



Australian Government
Department of Agriculture,
Water and the Environment



Future
Drought
Fund



Vic Hub
**DROUGHT &
INNOVATION**

**VICTORIA DROUGHT
RESILIENCE ADOPTION
AND INNOVATION HUB**

AGRICULTURE VICTORIA



Federation
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UNIVERSITY



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- Drought Consultations
- Water Allocation Forecasting
- Farm Management Deposits

Drought Consultations

Aims:

1. To identify issues, and implement actions, for drought resilience through projects co-designed with different communities.
 2. To provide a legacy of ongoing collaboration between key stakeholders to enhance drought resilience.
- Six formal consultations took place in October 2021.
 - A total of 28 individuals were consulted, from government, statutory authorities and banks.

Drought Consultations

Setting the scene – Victoria drought hub regional consultations/co-design

Thinking about the last drought:

- What happens(-ed)?
- How did it impact?
- What keep doing or do differently?
- Ideas for doing better in this phase

Thinking about when the drought broke:

- What happens(-ed)?
- How did it impact?
- What do again or do differently?
- Ideas for doing better in this phase?



Thinking about leading into drought:

- What happens?
- How does it impact?
- What keep doing or do differently?
- Ideas for doing better in this phase?

Thinking about when not in drought:

- What happens?
- How is this period changing?
- What keep doing or do differently?
- Ideas for doing better in this phase?

What should the drought hub be working on? Do you want to be involved in co-developing this area?

Drought Consultations

Following the consultations, several projects have been initiated and further planning is underway to address short, medium- and longer-term opportunities to improve drought resilience.

- Horticulture Skills Capacity Framework (completed)
- Think Tank – Farm Decisions (completed)
- ***New Method for Forecasting Seasonal Water Allocations (in development)***
- ***Farm Management Deposits (in development)***
- Blue Green Algae Control in Water Treatment Plants (in development)

New Method for Forecasting Seasonal Water Allocations

The new method improves the accuracy of allocation outlooks and narrows their uncertainty by up to 50%.

Apart from providing irrigators with more certainty about their annual planting decisions, it will also markedly increase their drought resilience.

- In a repeat of the Millennium Drought this will be invaluable information for horticulturalists throughout the southern-connected Murray-Darling Basin.
- **It will help them minimise the need to dry-off high value orchards and vineyards.**

New Method for Forecasting Seasonal Water Allocations

Old method

- Estimates are given for four potential climate scenarios, wet, average, dry, and extreme dry (based on historical climatic records)
- There is no commentary on the likelihood of each of those scenarios playing out in the coming year
- There is a wide range of uncertainty within each scenario
- The onus is currently on water users to estimate the risk distributions for each scenario.

New Method

- Produces water allocation outlooks based on seasonal streamflow forecasts from the Bureau of Meteorology (BoM)
- These forecasts are grounded in the weather of the current year rather than in potential climatic scenarios
- They forecast what the actual water availability is likely to be
- They narrow the risk distributions that water users must contend with.

New Method for Forecasting Seasonal Water Allocations – Project Design

1. Engage stakeholders, such as irrigators, agronomists, water traders, environmental water holders, catchment managers, wider rural industries, and communities, to co-design new water allocation outlook products, and work with them to determine the best pathways for rolling out the service.
2. Work with water agencies to transfer the new technology, which has been developed on the Goulburn River system, and deploy it on other river systems across Northern Victoria (e.g. Murray, Loddon, Broken, Campaspe Systems) so that it can be further evaluated for use on other river systems in the Murray-Darling Basin.
3. Establish a new operational system in Goulburn-Murray Water (GMW) for the ongoing production of the outlooks.
4. Support irrigators and other end-users in the best use of the new outlooks for improved decision-making – especially in times of drought.

Farm Management Deposits

Consultation outcomes for financial services:

- Develop community of practice in farm service banking
(Join up advice to farmers from agronomists, accountants, bankers, and financial counsellors)
- Improve timeliness of access to supporting financial resources
- Improve understanding of financial support mechanisms (like review FMDs) and how to use them strategically

Followed-up with a Victorian Drought Hub think-tank involving agronomists, accountants, bankers, and financial counsellors.

Farm Management Deposits

Issues:

- Some accountants and farmers treat FMDs as a tax management tool rather than a risk management tool
 - Though this might help minimise risky purchases to avoid tax
 - There are tax risks in having to cash out the deposits on the death of an FMD holder
- There are tax risks in using FMDs to manage drought at the onset of drought.
- The capped FMD amount hasn't grown at the same rate as the economies of scale in farming

In January 2023:

~ 45,000 farmers held FMDs

~Total holdings were \$5.9 billion

Farm Management Deposits

- The Victorian Drought Hub is in discussions with its counterparts in Northern NSW-Southern Queensland, as well as NSW more broadly, to develop potential projects.



Questions?

