

6. Water Availability – Market Competition

Purpose

To provide information about competition for water in the consumptive pool.

Background

The pool of water available for consumptive use is likely to decline over the period to 2048, due to climate change, the MDB Plan and changes to catchment land use affecting runoff.

The two main consumptive uses of water in the southern Murray Darling Basin (sMDB) are for agriculture and rural residential/urban supply.

Australia is expected to become more urbanised (metropolitan and regional). Victoria's population is expected to almost double significantly by 2048, with most of the growth in urban centres. Some re-allocation of water from agriculture to urban use is possible but the amount is uncertain.

The main threats to consumptive pool water availability to GMW's irrigators are expected to come from changes in irrigated agriculture. As water becomes scarcer and the profitability of traditional enterprises comes under pressure, the long-term trend of water moving to higher value uses can be expected to continue and potentially accelerate. There is also a risk of further buyback for the environment if investments in infrastructure are unable to achieve the recovery targets.

Irrigated agriculture in GMW's region includes horticulture, dairying, and cropping/mixed farming. Horticulture occurs in concentrated pockets across GMW's region and accounts for 10-15% of water use. Dairying and cropping/mixed farming are more widespread and share the balance of water use.

At the moment, several important changes are occurring:

- significant expansion of horticulture in the Mallee (Vic, NSW and SA). Their allocation demand currently exceeds entitlement by 200 GL and there are indications demand could increase by a further 250 – 350 GL over the next decade. The developers are targeting Victorian HRWS and allocation, most of which is expected to come from the GMID
- emergence of cotton as a relatively profitable, opportunistic crop that can complement/replace rice demand in southern NSW. Additionally, rice plant breeding programs to increase water use efficiency are well-advanced and may increase competitiveness. Rice has traditionally traded significant volumes of allocation to Victoria in dry years
- replacement of canning varieties with fresh fruit varieties and intensification of orchards in the Goulburn Valley, maintaining and potentially increasing water demand
- water use by traditional industries in the high rainfall valleys in GMW's region (regulated and unregulated diversion) has been stagnant or in long-term decline and alternative uses have been slow to emerge
- private irrigation corporations and irrigators are trading water to buffer against season variations, commodity price fluctuations and lower reliability water products within their businesses



OUR FUTURE

OUR STRATEGIC PLAN

Briefing Paper

The concentration of water use in higher value enterprises will increase the competition faced by GMW's traditional pasture-based and cropping water users. This will be especially acute in dry and drought years. Dairying, historically GMW's largest water use, is neither as profitable as horticulture nor as flexible as irrigated cropping (rice, cotton, and cereals).

Summary

The consumptive pool of water in the sMDB is expected to decline. Market competition from agricultural and non-agricultural uses outside GMW's region will increase, and there is still a risk of environmental buyback. GMW's traditional irrigation industries are vulnerable to these market forces, especially in years of lower water availability.

For more information:

<http://www.g-mwater.com.au/water-resources/water-trading>

<http://www.mdba.gov.au/managing-water/water-markets-and-trade>

<http://www.nationalwatermarket.gov.au/>

<http://www.aither.com.au/water-markets-reports/>