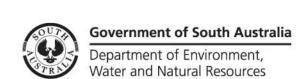
Surface water status reports

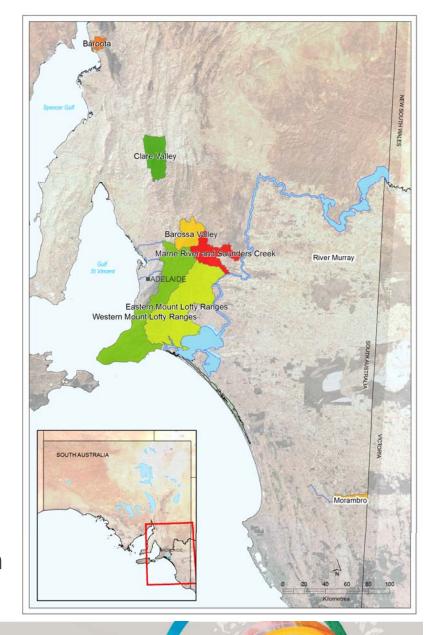
**Daniel Penney** 

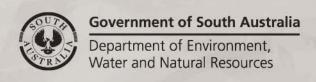




# Surface Water Status Reports

- Designed to fulfil DEWNR's commitment to increase the regularity of reporting on the status of water resources
- Published annually
- Review of prescribed surface water resources, particularly in response to changing climatic influences and consumptive demands
- 8 prescribed surface water resources in South Australia
- Resources assigned a status in the form of a 'traffic light' for streamflow





## 2015 Summa Water use summary Surface water use in the Barossa PWRA includes license



Surface water resources are highly dependent on rain average winter rainfall results in a reduction in an increased irrigation extractions, and these two elem Status available to dilute salts. Conversely, increased rainfall with potential decline or stabilisation of salinity.

#### Rainfall summary

The Angaston rainfall station (M023300) is located totalled 386 mm during the 2014-15 water-use year, third lowest of the past 38 years of rainfall records period of available streamflow data). During the 12 m above average rainfall, while the late winter and earl the last three consecutive years. A similar trend of mo experienced at the Tanunda (M023318) and Willian reaches of the Barossa PWRA respectively. The spatia long-term average across the Barossa PWRA, with a s (Fig. 4, 2<sup>nd</sup> panel). By comparison, the spatial distribut to the long-term average across the entire PWRA.

#### Streamflow summary

Four long-term streamflow gauging stations are loc stations are located along the North Para River, with flows draining the Barossa PWRA. The Tanunda Cre sub-catchment, with its confluence with the North Pa recorded annual streamflow of 10 454 ML in the 2014 The Barossa at a whole PWRA scale is assigned an amber si only one month (7644 ML in July 2014) had above i 'Annual streamflow was between the 25th-50th percentile average or no streamflow during the 2014-15 water record volume recorded at the Yaldara gauging station fron being observed at the Penrice and Mt McKenzie gau a slight increase in the long-term rainfall recorded at

demand from non-licensed farm dams (generally stock a latter brings treated water from the River Murray by SA Wa crops, including wine grapes. During 2014-15 the volume Water), with the previous year's total being 8427 ML. Wat with the previous year's total being 1390 ML. Existing stod volume taken from them is not limited to an allocated vo on non-licensed water demand. Estimated non-licensed w of the existing stock and domestic dam capacity. Recorder gauging station), with approximately 2761 ML (sum of extracted. As such, of the 13 215 ML (10 454 plus 2761 ML) from farm dams), it is estimated that 21% was extracted for

#### Salinity summary

Despite gaps with no recorded information, the Yaldara Tanunda Creek gauging station at Bethany provide a go Barossa PWRA (Fig. 5). A clear pattern of increasing salinity and winter months is shown in Figure 5, highlighting the watercourse draining to the west. Many permanent r. of salinity data is less than 1000 mg/L at both the Yaldara salinities in the PWRA with 34 % of data recorded being q Tanunda Creek gauging station were comparatively less s

To determine the status of the Barossa PWRA for 2015, the (2014-15) is expressed as a percentile by comparing it to (1977-78 to 2014-15). The percentile value indicates the streamflow. For example, if the 90th percentile annual stream values over the entire period or record were equal to or lo which means 46% of the annual streamflow values during annual streamflow. Status is defined based on which pe within (shown in the image below). This is a new approa Please visit the Frequently Asked Questions on the Wati current method of evaluating the status of surface water r

### 2015 Status



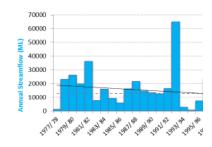
streamflow of 12 964 ML and ranks in the 25%–50% pt. for 2015 based on the status of streamflow at the Yaldara

This status report does not seek to evaluate the sustain resource, nor does it make any recommendations on monitoring of the resource. These actions are important, Figure 3. separate processes such as prescription and water allocati

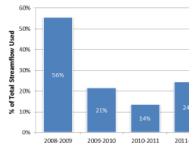
 5-year trend 700 600 400 300 Palling Panday Pastlay Pastlay Pastlay Pastlay Pastlay

Annual rainfall

Annual rainfall (mm) for the 1977-78 to 2014-15 wat long-term average annual rainfall, and the short-tern station (M023300)

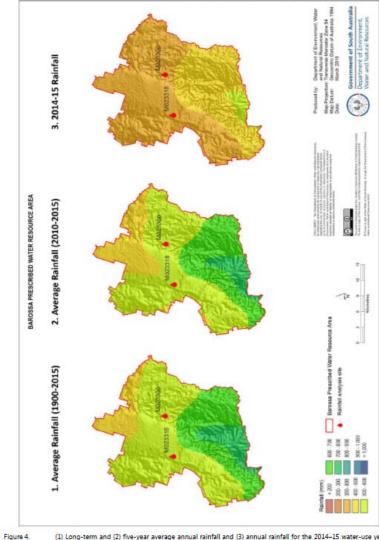


Annual streamflow (ML) for the 1977-78 to 2014-15 long-term average annual streamflow, and the shortgauging station (A5050502)



Surface water use as a percentage of total resource of years for the Barossa PWRA

2015 Barossa PWRA Surface water status report



(1) Long-term and (2) five-year average annual rainfall and (3) annual rainfall for the 2014-15 water-use year in the Barossa PWRA

2015 Barossa PWRA Surface water status report

2015 Barossa PWRA Surface water status report

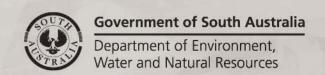


## Government of South Australia

Department of Environment, Water and Natural Resources

## Benefits

- help identify
  - emerging trends
  - risks to water supplies
  - whether further monitoring is needed
- inform:
  - water allocation plans
  - water allocation plan implementation
  - demand and supply statements
  - NRM report cards
  - NRM regions
  - the public





# https://www.waterconnect.sa.gov.au



### Water Resource Assessments

Regular reporting on the status of the statu non-prescribed regions of the State for groundwater and surface water resources. Simplified hydro-stratigraphic 3D models are also available for some regions. See the 3D Models Fact Sheet.

- Prescribed Area Assessments
- · Non-prescribed Region Assessments
- · Water Resource Status Symbols
- · Frequently Ask Questions

#### To use this map:

- . Mouse over the area of interest to see the related reporting area(s) highlighted in the list at (right).
- Click an area to see a pop up box listing the related reports. Select a report to view.
- . Mouse over the list to see the corresponding areas highlighted on the map.
- Click an area in the list to see the available reporting years. Click a year to view the report.



