FARM IRRIGATION SURVEY GMID¹ 2021/22²

Land use in the Goulburn Murray Irrigation District continues to evolve with transitioning land cover and land use both permanent and non permanent.

BACKGROUND

Based on the 2021/22 irrigation season, irrigators were surveyed 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 seasonal variability and water availability.

The project obtained a sample³ of irrigators for each of the key land use activities (Dairy, Cropping, Horticulture (orchard) and Grazing) against Water Use Licences. This fact sheet presents 2021/22 land and water ownership data and compares it to 2019/20.⁴

LAND COVER

In 2021/22 approximately two-thirds of irrigators grew annual pasture (62%), one-third perennial pasture (35%), and 40% winter grain/fodder. This was similar to 2019/20, however with a more favourable 2021/22 season, more irrigators grew summer grain/fodder (16%) compared to 2019/20 (7%) when more grew winter grain/fodder (48%).

TRANSITION

In 2021/22 21% of irrigators said they had transitioned from one main land use to another in the last five years. This was a decrease since 2019/20 (25%).

Types of land use are discussed on the following page.

Half of irrigators surveyed who had transitioned their primary land use reported the transition to be permanent, with 36% 'maybe' and 14% non-permanent.



Figure 1: Transition from one main land use to another



Figure 2: Transition permanent in 2021/22

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).

 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.

TYPES OF LAND USE TRANSITION

In 2021/22 the types of land use transitions reported occurring over the last five years ranged from land use changes (industry) such as Dairy to Grazing, Horticulture and Cropping, and land cover transition such as soybeans to lucerne, perennial pasture to annuals, and dryland cropping to irrigated lucerne.

REASONS FOR LAND USE TRANSITION

In 2021/22 the reasons given for land use transition over the previous five years included a variety of answers such as water availability and commodity prices, age/health/plans for retirement, risk management/flexibility, opportunistic management (if the season /water marker allows for it), to remove obsolete infrastructure, and the need to increase homegrown feed.

Agistment to cropping | Beef cattle and irrigated cropping and less cattle and mainly dryland | Cattle fattening to growing hay agistment Dairy | Dairy to beef cattle | Dairy to cropping | Dairy to grazing and cropping | Dairy to grazing | Predominantly pasture based to 'Partial Mixed Rations to Total Mixed Rations' system | Dairy to orchard Dairy, milk income was extremely low at that time | Dryland cropping to irrigated lucerne | Dryland to irrigation | Ex-dairy farm purchase to cropping and lucerne | From beef cattle to share crop farming – could not make money from cattle feed was too expensive | From irrigating and grazing to cropping because of the disaster of unbundling From dairy to grazing almost to retirement | Grazing to dryland cropping Grain growing | Grazing dairy to dairy barn cut and carry system | Grazing to cropping | Grazing to cropping – depending on the year and rainfall | I am tending to go from grazing to cropping Irrigated annuals to non-irrigated | Irrigated cropping to horticulture Irrigated pasture to dryland farming | Livestock Lucerne to cropping and sheep | Pasture / hay to grazing and crops Perennial pasture to annuals | Soybeans to lucerne | Stock to crops

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

This project is delivered and funded by partnerships between Department of Energy, Environment and Climate Action, 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.



Fact Sheet 6/6 Farm Irrigation Survey GMID 2021/22 Land Use Transition