

State Water Report 2005-06

A statement of Victorian water resources

Key findings

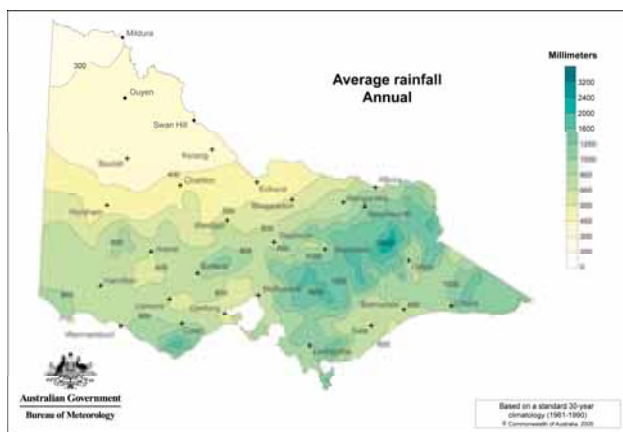
The Victorian Government's State Water Report 2005-06 provides a summary of the entire State's water allocation and use for the 2005/2006 year at bulk supply level. This document presents a summary of the key findings.

The complete report is available online at www.dse.vic.gov.au/SWR and includes a detailed account of water in each of Victoria's 29 river basins for 05/06.

Rainfall

In 05/06 Victoria experienced the tenth successive year of below average rainfall. This resulted in streamflows which were only 55% of the long term average, down from 62% in the previous year. Areas of slightly higher than average rainfall were observed in the far north west and the far east regions of the state, as well as a few other small isolated areas.

Victorian average annual rainfall



Streamflows

In 2006 many streamflows were significantly lower than the average of the last ten years across a range of Victorian waterways. Average streamflows of the last 10 years are significantly lower than the long term average.

Storage levels

In 05/06 the state of water storages across Victoria varied and many were depleted. At the end of June 2006, storages in Wimmera, Glenelg, Maribyrnong, Campaspe and Loddon Basins were less than 10% full, while storages in the Latrobe basin were 80% full.

Melbourne's total water consumption for the year (under permanent water saving measures) was approximately 438,000 ML which is about 25% of Melbourne reservoirs' total storage capacity.

Recycled Water

A total of 18% of wastewater was recycled for external use across Victoria in 05/06. This represents an increase in recycling compared to previous years' figures (12% in 04/05 and 14% in 03/04), and is in addition to the volume of wastewater recycled 'within process' at treatment plants throughout the State accounting for a further 4%.

Two key treatment plants operated by Melbourne Water are largely responsible for the significant increase in recycled water: the Eastern Treatment Plant recycled approximately 5,000 ML more than the previous year largely as a result of the Eastern Irrigation Scheme in which treated wastewater is supplied to irrigators in the Cranbourne Five Ways district; the Western Treatment Plant recycled around 17,700 ML more than the previous year for supply to Werribee irrigators and for wetland habitats.

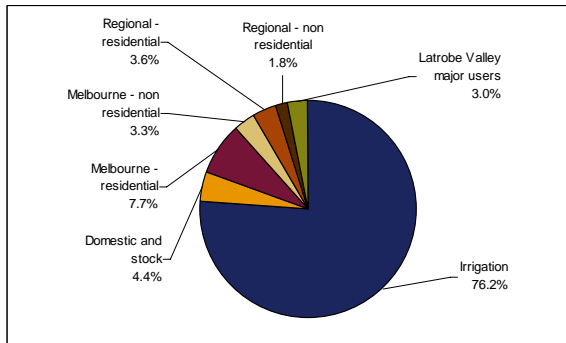
Outside the two major Melbourne metropolitan treatment plants, the remainder of the state recycled 25% or 35,148 ML of wastewater, using it for vineyards, vegetable farms, tree plantations, pasture, and recreational facilities.

Water Consumption

The majority of water used in Victoria is for irrigation purposes. Melbourne consumption accounts for around 11% of the total volume.

Large non-residential customer use in Melbourne (i.e. use by the largest 200 customers) continues to decline falling from 45,000 ML in 2000/01 to 39,640 ML in 2005/06, a decline of 13.7%.

Consumptive uses of water in Victoria 2005/06



The total volume of groundwater used across the State in 05/06 was around 366,000 ML. It was used for town water supply in some areas, for domestic and stock consumption, as well as for irrigation and industry.

Urban Water Restrictions

Low rainfall, decreased runoff, streamflows and aquifer (groundwater reserve) recharge put pressure on both urban and rural communities in 05/06.

At end June 2006, 192 towns were under water restrictions. A similar number of towns were on restrictions at the start of 2005/06. The majority of these were in the western half of the state.

Permanent Water Saving Measures

All Victorian water authorities were required to progressively introduce permanent water saving measures suited to local conditions, specifying the minimum water wise behaviour of consumers.

March 2006 figures showed that record amounts of water had been saved since the introduction of the Permanent Water Saving Rules in 2005. In Melbourne, water consumption was 22 per cent lower than the city's water usage in the 1990s with less water used per person in 2005 than in any other year since the metropolitan water authorities started keeping detailed records in 1995.

Seasonal Irrigation Allocations

Most irrigators received allocations at or above their water entitlement in 05/06 with a few notable exceptions. Irrigators in the Campaspe district received 31% of their entitlement and irrigators in the Wimmera received a 5% allocation late in the season but elected not to take it.

Groundwater & Stream Diversion Restrictions

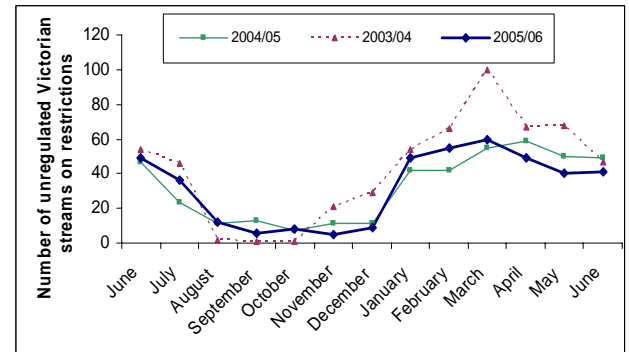
Only one restriction was applied to groundwater use in 05/06, for the Deutgam WSPA in the Werribee basin, limiting extraction to 60% of entitlement for most of the year. In June 2006 this was further reduced to 25% to protect the aquifer from seawater intrusion.

Restrictions on diversions from unregulated streams followed a typical pattern of severe restrictions during the

summer and autumn months and lower restrictions over the winter and spring seasons. Restrictions or bans applied to 41 streams at 30 June 2006.

Regulated diverters on Jacksons Creek in the Maribyrnong basin received just 15% of licence volume

Number of Victorian unregulated streams on restrictions



Water Trading

Water trading by irrigators in the Murray and Goulburn basins accounted for 90% of transactions in the water market in 05/06. Approximately 40,000ML of permanent water entitlements were traded, with 3,555ML traded interstate. The volume of permanent water traded interstate decreased by around 10% from 04/05. The temporary market was typically active with around 380,000ML temporarily exchanged via more than 27,000 transactions.

Water for the Environment

The establishment of the environment's formal right to water in legislation under the Water (Resource Management) Act 2005 is now firmly in place with the creation of the Environmental Water Reserve (EWR). For the first time, the 2005/06 State Water Report is able to report on the components of water that make up the EWR in each river basin.

The proportion of total flow leaving Victorian basins increased to 61% in 05/06 compared to 56% in 2004/05. However, in volumetric terms the amount of water leaving the basins reduced by more than 10% from 10,322 GL to 9,231 GL, reflecting generally lower basin inflows in 2005/06.

Basin Accounts

The basin accounts in part two of the State Water Report provide a detailed report on water availability and use in each of Victoria's 29 basins. They also include a map of the basin, the current management arrangements for water resources within the basin and a summary of total water resources in each basin in relation to surface water, groundwater, recycled water and water for the environment.