

Water Futures:

Action research to support community adaptation.

Water Futures aims to bring together community, industry and researchers to support action on water security and adaptation in four sites across the Murray Darling Basin. It is being led by independent researchers at the University of Sydney, funded through the One Basin Co-operative Research Centre.

Water Futures aims to support 'bottom up' adaptation initiatives designed in local communities, by local communities.

The unique aspect of this project is that those involved decide together on the problem to be solved, and work together to find the solution. The scope is purposefully broad to ensure that community needs are front and centre.

We anticipate that this project will contribute to local knowledge to adapt to the changing conditions and needs for communities within the Murray Darling Basin.



What will the study involve for me?

- If you decide to participate in this study, you will be asked to meet with a local action research group.
- Action research groups will meet at least monthly. The action research project will take place over a period of two years.
- Each local action research group will agree on where the meeting will take place.
- Action research groups may be audio recorded and/or observed by members of the research team. Audio recordings will be transcribed by a professional academic transcription service.
- Action research groups conduct research in a series of cycles. Please see below for more information on action research.
- Some action research groups may be conducted and recorded via Zoom and will be recorded and transcribed professionally.
- Photographs and video recordings may be made of the actions that have been organised by the local action research groups. When this occurs, you will be asked for your permission for any photography or video recordings.
- You will be regularly provided with opportunities to review information and data in the project as part of the co-design process.



Who can take part in Water Futures?

We are seeking community members who are interested in participating in a local action research group that will work together on co-designing actions to respond and adapt to future water use and available water in your region. Local action research groups are being established in the following regions:

- Goondiwindi
- Griffith
- Mildura
- Loxton

You are eligible to participate in the research if you:

- are 18 years or older
- reside, work, or run an enterprise in one of the above regions
- are able to participate in a local action research group in your area (see below for further information).



If you are interested in learning more please contact the researchers at the University of Sydney or your local OneBasin Hub Manager

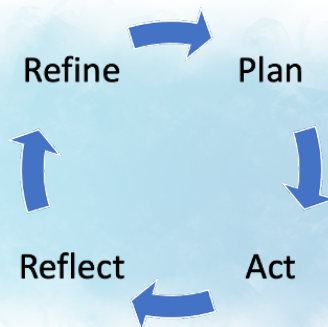
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What is action research?

Action research is a great way to build a strong body of research information from what you learn in any project or activity and to use that information straight away during the project to refine the next phase. Action research generates real time data which can be mobilised and acted on throughout a project rather than just at the end. It is ideal when you are experimenting with a new idea, when you are working with organisations or communities where learning and adapting are ongoing or where you want learning and new knowledge to be shared by everyone involved. Using action research everyone in the project acts as a co-researcher generating, analysing and using new information to design and implement your ideas as you go. In the Water Futures project a team of researchers (both local and from the University of Sydney) will walk along together as ideas and initiatives develop. We will provide support via our research knowledge and experience and will work with you to build local knowledge and research expertise which you can use in ongoing adaptation in your community. The National Literacy Trust (2020) argues that 'local data can promote a shared understanding of neighbourhood context, improve planning and help decision-makers target resources effectively'. Collecting data to understand how systems change over time has been found to contribute to successful place-based initiatives. It ensures projects are influenced by the area's history and culture, social and political dynamics, and institutional strengths. Data is also at the heart of continuous learning: the regular gathering, analysis, and reporting of data allows communities to learn what's working, what needs improving and to celebrate success along the way.



The key principles of action research are reflection and collaboration. This means that any research activity is done with and by the participants. The role of the formal researcher is a guide (and fellow traveller). This means research will take place through meetings, group exercises, learning retreats, peer networking and anywhere else people gather.

This might include undertaking:

- local conversations and workshops
- various forms of asset mapping
- surveys and needs assessments
- trialling new initiatives.

The strength of action research is its constant feedback loop, enabling actions to be adjusted and adapted to the evolving social context.

The diagram above illustrates that action research follows cycles of activity and reflection. This is different to traditional linear models - action research can occur over a number of cycles, with each cycle building on what has been learned in previous cycles. As such, changes may be made to the structure and/or process of the project as it unfolds, based on emerging understandings.

Unlike traditional approaches, action research is a collaborative experience.

In contrast to the traditional view of formal researchers as "the experts", action research places both formal researchers and other participants as co-researchers, recognising that all have expert knowledge to contribute. In action research, academics do not claim objectivity or remain at a distance, as if outside the research. Rather, we acknowledge that we are actively involved in working alongside communities and individuals as we explore and learn together. A third very important difference is that action research occurs not only to



develop knowledge, but to use that knowledge to bring about positive change. Increasing knowledge is vitally important, but not only for its own sake. This means that each cycle in an action research project represents a step towards putting learning into practice, to actively support community adaptation.