FARM IRRIGATION SURVEY GMID[1] 2021/22[2]

LAND AND WATER OWNERSHIP

Land and water ownership in the GMID continue to transform in response to seasonal conditions, water trade and commodity prices.

BACKGROUND

Based on the 2021/22 irrigation season, irrigators were surveyed to better understand property-level decision-making, to build understanding of how the Goulburn Murray Irrigation District (GMID) is changing, and how water users are adapting to changing seasons and water availability.

The project obtained a sample[3] of irrigators for each of the key land use activities (Dairy, Cropping, Horticulture (orchard) and Grazing) against Water Use Licences, however care should be taken in analysing results by industry group due to the small sample size. This fact sheet presents 2021/22 land and water ownership data and compares it to 2019/20[4] and 2015/16 data.[5]

OWNERSHIP OF HIGH RELIABILITY WATER SHARE (HRWS)

In 2021/22, 55% of irrigators owned less than 200 ML of High Reliability Water Share (HRWS), similar to 2019/20 (50%). Dairy farmers were more likely to own larger HRWS with 54% owning >500 ML compared to the average of across all industries (24%) (Table 1).

PRICE ABOVE WHICH ALLOCATION WATER BECOMES UNVIABLE

In 2021/22, irrigators remained highly sensitive to water price, indicating that the average price at which allocation water becomes unviable for their business is $207. The average price above which allocation water becomes unviable for all industries ranged from $162-$350/ML with the price indicated by Horticulture ($350/ML) higher compared with other industry groups (Table 2).

Table 1: Ownership of High Reliability Water Share (HRWS) across land uses (% by land use) (rounded to nearest whole number)

Ownership of HRWS	All irrigators 2021/22 (n=68)	All irrigators 2019/20 (n=115)	All irrigators 2015/16 (n=384)
No water shares	3	3	8
1 - 200 ML	55	50	41
201 - 500 ML	18	22	29
More than 500 ML	24	25	22

Table 2: Price above which allocation water becomes unviable

HRWS	Dairy	Cropping	Horticulture	Grazing	All irrigators 2021/22	All irrigators 2019/20	All irrigators 2015/16
Mean price unviable ($)	202	251	350	162	207	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. 2021/22 data is reflective of activity of the respondents at the point of survey and based on the 2021/22 irrigation season (August 2021 to May 2022).
3. 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.
4. GB CMA (2021). Regional Irrigated Land and Water Use Mapping in the Goulburn Murray Irrigation District (Technical Report), 2019/20. Goulburn Broken Catchment Management Authority, Shepparton.
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.

LAND OWNERSHIP AND SUCCESSION PLANNING

Changes in the ownership pattern of farms in the GMID has occurred since 2015/16 with more farmers owning, as well as leasing, managing and share-farming multiple properties in 2021/22 (19% compared to 3.5% in 2015/16).

21%	of irrigators in the last five years made some kind of land use transition such as grazing to cropping, or dairy to grazing, or cropping to grazing moving from primarily dairy to a mix of dairy and grazing/cropping. Reasons included managing changing water availability, commodity prices and personal reasons (e.g. retirement).
50%	of the above transition was reported to be permanent, 36% undecided and 14% said it was not permanent.
68%	of irrigators who responded have professionally designed Whole Farm Plans for their properties.
63%	of irrigators planned to pass their property to another person in the family. This response was higher for Grazing (73%) and lower for Cropping (47%). Responses are similar to surveys conducted in 2019/20 (55%), 2015/16 (50%) and 2004/05 (51%).
76%	of irrigators said their property would be irrigated in 5-years' time.

USE OF ALLOCATION TRADE - KEY FINDINGS

31%	of irrigators in 2021/22 said they had a 'large reliance' on allocation trade, particularly Dairy 46% and 43% of Horticulture.
63%	of irrigators said it was part of their long-term business plan to use allocation trade including 85% Dairy and 71% Horticulture.
70%	of irrigators traded-in temporary water, particularly Dairy (91%) and Horticulture (83%).
30%	of irrigators traded-out temporary water, mainly Cropping (39%) and Grazing (41%). This supports the 2019/20 statistical association between those who 'trade-in or out' and 'industry', with Dairy and Orchard more likely to trade-in than Cropping and Grazing.
37%	of irrigators in 2021/22 said that allocation trade had a positive impact on profit, compared to 33% negative and 30% no impact.
53%	of irrigators in 2021/22 said price affected water purchase decisions compared to 74% in 2019/20 and 71% in 2015/16.

Accompanying fact sheets are available at **www.gbcma.vic.gov.au**

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Please reference as: *GBCMA (2023). Regional Irrigated Land and Water Use Mapping in the Goulburn Murray Irrigation District - Fact Sheets - 2021/2022.*