred between 2011 and 2016
- Workforce participation rose from 31.6 to 36 FTE per 100 persons

Agricultural workforce

Decreased 12.1% (93 FTE) between 2001 and 2016

- Decreasing 21.2% between 2001 and 2011, increasing 9% between 2011 and 2016
- Employment in irrigated production was less than 5 FTE

Non-agriculture private workforce

Increased 9.7% (74 FTE) between 2001 and 2016

- All the increase occurred between 2011 and 2016

Government services workforce

Increased 76% (252 FTE) between 2001 and 2016

- Increasing by over 30% between 2001 and 2006, and between 2011 and 2016

ECONOMIC STRUCTURE

Percentage FTE in key sectors:

- **2001:** 40% agriculture, 41% non-agriculture private, 17% government services
- **2016:** 31% agriculture, 38% non-agriculture private, 26% government services

TOWN POPULATION

Decreased from 4,146 to 4,056 persons (2.2%) between 2001 and 2016

→ Decreasing 6.5% between 2001 and 2011, increasing 4.4% between 2011 and 2016

54% of the town population was 45 and over in 2016, up from 42% in 2001

→ 24% increase in 45 years and over, 21% decrease in under 45s

EMPLOYMENT

Full-time employment

Remained around 22% of town population across the period

Part-time employment

Constant around 12% to 14% of town population

Unemployment in the town

Fell from 4% of town population in 2001 to 2% in 2016

SEIFA FOR TOWN: (DECILE RANKINGS)

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

→ **2011:** disadvantage = 4, advantage/disadvantage = 4, wealth = 4, education = 3

Land use

Irrigated production



0 20 40 60 80 100

% land use in Temora

Wah Wah community

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Total surface water entitlements available in Wah Wah prior to Basin Plan water recovery was 119.7GL. 9.8GL (8.2% of available water) was recovered up to October 2016. 8.8 GL was recovered through purchase (of which 1% was purchased up to June 2011). 1GL was recovered through on-farm infrastructure investment. The net reduction in water available for production is 8.4GL (7.1% of available water).

Trends in social and economic conditions

AREA POPULATION

Decreased from 629 to 221 persons (64.9%) between 2001 and 2016

- Mostly between 2006 and 2011

WORKFORCE

Total area workforce

Decreased from 225 to 74 FTE (67.3%) between 2001 and 2016

- Most of the decrease occurred between 2006 and 2011
- Workforce participation fell from 35.3 to 33.3 FTE per 100 persons

Agricultural workforce

Decreased 75.6% (83 FTE) between 2001 and 2016

- Mostly between 2001 and 2011
- Employment in irrigated production decreased 80.5% (73.9% between 2001 and 2011)

Agricultural manufacturing workforce

Remained a small part of the local economy

Non-agriculture private workforce

Decreased 68.3% (50 FTE) between 2001 and 2016

- Mostly between 2006 and 2011

Government services workforce

Decreased 54.5% (20 FTE) between 2001 and 2016

- Increasing 7% between 2001 and 2006, decreasing 61.6% between 2011 and 2016

ECONOMIC STRUCTURE

Percentage FTE in key sectors:

- **2001:** 49% agriculture, 32% non-agriculture private, 16% government services
- **2016:** 36% agriculture, 31% non-agriculture private, 23% government services

TOWN POPULATION

Decreased from 308 to 287 persons (6.8%) between 2001 and 2016

- Nearly all between 2001 and 2006

43% of the town population was 45 and over in 2016, up from 36% in 2001

- 11% increase in 45 years and over, 16% decrease in under 45s

EMPLOYMENT

Full-time employment

33% of town population in 2016
down from 36% in 2001

Part-time employment

Varied around 5% to 12% of
town population

Unemployment in the town

Constant around 1% of town
population

SEIFA FOR TOWN: (DECILE RANKINGS)

- **2001:** disadvantage = 6, advantage/disadvantage = 5, wealth = 7, education = 2
- **2011:** disadvantage = 3, advantage/disadvantage = 3, wealth = 3, education = 3

Land use



Water recovery programs

Water recovery was primarily through purchase between 2011 and 2013, then through round 5 of the On-Farm Irrigation Efficiency program.

Waikerie community

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

Total surface water entitlements available in Waikerie prior to Basin Plan water recovery was 64.2GL. 20.7GL (32.2% of available water) was recovered up to October 2016. 16.4 GL was recovered through purchase (of which 49% was purchased up to June 2011). 4.2GL was recovered through on-farm infrastructure investment. The net reduction in water available for production is 14.6GL (23.6% of available water).

Trends in social and economic conditions

AREA POPULATION

Increased from 3,827 to 4,084 persons (6.7%) between 2001 and 2016

- Decrease 2.7% between 2001 and 2006, increase 8.6% between 2011 and 2016

WORKFORCE

Total area workforce

Decreased from 1,382 to 1,157 FTE (16.3%) between 2001 and 2016

- Decrease was relatively constant across the period
- Workforce participation fell from 36.1 to 28.3 FTE per 100 persons

Agricultural workforce

Decreased 40.1% (269 FTE) between 2001 and 2016

- Over half the decrease occurred between 2001 and 2006
- Employment in irrigated production decreased 43.3% (27.3% between 2001 and 2006)

Agricultural manufacturing workforce

Decreased 42.9% (49 FTE) between 2001 and 2016

- Increasing 33.1% between 2001 and 2006, decreasing 75.9% between 2006 and 2016

Non-agriculture private workforce

Decreased 6.9% (28 FTE) between 2001 and 2016

- Mostly between 2011 and 2016

Government services workforce

Increased 43.5% (81 FTE) between 2001 and 2016

- Increasing 53.4% between 2001 and 2011, decreasing 9.9% between 2011 and 2016

ECONOMIC STRUCTURE

Percentage FTE in key sectors:

- **2001:** 49% agriculture, 30% non-agriculture private, 13% government services
- **2016:** 35% agriculture, 33% non-agriculture private, 23% government services

TOWN POPULATION

Decreased from 1,771 to 1,635 persons (7.7%) between 2001 and 2016

- Mostly between 2006 and 2011

57% of the town population was 45 and over in 2016, up from 44% in 2001

- 19% increase in 45 years and over, 30% decrease in under 45s

EMPLOYMENT

Full-time employment

19% of town population in 2016
down from 25% in 2001

Part-time employment

Constant around 12% to 13% of
town population

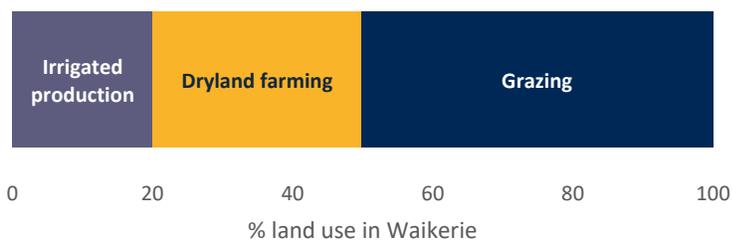
Unemployment in the town

Constant around 2% to 3% of
town population

SEIFA FOR TOWN: (DECILE RANKINGS)

- **2001:** disadvantage = 3, advantage/disadvantage = 2, wealth = 4, education = 2
- **2011:** disadvantage = 2, advantage/disadvantage = 2, wealth = 2, education = 3

Land use



Water recovery programs

Water recovery through occurred between 2010 and 2013. Rounds 1 to 4 of the On-Farm Irrigation Efficiency program represented the majority of the infrastructure water recovery. A small portion came through the Private Irrigation Infrastructure Program for South Australia.

Wakool community

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Total surface water entitlements available in Wakool prior to Basin Plan water recovery was 258GL. 97.9GL (38% of available water) was recovered up to October 2016. 91GL was recovered through purchase (of which 54% was purchased up to June 2011). 6.9GL was recovered through on-farm infrastructure investment. The net reduction in water available for production is 88GL (34.5% of available water).

Trends in social and economic conditions

AREA POPULATION

Decreased from 1,569 to 854 persons (45.6%) between 2001 and 2016
→ Mostly between 2006 and 2011

WORKFORCE

Total area workforce

Decreased from 537 to 249 FTE (53.7%) between 2001 and 2016
→ Mostly between 2006 and 2011
→ Workforce participation fell from 34.3 to 29.2 FTE per 100 persons

Agricultural workforce

Decreased 61.5% (158 FTE) between 2001 and 2016
→ Mostly between 2006 and 2011
→ Employment in irrigated production decreased 71.8% (47.6% between 2006 and 2011)

Agricultural manufacturing workforce

Decreased 44% (8 FTE) between 2001 and 2016
→ Falling across the period

Non-agriculture private workforce

Decreased 57.3% (96 FTE) between 2001 and 2016
→ Mostly between 2006 and 2011

Government services workforce

Decreased 35.1% (34 FTE) between 2001 and 2016
→ Increasing 6.9% between 2001 and 2006, decreasing 42% between 2006 and 2016

ECONOMIC STRUCTURE

Percentage FTE in key sectors:

- **2001:** 48% agriculture, 31% non-agriculture private, 18% government services
- **2016:** 40% agriculture, 29% non-agriculture private, 26% government services

TOWN POPULATION

Decreased from 412 to 304 persons (26.2%) between 2001 and 2016

- Half the decrease occurred between 2001 and 2006

54% of the town population was 45 and over in 2016, up from 38% in 2001

- 4% increase in 45 years and over, 45% decrease in under 45s

EMPLOYMENT

Full-time employment

21% of town population in 2016
down from 23% in 2001

Part-time employment

Varied between 8% to 14% of
town population

Unemployment in the town

Varied around 1% to 4% of town
population

SEIFA FOR TOWN: (DECILE RANKINGS)

- **2001:** disadvantage = 2, advantage/disadvantage = 2, wealth = 5, education = 2
- **2011:** disadvantage = 2, advantage/disadvantage = 2, wealth = 2, education = 3

Land use



Water recovery programs

Water recovery was primarily through purchase up until July 2014. Some water recovery occurred through rounds 1, 2, 4 and 5 of the On-Farm Irrigation Efficiency program. Water users benefitted from improvements to the water delivery infrastructure in the Murray Irrigation district. The community received funding through the Strengthening Basin Communities program.

Weddin (control) community

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We have captured data for 40 irrigation-dependent communities, and 5 that are not dependent on irrigation. These 5 ‘control’ communities have been included as a point of comparison to help us assess the impact of the Basin Plan’s water recovery.

Limited irrigated production, no Basin Plan water recovery.

Trends in social and economic conditions

AREA POPULATION

Remained around 3,660 people between 2001 and 2016

- Very small increases and decreases across the period

WORKFORCE

Total area workforce

Increased from 751 to 1,238 FTE (64.8%) between 2001 and 2016

- Most of the increase occurred between 2001 and 2006
- Workforce participation rose from 20.5 to 33.8 FTE per 100 persons

Agricultural workforce

Increased 31.1% (147 FTE) between 2001 and 2016

- Increasing 36% between 2001 and 2006, decreasing 4.9% between 2011 and 2016
- Employment in irrigated production was less than 10 FTE

Non-agriculture private workforce

Increased 64.3% (127 FTE) between 2001 and 2016

- Employment was highly variable across the period

Government services workforce

Increased 143.2% (190 FTE) between 2001 and 2016

- Over half the increase occurred between 2001 and 2006

ECONOMIC STRUCTURE

Percentage FTE in key sectors:

- **2001:** 54% agriculture, 26% non-agriculture private, 18% government services
- **2016:** 43% agriculture, 26% non-agriculture private, 26% government services

TOWN POPULATION

Increased from 1,928 to 1,973 persons (2.3%) between 2001 and 2016

→ Increasing 3.1% between 2001 and 2006, decreasing 1.2% between 2011 and 2016

60% of the town population was 45 and over in 2016, up from 50% in 2001

→ 22.9% increase in 45 years and over, 18.9% decrease in under 45s

EMPLOYMENT

Full-time employment

21% of town population in 2016
up from 20% in 2001

Part-time employment

Constant around 11% to 12% of
town population

Unemployment in the town

Fell from 3% in 2001 to 2% in
2016

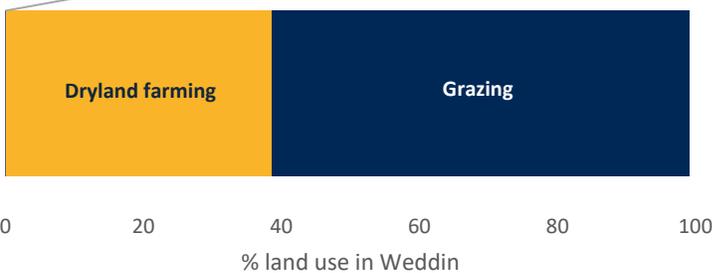
SEIFA FOR TOWN: (DECILE RANKINGS)

→ **2001:** disadvantage = 5, advantage/disadvantage = 4, wealth = 2, education = 5

→ **2011:** disadvantage = 3, advantage/disadvantage = 3, wealth = 3, education = 4

Land use

Irrigated production



Wentworth community

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Total surface water entitlements available in Wentworth prior to Basin Plan water recovery was 35.5GL. 4.1GL (11.5% of available water) was recovered up to October 2016. 3.9 GL was recovered through purchase (of which 45% was purchased up to June 2011). 0.2GL was recovered through on-farm infrastructure investment. The net reduction in water available for production is 3.9GL (11% of available water).

Trends in social and economic conditions

AREA POPULATION

Decreased from 1,728 to 1,474 persons (14.7%) between 2001 and 2016

- Half the decrease occurred between 2001 and 2006

WORKFORCE

Total area workforce

Decreased from 557 to 383 FTE (31.2%) between 2001 and 2016

- All the decrease occurred between 2011 and 2016
- Workforce participation fell from 32.3 to 26 FTE per 100 persons

Agricultural workforce

Decreased 30.2% (71 FTE) between 2001 and 2016

- Decrease was relatively constant across the period
- Employment in irrigated production decreased 56.6% (27.6% between 2006 and 2011)

Agricultural manufacturing workforce

Decreased 88.1% (30 FTE) between 2001 and 2016

- Over half the decrease occurred between 2006 and 2011

Non-agriculture private workforce

Decreased 42.8% (86 FTE) between 2001 and 2016

- Mostly between 2011 and 2016

Government services workforce

Decreased 3.6% (3 FTE) between 2001 and 2016

- Increasing 31.4% between 2001 and 2011, decreasing 35% between 2011 and 2016

ECONOMIC STRUCTURE

Percentage FTE in key sectors:

- **2001:** 42% agriculture, 36% non-agriculture private, 16% government services
- **2016:** 43% agriculture, 30% non-agriculture private, 22% government services

TOWN POPULATION

Decreased from 1,431 to 1,224 persons (14.5%) between 2001 and 2016

- Half the decrease occurred between 2001 and 2006

66% of the town population was 45 and over in 2016, up from 48% in 2001

- 17% increase in 45 years and over, 44% decrease in under 45s

EMPLOYMENT

Full-time employment

16% of town population in 2016
down from 22% in 2001

Part-time employment

Varied around 10% to 13% of
town population

Unemployment in the town

Varied around 2% to 4% of town
population

SEIFA FOR TOWN: (DECILE RANKINGS)

- **2001:** disadvantage = 4, advantage/disadvantage = 4, wealth = 3, education = 5
- **2011:** disadvantage = 2, advantage/disadvantage = 2, wealth = 2, education = 3

Land use



Water recovery programs

Water recovery was primarily through purchase across 2009 and 2010.

West Berriquin community

These community profiles are a preliminary part of the work we are doing to analyse the reasons for social and economic changes that Basin communities have experienced over the last 15 years—work which we aim to release in full in April 2018. We are releasing this preliminary and foundational work now to give people the opportunity to examine the data for themselves, and so we can be confident about the data we are using to inform our socio-economic analysis.

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

Total surface water entitlements available in West Berriquin prior to Basin Plan water recovery was 130.8GL. 31.9GL (24.4% of available water) was recovered up to October 2016. 24.1GL was recovered through purchase (of which 88% was purchased up to June 2011). 7.8GL was recovered through on-farm infrastructure investment. The net reduction in water available for production is 20.7GL (16.6% of available water).

Trends in social and economic conditions

AREA POPULATION

Decreased from 1,198 to 854 persons (28.7%) between 2001 and 2016

- Most of the decrease occurred between 2006 and 2011

WORKFORCE

Total area workforce

Decreased from 437 to 271 FTE (38%) between 2001 and 2016

- Over half the decrease occurred between 2006 and 2011
- Workforce participation fell from 36.5 to 31.7 FTE per 100 persons

Agricultural workforce

Decreased 55.8% (92 FTE) between 2001 and 2016

- Mostly between 2001 and 2011
- Employment in irrigated production decreased 64.5% (40% between 2001 and 2006)

Agricultural manufacturing workforce

Remained a small, constant part of the local economy

Non-agriculture private workforce

Decreased 40.5% (72 FTE) between 2001 and 2016

- Half the decrease occurred between 2006 and 2011

Government services workforce

Decreased 12.3% (19 FTE) between 2001 and 2016

- Increasing 16.2% between 2001 and 2006, decreasing 28.5% between 2006 and 2016

ECONOMIC STRUCTURE

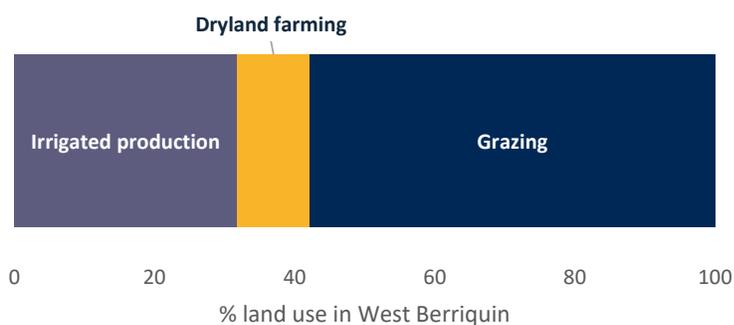
Percentage FTE in key sectors:

- **2001**: 38% agriculture, 41% non-agriculture private, 18% government services
- **2016**: 27% agriculture, 39% non-agriculture private, 25% government services

TOWN POPULATION

There are no towns within the West Berriquin community area

Land use



Water recovery programs

Purchase accounted for most of the water recovered. Infrastructure water recovery was from all 5 rounds of the On-Farm Irrigation Efficiency program, occurring after 2010.

Yanco community

These community profiles are a preliminary part of the work we are doing to analyse the reasons for social and economic changes that Basin communities have experienced over the last 15 years—work which we aim to release in full in April 2018. We are releasing this preliminary and foundational work now to give people the opportunity to examine the data for themselves, and so we can be confident about the data we are using to inform our socio-economic analysis.

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

Total surface water entitlements available in Yanco prior to Basin Plan water recovery was 378GL. 17.5GL (4.6% of available water) was recovered up to October 2016. 12.7GL was recovered through purchase (of which 27% was purchased up to June 2011). 4.8GL was recovered through on-farm infrastructure investment. The net reduction in water available for production is 10.6GL (3% of available water).

Trends in social and economic conditions

AREA POPULATION

Remained fairly constant (around 11,300 people) between 2001 and 2016

WORKFORCE

Total area workforce

Decreased from 4,047 to 3,660 FTE (9.6%) between 2001 and 2016

- Over half the decrease occurred between 2001 and 2006
- Workforce participation fell from 35.4 to 32.3 FTE per 100 persons

Agricultural workforce

Decreased 40.7% (467 FTE) between 2001 and 2016

- Most of the decrease occurred between 2001 and 2006
- Employment in irrigated production decreased 23.9% (decreasing 36.1% between 2001 and 2011 before increasing 11.2% between 2011 and 2016)

Agricultural manufacturing workforce

Increased 30.8% (154 FTE) between 2001 and 2016

- Increasing 45.1% between 2001 and 2006, decreasing 14.4% between 2006 and 2016

Non-agriculture private workforce

Decreased 22.7% (384 FTE) between 2001 and 2016

- Most of the decrease occurred between 2001 and 2006, and between 2011 and 2016

Government services workforce

Increased 25% (177 FTE) between 2001 and 2016

- Increasing 25.4% between 2001 and 2011, decreasing 0.5% between 2011 and 2016

ECONOMIC STRUCTURE

Percentage FTE in key sectors:

- **2001**: 28% agriculture, 42% non-agriculture private, 17% government services
- **2016**: 19% agriculture, 36% non-agriculture private, 24% government services

TOWN POPULATION

Remained constant (around 6,900 persons) between 2001 and 2016

- Small increases and decreases across the period

45% of the town population was 45 and over in 2016, up from 34% in 2001

- 32% increase in 45 years and over, 17% decrease in under 45s

EMPLOYMENT

Full-time employment

28% of town population in 2016
down from 29% in 2001

Part-time employment

Constant around 11% to 12% of
town population

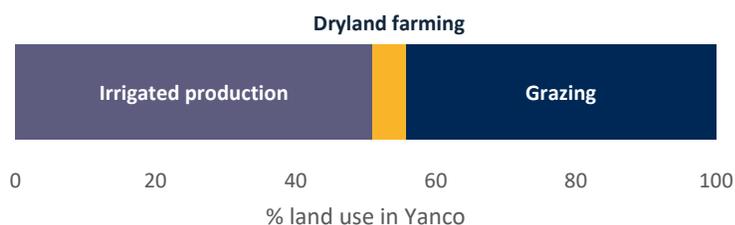
Unemployment in the town

Constant around 2% to 3% of
town population

SEIFA FOR TOWN: (DECILE RANKINGS)

- **2001**: disadvantage = 7, advantage/disadvantage = 7, wealth = 8, education = 6
- **2011**: disadvantage = 4, advantage/disadvantage = 4, wealth = 5, education = 5

Land use



Water recovery programs

Water recovery through purchase occurred between 2010 to 2013. Infrastructure water recovery from the On-Farm Irrigation Efficiency program occurred between 2012 and 2017. The community benefited from irrigation system modernisation delivered through Murrumbidgee Irrigation.