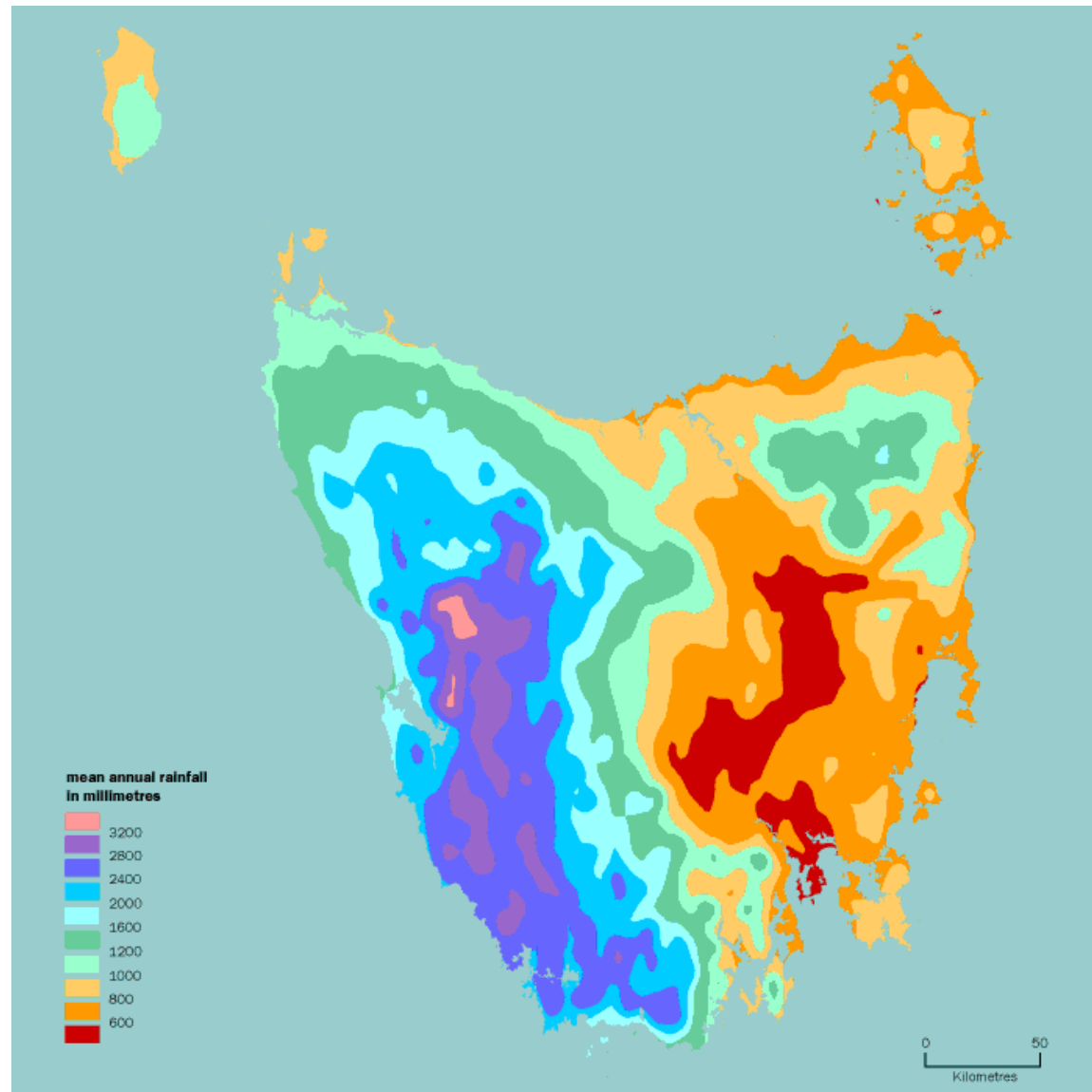


Source: [State of the Environment Report](#)

Tasmania

Has a cool temperate western maritime climate
Dominated by the westerly winds (Roaring Forties)
Having wet western mountains and drier rain shadow areas.



Tasmania has 12% of the Australia's fresh water resources. This gives a competitive advantage for agriculture, forestry and industries requiring water.

If the power industry is excluded, the consumption of water is less than 1% of the annual run-off. Compared with the rest of Australia the State is only 0.9% of the land area and some 3% of the population. The average annual surface run-off available is around 44 million ML

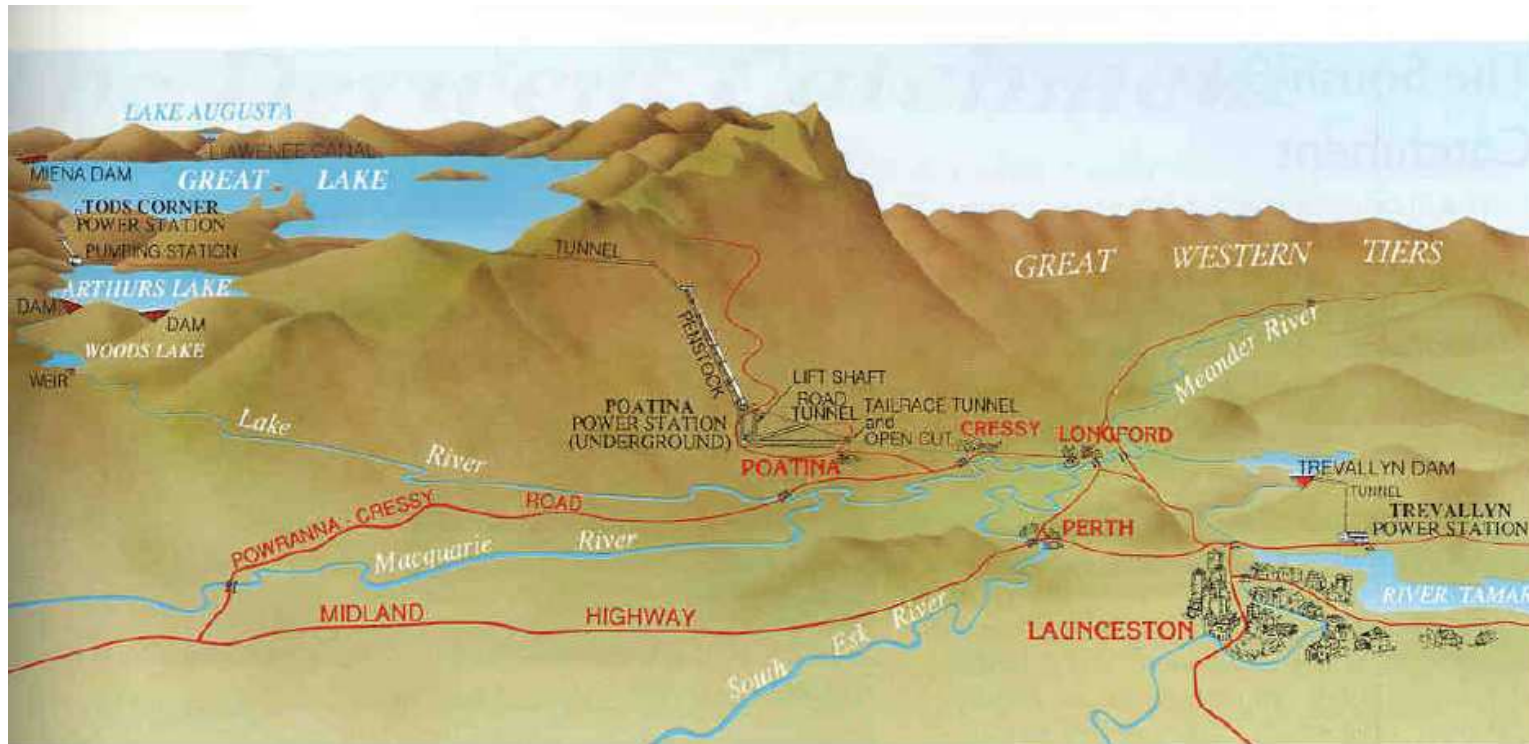


Tasmania's climate makes it a great place to grow trees, and it is the most forested State (% wise) in the Nation

Source: <http://soer.justice.tas.gov.au/2003/>

Water Supply will be drawn from Trevallyn Dam

2600 GL flows into this dam from the South Esk Basin, comprising the Meander, Macquarie and South Esk rivers including water from the Poatina hydro power station.



The Trevallyn power station has 4 turbines giving maximum power generating capacity of 83.6 MW at a discharge of about 80 m³/s. This equates to about 2,500 Giga litres (GL) of water a year that then flows down the Tamar to the sea.

Prior to being used in the power station 28 GL from the dam is diverted into two water treatment plants serving the West Tamar and the South Esk schemes and for riparian water to maintain environmental flows to the Cataract Gorge.

The Pulp mill will buy at commercial rates 26 GL each year from the power station's water that would be generating about 0.83 MW of power (less than 1% of capacity)

EXTRACT FROM HYDRO MEDIA RELEASE

IN PRINCIPLE WATER AGREEMENT REACHED WITH GUNNS

22 July 2005

Hydro Tasmania has confirmed today that it has reached agreement in principle with the final details to be negotiated with Gunns Limited for the sale of water to Gunns for the operation of its proposed pulp mill at Bell Bay.

“Gunns has approached Hydro Tasmania for access to a volume of water for it to operate its pulp mill,” Hydro Tasmania’s Group Manager Production Andrew Livingston said in Hobart today.

“The amount of water involved will be 26 gigalitres per annum.”

“We are negotiating with Gunns in order to reach formal agreement on a range of issues associated with the supply of this volume of water.

“The negotiated agreement will formalise the transfer of water from Hydro Tasmania’s water allocation in the South Esk catchment to Gunns for its pulp mill.

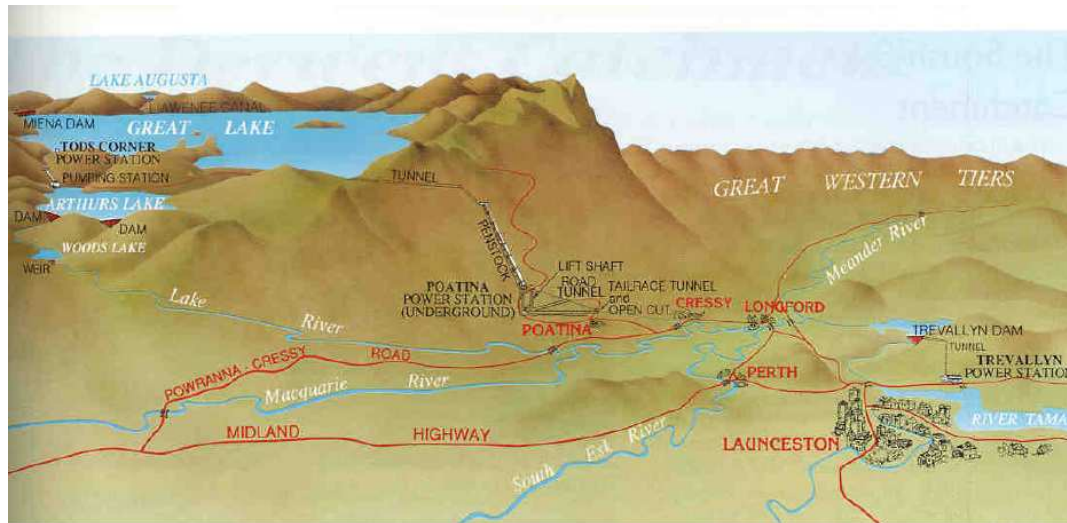
“The issues under negotiation cover water volume, price, point and mode of Gunns’ access to the water source, terms and conditions to be applied to the water supply, health and safety issues and all contractual matters associated with this arrangement.

“Hydro Tasmania expects the price paid by Gunns to be at a commercial rate and we plan to be in a position to make the price public so that the arrangement is transparent,” Mr Livingston said.

“This is strictly a commercial issue for Hydro Tasmania, which is empowered to sell part of its water allocation through the Special Licence it holds under the Water Management Act 1999,” Mr Livingston said.

Releasing the water for the proposed pulp mill would not occur until 2008 at the earliest and would not impact on Hydro Tasmania’s water storage capacity.

The South Esk basin is almost 900,000 ha about 12 % of the State's landmass.

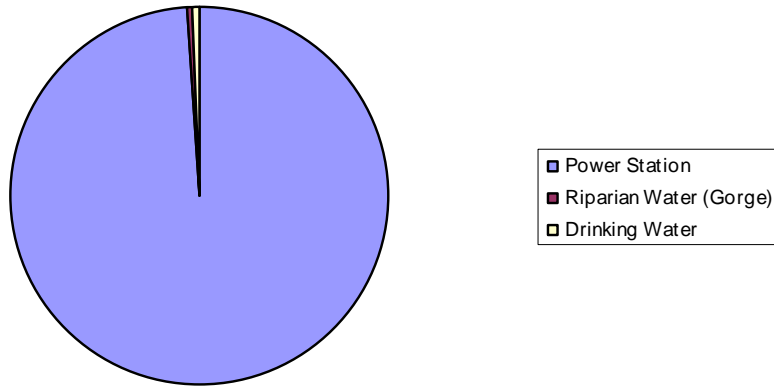


Prior to reaching the Dam the river flows have been subject to the following extractive use:

	South Esk	Macquarie	Meander
Irrigation	28,756 ML	88,329 ML	13,207 ML
Stock & Domestic	608 ML	200 ML	1,156 ML
Water Supply	485ML	540 ML	611 ML
Other	480 ML	1,615 ML	4,547 ML

This extractive use will not be impacted, as the pulp mill's water is extracted as 1% of the power station supply

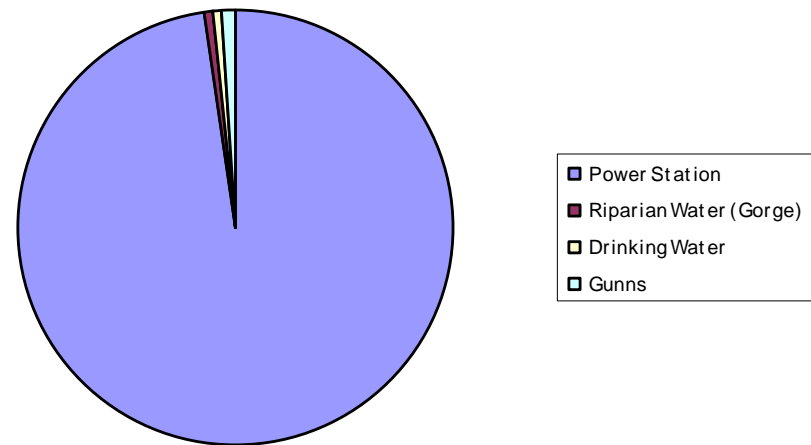
Trevallyn Dam Water



WATER USE

Sources: Esk Water <http://www.eskwater.com.au/>
Hydro Tasmania Media Release 22 July 2005
Gunns 2007 Response to EPBC Submissions

Proposed Use



What are Giga litres, Mega litres, Cubic Metres or Litres

One millimetre (mm) of rain falling on one square metre produces one litre of water.

A hectare (100m by 100m) is 10,000 square metres, eg one mm rain on a hectare equals 10,000 litres of water.

A litre is a small container standing 10 cm high, 10 cm long and 10 cm wide, has a volume of 1,000 millilitres or 1 litre.

When talking in large volumes of water it is easier to visualise a cubic metre: a container 1 metre high, 1 metre long and 1 metre wide? This answer is 1,000 litre, also referred to as a kilolitre or 1 cubic metre. 1000 litres of water weighs a metric tonne.

1,000 kilolitres (1000 cubic metres) is also called a megalitre because it's a million litres (1,000,000). A container 10m high, 10m long and 10 m wide.

This is often referred to as the size of an Olympic pool but this is incorrect. An Olympic pool has the dimensions 2m deep(min), 50 m long and 25m wide [2.5 MI] http://www.fina.org/rules/FR/rules_fr3.htm)


The next size up from a megalitre is a gigalitre or a thousand mega litres.

We can see that 26,000,000,000; 26 billion, 26 giga litres or 26,000 mega litres are the same.

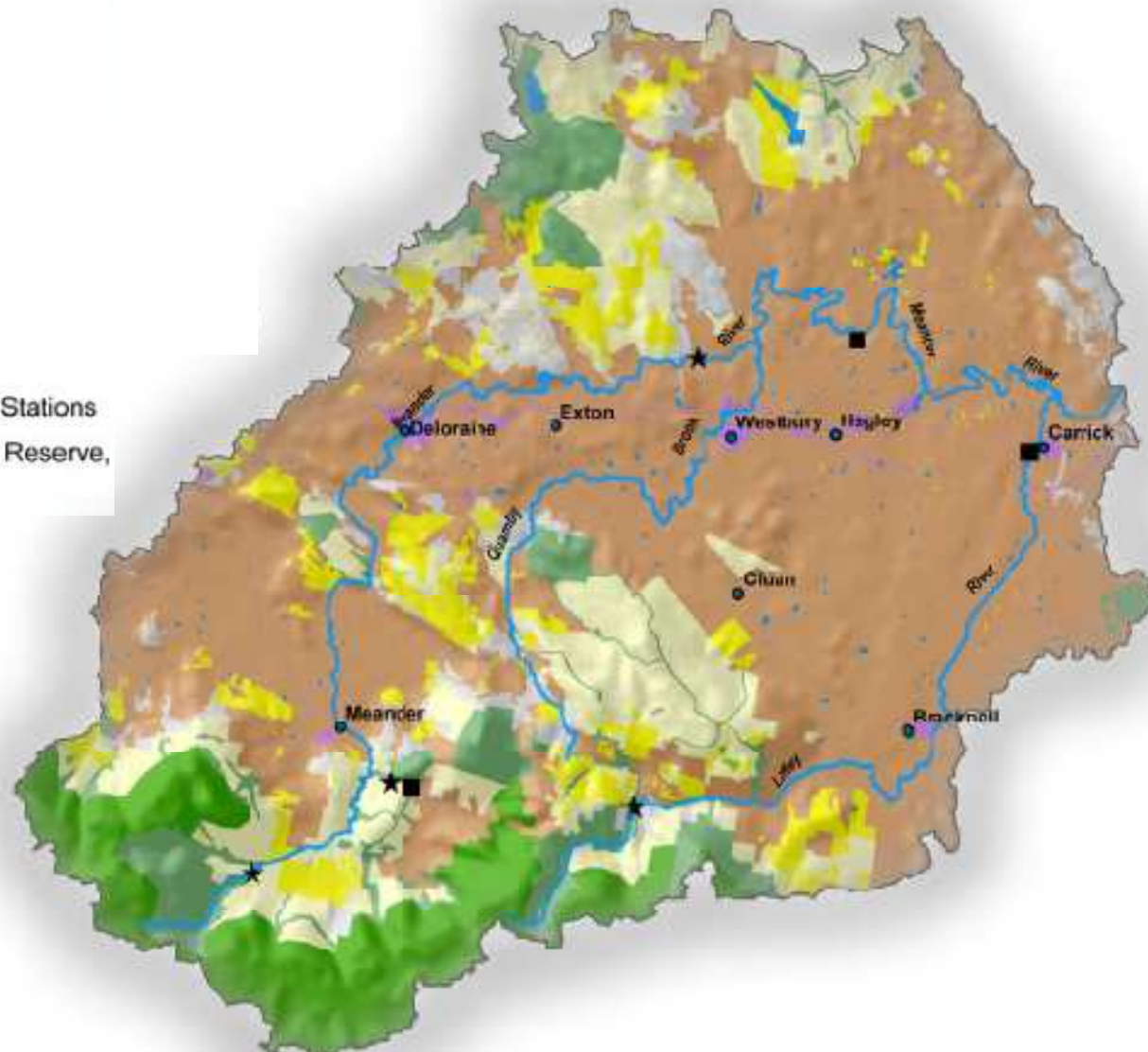
Legend

Land Use

-  Agriculture
-  Built Environment
-  Conservation
-  Other Protected Area
-  Minimal Use
-  Plantation
-  Production Forestry
-  Water

-  AusRivAs Monitoring Sites
-  Streamflow WQ Monitoring Stations
-  Multipurpose Forest Values Reserve, or Road Reserve

MEANDER



Source DPIW Annual Waterways Monitoring Reports

<http://www.dpiw.tas.gov.au/inter.nsf/WebPages/JMUY-6BV8GJ?open>

Macquarie

Legend

Land Use

-  Agriculture
-  Built Environment
-  Conservation
-  Other Protected Area
-  Minimal Use
-  Plantation
-  Production Forestry
-  Water

-  AusRivAs Monitoring Sites
-  Streamflow WQ Monitoring Stations
-  Multipurpose Forest Values Reserve, or Road Reserve




Source DPIW Annual Waterways Monitoring Reports

<http://www.dpiw.tas.gov.au/inter.nsf/WebPages/JMUY-6BV8GJ?open>

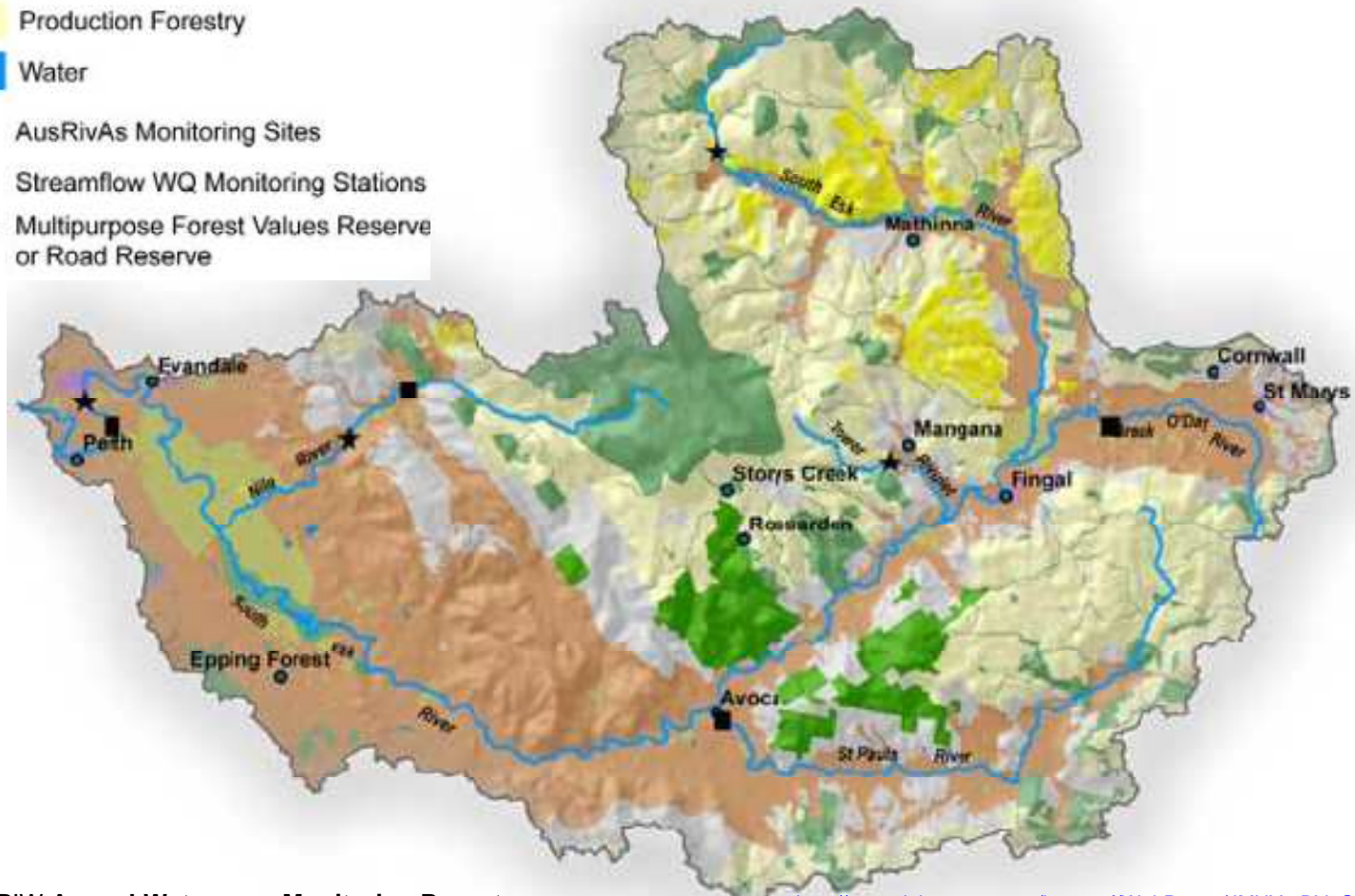
Legend

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-  Multipurpose Forest Values Reserve or Road Reserve

South Esk



Source DPIW Annual Waterways Monitoring Reports

<http://www.dpiw.tas.gov.au/inter.nsf/WebPages/JMUJ-6BV8GJ?open>

A major discussion point has been plantations in catchments yet plantations on private land occupy only 2.7% of the 43 major Tasmanian water catchments where private plantations occur.

Tasmania now has 254,200 hectares of plantations with 150,407 hectares of plantations on private land with 129,178 hectares planted to hardwood species and 21,229 hectares planted to softwood or other species;

Over the five years 2002 to 2006, there were 1,357 hectares of plantations established on land mapped as being Class 1- 3 land representing 2.2% of plantations established during that period, and covering 1.3% of the total area of land mapped as Class 1-3 land;