

FARM IRRIGATION SURVEY LAND AND WATER OWNERSHIP

GMID¹ 2019/20²

Land and water ownership in the GMID continue to transform in response to water availability, commodity prices and changes in water and planning policy.

BACKGROUND

Based on the 2019/20 irrigation season, irrigators were surveyed³ to understand property-level decision-making, and build understanding of how the Goulburn Murray Irrigation District (GMID) is changing, and how water users are adapting to reduced water availability.

The project obtained a representative sample of irrigators for each of the key land use activities (Dairy, Cropping, Horticulture (orchard) and Grazing) against Water Use Licence. This fact sheet presents 2019/20 land and water ownership data⁴, and compares it to 2015/16 data.⁵

OWNERSHIP OF HIGH RELIABILITY WATER SHARE (HRWS)

53% of irrigators own less than 200ML, which was similar to 2015/16 (50%). However, 47% own more than 200ML, with roughly half of this group owning more than 500ML. More than two-thirds of Dairy own more than 200ML (69%) compared to Horticulture (orchardists) (33%) (Table 1).

PRICE ABOVE WHICH ALLOCATION WATER BECOMES UNVIABLE

In 2019/20, irrigators remained highly sensitive to water price, with 77% of irrigators indicating water allocation prices greater than \$250/ML were not viable for their business. The average price above which allocation water becomes unviable for all industries ranged from \$184-\$500/ML with the price indicated by Orchard (\$500/ML) significantly higher compared with other industry groups (Table 2).

Table 1: Ownership of High Reliability Water Share (HRWS) across land uses (% by land use)

Ownership of HRWS	Dairy (n=26)	Cropping (n=50)	Orchard (n=9)	Grazing (n=30)	All irrigators 2019/20 (n=115)	All irrigators 2015/16 (n=356)
No water shares	3.8	2.0	11.1	0.0	2.6	7.8
1 - 200 ML	26.9	52.0	55.6	66.7	50.4	41.6
201 - 500 ML	34.7	20.0	11.1	16.7	21.8	28.7
More than 500 ML	34.6	26.0	22.2	16.7	25.2	21.9

Table 2: Price above which allocation water becomes unviable

HRWS	Dairy	Cropping	Orchard	Grazing	All irrigators 2019/20	All irrigators 2015/16
Number of license holders	21	38	9	27	95	222
Mean price unviable (\$)	219	184	500	211	230	173

1. The project area is referred to collectively as the Goulburn Murray Irrigation District (GMID), which includes the GMID (including Woorinen), Tresco and Nyah Irrigation Districts.

2. 2019/20 data is reflective of activity at the point of survey and based on the 2019/20 irrigation season (August 2019 to May 2020).

3. Full technical reports which outline the survey methodology are available at www.gbmca.vic.gov.au

4. Sample size is an important marker of the quality of survey research which can influence the validity and generalisability of study results. In this study, care must be exercised in drawing conclusions about subgroups of population when the number of units captured by the sample in the subgroup is very small.

5. GB CMA (2017). Regional Irrigated Land and Water Use Mapping in the Goulburn Murray Irrigation District (Technical Report), 2015/16. Goulburn Broken Catchment Management Authority, Shepparton..

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LAND OWNERSHIP AND SUCCESSION PLANNING

Farm ownership reported was similar in the 2015/16 irrigation season (96%) and the 2019/20 irrigation season (83%) surveys, however more farmers were owning and leasing/share-farming multiple properties in 2019/20 (16.5% compared to 3.5% in 2015/16).

23%	of irrigators made some kind of land use transition moving from primarily dairy to a mix of dairy and grazing/cropping, to manage changing water availability, cost of water, and personal reasons (age/health).
67%	of irrigators had designed Whole Farm Plans.
55%	of irrigators planned to pass their property to another person in the family. This response was higher for grazing (59%) and lower for orchard (44%). Responses are similar to surveys conducted in 2015/16 (50%) and 2004/05 (51%).
75%	of irrigators said their property would be still be irrigated in 5-years time.

In the 2019/20 survey, irrigators had an average of 35 years of farming experience, with a range of 31-37 years experience, across all land uses (dairy, cropping, orchard and grazing).

Accompanying fact sheets and full technical report are available at www.gbcma.vic.gov.au

USE OF ALLOCATION TRADE - KEY FINDINGS

46%	of irrigators said allocation trade forms a large part of their farm water use, including 54% of dairy respondents and 35% of orchardists.
56%	of irrigators said it was part of their long-term business plan to use allocation trade.

There was a statistical association between those who 'trade-in or out' and 'industry', with Dairy and Orchard more likely to trade-in than Cropping and Grazing.

There was a statistical association between those who had upgraded irrigation infrastructure and those who had sold water. There was also a significant association between those who had upgraded irrigation infrastructure and those with long-term plans to use allocation trade. This supports the findings of previous studies which show participation in on-farm programs that fund irrigation upgrades in exchange for water entitlements makes irrigators more reliant on the allocation market.

This project is delivered and funded by partnerships between Department of Environment, Land, Water and Planning, Agriculture Victoria, Goulburn Broken and North Central Catchment Management Authorities, Goulburn Murray Water, Murray Dairy and HMC Property Group. These organisations do not guarantee that the publication is without flaw of any kind or is wholly appropriate for your particular purpose and therefore disclaim all liability for error, loss or other consequence which may arise from relying on this publication's information.