

ENVIRONMENTAL ISSUES

There is a consistent willingness to manage environmental issues on-farm such as planting trees, protecting wetlands, fencing off remnants, creating corridors and managing salinity risk. Comparative analysis of survey results show salinity risk management may be impacted by seasonal conditions.

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 Licence.

This fact sheet presents 2021/22 land and water ownership data and compares it to 2019/20⁴ and 2015/16 data.⁵

WILLINGNESS TO MANAGE ENVIRONMENTAL ISSUES ON-FARM

Since 2015/16 this survey has found an increasing willingness for irrigators to manage environmental issues on-farm. Examples of managing environmental issues may include planting trees, fencing off remnants, creating corridors and protecting riverine environments such as dams, creeks, wetlands, and waterways. In 2015/16 72% of irrigators said they had a high willingness to manage environmental issues on farm which increased to 87% in 2021/22. This translated to an average rating of 4.5 out of 5 for willingness to manage environmental issues on farm (where 0 = low willingness and 5 = high willingness).

Figure 1: Willingness to manage environmental features on farm (%)

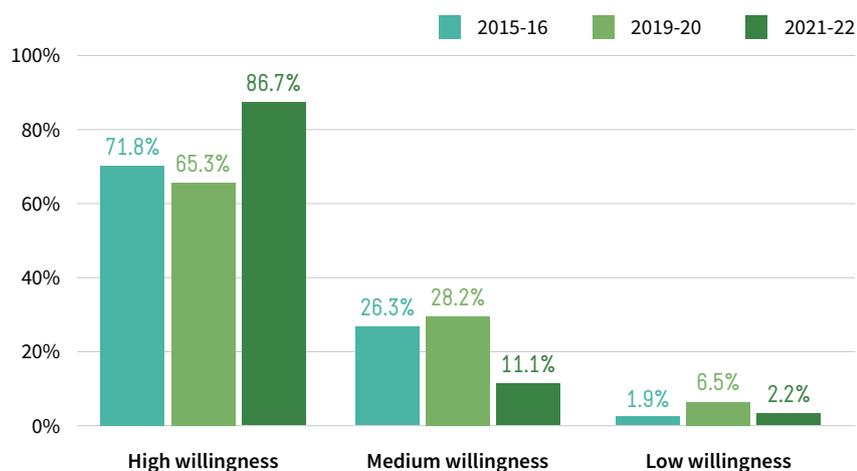
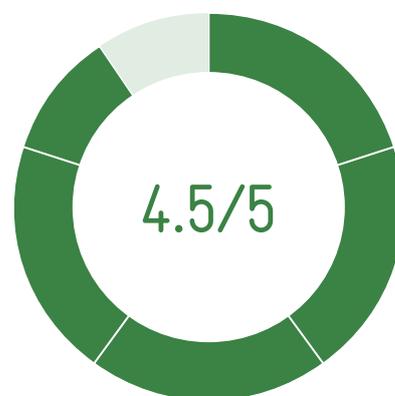


Figure 2: Average willingness to manage environmental issues (2021/22)



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).
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.

WILLINGNESS TO MANAGE SALINITY ISSUES ON-FARM

High willingness of irrigators to manage salinity issues on-farm has decreased slightly since 2015/16, however, when combined with medium willingness, the data shows that salinity remains an issue for irrigators. No irrigators had 'low willingness' to manage salinity on-farm in 2021/22. This translated to an average rating of 4.5 out of 5 willingness to manage salinity issues on-farm (where 0 = low willingness and 5 = high willingness). With Victoria receiving above average rainfall in 2021/22, salinity risk has increased. Wet conditions recharge the shallow groundwater system and the watertable rises. This can lead to restriction of plant growth, damage to soil structure, and loss of biodiversity.⁶ An increase in the 'high willingness' to manage salinity issues corresponds with these wetter conditions. It is important to note that 2019/20 was a very dry period and so the need to manage salinity issues was reduced. Therefore, results may be a reflection of willingness to manage salinity risk based on condition.

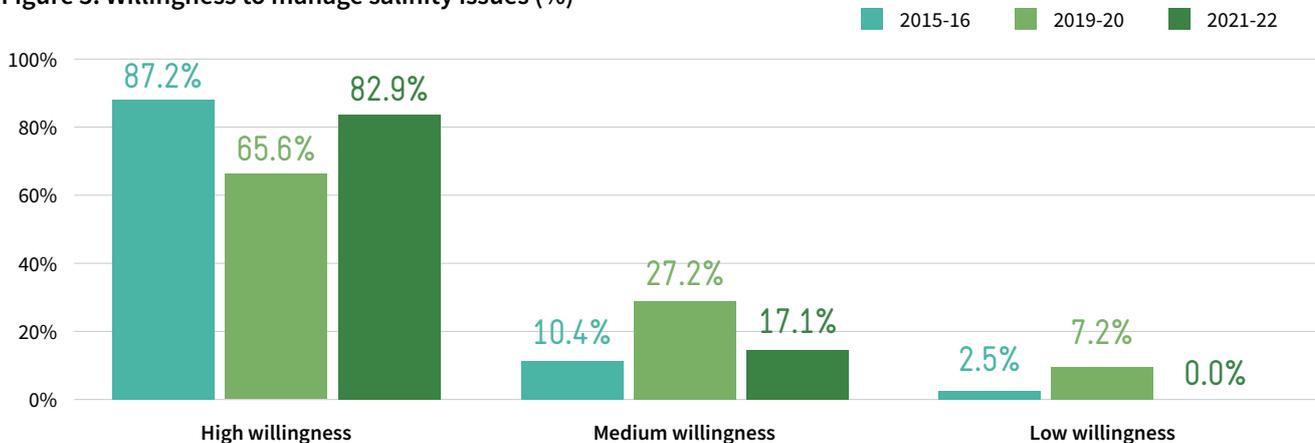
NATIVE VEGETATION WORKS IN 2021/22

In 2021/22 48% of irrigators responded that they had undertaken native vegetation works such as tree planting in the last five years. Dairy (85%) were more likely to have undertaken works, compared to Cropping (20%).

Figure 4: Average willingness to manage salinity issues (2021/22)



Figure 3: Willingness to manage salinity issues (%)



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

6. Shallow Groundwater in the Shepparton Irrigation Region Salinity Explained (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.

