

BERGRIVIER MUNICIPALITY



Main insights

- Unless the Bergrivier Municipality (BM) urgently develops options for water supply augmentation, water shortages will constrain future development.
- If the BM does not secure additional water allocation for agriculture, farmers will need to switch to more water efficient crops and should be encouraged to invest in water efficiency technologies to ensure sustainability.
- In the absence of significant new supply options, the BM should decouple population growth and water consumption through water conservation and demand measures.

POPULATION

67 474

in 2016

1.7%

(Population Growth 2011-2016)

GDP & EMPLOYMENT

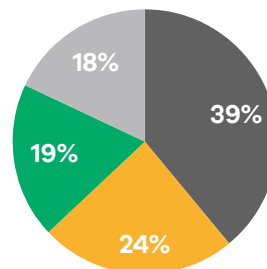
2.2%

GDP growth rate, 2005-2013

-2.7%

employment growth rate, 2005-2013

LARGEST 3 SECTORS (2013)

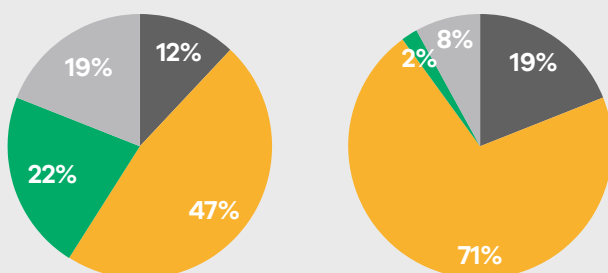


- Agriculture, Forestry, and Fishing
- Manufacturing
- Wholesale and Retail Trade, Catering and Accommodation Services
- Other

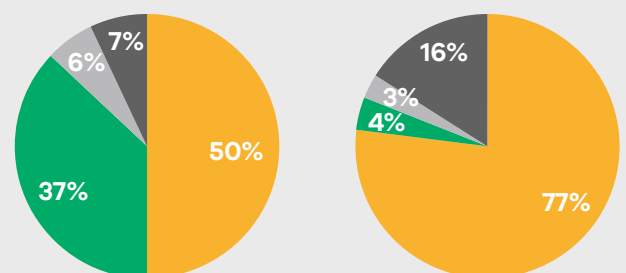
What is the water intensity of the Bergrivier economy?

Water intensity is the volume of water used per unit of value added to the economy, with some sectors in an economy using more water than others to produce goods and services of the same value. Compared to the entire Berg WMA, the BM is the most reliant on high and moderate water intense sectors, including agriculture. These sectors comprise 50%+ of the municipal GVA (Gross Value Add) and 50% of employment in the BM. Given the level of water intensity of the Bergrivier economy, water shocks and constraints would have a significant impact on the economy and wellbeing of the local population.

GVA by water intensity of sectors



Employment by water intensity of sectors



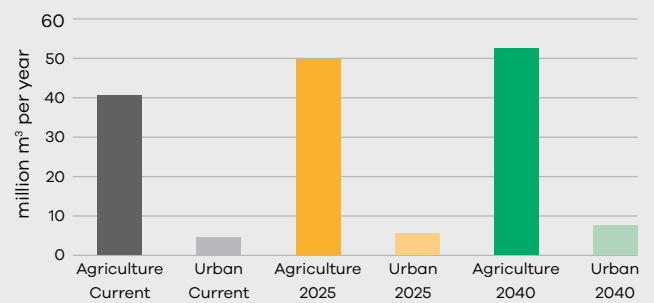
■ Low water intense sectors
 ■ Agriculture
 ■ Other heavily water intense sectors
 ■ Moderately water intense sectors

How will water demand change in the future?

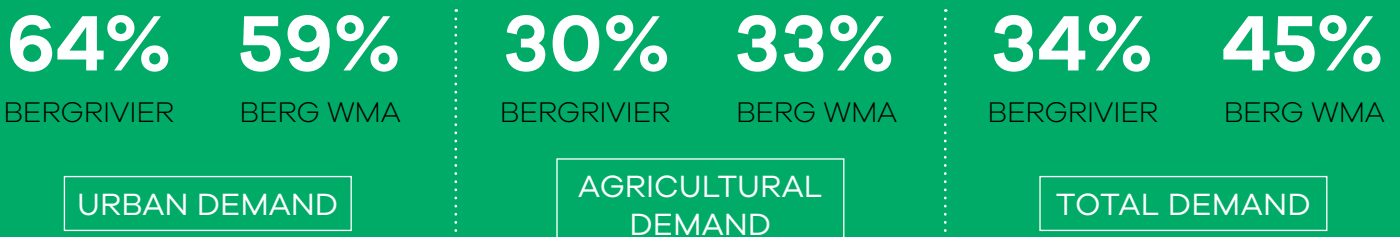
Changing climatic conditions are expected to increase the water requirements of the agriculture sector in Bergrivier by 33% between 2015 and 2040. By 2040, the water requirements for grapes and citrus fruits, the most important crops in the region, are expected to increase by 34% and 35%, respectively.

Population growth, while not as significant a factor as in Drakenstein, Saldanha Bay, Stellenbosch, or Swartland, will nonetheless significantly increase water requirements for the municipality, growing 59% between 2015 and 2040.

Irrigated agriculture and urban water requirements per year



What is the expected growth in water demand by 2040?

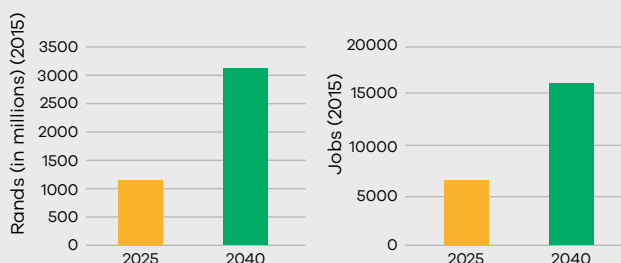


How much will the future supply deficit cost Bergrivier?

The total water supply deficit for the BM is estimated to be 10.4 million m³ per annum by 2025, 7.5% of the Berg WMA's total deficit. By 2040, the water deficit may increase to ~14.9 million m³ per annum, 4.9% of the Berg WMA deficit. While the BM is unlikely to be a high contributor to the regional deficit, constraints on water supply will have significant

impacts on the local economy and employment, with the most significant costs to GVA and employment originating from the opportunity costs of the urban water deficit. By 2040, the water deficit may cost the local economy ~R3.1 billion per annum, 86% of the local economy's current size, and 16 229 jobs per annum, 74% of the current size of local employment.

Value of water supply deficit



GVA deficit

| | Bergrivier | Berg WMA |
|-------------|------------|----------|
| 2025 | 33% | 33% |
| 2040 | 86% | 7% |

Employment deficit

| | Bergrivier | Berg WMA |
|-------------|------------|----------|
| 2025 | 30% | 7% |
| 2040 | 74% | 38% |

For more information and support, call GreenCape's water team on 021 811 0250 or email water@greencape.co.za



This municipal snapshot is the result of a broader study and can be read in conjunction with the policy brief; A case for integration: water resource and development planning in the Berg Water Management Area which was funded by the Water Research Commission and The Western Cape Government's Department of Economic Development and Tourism. The policy brief is freely available here: <https://www.greencape.co.za/content/focusarea/water-for-sustainable-development>