# Empowering Next Generation Agriculture

## Innovation Working Group (IWG) Session #1

## Meeting minutes

Tuesday 13th August 2024, 6.00pm – 8.30pm, Upper Murray Community Recovery Hub.

Facilitator: Karensa Menzies

**Participants:**

**Helix representation** (please note, some participants could wear several hats): 11 Community members including 10 Farmers / Producers, 8 Government representatives, 3 industry representatives (from outside the community), 3 representatives of Education/Research

**Names:** Amanda Farrelly (DEECA), Anna Paton (Beef Producer, NSW), Anthony Dore (Sheep farmer, NSW), Bruce Wilson (RMIT), Cain Jenkins (Beef farmer), Carley Hodge (Beef producer), Chloe Trompf (Vet, Beef/sheep producer), Chloe Ward (DEECA), David Lamb (Food Agility CRC), David Mitchell (Beef/Sheep producer), Dennis Watson (AgVic), Doug Paton (Beef farmer), Ed Barry (UMI), Ed Durham (Beef/Seed producer), Grace Findlay (Food Agility CRC), Jo Mackinnon (Beef/Seed producer, UMI), Karensa Menzies (Faciltator, Agrifood advisory), Kylie McCreadie (AgVic), Lachlan Campbell (NECMA), Lyn Coulston (Upper Murray Landcare), Matt Thomas (DEECA), Milli Mackinnon (Beef/Seed producer), Molly Waters (Sheep farmer, NSW), Oya Maya (Community member), Phil Whiteley (Beef producer, Fertiliser contractor), Sarah Whiteley (Beef producer, UMI), Monty Whiteley (son Sarah & Phil), Sophie Hanna (Riverine Plains, Beef producer), Stephen Gemmill (Goulburn Murray Water), Tobias Jones (Beef farmer, NSW), Toby Robinson (Beef farmer, NSW), Tony Jarvis (Beef producer, Landcare)

**Setting the scene**

Conclusion from the EDP workshop and starting point of the IWG session was: “Understanding and unlocking greater water access has the highest potential for transformative change and impact in the Upper Murray and this would be the initial focus for the Innovation Working Group.”

The topic was elaborated upon as follows by the participants:

- What can be changed in the area to make farmers better ones, more productive (sustainably) and with greater Return on Investment (ROI)
- Water Challenge
    - Small amount of irrigation water – but it is underutilised
    - Availability?– lack of transparency / visibility in terms of access, potential to trade .
    - Water licenses are tightly held
    - Water allocations on NSW side are significantly higher than Vic, and there is no “platform” of trading (i.e. ability to trade cross border, a regulatory challenge).
    - How do we use more of what we’ve got – both regulated, unregulated and rainfall?
- Soil pH and nutrient management onfarm is hard to manage and requires a lot of work involved to manage it. Can we do things more targetedly? Data driven management
- To increase productivity sustainably, how can we use data
- For diversification: water and cost of land are considered two important factors.
- Young / next Gen farmers are coming (back) to the Upper Murray because:
    - Opportunity in the lifestyle

- Great area for production and to farm (e.g. rainfall, seasonal conditions, long growing period)
- Ability to put new practice/s into place
- Many opportunities not tapped into

**Clarification on current water access**

*Refer to presentation from Stephen Gemmill, GMW, for the Victorian side of the river.*

Key elements listed below:

Useful definitions for trading:

- Regulated: storage that GMW have control of
- Unregulated: water use in unregulated catchments is managed through take and use licensing and local management rules. This includes the Upper Murray and Biggarra sections of the River Murray, plus other creeks, as well as farm dams.

Groundwater (bores) *Following information is only true for professional use.*

- Each Groundwater Management Area (GMA) needs a water management plan (which provides guidance on licensing policy) plus a statutory management plan
- Upper Murray GMA: Cap for Indi zone is 4,266 ML/yr – entitlement not reached in the Upper Murray so people can apply for entitlement (current license volume is about 50% of entitlement capacity). While there is availability to issue new licences within the GMA, there are also limitations that require assessments and technical works (compulsory pumping tests) by specialised consultants – which comes at a cost and defines final volumes authorised to be licensed (which can be lesser than initial plans).

Surface water

- No new entitlement can be issued. Trade with existing titles is the only solution.
- General rules for surface water trading 1- want to pump all year, trade from upstream. 2- trade from downstream only for July-Oct period. Exception zone 160 (Upper Murray) and 161 (Main Stem): can trade all year. 3- sustainable diversion limit: assessment required by GMW.
- Current use: about 20-30% of total capacity. Tendency: people are tight on their water and not willing to trade when they are not using it, even temporarily.
- Water license trading requires paperwork through GMW but GMW does not dictate any value – this is subject to commercial arrangements between offer and demand.

**Opportunities, challenging the needs and desired outcome(s)**

*Refer to presentation from Dave Lamb (Food Agility).*

Key elements listed below:

- Market requirements for data recording are growing, both in Australia and internationally. This impacts producers across all systems and sectors. However, these increased requirements can be increased opportunities.
- Future state reporting to meet requirements is expected to involve digital traceability, digital certification of all produce.
- What is the end game of water? What are the indicators that prove that water is the issue? What is the value proposition that is going to come with it? What is the collective end game?
- Branding of Upper Murray produce utilising the assets: the data and evidence need to back up the story. Think of metrics that matter.

- Assets – Mandatory Scope 3 emissions reporting for large companies includes reporting on their entire supply chain. This means that what we produce as “small producers” and supply them with, has to be estimated in their reporting. If the Upper Murray region can provide data so that bigger buyers/companies do not need to estimate, this data has a monetary value.

**Discussions and Questions:**

1 – Understanding our water asset

It was agreed by the group that a water audit could provide important information to understand what we have, to get transparency / visibility on the system, and allow (data) analysis to move forward ideas at both at an optimisation level and lobbying level.

- Collate in a single report, for both Vic and NSW sides, that would cover:
    - Ground water availability
    - Water register for surface water
    - What is available and what is being used by each farmer
    - Reason(s) why people are not using their full licence capacity or trading it,
- Use information to analyse and consider realistic solutions. For e.g.
    - Is the Water Act inhibiting the success of the farming industry of the Upper Murray? Quantify the water gap – how big is it?
    - If a gap: What are the short term option(s) and long term advocacy to work on? Could some ground water transfer to surface water use? Develop a trading platform for Upper Murray community/farmers? Education to improve water trading literacy?
    - In any case:
        - What is the collective end game?
        - Find the right lever to be self perpetuating in the long term
        - How can we benchmark data amongst farmers to learn from others (find and develop best practices, work collaboratively to improve them)

2 – Understanding other limitations

- What do we need to future proof (agriculture in) our region? What is the most limiting constraint? Is it actually water or soil acidity or something else?
- Do we need to embed or encourage circular economy thinking? And building capability through better knowledge and entrepreneurial thinking?
- Importance of data to understand and tell the story; inform decision and actions.

**Conclusion and next steps**

**Summary Points**

- Agreed Upper Murray has significant assets for a prosperous agricultural future
    - Great area for production (rainfall, seasonal conditions with long growing period, lifestyle, ability to put new practice into place, many areas to tap into)
    - Water (even though access and use are largely not quantified / audited)
    - Next generation of farmers settling in the region – need to ensure they stay
- Agreed the need for foundational work, such as a water audit, to position the community to understand what it has and if there are realistic options to pursue greater water access
    - Whatever the outcome, it is a starting point to address or eliminate the perception that lack of availability is the blocking stone on any diversification project.
- Farmers need to agree on the collective end game that needs to aim at:

    - Prosperity of farmers in the region
    - Circular economy thinking and building capability through better knowledge and entrepreneurial thinking: Trace and track what you are doing as a start, measure, correct if not successful, measure change, re-think, etc.; involves data.
    - Positive impact on the greater community.
- All IWG stakeholders and participants agreed there is significant value in meeting again to further explore and progress the above

**Next steps**

- Discussion within (Innovation Upper Murray overarching) Project Control Group to help frame approach to foundational water work &/or audit, understand the financial implications of that and involve the experts that are needed to progress. Keep IWG informed and involved to ensure a meaningful outcome.
- Organise and set date for next IWG session.
- Continue to communicate relevant information to IWG participants and broader community/stakeholders to encourage engagement & participation