



Annual Water Outlook

1 December 2019

Map of the Barwon Water service region and key infrastructure



Our challenge

Our climate is getting hotter and drier. Australia's climate has warmed just over 1 °C since 1910 and rainfall over southeastern Australia has been particularly low in recent decades.

Hotter weather and less rainfall directly impacts our water supplies. For example, West Barwon Reservoir in the Otways, one of our biggest catchments, has seen a 32% reduction in annual inflows since 1997. This equates to a quarter of the Greater Geelong region's annual water use.

Our response – for the short-term

Rainfall in seven out of the twelve months over 2018/2019 was below the recent ten-year average. January 2019 saw the lowest January rainfall on record at West Barwon Reservoir, just 3.2 mm of rain fell in the entire month.

Record low rainfall combined with high water demand in 2018/2019 saw storage levels drop dramatically over summer, to a low of 33% in May 2019, which required us to activate the Melbourne-to-Geelong pipeline and the Anglesea Borefield.

Melbourne to Geelong Pipeline

The Melbourne to Geelong Pipeline commenced pumping in March 2019. A pump station upgrade was completed in late November 2019, to allow full utilisation of the Melbourne to Geelong Pipeline.

Anglesea Borefield

Preparation of the Anglesea borefield commenced in late May 2019 and it began supplying water in early November 2019. The Anglesea borefield will operate in conjunction with an extensive environmental monitoring program, which includes community oversight through the Anglesea River Working Group, regular community 'pop-ups' and information on our website.

Barwon Downs Borefield

We announced on 14 March 2019, the withdrawal of our Barwon Downs borefield licence renewal application to focus on remediation of historical impacts of management of groundwater pumping and meeting the requirements of a Ministerial Notice issued under section 78 of the *Water Act 1989*.

Our response – for the long-term

With less rain expected to continue, it's time to think differently about how we use water and where it comes from. We are asking our community to help us design a new sustainable and reliable water future – a future where there is enough water to meet our everyday needs and to support liveable and thriving communities and a healthy environment. Learn more at www.barwonwater.vic.gov.au/future

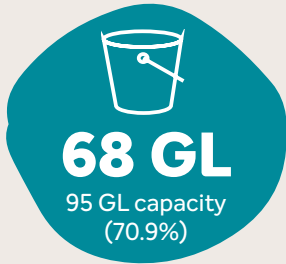
2019/2020 Climate Outlook

The Bureau of Meteorology forecast (issued on 21 November 2019) indicates that rainfall in our region is expected to be below average, with higher than average maximum temperatures for the next three months.

More information on the observed changes and longer-term future climate and water projections can be found at www.water.vic.gov.au/climate-change.

Greater Geelong system

Geelong's drinking water is sourced from catchments on the upper Barwon and Moorabool rivers. During dry periods Barwon Water also has an entitlement to take water from Melbourne's Yarra Thomson catchment, as well as groundwater from the Anglesea Borefield. We operate two Class A recycled water plants – the Northern Water Plant and the Black Rock Recycled Water Plant.



Current storage

As of 25 November 2019



Population



Water demand

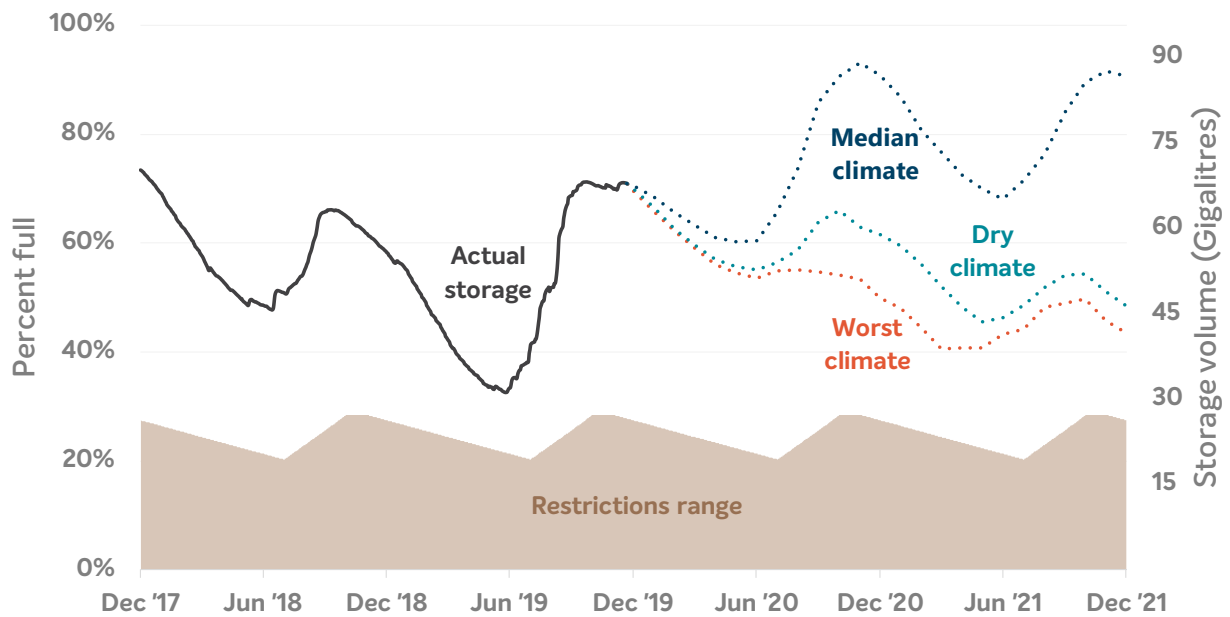


Restrictions likelihood

GL = gigalitre = 1 billion litres of water

Storage outlook

The short-term storage outlook shows that even under the worst climatic conditions, water restrictions will not be necessary in the next two years, to November 2021.

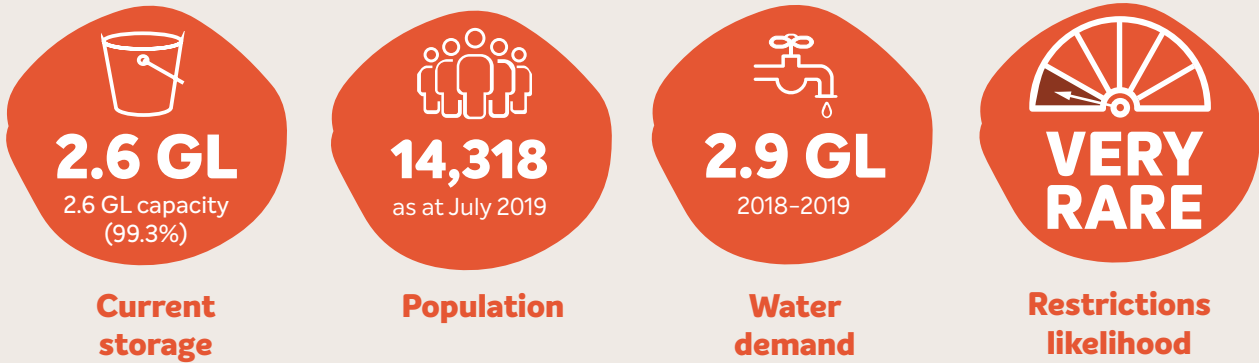


Short term action plan

Action	Status
We will continue to work with our community and stakeholders to develop and implement a remediation plan for Big Swamp, Boundary Creek and surrounding environment	On track
We will utilise the Melbourne-to-Geelong Pipeline and the Anglesea Borefield to supplement Geelong's surface water supplies	In operation
We will switch on the Black Rock Class A recycled water plant	In operation
We will engage with our community to follow Permanent Water Saving Rules and other demand management strategies	In operation
Our Water for our Future program will engage the Greater Geelong community to understand their views for how we create a sustainable water future	On track

Colac system

Colac's water supply is sourced from the West Gellibrand and Olangolah reservoirs, which are located on the Gellibrand River in the Otway Ranges. During dry periods, Colac's water supply can be supplemented with water from the Geelong system via a pipeline connecting Geelong to Colac.

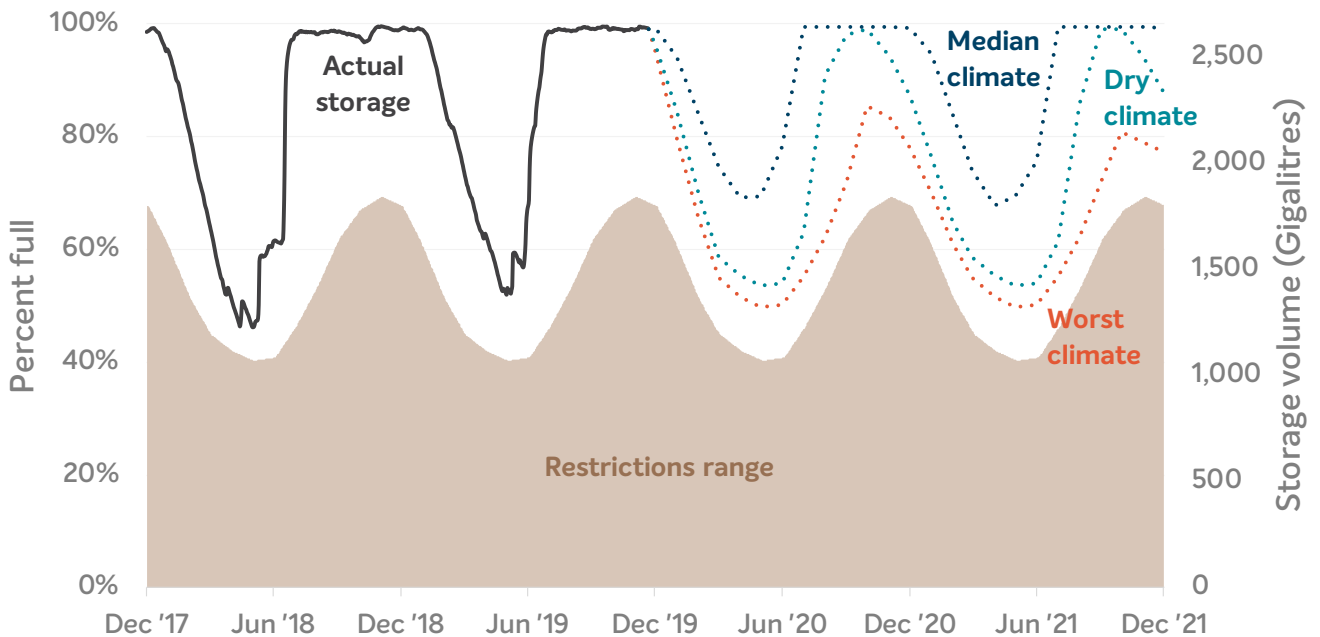


As of 25 November 2019

GL = gigalitre = 1 billion litres of water

Storage outlook

The short-term storage outlook shows that even under the worst climatic conditions, water restrictions will not be necessary in the next two years, to November 2021.

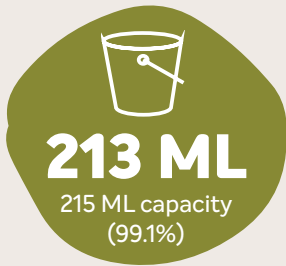


Short term action plan

Action	Status
We will optimise operating rules and triggers for when we should transfer water from the Greater Geelong system to Colac.	Early stages
We will engage with our community to follow Permanent Water Saving Rules and other demand management strategies	In operation
Our Water for our Future program will engage the Colac community to understand their views for how we create a sustainable water future	On track

Lorne system

The Lorne system is supplied with water from Allen Reservoir, which is located on the St George River. Water is fully treated at the Lorne Water Treatment Plant before being supplied to customers.



Current storage

As of 25 November 2019



Population



Water demand

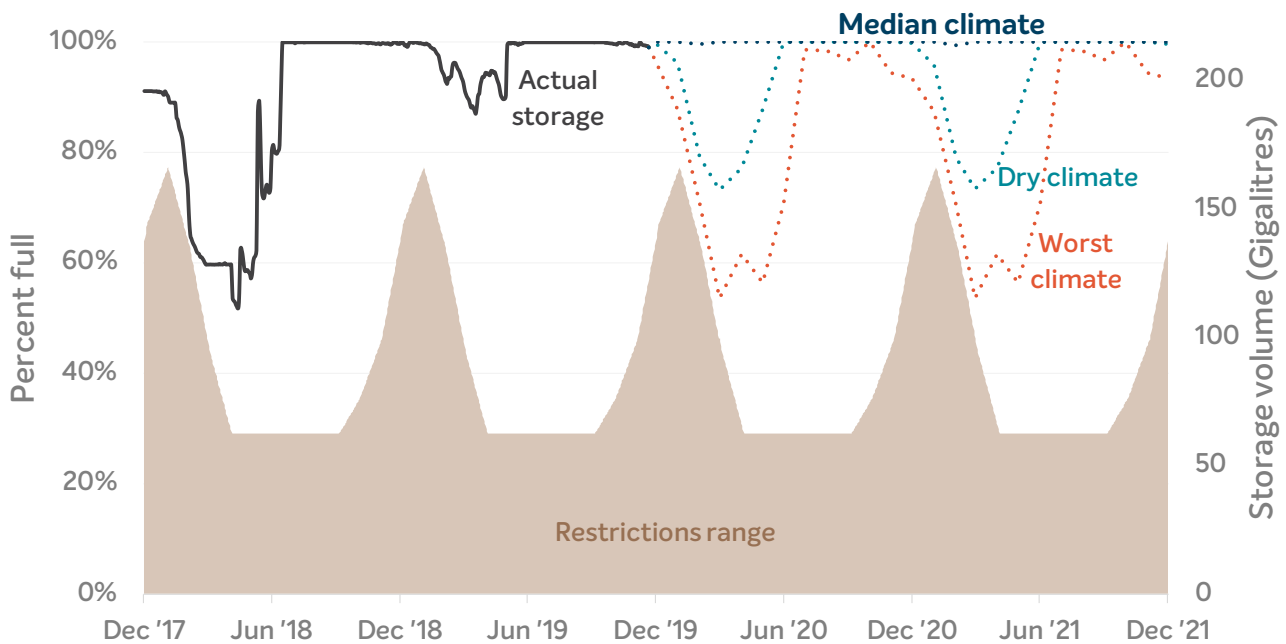


Restrictions likelihood

ML = megalitre = 1 million litres of water

Storage outlook

The short-term storage outlook shows that even under the worst climatic conditions, water restrictions will not be necessary in the next two years, to November 2021. Water storage levels will continue to be monitored closely.

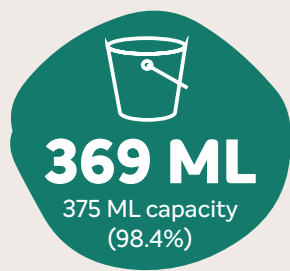


Short term action plan

Action	Status
We will engage with our community to follow Permanent Water Saving Rules and other demand management strategies	In operation
Our Water for our Future program will engage the Lorne community to understand their views for how we create a sustainable water future	On track

Apollo Bay system

The Apollo Bay system supplies water to Apollo Bay, Marengo and Skenes Creek. Water is sourced from the Barham River and pumped to the Marengo Basin (125 ML) and the Apollo Bay Basin (250 ML). Water is fully treated at the Apollo Bay water treatment plant before being supplied to customers.



Current storage

As of 25 November 2019



Population



Water demand

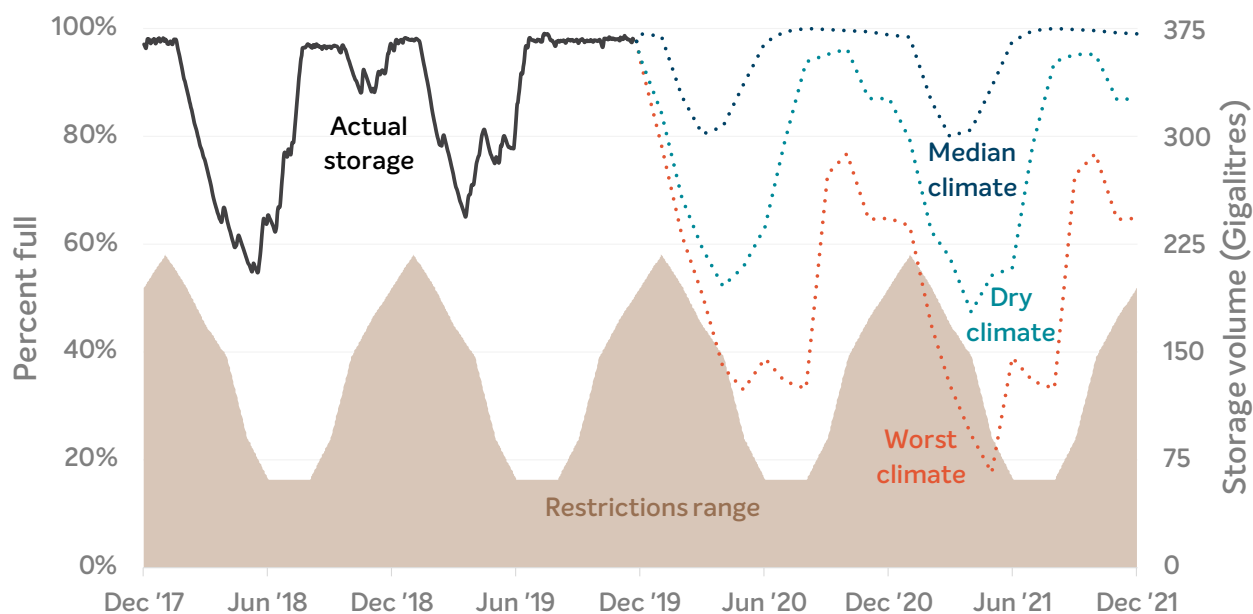


Restrictions likelihood

ML = megalitre = 1 million litres of water

Storage outlook

The short-term storage outlook shows that under median or dry climatic conditions water restrictions will not be necessary in the next two years, to November 2021. However, under the worst case climate scenario, although the likelihood of this is rare, water restrictions may need to be applied in summer 2019/2020 and summer 2020/2021.



Short term action plan

Action	Status
We will undertake a range of leak reduction initiatives and demand management measures to improve short term water security in Apollo Bay, in summer 2019/2020 and summer 2020/2021	On track
We will engage with our community to follow Permanent Water Saving Rules and other demand management strategies	In operation
Our Water for our Future program will engage with Apollo Bay community to understand their views for how we create a sustainable water future, and discussion on specific water security options for Apollo Bay	On track

Gellibrand system

Gellibrand is located approximately 25 km south of Colac and water is supplied to less than 100 properties. The Gellibrand system is supplied from Lardners Creek. Water is pumped from the creek to the Gellibrand Water Treatment Plant prior to being gravity fed to customers.



Annual entitlement



Population



Water demand



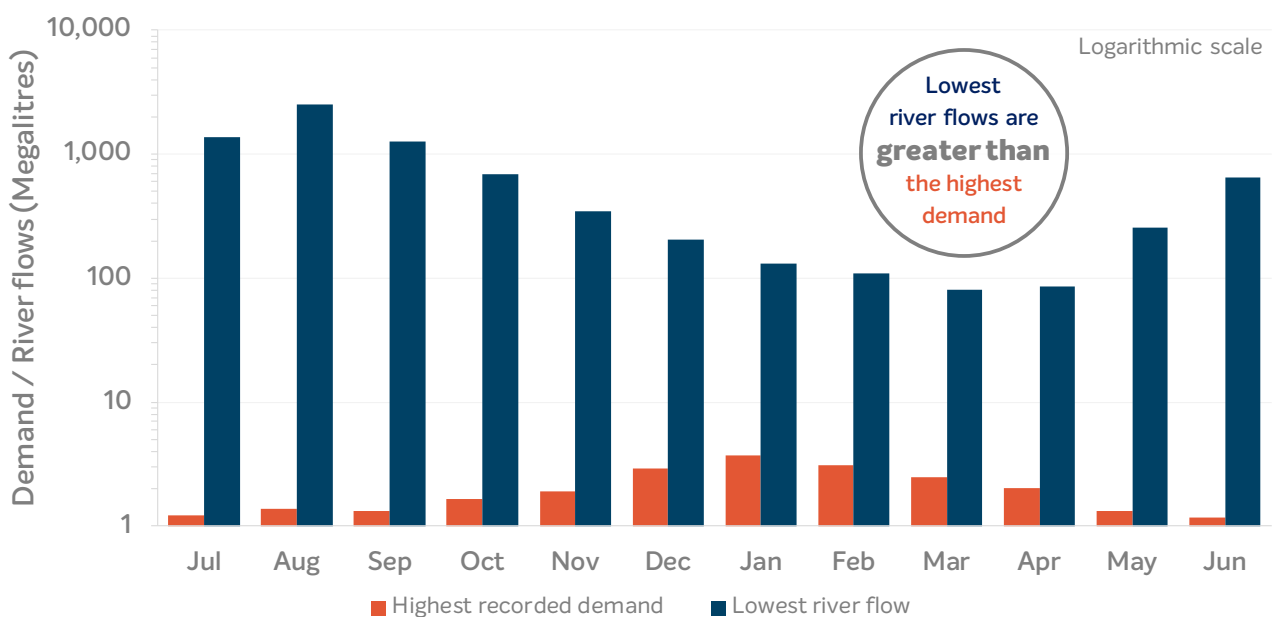
Restrictions likelihood

As of 25 November 2019

ML = megalitre = 1 million litres of water

Storage outlook

The short term storage outlook shows that even under the worst climatic conditions, water restrictions will not be necessary in the next two years, to November 2021.



Short term action plan

Action	Timing	Status
We will engage with our community to follow Permanent Water Saving Rules and other demand management strategies		In operation
Our Water for our Future program will engage the Gellibrand community to understand their views for how we create a sustainable water future		On track



55-67 Ryrie Street
PO Box 659
Geelong Victoria 3220

☎ 1300 656 007 | ✉ info@barwonwater.vic.gov.au

barwonwater.vic.gov.au

f t v i in