

# **Mallee Regional Innovation Centre**

**SUBMISSION**

**to**

**Commonwealth Department of Agriculture,  
Forestry and Fisheries**

**in response to the**

***Consultation draft: Future Drought Fund Investment  
Strategy 2024 to 2028***

**December 2023**

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# Submission Objective

This submission seeks to address some of the questions raised in the Commonwealth's *Consultation draft: Future Drought Fund Investment Strategy 2024 to 2028*.

Responses to the themed areas, in conjunction with examples from the Centre's current activities will highlight the opportunities in the Mallee (Northwest Victoria) with regard to further work for the Mallee Regional Innovation Centre as a Node of the Victoria Drought Resilience Adoption and Innovation Hub.

In addition to that, the submission seeks to build an understanding of the horticulture sector and the impact of the work undertaken through the Centre as a Node of the Victoria Drought Resilience and Innovation Hub.

## Introduction

### Mallee Regional Innovation Centre

The [Mallee Regional Innovation Centre](#) (the Centre) is a partnership between the University of Melbourne, La Trobe University and the Sunraysia Institute of TAFE (SuniTAFE).

Headquartered in Mildura and with a focal application areas of horticulture, water, energy and the environment, the Centre facilitates a Mallee-centred, collaborative innovation network. This provides a connected system of support, where research and development can be actualised for regional transformation.

To achieve this, the Centre engages with stakeholders and partners to explore complex issues faced by the region. Central to the success of the Centre activities is a place-based approach that prioritises regional impact.

With the support of its partners — the University of Melbourne, La Trobe University and SuniTAFE — and through connecting industry, businesses, government and researchers, the Centre has facilitated new opportunities and innovations for the region since its inception in 2019. Key to the Centre's success has been identifying suitable academic expertise from within each of the universities, plus the opportunities on farm at the SuniTAFE SMART Farm. Combined this provides opportunities in our drought work to work directly with farmers and industry.

### Centre Vision

The Mallee region: a global leader in collectively innovating and adapting to achieve sustainability of its natural resources and food systems.

### Centre Purpose

The Centre's purpose is to mobilise a network of collaboration, innovation and adaptation that enhances the position of the Mallee region as a globally competitive food bowl in an environment that is prosperous, sustainable and resilient.

The Centre understands existing projects and mobilises research into areas of regional priority, where emerging inventions, systems, technologies and solutions can respond to challenges and development opportunities.

## Victoria Drought Resilience Adoption and Innovation Hub

The Mallee Regional Innovation Centre as a partner in the Victoria Drought, Resilience, Adoption and Innovation Hub fills the role of a regional Node (Northwest Irrigated Horticulture Node). Of note is the nodal focus on horticulture.

The Victorian Drought Resilience Adoption and Innovation Hub (Victoria Drought & Innovation Hub) is one of eight national hubs funded by the Australian Government to enhance drought preparedness and resilience through economic, environmental, and community initiatives. The Hub's focus was expanded beyond drought resilience to include broader agricultural innovation.

The Victoria Drought & Innovation Hub is headquartered at the University of Melbourne's Dookie Campus. The Hub is a statewide partnership between four universities, the state government and five regionally well connected and engaged farming groups.

The Future Drought Fund's vision is:

*An innovative and profitable agriculture sector, a sustainable natural environment, and adaptable rural, regional and remote communities – all with increased resilience to the impacts of drought and climate change.*

With the Aim:

*To build drought resilience, and by extension climate resilience, for the public good of the Australian agriculture sector, landscapes and communities.*

By actively building drought resilience in the short, medium and long-term, this aim will support the vision of the fund.

The fund has three inter-connected strategic objectives to achieve the vision and aim of the fund.

- 1) *growing the productivity and self-reliance of the agricultural sector (to build economic resilience)*
- 2) *improving management of the natural capital on, and function of agricultural landscapes (to build environmental resilience)*
- 3) *strengthening the social capital, wellbeing and connectedness of rural, regional and remote agricultural communities (to build social resilience).*

## Alignment with Future Drought Fund

The Centre's vision and purpose closely align with those Future Drought Fund, with commonalities in regard to innovation and adaptation to support sustainable food systems. Within food systems, farmers are a key component, but the linkages include supporting service sectors and communities.

Further to that, the descriptor of the Drought Hub programs closely aligns with the Centre's vision and purpose. Working collectively within regions is key to innovation and adapting to ensure sustainability of resources and food systems.

*Providing regionally focused support to farmers and communities to adopt drought resilient practices and technologies. Includes collaborative hub projects and adoption officers.*

(1. Consultation draft: Future Drought Fund Investment Strategy 2024 to 2028, p.21)

In regional communities where industries like agriculture are a major foundation of income and prosperity, success and challenges within sectors have ripple effects and impact can be felt across the region as a whole.

The Drought & Innovation Hub offers a vehicle through which initiatives and projects can be activated at a regional level but have the potential to be shared through hub networks across regions, states and at a national level.

## Centre Background

The model of Centre operations is a mix of a traditional research centre and framework, with a lens of local impact through in-place activities with industry, business, government and community.

### Centre Board

The Centre is governed by a Board with representatives from all three partners. This includes the University of Melbourne's Professor Mark Hargreaves AM, Acting Deputy Vice Chancellor (Research) and Professor Angus Webb, La Trobe University's Professor Susan Dodds, Senior Deputy Vice-Chancellor and Vice-President (Research and Industry Engagement) and Professor Ashley Franks, Pro Vice-Chancellor (Research Capability) and SuniTAFE's CEO Brett Millington and Operations Manager David Harris.

### Strategic Advisory Panel

The Centre has strong support in the region and has a [Strategic Advisory Panel](#) (SAP). Members of the SAP review and provide advice on projects and Centre activities. Their combined knowledge enables project teams to be tested and shaped in a way that adds value and ensures fit for purpose outcomes and regional impact.

SAP members include – SAP Chair [Leonie Burrows](#) OAM, Anne Mansell (former CEO Dried Fruits Australia), Jenny Collins (CEO Mallee Catchment Management Authority), Richard Byllaardt (Citrus industry) and Tim Jackson (Almond industry), Peter O'Donnell (Executive Director Southern Cross Farms), Paul Northey (Managing Director of Lower Murray Water), Ross Lake (President Mallee Family Care) and Peter Forbes (Regional Development Victoria).

### Centre Operations

The Centre was opened on the 6 May 2019 and has staffed offices in Mildura, in the Northwest of Victoria. The Centre concentrates on the focal areas of horticulture, water, energy and the environment, applied to irrigated production and natural resource management along the Murray River in the Swan Hill Rural City Council local government area, and through to the Mildura Rural City Council local government area.

Through our project profile, the scope of universities the Centre is connected with now includes: The University of Melbourne, La Trobe University, Deakin University, Federation University, Adelaide University, Flinders University, Australian National University, The University of Sydney and Charles Sturt University.

The Centre is building our engagement and is involved in projects with Hort Innovation, Wine Australia, the national horticulture peak industry bodies and Agriculture Victoria.

The Centre is bringing researchers to the region who are undertaking their PhD, others that are building their early careers, right through to senior professors. The Centre is also building exposure to the region, to build knowledge and educate on the regional opportunities through internships and assisting with hosting students subject visits to the region.

This clip explains the Mallee Regional Innovation Centre - [https://youtu.be/CtLID6B9r1M?si=9Z\\_y\\_Q2OdgoN1IWv](https://youtu.be/CtLID6B9r1M?si=9Z_y_Q2OdgoN1IWv)

This clip reports on the Centre's *Growing Smarter in the Mallee Regional Summit* event at the SuniTAFE Smart Farm - [https://youtu.be/3bKRbPO-SUo?si=QbAFS2kZMLY5lw\\_I](https://youtu.be/3bKRbPO-SUo?si=QbAFS2kZMLY5lw_I)

# Framing the Region

## Horticulture

The Centre is embedded in a tristate location that is known for its horticulture output and is known as a vital contributor to food production. On 28 July 2022, The Weekly Times reported that Mildura Rural City Council local government area was officially the nation's most valuable farming region with production receipts of more than \$1.1billion.

Of the \$2.2 billion in regional exports, \$672 million is from Agriculture, Forest and Fisheries and \$534 million from Manufacturing (mostly agricultural value add) (REMPAN data, Mildura Regional Development, accessed 5 December 2023). The region has many manufacturing businesses that service the Agriculture, Forest and Fisheries sectors.

The horticulture sector continues to grow, with trade increases, in particular the following export data should be noted.

*The value of Australian horticultural exports rose to their second highest level in 2022/23. This was primarily a result of increased grape and nut exports which more than offset a slight decline in the value of other fruit and vegetable exports.*

*Horticultural exports totaled \$2.78 billion in 2022/23, up \$277.9 million (+11.1 per cent). The volume of horticultural exports also increased marginally for the third consecutive year, up 2.5 per cent.*

*(3. Accessed 5 December, Horticulture Exports 2022/23, Rural Bank, September 2023)*

## Horticulture Cropping

As noted in the Mallee Catchment Management Authority's 2018 Mallee Crop Report, the main crops, in order of dominance in the Mallee catchment are as follows:

- *almonds; 24,485 hectares (30% of the irrigable area) predominantly grown in the Boundary Bend and Wemen river reaches;*
- *table grapes; 8,965 hectares (11% of the irrigable area) predominantly grown in the Robinvale and Mildura irrigation districts;*
- *wine grapes; 8,050 hectares (10% of the irrigable area) predominantly grown in the Colignan to Koorlong river reach and the Red Cliffs irrigation district;*
- *field crops; 5,685 hectares (7% of the irrigable area) predominantly grown in the Nyah and Boundary Bend river reaches;*
- *citrus; 4,135 hectares (5% of the irrigable area) predominantly grown in the Colignan to Koorlong river reach;*
- *olives; 3,815 hectares (5% of the irrigable area) predominantly grown in the Boundary Bend river reach;*
- *potatoes; 3,410 hectares (4% of the irrigable area) predominantly grown in the Boundary Bend river reach and the Murrayville Groundwater Management Area;*
- *dried grapes; 3,145 hectares (4% of the irrigable area) predominantly grown in the Colignan to Koorlong river reach and the Mildura and Merbein irrigation districts;*
- *and vegetables other than carrots and potatoes, 2,685 hectares (3% of the irrigable area) predominantly grown in the Wemen and Colignan river reaches.*

p.7, Argus,S, 2018. (10)

## Mallee Climate Projections

Water and climate considerations will challenge the agriculture industry's ability to sustain this growth as they grapple with availability, increased local water demands due to increased evapo-transpiration, the potential of increased water prices due to increased demands, increased heat stress on crops due to increased temperatures, and increases in the frequency and intensity of extreme events. Understanding better and preparing for this with the addition of a drought overlay, increases the significance and importance of drought preparedness.

The CSIRO has released the Mallee Climate Projections 2019 and they state that:

- by the 2050s, the climate of Mildura could be more like the current climate of Menindee, New South Wales, and Swan Hill more like Balranald, New South Wales. (3)
- by the 2030s, increases in daily maximum temperature of 0.8 to 1.6°C (since the 1990s) are expected. (1)

Rainfall will continue to be very variable over time, but over the long term it is expected to continue to decline in winter and spring (medium to high confidence), and autumn (low to medium confidence), but with some chance of little change.

Maximum and minimum daily temperatures will continue to increase over this century (very high confidence).

Combining these projections with future drought scenarios, the decreasing water availability in the system and increased development, the region is set to be challenged in emerging trends and impacts.

## Strategically positioned

The Centre is positioned within a region that is now strategically recognized by a critical mass of agencies and organisations that the Centre engages with through our Drought Hub activities. This includes offices for the national peak industry bodies of the Almond Board of Australia, Citrus Australia, Australian Table Grape Association and Dried Fruits Australia. In addition to this, Hort Innovation have a presence in the region through their Industry Service and Delivery Managers.

Additionally there are offices for the Inspector-General Murray- Darling Basin Water Resources, the Murray Darling Basin Authority and representatives from the Commonwealth Environment Water Holder.

Complementary to that, the region is already home to staffed offices of the First People of the Milewa-Mallee, the Victorian Department of Land, Water and Planning, Victorian Department of Jobs and Precincts and Regions, Mallee Catchment Management Authority, Agriculture Victoria, Parks Victoria, Lower Murray Water, Western Murray Irrigation, Regional Development Victoria, New South Wales Department of Primary Industry, ALTA (Analytical Laboratories and Technical Services Australia), Bird Life Australia, Trust for Nature, Sunrise Mapping and Research.

The region is also home to the SuniTAFE SMART Farm, the CSIRO have a presence through the Koorlong Field Station and Agriculture Victoria has a smart farm

Industry knowledge and expertise is further enriched in the region by the presence of these organisations. The relationship the Centre has built and will continue to build with these stakeholders, will enhance our ability to undertake key activities in the region that will support the drought preparedness of farmers, related industry and community.

# Submission Details

## Terms of Reference

The Draft Future Drought Fund Investment Strategy 2024 to 2028 was released alongside the Draft Future Drought Fund Drought Resilience Funding Plan 2024 to 2028 for public comment between 20 October 2023 and 6 December 2023.

The funding plan is a legislative instrument that outlines the high-level vision, aim and strategic objectives of the Future Drought Fund (FDF). It also sets out enduring funding principles that apply to the design of FDF program at a whole-of-fund level and, separately, principles that apply to each arrangement and grant made under the Future Drought Fund Act 2019 (the FDF Act).

The draft investment strategy provides detailed information about the operation of the FDF and proposed priority areas of investment over the next 4-year funding cycle (2024 to 2028).

Once completed, the strategy will outline:

- investment priorities for the 2024 to 2028 funding cycle
- the suite of investments to deliver the identified priorities
- the intersection of FDF investments including sequencing and integration of activities
- how the FDF and its investments aligns with the relevant government policies and programs related to drought and climate resilience
- how the department intends to work with stakeholders to design, deliver and evaluate FDF programs.

The investment strategy is intended to assist stakeholders, including FDF delivery partners and beneficiaries, to better understand the nature and timing of investment opportunities over the next funding cycle and plan their engagement accordingly.

## Scope

Stakeholders were invited to have their say on the draft investment strategy and associated draft funding plan, via the department's 'Have Your Say' webpage by 6 December 2023.

In addition to this, public consultation sessions were held face to face and online.

The consultation process will assist to inform the finalisation of these documents provided, in early to mid-2024 and enable new program, to be announced before funding becomes available from 1 July 2024.

## Key Questions

A set of key questions were provided as a part of the consultation process. They are detailed below.

	Program	Question
1	5.0 Proposed Key Features of New Programs	Does the draft funding plan provide an appropriate framework to guide spending on drought resilience initiatives?
2	5.0 Proposed Key Features of New Programs	Which current FDF programs should be retained?
3	5.0 Proposed Key Features of New Programs	Which current FDF programs could be integrated with existing programs or built upon to drive efficiency or to maximise impact?
4	6.1 Place-based Action and Partnerships	How should the Hubs' role be better defined to deliver more impact for their regions? Are the proposed funding options for the Hubs appropriate?
5	6.1 Place-based Action and Partnerships	What implementation pathways and governance options are the most appropriate ways of actioning regional plans?
6	6.2 Information, Skills, and Capacity Building	Should a future iteration of the FBR program be more focused on specific learning areas or target particular cohorts of farmers (e.g., young farmers, remotely located farmers, smaller landholders and/or those operating on marginal land)?



	Program	Question
7	6.2 Information, Skills, and Capacity Building	How should public and private good be balanced in a future iteration of the FBR program? Should the program require farmer co-contributions?
8	6.2 Information, Skills, and Capacity Building	Should the FDF provide training on how best to use and interpret information from existing climate tools, including but not limited to 'My Climate View'? If so, who could benefit most from such training?
9	6.2 Information, Skills, and Capacity Building	Should the long-term goal for CSA be providing adaptation information to better support practice change in response to climate projections?
10	6.3 Agriculture and Land Management	Should the FDF prioritise natural capital management projects through discrete programs (such as a new Drought Resilience Soils and Landscapes program) or should NRM continue to be embedded throughout most streams of investment? Or both?
11	6.3 Agriculture and Land Management	How can First Nations communities be supported so that their knowledge and practices to care for country can be maintained for the benefit of their communities and land?
12	6.4 Innovation and Transformation	Should the FDF focus on innovation, or broader extension and adoption of tried and tested practices to enable change at scale in Australia? Or both?
13	6.4 Innovation and Transformation	Should transformational change, and partnerships that facilitate it, be prioritised by the FDF? What incentives or programs would best support transformational change?  Or should the FDF continue to also build incremental change – that eventually lead to transformation – and focus on the preconditions (knowledge, skills, and support etc) that enable individuals and communities to make transformational changes?
14	6.4 Innovation and Transformation	What Drought Resilience Innovation Challenges could be targeted in the proposed new innovation pilot program?
15	6.5 Enabling Activities	What enabling activities are essential to the success of the FDF and should be directly funded to support FDF programs?

# Response

## Horticultural lens

The Mallee Regional Innovation Centre attended the public consultation session in Melbourne on the 3 December 2023, alongside other partners from the Victoria Drought Resilience and Innovation Hub. The consultation session provided an opportunity to feed back into the Future Drought Fund Consultative Committee and department representatives. Some of the feedback communicated at that session is recorded below.

The Mallee Regional Innovation Centre would like to acknowledge and thank the department for their willingness to review elements of the areas of engagement. As an example of this, the approach to listen, review and indicate a chance to allow activities in some instances to include 'off-farm' as well as 'on-farm'. Many elements impacting horticulture are off the farm, and sometimes matters impacting the region are not in the immediate region. This change has allowed the Centre to undertake projects that arise in our drought consultation process. This includes activities related to Blue Green Algae and Water Allocation Forecasting.

## Proposed Key Features of New Programs

The Centre supports the continuation of the hub and node-based system for Future Drought Fund activities. Place-based action is only made possible through the hubs and the nodes. This creates the network of local stakeholders necessary to identify opportunities in regions and develop the level of trust required for effective ongoing collaboration.

The Centre welcomes the proposed enhanced consideration of climate change effects on the drought cycle. A focus on 'climate resilience' as opposed to simply drought resilience has the potential to drive investment and innovation during the 'good times' between droughts, something that has proved elusive historically.

Funding for hub and node operations is necessary but needs to be associated with funding to flexibly fund on-ground activities in the region. If funding for on-ground activities is managed centrally, then the benefit of the hubs is lost, and engagement will falter.

The Centre would like to acknowledge that the horticulture sector uses a variety of terms relating to drought. In particular the sector uses the term dry seasons. At the public consultation session, this point was raised by other organisations in attendance. Using the term, along with drought, enables another 'hook' into engagement.

The Centre would like to acknowledge that one of the challenges it has faced in our drought project and activities is the understanding of horticulture and how it is impacted by drought. As reported in the Centre's *Regional Drought Consultation Summary Report*, consultations have indicated that recovery takes a minimum of two years for dryland agriculture and four years for irrigated horticulture. This is in addition to storage levels in dams increasing to enable suitable allocations to be made for irrigators.

In addition to this, the Centre has found that in some cases, opportunities to engage in initiatives for funding opportunities did not have a scope that took horticulture into account. In some instances, we were unable to join with our Victoria Drought & Innovation Hub partners in supporting a project. Another example was the timing of the 'Science to Practice' Forum. In 2023, this event was run at the same time as the Hort Connections conference. The Hort Connections will be run from the 3 to 5 June 2024. Hort Connections is Australia and New Zealand's premiere horticulture conference and trade show.

The Centre would like to note that we have had approaches to engage with other entities, including in the evaluation of tools, but in some cases, the horticulture sector was not included in the tool. This provided important opportunities to have discussions about the horticulture sector and again raise the profile and understanding of those working within the agriculture sector.

## Place-based Action and Partnerships

Through the framework of the Drought Hubs and the associated activities that the Centre has been involved in or led, we have built new relationships with organisations. Through these new partnerships, we will be able to build activities and opportunities for our region to have access to an even greater diversity of collaborators, which includes industry, researchers, government, and business entities.

This in turn enables the Centre to contribute to core concepts related to building drought resilience (including economic, environmental and social dimensions to drought resilience), and public good and the five capitals' (financial capital, human capital, physical capital, social capital, and natural capital). Continuity of the Hubs funding is important to maintain and deepen the crucial relationships.

In some instances, our consultations have highlighted projects that haven't come to fruition. This is sometimes because it was not possible for one organisation to take on carriage of such an activity alone, despite potential benefit to a sector. An example of this for the Centre is our work in developing relationships with water corporations in Victoria, to enable a Drought Hub project relating to blue green algal impacts on drinking water treatment. That project is now underway, but could not have happened without the structure and support of the Victoria Drought & Innovation Hub and the MRIC node.

Given the primacy of place-based actions in the investment strategy, there should be a mechanism for stakeholder networks to bring proposals to the Future Drought Fund. These could then be developed and refined with the Department of Agriculture, Forestry and Fisheries and worked into a suitable program of work. Not all ideas are best served by open and competitive grant calls; some could be better co-designed between proponents, hub networks and the department.

The Centre supports the involvement of hubs in cross-sectorial, nationally coordinated programs supporting transformational change. These could be designated as priority program components for hubs. We would note that when opportunities arise, if partners are given more time for co-design, application, and submission, then there is a greater likelihood that more strategic objectives of the Future Drought Fund will be met.

## Information, Skills, and Capacity Building

The Centre is engaging with a range of farmers, their peak industry bodies, associations, and departments. Through engagement across the state, the Victoria Drought & Innovation Hub recognizes that there is work to be done in recording the 'institutional memory' and life experience of farmers, particularly in relation to drought.

The Centre supports wide engagement where possible. An example of this is across generations. Do we need to rethink terms like ‘young farmer’. In 2018/19, the average age of a farmer was recorded by the Australian Bureau of Statistics as fifty-eight years old.

## Agriculture and Land Management

The Centre acknowledges that as a relatively new entity, we still need to build our engagement with First Nations. We are continuing to build our understanding of how best to undertake this process. Through our building of regional partnerships, we are now receiving trusted advice about how best to move forward in a meaningful way.

## Innovation and Transformation

To achieve transformational change, sustained investment in the hubs is required. The current proposal to fund hubs for two years, with funding beyond this contingent upon performance could act to undermine the long-term realization of transformational change. Some programs will take some time to set up and results will not be apparent after two years.

In some cases, transformational change is not immediately apparent. There are frameworks that can be adopted to ensure the more likelihood of adoption, which include the role of local champions and demonstration sites. As referenced in the Centre’s Cross Drought Hub project which engaged with regional irrigators.

In line with transformational change, it must be noted for horticulture, long term trials require multiple years of recording and assessment of an activity. For example, as reported in the Centre’s Regional Drought Consultation Summary Report, recovery for horticulture can take up to four years. Build in the context of trialing new varieties or techniques, it can take up to ten years to develop, and that is before it is market ready.

The flip-side of the point above is that we strongly support the program’s current and proposed future focus on public good outcomes.

Taking all that into account, examples like the Victoria Drought & Innovation Hub bring together a unique partnership that provides the expertise, on the ground experience and connections to cultivate an environment of trust where transformational change has the best opportunity to flourish.

The Centre agrees that innovation is at the core of building resilience and should remain a focus of the Future Drought Fund. However, ‘innovation’ should not be reduced to immediately commercialisable and marketable products, but more broadly to include practices and systems that enhance the common and public good.

The Centre has examples of engagement outside of the Drought Hub framework where we have seen industries come together and work towards building resilience through innovation of advancing technologies. The information was shared across their industry, with the schematics shared with farmers, who then built a number of prototypes in the region. There are different ways of doing things that don’t result in a startup or immediate commercialisation.

## Closing Statement

The Mallee Regional Innovation Centre supports key place-based activities through the Future Drought Fund. The Centre’s drought consultation process has provided a rich resource to guide the activities the Centre has undertaken. These activities align with the Future Drought Fund objectives.

Place-based regional engagement and activities allow for showcasing developments and milestones through engagement and project activities. It also allows for local champions to assist in fostering transformational change of new or emerging techniques/practices. This helps to drive an increase in adoption.

Climate, water and energy risks are heightened when farmers, service sectors and communities are dealing with drought. For farmers, environmental managers, service industries, supply chains and now boards, these are all pressure points and require risk assessment and plans with key decisions or trigger points in place before it becomes difficult to make decisions without additional pressures of the current circumstances.

The framework of the MRIC allows us to have feet on the ground to drive collaboration and participation, all with the outcome of having better and improved adoption.

Some challenges and opportunities for agriculture are not only shared across industries, but often these are specific to a region, or at least solutions are best targeted through regional programs. Regional partnerships can also be networked across the country, so that any benefits or synergies, can be shared and leveraged for greater impact. Strong regional ownership in the drought space is critical.

Central and core to successful for impactful outputs from the Future Drought Fund programs, is farmer health and wellbeing. The National Farmer Wellbeing Report 2023 documents how farmers are pushed to extremes, and don't feel valued in what they see as uncertain futures. In this report, horticulture was noted as having the second highest declines in mental health (44% of participants). For farmers to change practice, take on new initiatives or engage in projects outside business as usual, they need to feel valued.

The Centre through our drought hub has built networks, where our staff are exposed to activities undertaken in other regions. That prompted the Centre to take that idea and adapt it to our region. This resulted in the production of a drink holder, with a QR code to regional mental health information, building on an initiative through Primary Health Network Murray. The Centre has now shared our project with other hubs across Australia.

## Key contacts for submission

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## References

- 1) Consultation draft: Future Drought Fund Investment Strategy 2024 to 2028, Department of Agriculture, Forestry and Fisheries.
- 2) REMPLAN data, Mildura Regional Development, accessed 5 December 2023 (<https://app.remplan.com.au/milduraregion/economy/industries/regional-exports?state=GABNi6!Aj6ECyPz0h3ma3DSYO0rRTmiQSzdgFBvpvksjDMDltqSj8HRSrhddmvs2GP>)
- 3) Rural Bank, Horticulture Exports 2022/23, Rural Bank, September 2023, accessed 5 December. (<https://www.ruralbank.com.au/knowledge-and-insights/publications/agricultural-trade/trade-horticulture-2022-23/#:~:text=Horticultural%20exports%20totalled%20%242.78%20billion,year%2C%20up%202.5%20per%20cent.>)
- 4) Mallee Climate Projections 2019, Clarke JM, Grose M, Thatcher M, Round V & Heady C. CSIRO, Melbourne Australia.
- 5) 2018 Mallee Crop Report, Argus, S., Mallee Catchment Management Authority, November 2018
- 6) Australian Bureau of Statistics – average age of farmers Accessed 5 December 2023. (<https://www.abs.gov.au/statistics/industry/agriculture/agricultural-commodities-australia/2018-19#:~:text=In%202018%2D19%2C%20the%20average,years%20of%20experience%20in%20farming>)
- 7) The National Farmer Wellbeing Report, National Farmers Federation and Norco, 2023 chrome-extension://efaidnbmninnbpcjpcglclefindmkaj/https://norcofoods.com.au/wp-content/uploads/2023/03/1212\_Farmer-wellbeing-report\_Navigation\_FINAL.pdf?x64161