



Making Water Work

Anthony Curro
Chief Executive Strategy and Engagement



Australian Government
Department of Industry,
Science and Resources

Cooperative Research
Centres Program



CRCNA.COM.AU



01.

THE CRCNA

Industry-led research and development across Northern Australia

02.

MAKING WATER WORK PROGRAM

Collective development in the Lower Fitzroy catchment

03.

MAKING WATER WORK

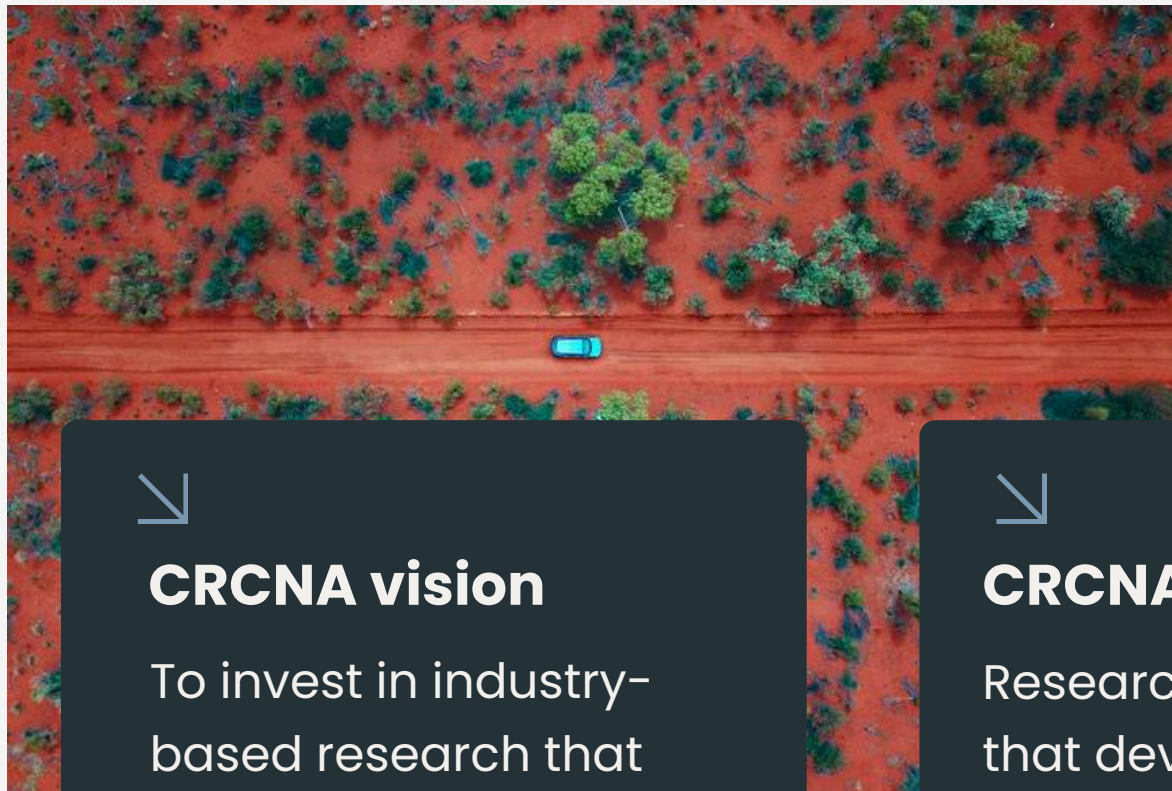
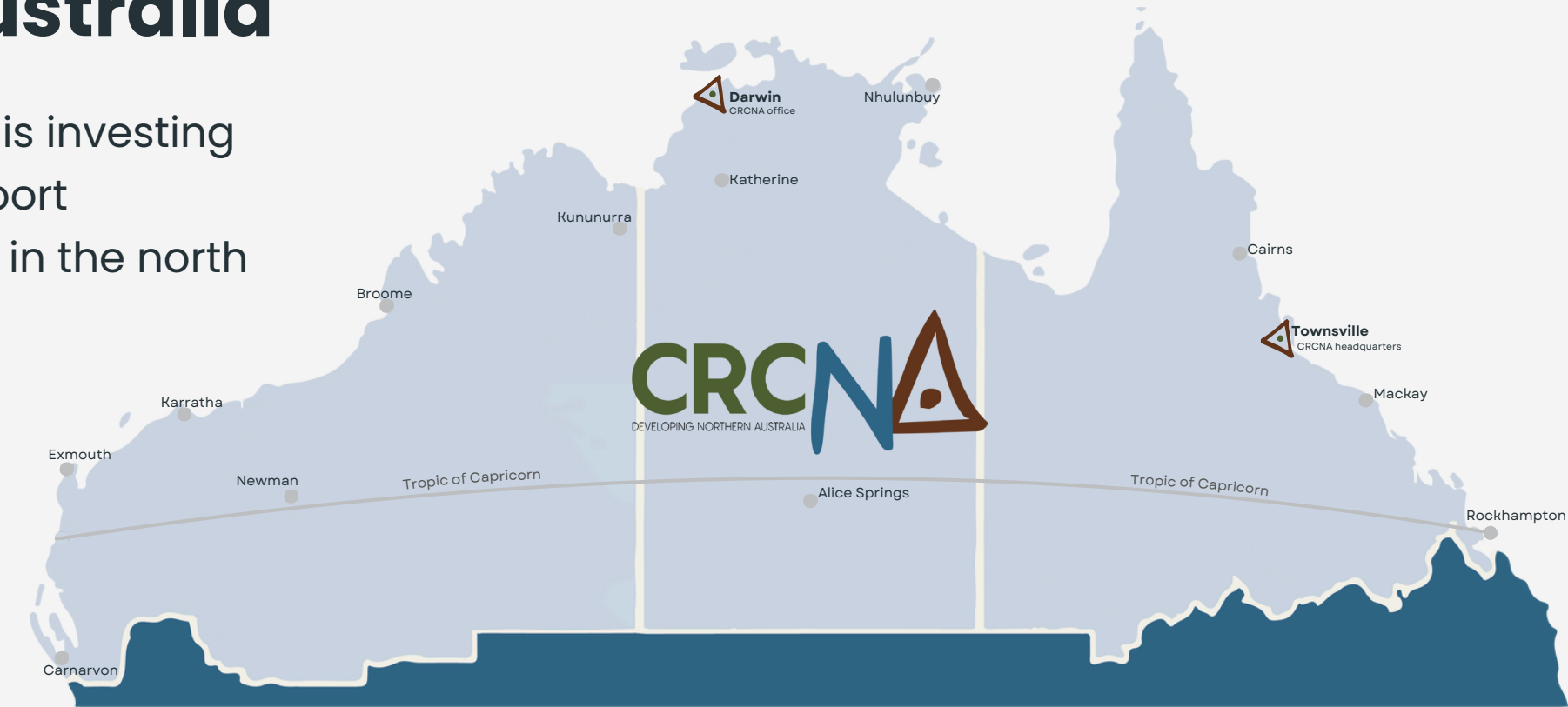
Projects supporting next generation ag

04.

NEXT STEPS

Research and Development for Northern Australia

The **Cooperative Research Centre for Developing Northern Australia (CRCNA)** is investing \$75 million in Australian Government funds over ten years (2017 to 2027) to support industry-led research and development collaborations to make doing business in the north easier, more efficient and with less risk.



CRCNA vision

To invest in industry-based research that de-risks development in Northern Australia to realise a resilient and sustainable economic future.



CRCNA focus

Research collaborations that develop new technologies, products and services to address industry issues unique to the north.



CRCNA origins

Established as a key initiative of the Australian Government's 2015, *Our North, Our Future: White Paper on Developing Northern Australia*.

Northern Australia development partners



Northern Australia
Indigenous Reference Group



CRCNA's Industry-led research themes



First Nations-led business development



Agriculture, incl. horticulture and forestry



Aquaculture and seafood



Water resources



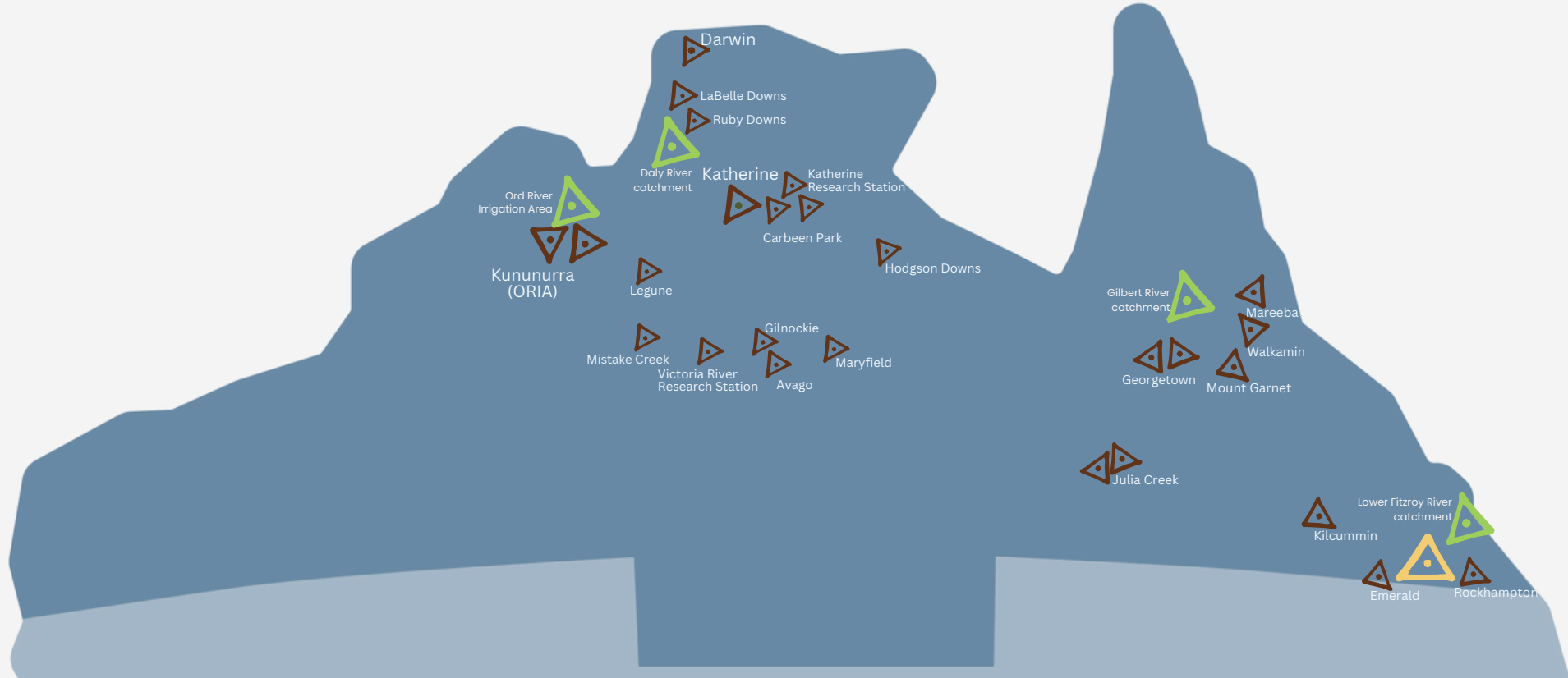
Health service delivery incl. tropical health



Education program

CRCNA programs

De-risking agricultural development



Water Security for Northern Australia



Lower Fitzroy catchment (CQ)



Gilbert River catchment (NQ)



Daly River catchment (NT)



Ord River Irrigation Area (WA)

Cotton, Grains, Cattle



Crops for Cattle (NT)



Fundamentals of cropping systems (NT)



Sustainable cropping, ORIA (WA)

Making Water Work: Lower Fitzroy



Land use planning



Defining supply chains



Achieving reef water quality



Water governance



Hyacinth harvest and processing



Intensification of cattle production (WA)



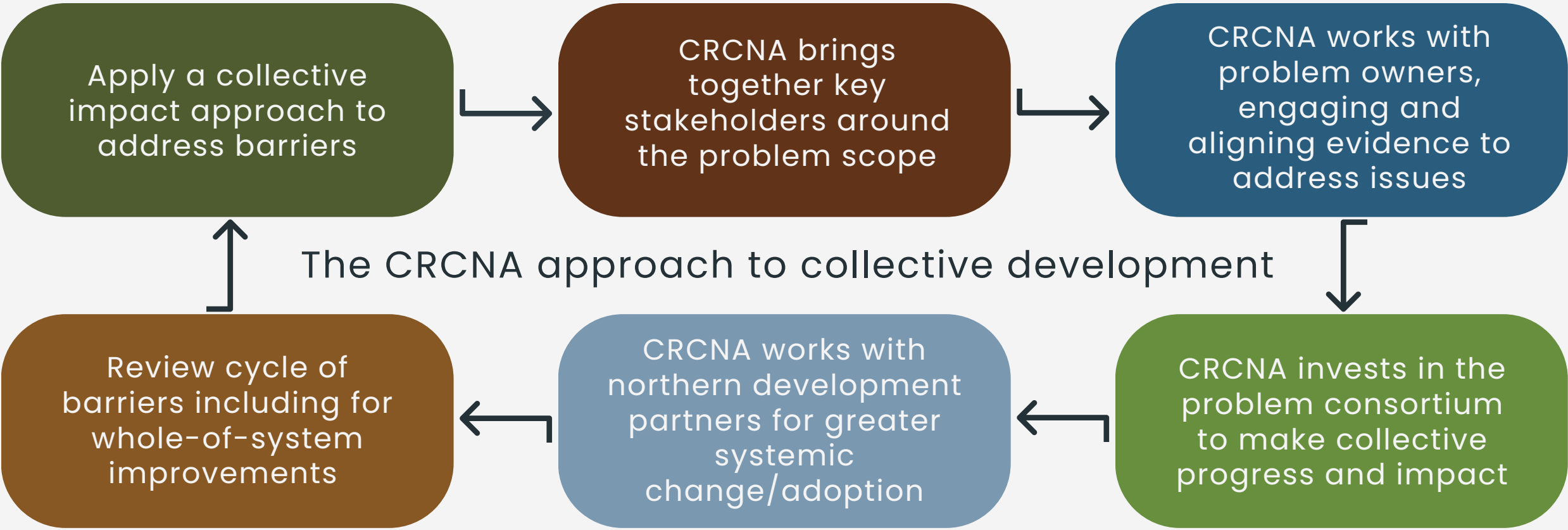
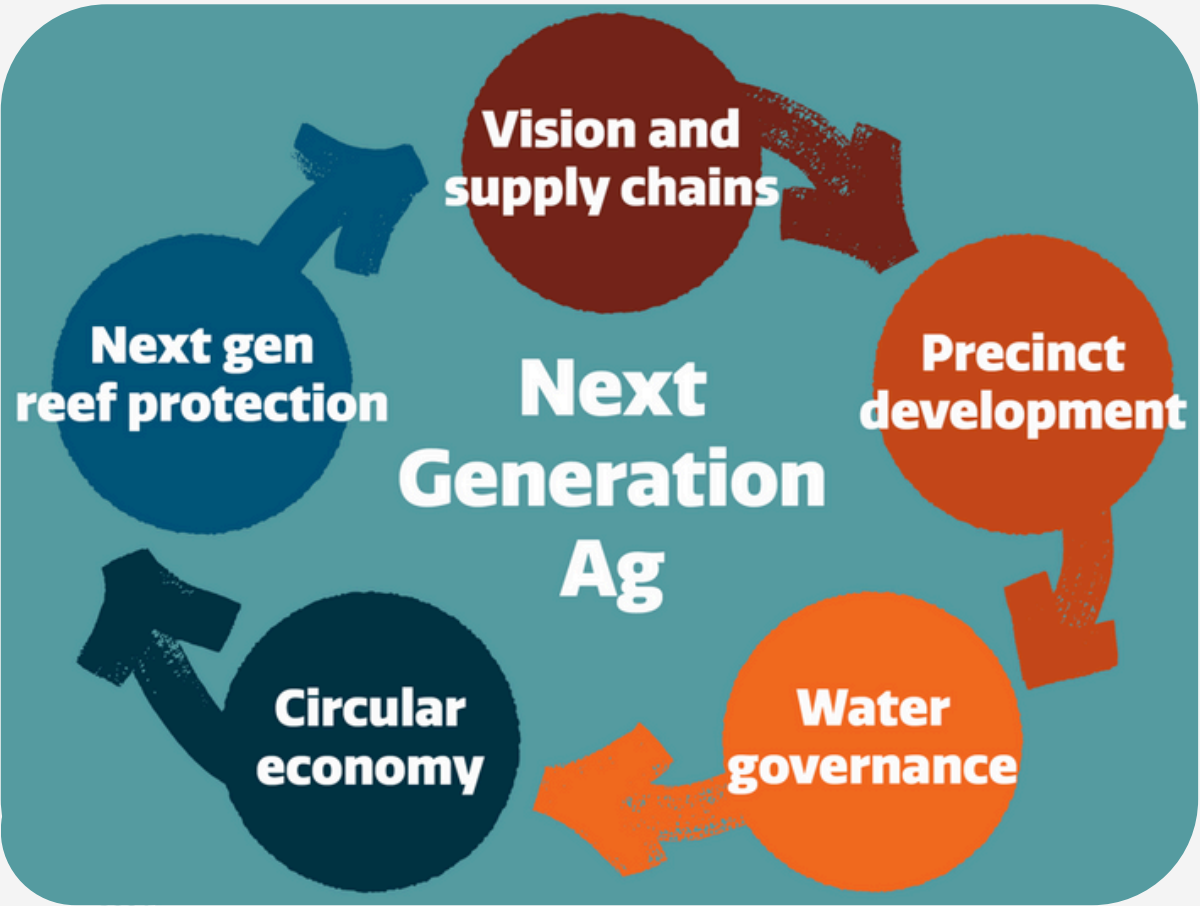
Extension capacity for cropping (NQ)



Farming systems (NQ)

Making Water Work program

Focused on next generation agriculture by diversifying and better managing water resources to meet market demands, maximising new and existing water resources for a more circular economy and achieving environmental outcomes.



Working group:

- Agforce
- CQUniversity*
- CRCNA
- Darumbal
- Department of Agriculture & Fisheries *
- Department of Environment and Science
- Department of Regional Development, Manufacturing and Water
- Rockhampton Regional Council (Advance Rockhampton)*
- Fitzroy Basin Association
- NBNC
- Regional Development Australia – Fitzroy
- Stanwell
- Sunwater*



Making Water Work program

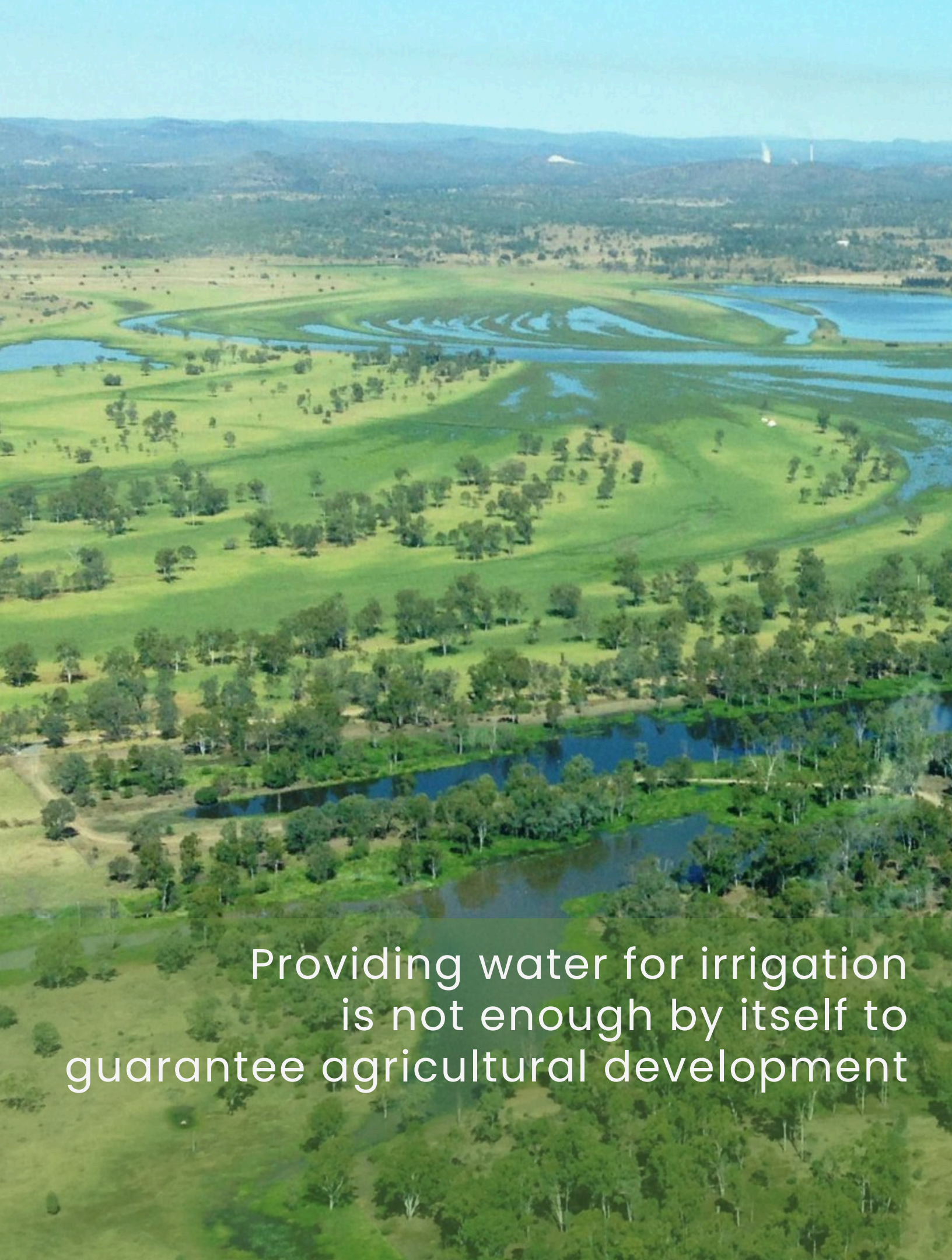
Project 1: Visionary land use planning to facilitate development precincts

Aim: Support the viability of a local irrigation water supply scheme for South Yaamba to landholders that have suitable land without direct river access.

Partners: Rockhampton Regional Council, Pinion Advisory

Outcomes: Apply this model to other regional water development that balances water security, agricultural productivity, diversification, and environmental values.

Timeframe: Jul 2022 to Nov 2023



Providing water for irrigation
is not enough by itself to
guarantee agricultural development

Making Water Work program

Project 2: Defining a Supply Chain for Lower Fitzroy

Aim: Provide a more coordinated approach to development of agricultural precincts, using the lower Fitzroy as a water development model.

Partners: CQUniversity, KPMG, Qld DAF

Outcomes: Identify and improve planning and coordination processes to develop agricultural precincts and improve services including information and engagement with potential investors.

Timeframe: Oct 2022 to April 2024



Making Water Work program

Project 3: Achieving reef water quality requirements in new agricultural developments

Aim: Assist the expansion of agriculture in the Lower Fitzroy by bridging the support gap to meet Reef Water Quality requirements.

Partners: Rockhampton Regional Council – Advance Rockhampton, Qld DAF, Sunwater

Outcomes: Establish land management toolkits to navigate the regulatory constraints, monitoring and record keeping practices necessary for production and operation, e.g. farm plans, sediment and nutrient plan accounting, case studies, governance frameworks.

Timeframe: Jun 2023 to Dec 2024



Making Water Work program

Project 4: Mobilising strong water governance arrangements

Aim: Work with landholders to form a network to address issues in irrigation systems management. Improve market trading mechanisms for information, platform access and consistencies between ownership structures.

Partners: CQUniversity, Qld DAF

Outcomes: Develop a cooperative framework for the regions irrigation sector, creating efficiency of water allocations and water use. Improve the water allocation process and generate new efficiencies in the way that water is used - higher value crops, investor access, markets.

Timeframe: Jan 2023 to Dec 2024



Making Water Work program

Project 5: Integrating nutrient, waste and energy streams in agriculture development through hyacinth harvest and processing

Aim: Identify and evaluate methods for the beneficial reuse of water hyacinth in the Fitzroy River, including as a vector for the removal of nutrients from the waterway to improve water quality flowing to the Great Barrier Reef.

Partners: Fitzroy Basin Association, Rockhampton Regional Council, Qld DAF

Outcomes: Improved water quality and ecosystem condition through reduction of invasive aquatic weeds. Adoption of recycling principles for the aquatic weed biomass as a soil ameliorant, reduced weed management, and cost benefit analysis.

Timeframe: Jan 2023 to Dec 2024

A person wearing a yellow jacket and a cap is operating a boat through a field of pink flowers. The boat is equipped with a canopy and a large circular propeller or pump at the rear. The scene is set on a body of water, with the boat's wake visible in the foreground.

Watch on YouTube
@CRC_NorthernAustralia

https://youtu.be/Lmj6gsvafE?si=9s_ok73crGPhJ7cd



Where to from here

- ↳ Reality of water development planning - First iteration of a multistep process
- ↳ Good foundation set by the working group - supported by a very proactive LGA
- ↳ Several opportunities to capitalise on work to date (\$1.2M) - Staus Quo for Next Gen Ag
- ↳ CRC for Developing Northern Australia now fully allocated yet still has a strong vision going forward
- ↳ Integrated and place based solutions to complex development investments



Stay connected

CRCNA.COM.AU

@CRC_Northern Australia



Cooperative Research Centres Program

