WINE ENGINEERING ASSOCIATION NATIONAL CONFERENCE

River Murray Water Allocations and Associated Challenges

11 September 2019

Jarrod Eaton
Manager, River Murray Water Delivery
Dept. for Environment and Water

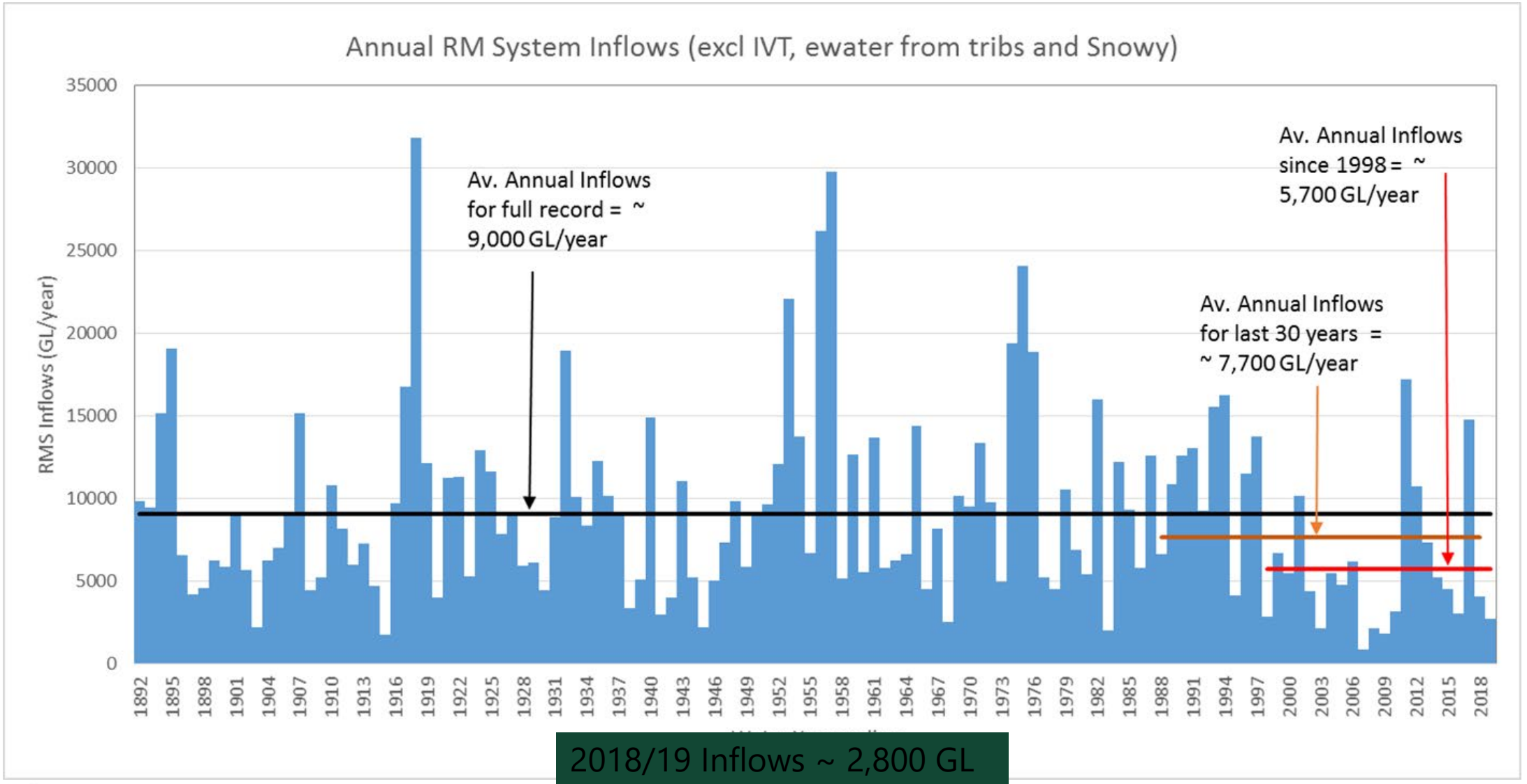
SOUTH AUSTRALIA

Government of South Australia
Department for Environment and Water

Presentation Outline

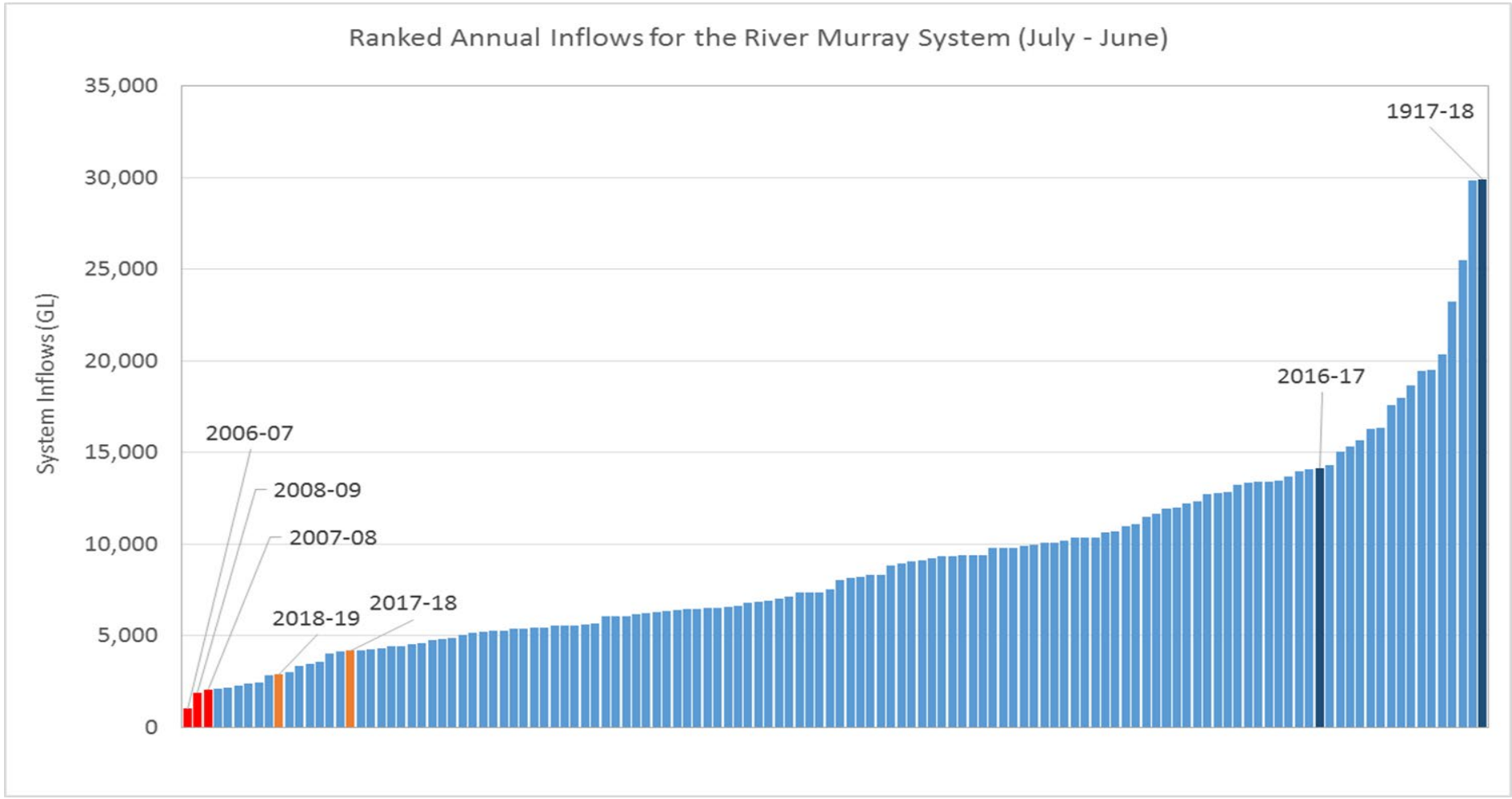
- River Murray system inflows and storages - reflecting upon past conditions
- Current water resource position
- Water allocations – history and current state of play
- South Australian River Murray water allocation processes
- Information on allocations and carryover
- Questions

River Murray System Inflow Trends

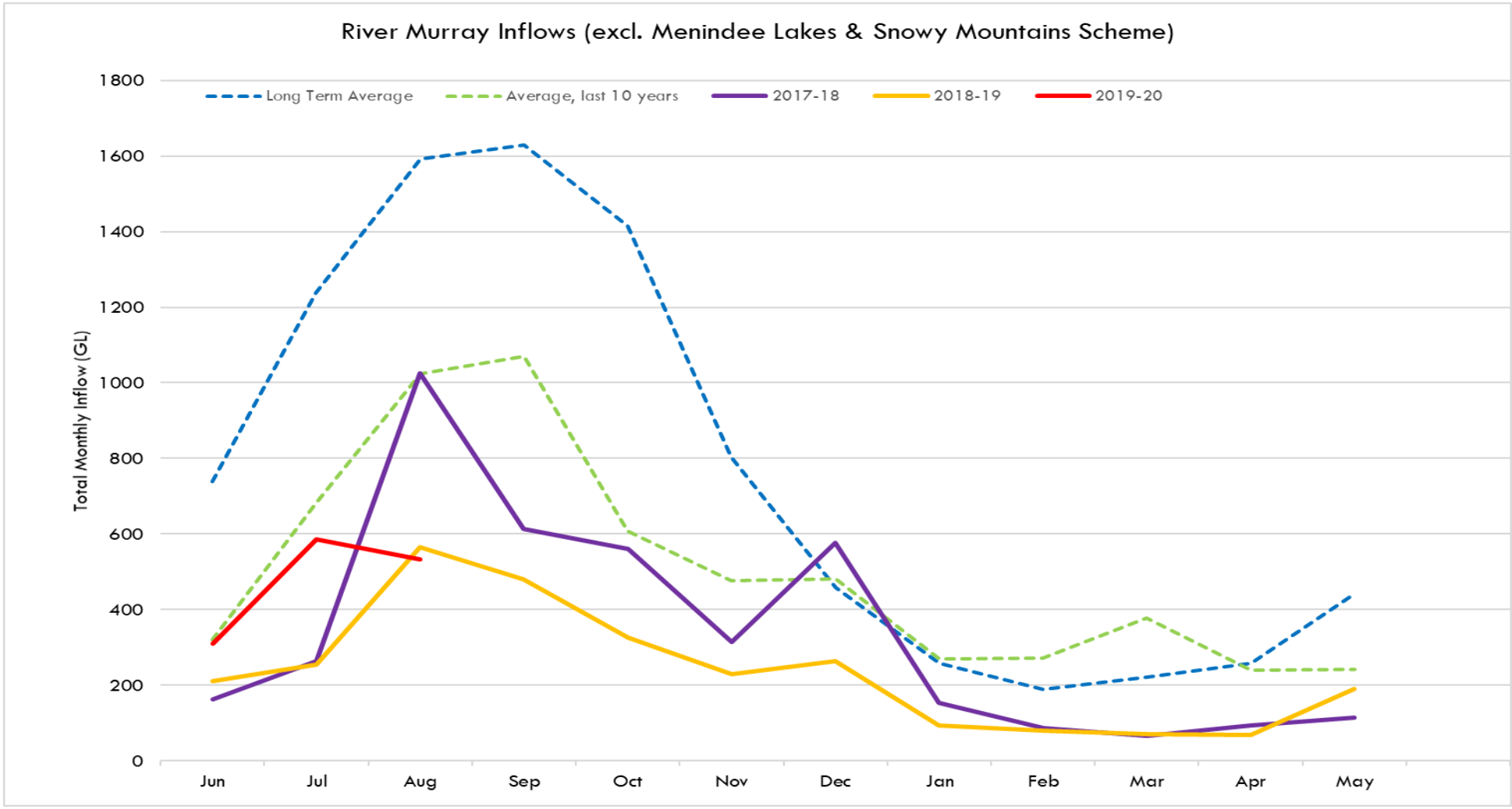


2018/19 Inflows ~ 2,800 GL
Second consecutive dry year

River Murray System Inflow Trends



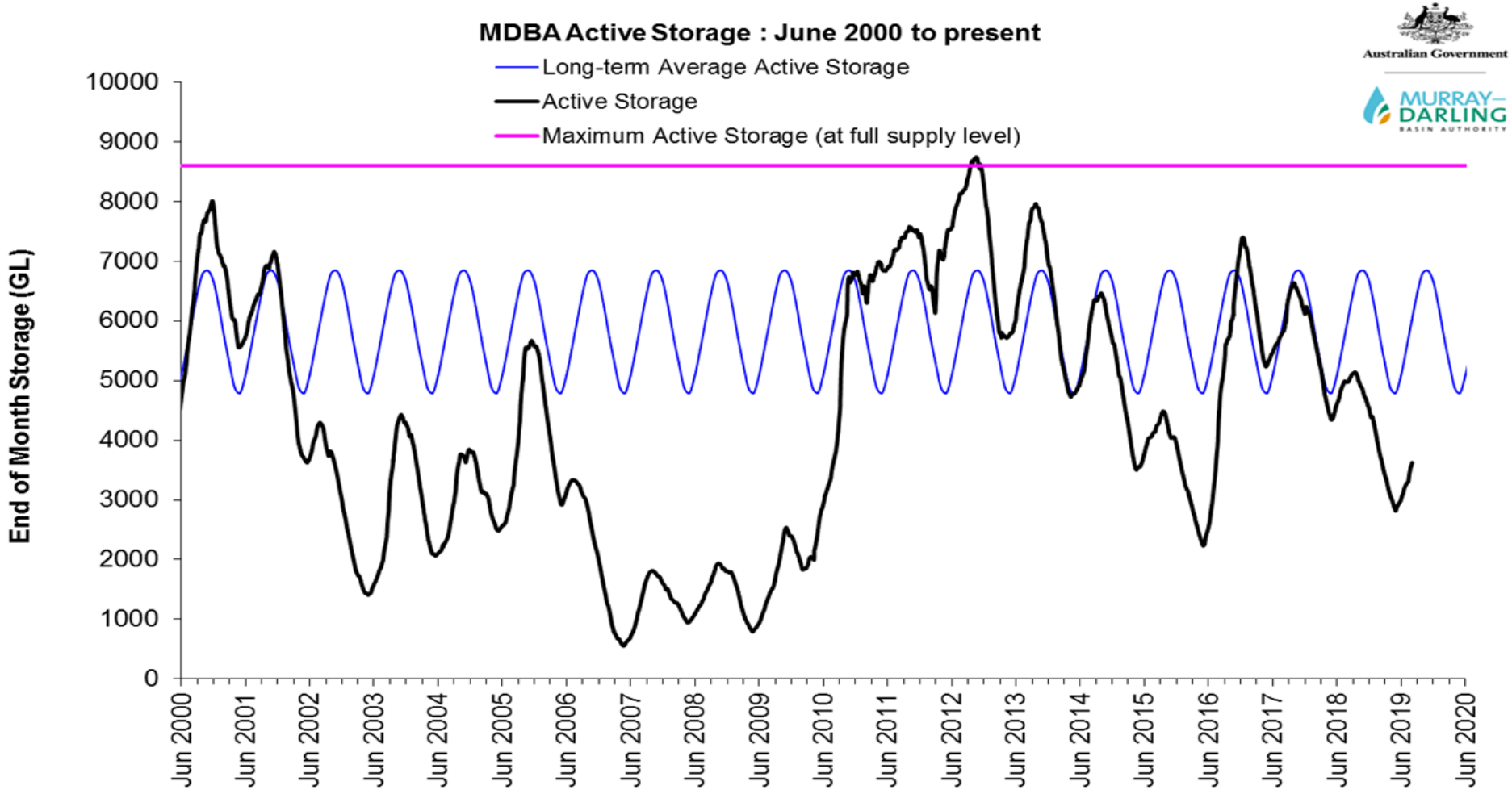
River Murray system inflows



SOUTH AUSTRALIA

Government of South Australia
Department for Environment and Water

MDBA Active Storage



Australian Government

MURRAY–DARLING BASIN AUTHORITY

SOUTH AUSTRALIA

Government of South Australia

Department for Environment and Water

MDB Water Allocations – summary of previous years and current position

	High Security Water Allocations End of Year							
	2012/13	**2013/14**	**2014/15**	**2015/16**	**2016/17**	**2017/18**	**2018/19**	**2019/20***
NSW Murrumbidgee	100 + 105% general security	95 + 68% general security	95 + 53% general security	95 + 37% general security	100 + 100% general security	95 + 45% general security	95 + 7% general security	95% + carryover = + 6% general security
NSW Lower Darling	100 + 64% general security	100 + 97% general security	100 + 66% general security	80 and no general security	100 + 100% general security	100 + 100% general security	100 + 0% general security	30% + 0% general security
NSW Murray	100 + 65% general security	100 + 96% general security	97 + 61% general security	97 + 23% general security	100 + 100% general security	97 + 51% general security	97% no general security	97% + carryover + 0% general security
Vic Murray	100%	100%	100%	90%	100%	100%	100%	33% + carryover
Vic Goulburn	100%	100%	100%	100%	100%	100%	100%	37% + carryover
SA	100%	100%	100%	100%	100%	100%	100%	74%

** As at 2 September 2019*

NOTE- the allocation percentages above does not include carryover availability in NSW and VIC

States have different allocation systems based on water availability

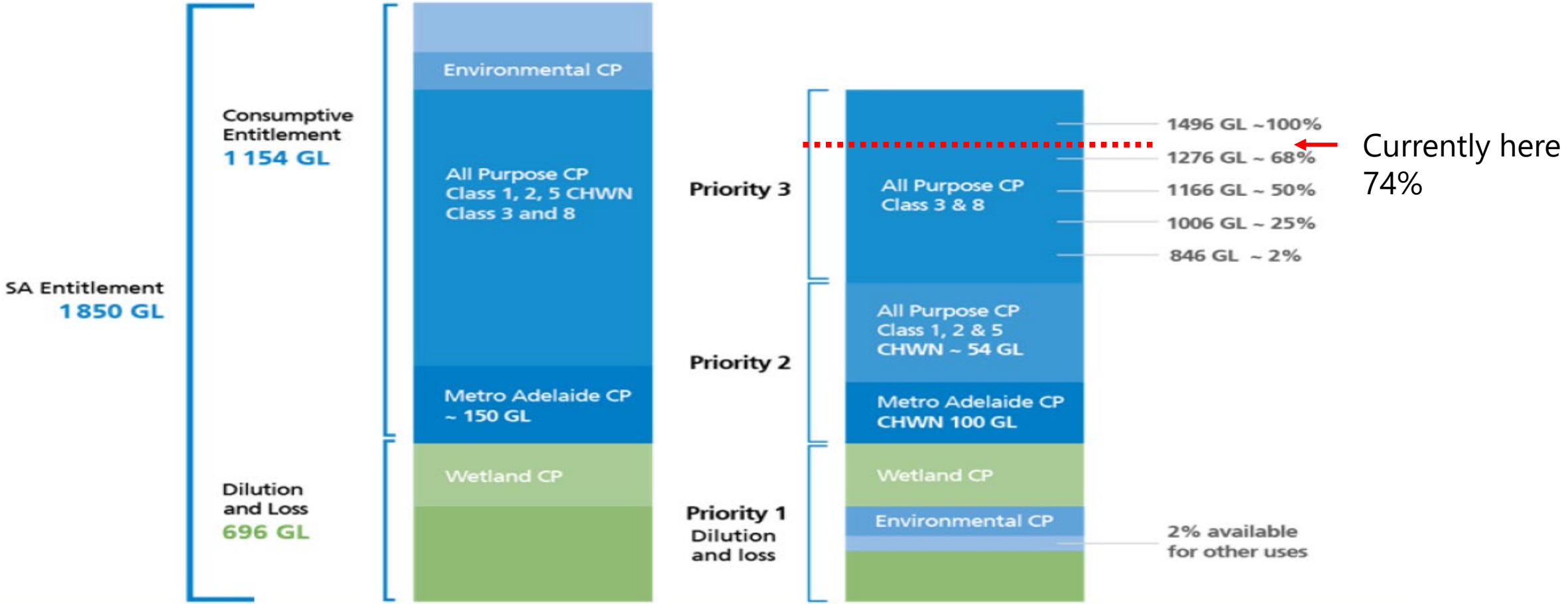
SOUTH AUSTRALIA

Government of South Australia
Department for Environment and Water

SA River Murray Water allocations & carryover

- Water allocations are an important way to share, conserve and manage the restricted volume of water available to South Australia.
- Managing our water responsibly contributes to achieving long-lasting benefits for the River Murray and water users, including primary producers, industry, recreational users and the environment.
- Water allocations are critical for all river communities and industries that rely on a healthy river system.
- Private carryover may be granted when the **minimum opening allocation announced in April is less than 50 per cent**. Allows irrigators to carryover unused water allocations - up to 20 per cent of a user's entitlement - from one year to the next.

Water Allocation Framework



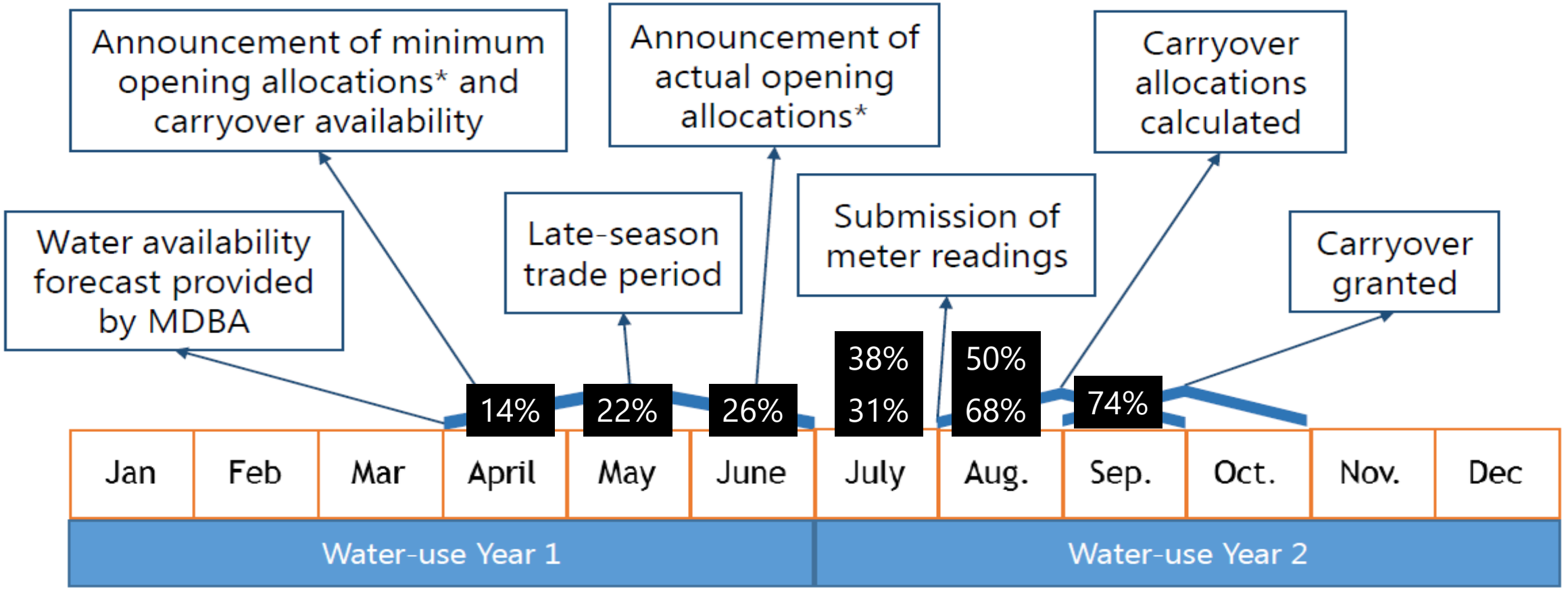
Access the River Murray Water Allocation Plan
https://www.naturalresources.sa.gov.au/samurraydarlingbasin/water/water-allocation-plans/river-murray-wap

SOUTH AUSTRALIA
Government of South Australia
Department for Environment and Water

SA River Murray allocation announcements

- Entitlement holders receive the following:
  - Water allocation announcements twice a month when allocations <100% (1st and 15th of each month)
  - Detailed information on water resources conditions
  - Information on private carryover water availability (announced April with the eligible volume to be advised in September)
  - Information on potential water allocations under a range of probability scenarios
  - Updates on water allocations provided by email, media releases, weekly River Murray flow report

Process for announcements in South Australia



*When allocations are less than 100 percent they will be increased over time if there are improvements in water availability.

Water Availability Projections

SA River Murray Irrigation Allocation Scenarios* All Purpose - Class 3 | 2 September 2019	Minimum Allocation for 2019-20	1 Nov 2019	1 Jan 2020	1 Apr 2020
	Projected Allocation as %			
Exceptionally dry - 99% likelihood allocation will be at least	74	76	91	100
Extreme dry conditions - 95% likelihood allocation will be at least	74	84	100	100
Very dry conditions - 90% likelihood allocation will be at least	74	94	100	100
Dry conditions - 75% likelihood allocation will be at least	74	99	100	100
Average conditions - 50% likelihood allocation will be at least	74	100	100	100
Wet conditions - 25% likelihood allocation will be at least	74	100	100	100

Based on forecast provided on 27 August 2019 water availability.

*Based on modelling of water availability that simulates historical variability in rainfall and temperature, in combination with current policy and operational settings.

DISCLAIMER: This data is provided for information only. Historical performance is not necessarily an indicator of future outcomes. Projections are based on historical climate variability across the last 30 years. The Government of South Australia accepts no liability for any loss resulting from the use of or reliance on any of this data or information.

SOUTH AUSTRALIA

Government of South Australia
Department for Environment and Water

Private carryover

- Private carryover is available for the 2019-20 water year.
- Private carryover is made available for use in dry years, when the projected minimum opening irrigation allocation is 50 percent or less. Private carryover provides insurance, increasing the volume of water available to water users by up to 20 percent at the beginning of 2019-20.
- There is sufficient water available for carryover in 2019-20 to meet all potential eligible carryover demands.
- https://www.environment.sa.gov.au/topics/river-murray/water-allocation-and-carryover/south-australian-private-carryover

Summary and points for noting

- Providing regular information to assist water users to make informed business decisions
- At 1,496 GL = 100% allocation
- Take note of the current conditions – improving BUT significant improvements required in 2019-20 to change the outlook for 2020-21
- Start planning early for 2020-21 – inflows to end spring are critical
- Don’t be afraid to ask questions and seek advice

Where can I access information on water allocations?

- South Australia
  - https://www.environment.sa.gov.au/topics/river-murray/water-allocation-and-carryover/water-allocations-and-announcements
- New South Wales
  - https://www.industry.nsw.gov.au/water/allocations-availability
- Victoria
  - https://nvrm.net.au/outlooks
  - https://nvrm.net.au/seasonal-determinations
- Murray-Darling Basin Authority
  - www.mdba.gov.au

Key challenges for South Australia

- *In the context of River Murray water resource availability*:
- Variability with water resources – northern basin inflows looking to be less reliable
- Impacts of climate change in the southern Murray-Darling Basin leading to lower inflows in NSW
- Water trade market evolution
- Expansion of high value horticulture (almonds in Sunraysia)
- Inter-Valley Trade water management and restrictions

Contact details

Jarrod Eaton

Manager, River Murray Water Delivery

Jarrod.Eaton@sa.gov.au

Ph (w) 8463 7927

Government of South Australia

Department for Environment and Water