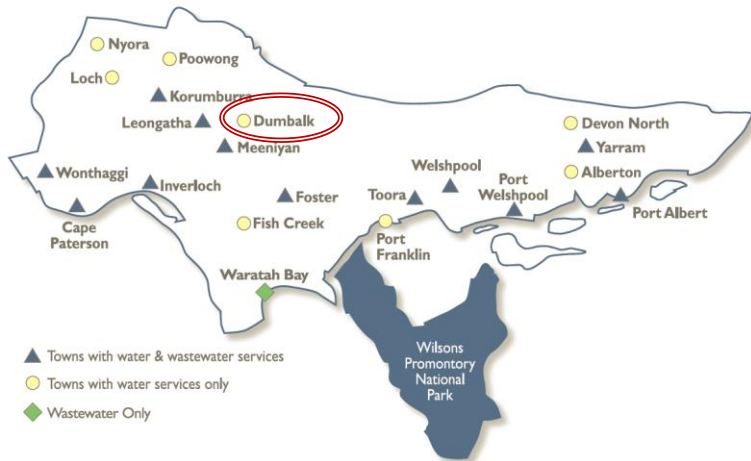


## Dumbalk Water Supply System

Dumbalk is supplied from the Tarwin River East Branch.

After diversion from the river, water is stored in a small water storage and water tower. This small water storage helps South Gippsland Water to maintain a good quality water supply.



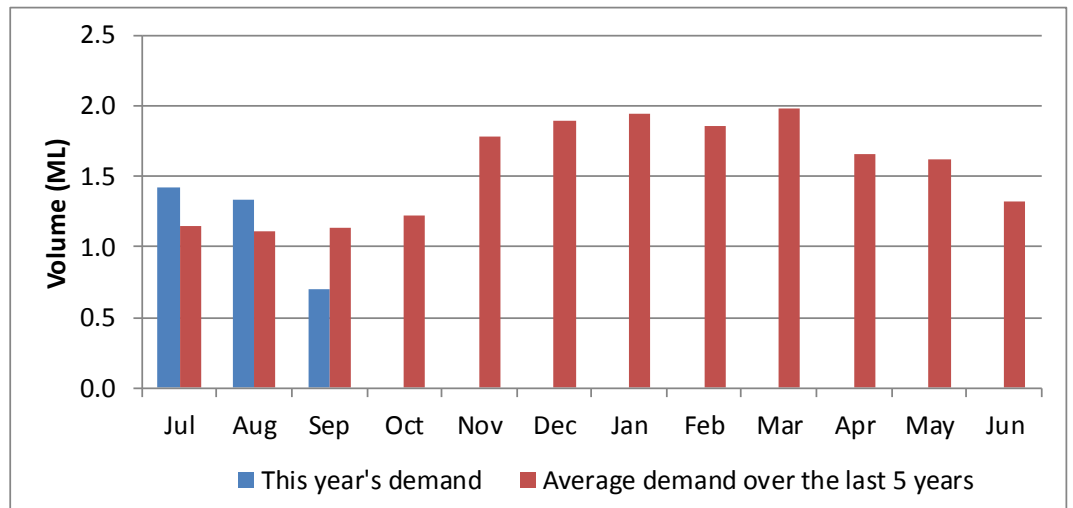
## Water Supply Information

Water resources held by South Gippsland Water for the Dumbalk Water Supply System are shown below. Less than 3.5% of the available annual entitlement has been used from the river in the current year to date (Jul-Oct 2018). This entitlement is a legal right to access water, subject to availability.

Water Component	Maximum Annual Entitlement	Volume Extracted 2018-19	Volume Remaining 2018-19
Tarwin River at Dumbalk	100 ML	3 ML	97 ML

## Water Consumption

Demands for 2018 to date have been higher than average between July and August however in September the demand reduced to 62% of the average September value. Water consumption is expected to continue to follow the average trend for the remainder of the year.



### Further Information:

- The most recent records for the Tarwin River East Branch at Dumbalk show that it was flowing at an average of 103 ML/d during October. This is well above SGW's restriction trigger of 1 ML/d, close to a median flow (exceeded in 55% of Octobers).
- Unregulated river flows are difficult to forecast. SGW has only forecast the next 3 months due to low forecast skill beyond 3 months. The graph is formatted to highlight low flow behaviour.
- Units are in megalitres per day (ML/d), where 1 ML is equivalent to 1 million litres (or roughly one Olympic sized swimming pool).

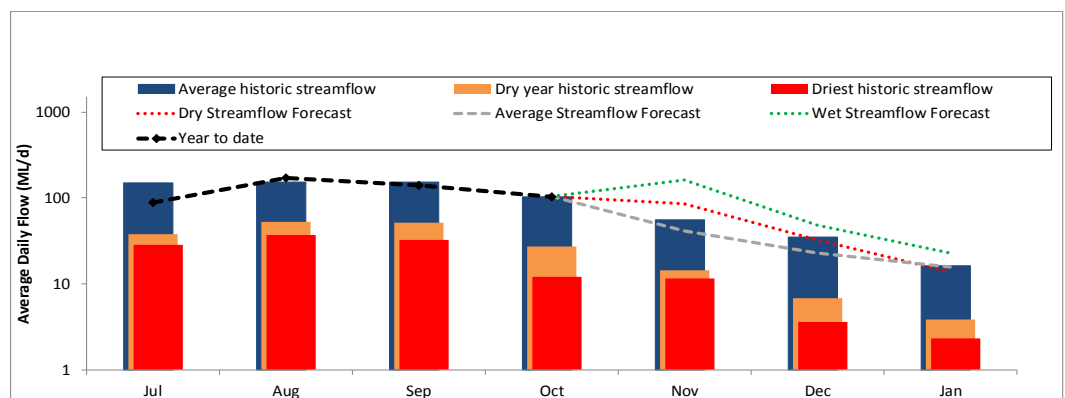
## Climate Conditions

Forecast climate conditions for the coming three months have considered the Bureau of Meteorology's seasonal climate forecast for the region and local climate conditions in the year to date. The Bureau's climate outlook indicates that rainfall over the next three months is likely to be below the long-term average. Winter/spring rainfall in the year to date has been below average. Air temperature is forecast over the next three months to be higher than the long-term average for this time of year. After taking these factors into account, South Gippsland Water is forecasting on the basis of a dry climate scenario.

Chance of Exceeding Median Rainfall	Chance of Exceeding Median Maximum Temperature	This Year's Spring Rainfall	Likely Outlook Scenario
35-40%	60-65%	Dry	Dry

## Streamflow Outlook

Streamflows in the Tarwin River are naturally highly variable. For the year to date, streamflows fluctuated around the historical average, exceeding the average in August. Whilst precisely forecasting streamflow conditions is difficult, streamflows for the outlook period are currently expected to remain slightly below the historical average if the dry climate conditions continue as expected. River flows are still expected to remain above SGW's 1 ML/d trigger for restrictions over the outlook period.



## Urban Water Restrictions Outlook

Based on the recent streamflow record, approximately average demands for water in the year to date, the Bureau of Meteorology climate forecast and SGW's daily streamflow forecast, no water restrictions are anticipated over the outlook period at the current time. South Gippsland Water's Permanent Water Savings Plan applies to all customers over the outlook period.

Climate Scenario	Outlook		
	1 Dec 2018	1 Jan 2019	1 Feb 2019
Wet	PWSP	PWSP	PWSP
Average	PWSP	PWSP	PWSP
Dry	PWSP	PWSP	PWSP

PWSP Permanent Water Savings Plan

## *Action Plan*

A list of priority actions for this supply system prior to the next update of the Urban Water Strategy is presented below. Further information on actions can be found in the Urban Water Strategy published in 2017 and Water Plan 3 publications on our website. The next phase of our Water Plan and Pricing Review is currently underway.

Action Name	Timing
Demand management	Ongoing
Reduce leaks and wastage	Ongoing
Update water security outlook	Every November

The information provided in this water security outlook is intended as a guide only. An update will be issued if conditions change during the outlook period.