

One Basin's round 1 projects



This table introduces the **One Basin CRC's** first round of co-designed research projects. Work will begin on these projects in 2024; to learn more, visit onebasin.com.au or email admin@onebasin.com.au.

Lead partners

Lead regional hub

Research and industry leads



Putting people at the centre: towards transforming climate risk assessment for water security and delivery

Developing and testing a new approach to climate risk assessment that not only provides tailored information to different stakeholder groups, but also empowers them to act by involving them in developing an understanding of climate risk and appropriate adaptation strategies.

Australian National University
Goulburn Broken CMA
Murray–Darling Basin Authority
Murraylands and Riverland Landscape Board
North East CMA
NSW DCCEE
University of Adelaide
University of Melbourne

Mildura

Holger Maier (University of Adelaide)
Avril Horne (University of Melbourne)
Joel Bailey (Murray–Darling Basin Authority)

Unlocking collaborations for transformation: Towards a platform for data and knowledge sharing

This project aims to understand and influence how various stakeholders, including community groups, industries (i.e., irrigators) and others, will navigate challenges and seize opportunities, anticipating transformative change and knowledge sharing within the context of reduced water availability in the Murray–Darling Basin.

Australian National University
Charles Sturt University
Sensand Technologies
University of Sydney

Griffith

Tahmid Nayeem and Felicity Small (Charles Sturt University)
Darcy Clarke (Sensand Technologies)

Water futures

This project brings together community, industry and researchers to identify the enabling factors that support community action to enhance water security and adaption to water scarcity through co-design, piloting, documenting and evaluating responses in four sites in the Murray–Darling Basin.

Murray Darling Association
Murray–Darling Basin Authority
Regional Development Australia Murraylands and Riverland

Loxton

Amanda Howard (University of Sydney)
Margot Rawsthorne (University of Sydney)
Ben Fee (Regional Development Australia Murraylands and Riverland)
Mark Lamb (Murray Darling Association)

Understanding future leadership needs

This program of work investigates the leadership knowledge, skills and environments which can promote leadership from anywhere, and for anywhere, in the Murray–Darling Basin.

Australian National University

Loxton

Hannah Feldman (Australian National University)



Australian Government
Department of Industry,
Science and Resources

AusIndustry
Cooperative Research
Centres Program

Lead partners



Lead regional hub



Research and industry leads



Stories of One Basin: First Nations knowledge and Indigenous-led research to address climate change

The aim of this project is to develop and support Indigenous-led research while also protecting the intellectual and cultural property rights of First Nations across the Murray–Darling.

Charles Sturt University
University of Sydney

Goondiwindi

Peta Jeffries (Charles Sturt University)
Geoff Reid (One Basin CRC)

Water banking for enhanced drought resilience

Banking water underground for later use via managed aquifer recharge (MAR) presents an opportunity to recharge basin aquifers during periods of surplus water allocations or low allocation prices and withdraw water from aquifers when demand for water exceeds supply to enhance water security for irrigated agriculture, communities and for the environment in the Basin.

Aither Pty Ltd
Australian National University
Coleambally Irrigation
Flinders University
NSE DCCEEW
SA Department for Environment and Water
University of Sydney

Loxton

Ilka Wallis (Flinders University) and Howard
Fallowfield (Flinders University)
Andrew McCallum (NSW DCCEEW)

Future governance for water-limited communities

This project addresses growing uncertainty to ensure that innovations in governance respond to future needs and enable resilience in social–ecological systems.

Australian National University
University of Adelaide
Watertrust Australia

Griffith

Melissa Nursey-Bray (University of Adelaide)
Kane Aldridge (Watertrust Australia)

Reducing uncertainties and enabling multiple benefits in water delivery operations

This project aims to improve information systems and processes that underpin decisions around water deliveries to reduce uncertainties faced by water system operators, and to enable multiple environmental, social, cultural and productive benefits.

Australian National University
Murray–Darling Basin Authority
Murrumbidgee Irrigation
University of Adelaide
University of Melbourne

Griffith

Serena Hamilton (Australian National
University)
Karen Hutchinson (Murrumbidgee Irrigation)

Incentivising and investing in climate adaptation and the adoption of sustainable basin management practices

Assessment of emerging incentive and investment instrument opportunities, undertaking case studies to test assumptions and engage basin stakeholders to align research with real-world applications tailored to promote the adoption of sustainable strategies by leveraging financial and non-financial returns to landholders and private market investment.

Australian Wine Research Institute
Charles Sturt University
Murray–Darling Basin Authority
RMCG
University of Sydney
Western Murray Land Improvement Group

Loxton

Nick Pawsey (Charles Sturt University)
Alex Sas (Wine Australia)