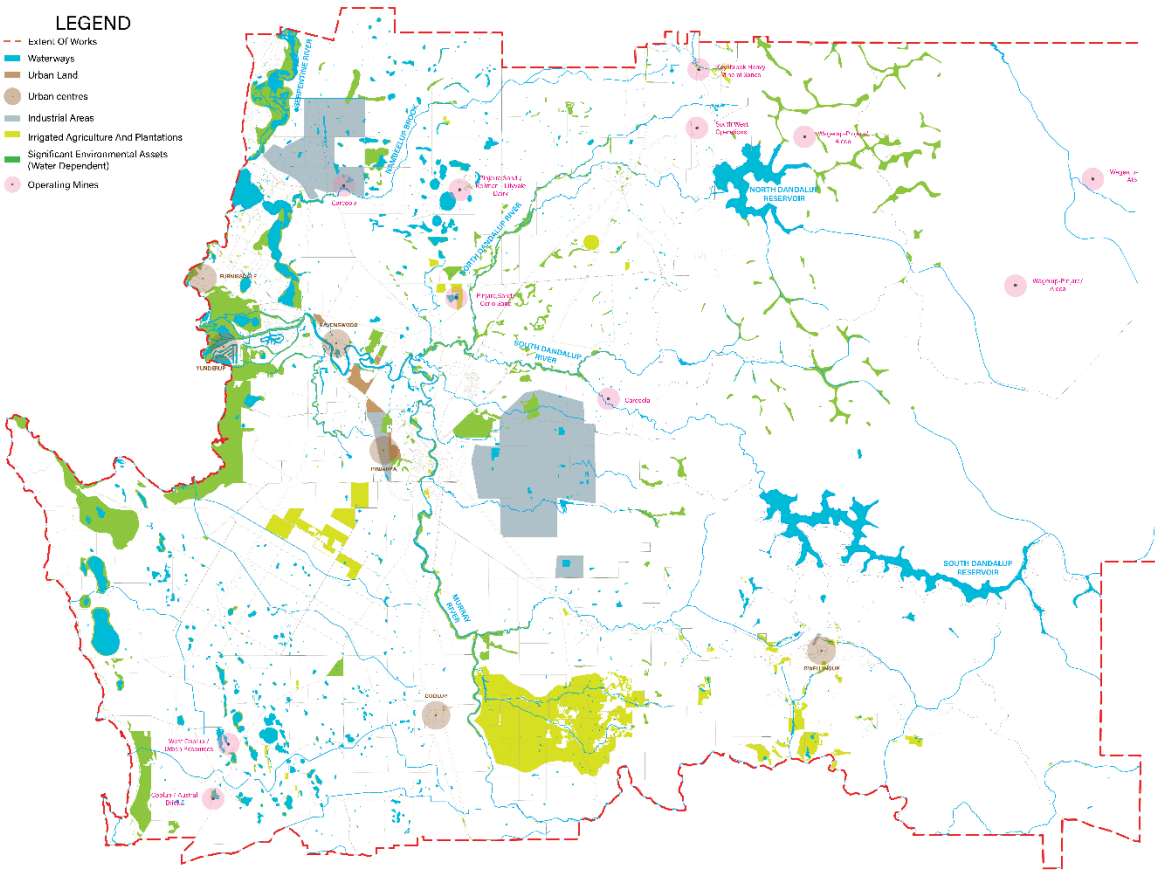
Peel Regional Water Supply Initiative
Shire of Murray snapshot

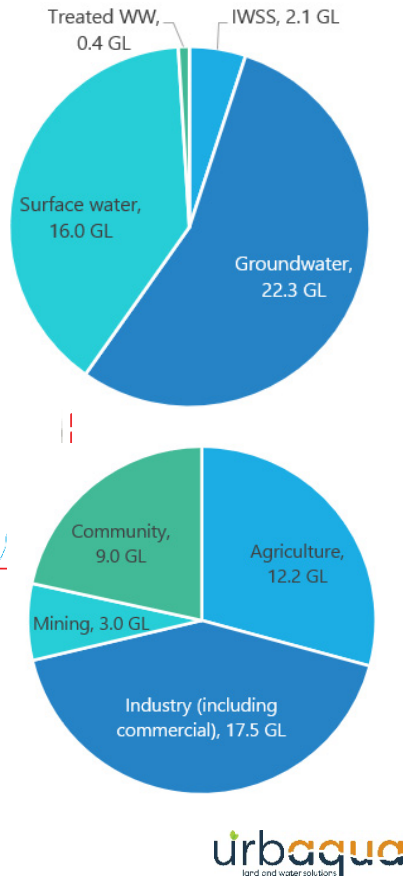
Population of around 18,300 residents, located in over 7,400 households. This is predicted to increase to over 70,000 people by 2051.

The key land uses in the Shire of Murray are a combination of agriculture, industry, mining, residential and rural residential. The strategic agricultural areas include Nambeelup and Coolup as well as the Peel Food Zone.

The urban centres are serviced by the Water Corporation's Integrated Water Supply Scheme (IWSS) and reticulated sewerage. The Pinjarra wastewater treatment plant provides treated wastewater (TWW) to Alcoa.

Important environments include the Peel Harvey Estuary, Black Lake, Lakes Meelup and McLarty, and the Serpentine, North and South Dandalup and Murray rivers. Access to these natural resources underpins the Shire's economic prosperity and significantly supports community wellbeing

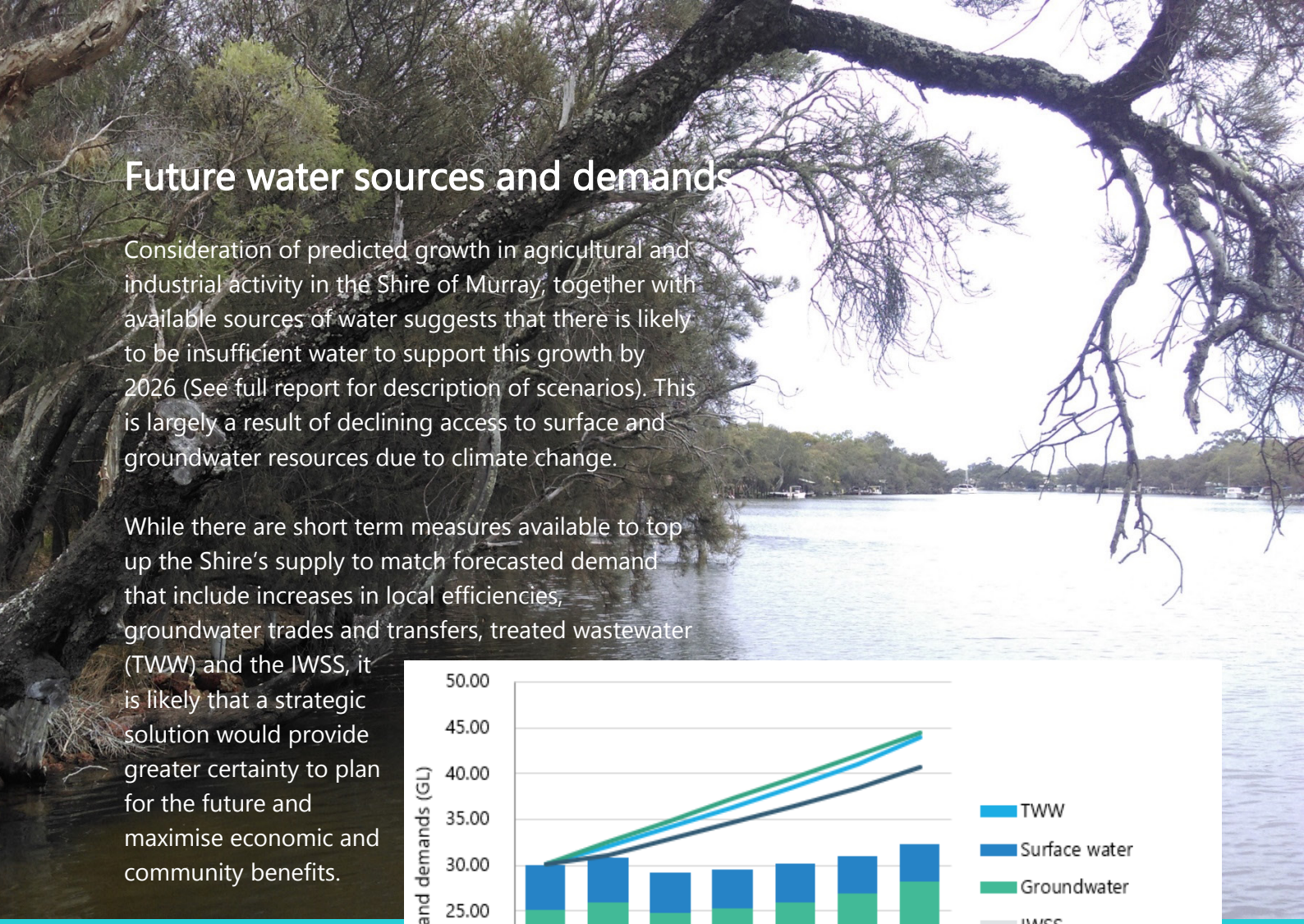




Current water needs are approximately 41.7GL

The cost of supplying water from its current sources is estimated to be $993 million in present day dollars[1].

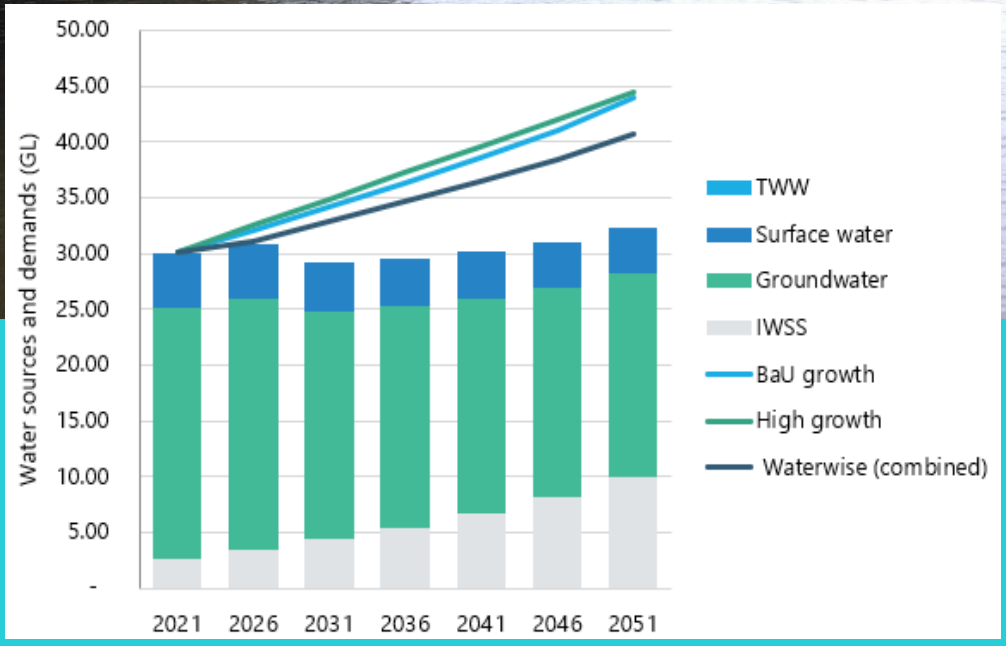
[1] High level economic analysis undertaken by Marsden Jacob Associates, 2023.



Future water sources and demands

Consideration of predicted growth in agricultural and industrial activity in the Shire of Murray, together with available sources of water suggests that there is likely to be insufficient water to support this growth by 2026 (See full report for description of scenarios). This is largely a result of declining access to surface and groundwater resources due to climate change.

While there are short term measures available to top up the Shire's supply to match forecasted demand that include increases in local efficiencies, groundwater trades and transfers, treated wastewater (TWW) and the IWSS, it is likely that a strategic solution would provide greater certainty to plan for the future and maximise economic and community benefits.



If this shortfall is addressed, the accumulative value of production in the Shire of Murray is estimated to increase between $24,846 million (high growth scenario) and $12,192 million (Waterwise scenario) in present day dollars. Of this gain in production, $427 to $210 million can be attributed to irrigated agricultural activities whilst between $24,419 and $11,982 million can be attributed to industrial activities (present day dollars). This would also result in between 55,956 and 28,042 jobs across agriculture and industrial sectors (assuming BaU demand forecasts[2]. This value would be lost if the water demand shortfall is not met.

In the event of a shortage, water may be in limited supply and impact the community's parks and gardens. If this were to occur, the landscape will become drier and less green. The community benefit of maintaining green (irrigated) parks in the Shire of Murray is estimated (from willingness to pay studies on the amount of the water shortfall) at between $3 and $4 million in present day dollars over the period of 2024 to 2051.

Please refer to the full report, available on the Peel Alliance website: www.peelalliance.org.au for additional information, or contact Peel Alliance Executive Director, Anika Serer at anika@peelalliance.org.au.

[2] High level economic analysis undertaken by Marsden Jacob Associates, 2023.