WATER SECURITY OUTLOOK

NOVEMBER 2019

South Gippsland Water

The Tarra River Water Supply System supplies water to the townships of:

- Yarram;
- Alberton;
- Port Albert; and
- Surrounding rural communities.

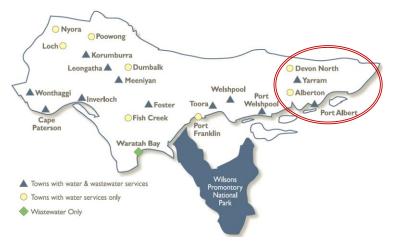
Primary supply is from a diversion weir on the Tarra River, with backup supply from a groundwater bore. Both sources of water are transferred to a storage basin, with a capacity of 30 ML. This storage allows water supply to be maintained during short periods of low river flow during drought.

South Gippsland Water

1300 851 636

www.sgwater.com.au

Tarra River Water Supply System



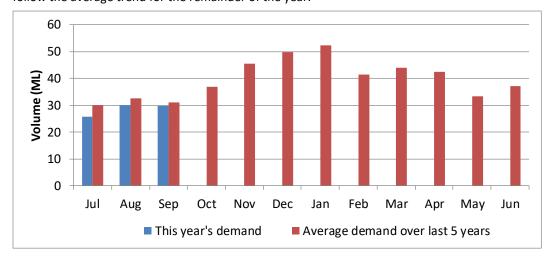
Water Supply Information

Water resources held by South Gippsland Water for the Tarra River Water Supply System are shown below. Only 10% of the available annual entitlement has been used from the Tarra River in the current year to date (Jul-Oct 2019), with 2% of the annual groundwater bore entitlement used over the same period. This entitlement is a legal right to access water, subject to availability.

| Water Component | Maximum Annual Entitlement | Volume Extracted 2019-20 | Volume Remaining 2019-20 |
|------------------|----------------------------------|-----------------------------|-----------------------------|
| Tarra River | 853 ML | 81 ML | 772 ML |
| Groundwater Bore | 214.2 ML | 4.3 ML | 209.9 ML |

Water Consumption

Monthly water consumption for the Tarra River Water Supply System in the year to date was slightly below the average demand over the last five years. Water consumption is expected to follow the average trend for the remainder of the year.





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Further Information:

- The most recent records for the Tarra River upstream of the diversion weir show that it was flowing at an average of 23 ML/d during October. This is above the 5 ML/d flow threshold to activate groundwater pumping, which is used to deal with water shortages, and is above the median flow (exceeded in 60% of Octobers).
- The Yarram storage basin was 100% full at the end of October.
- 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).

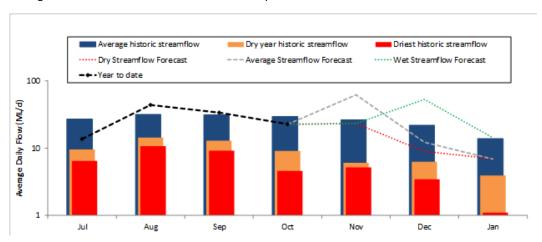
Climate Conditions

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. Winter/spring rainfall in the year to date has been close to the long-term average, however the Bureau's climate outlook indicates that rainfall over the next three months is likely to be below the long-term average. Air temperature is forecast over the next three months to be higher than the long-term average for this time of year, and this trend is expected to continue beyond this period. After taking these factors into account, South Gippsland Water is forecasting on the basis of a dry climate scenario.

| Chance of Exceeding | Chance of Exceeding Median | This Year's | Likely Outlook |
|---------------------|----------------------------|-----------------|----------------|
| Median Rainfall | Maximum Temperature | Spring Rainfall | Scenario |
| 30-35% | 55-60% | Average | Dry |

Streamflow Outlook

Streamflows in the Tarra River are naturally highly variable, and for the current year period they have fluctuated around the historical average. Whilst precisely forecasting streamflow conditions is difficult, streamflows for the outlook period are currently expected to remain below average if the climate conditions continue as expected.



Urban Water Restrictions Outlook

Based on the streamflow outlook, the demands for water in the year to date, and the Bureau of Meteorology climate forecast, no water restrictions are anticipated for the remainder of the year at the current time. For the dry climate outlook expected, it is estimated that the groundwater bore entitlement will be used at some stage in 2019/20 to avoid the need for restrictions. South Gippsland Water's Permanent Water Savings Plan applies to all customers over the outlook period.

| Climate Scenario | Outlook | | |
|------------------|------------|------------|------------|
| | 1 Dec 2019 | 1 Jan 2020 | 1 Feb 2020 |
| Wet | PWSP | PWSP | PWSP |
| Average | PWSP | PWSP | PWSP |
| Dry | PWSP | PWSP | PWSP |

PWSP Permanent Water Savings Plan

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Action Plan

A list of priority actions for this supply system 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 |
| Continue purchase of groundwater licences as required | 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.

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