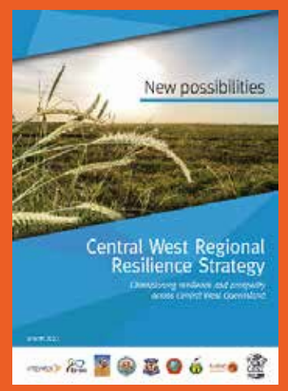
RAPAD
REMOTE AREA PLANNING & DEVELOPMENT BOARD

REALISING THE ECONOMIC POTENTIAL OF THE CENTRAL WEST

UNLOCKING THE REGION'S WATER RESOURCES FOR ECONOMIC DEVELOPMENT

UNLOCKING WESTERN QUEENSLAND'S WATER RESOURCES WILL ENABLE TRANSFORMATIVE GROWTH



The Central West Water Strategy seeks to achieve the outcomes set out in the Central West Regional Resilience Strategy – sustainable development the region's water resources to improve drought resilience and unlock a step-change in the region's economy.

The Future Drought Fund outlines building drought resilience as a complex and long-term endeavour. It requires tailored and practical support reflecting the unique circumstances and diverse needs and aspirations of different farmers, their communities and agricultural industries.

Queensland Government

This work is an action of the "Central West Regional Resilience Strategy Implementation Overview and Regional Action Plan: New Possibilities Championing Resilience and Prosperity Across the Central West" undertaken and funded by the Queensland Government through the Queensland Reconstruction Authority.

This report has been proudly funded by the Qld State Governments Remote Area Board Funding Program.

THE CENTRAL WEST WATER STRATEGY | AT A GLANCE

60%

OF WATER PLANS REMAIN UNALLOCATED (SURFACE AND GROUND WATER)

0.3%

OF WATER IN LAKE EYRE CATCHMENTS IS ALLOCATED. DEVELOPED CATCHMENTS ARE 20%+

2,527

ADDITIONAL FTE JOBS IN THE REGION (45% INCREASE)

$368 M

POTENTIAL GROWTH IN REGIONAL ECONOMY (GRP)(36% INCREASE)

$91M

ADDITIONAL TAX REVENUE GENERATED EVERY YEAR

37%

INCREASE IN REGION'S POPULATION (10,721 TO 18,897)

The water strategy seeks to realise the following opportunities:

1. Irrigated agriculture (both drought resilience and value-adding cattle and irrigated cropping)
2. Green hydrogen production for zero emissions road transport
3. Critical minerals (copper) essential for the development of renewable energy technologies

These outcomes can be achieved through better utilisation of existing resource allocations and better regulation to allow easier access to water resources.

CONTENTS

WATER IS A PRECIOUS RESOURCE IN THE CENTRAL WEST.

WE NEED TO BE ABLE TO MAKE THE MOST OF IT, BOTH IN THE GOOD TIMES AND PARTICULARLY IN THE BAD.

Allocations in the RAPAD region typically represent less than 2% of the median annual flow.

By way of comparison surface water allocations in the full Burdekin and Fitzroy River basins represent 19.8% and 16.4% of the mean annual flow

1 WATER IN THE CENTRAL WEST

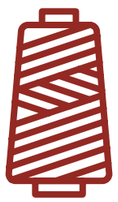
THE RAPAD REGION DRAWS WATER FROM SEVERAL SOURCES:

- ☑ Surface water – Diamantina, Georgina, Cooper and Burdekin catchments
- ☑ Ground water – Great Artesian Basin

Larger towns can also provide opportunities for beneficial reuse of waste water

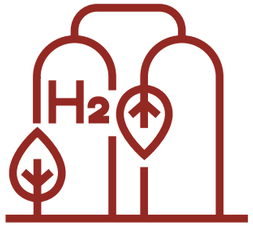
WATER UNDERPINS ALL ASPECTS OF THE REGION'S FUTURE ECONOMIC TRANSFORMATION

Liveable communities and population growth



Value adding existing industries

Enabling tourism and visitation

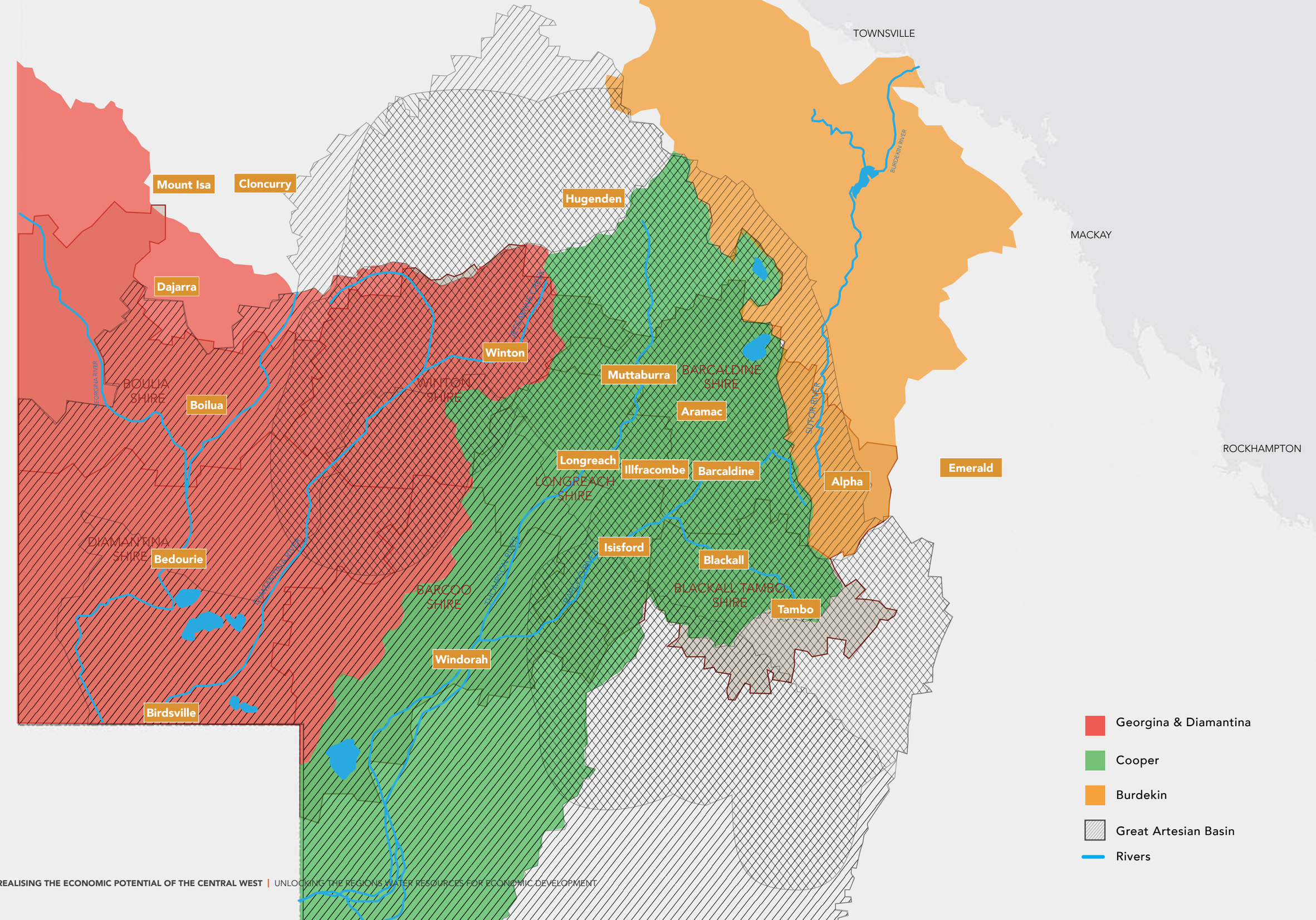


Attraction of new industries

Supporting resource industry development

Improved drought resilience

1 WATER IN THE CENTRAL WEST



WATER IS USED TO SUPPORT A NUMBER OF AGRICULTURAL, RESOURCE AND URBAN ACTIVITIES ACROSS THE CENTRAL WEST:

	Georgina and Diamantina		Cooper		Burdekin (Belyando Suttor)	Great Artesian Basin*
Resource monitoring						
Monitoring site	Georgina River at Roxborough Down	Diamantina River at Diamantina lakes	Thomson river at Longreach	Barcoo River at Blackall	Native Companion Creek at Violet Grove	N/A
Median Annual Flow (ML/a)	468,330	896,610	563,760	453,190	20,780	
Maximum annual flow	6,312,710	10,520,520	10,769,950	5,635,340	525,610	
Resource utilisation						
Current allocations (ML)	7,108		17,788		82,425	10,878
Unallocated water (ML)	13,500		2,200		139,200	20,500
% of allocations remain unallocated	66%		11%		63%	65%
% of resource used productively	0.3%		0.3%		13.8%	N/A

* only sub-basins in the RAPAD region are included in GAB assessment

2 WATER-RELATED GROWTH OPPORTUNITIES

THE REGION'S WATER RESOURCES CAN SUPPORT FUTURE ECONOMIC GROWTH IN

- ☑ Irrigated agriculture & drought resilience
- ☑ Create hydrogen for transport fuels
- ☑ Critical mineral mining

THE BENEFIT OF REALISING THESE OPPORTUNITIES ARE TRULY TRANSFORMATIVE:

$368M

Additional gross regional product (36% increase)

2,527

Additional FTE jobs in the region (45% increase)

37%

Increase in regional population (10,721 currently)

$91M

Additional tax revenue generated every year

IRRIGATED AGRICULTURE & DROUGHT RESILIENCE

FUTURE PROOFING AGRICULTURE

The RAPAD region has 18 million hectares of land potentially suited for irrigated agriculture including:

Improved pasture

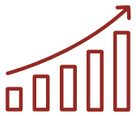
Irrigated cropping

Irrigated horticulture

WITH EXSISTING ALLOCATIONS

Existing water allocations could support development of up to 25,190 ha (0.1% of suitable land).

Benefits:



$23 M
increase in GRP
($15 M directly)

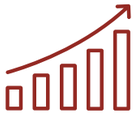
296
additional FTEs
(155 directly)

$5.6 M
in additional tax revenue
($1.2 M for QLD Gov)

UPDATING THE WATER PLAN

Expanding water resource use to 10% could enable an additional 200,000 ha (1.2% of suitable land)

Benefits:



$163 M
increase in GRP
($109 M directly)

1,499
additional FTEs
(1,127 FTE directly)

$40 M
in additional tax revenue
($8.6 M for QLD Gov)

Mount Isa
Cloncurry
Hugenden
Dajarra
Winton
Muttaburra
Aramac
Longreach
Illfracombe
Barcaldine
Alpha
Boilua
Bedourie
Isisford
Blackall
Tambo
Windorah
Birdsville

BOULIA SHIRE
WINTON SHIRE
BARCALDINE SHIRE
LONGREACH SHIRE
DIAMANTINA SHIRE
BARCOO SHIRE
BLACKALL TAMBO SHIRE

GEORGINA RIVER
JESSAMINE CREEK
DIAMANTINA RIVER
THOMPSON RIVER
BARCOO RIVER
SUTTOR RIVER

Flinders Highway
Landsborough Highway
Landsborough Highway
Richmond
Jundah

Key:

- Recent Quaternary Alluvial Systems
- Tertiary-early Quaternary clay plains
- Tertiary-early Quaternary loamy and sandy plains and plateaus
- Quaternary inland dunefields

GREEN HYDROGEN FOR TRANSPORT

The RAPAD region is located along a key national freight route (Darwin to Brisbane and Sydney). Approximately 70,810 heavy vehicle movements occur along the Landsborough Highway in the RAPAD region annually – a 194 daily movements on average.

De-carbonising road transportation could reduce Australia's Greenhouse Gas Emissions by 20% and is essential in reaching net zero emissions.

GREEN FREIGHT CORRIDOR

Upgrading the region's recycled water treatment plants could enable production of up to 92,393 tonnes of green hydrogen annually, delivering a green transport corridor.

Benefits:

$90 M
increase in GRP
($24 M directly)

379
additional FTEs
(93 FTE directly)

$16.7 M
in additional tax revenue
($3.9 M for QLD Gov)


Darwin
Gulf of Carpentaria
Cairns
Townsville
Mackay
Coral Sea
Northern Territory
Winton
Queensland
Longreach
Barcaldine
Rockhampton
Alice Springs
Blackall
AUSTRALIA
Toowoomba
Brisbane
Gold Coast
Melbourne
Sydney
South Australia

CRITICAL MINERAL MINING

The RAPAD region has multiple potential critical mineral resource deposits. Major mining companies Rio Tinto, Sandfire and Anglo American have exploration permits in the far west for new copper deposits.

NET ZERO TRANSITION

Developing new copper mines in the far west is essential to realising the opportunity to de-carbonise the economy:

Benefits:

$252 M
increase in GRP
($150 M directly)

443
additional FTEs
(109 FTE directly)

$28 M
in additional tax revenue
($12 M for QLD Gov)

Benefit calculated assuming two new mines are developed

NORTH WEST
MINERAL PROVINCE

TOWNSVILLE

MACKAY

ROCKHAMPTON

Mount Isa

Cloncurry

Hugenden

Dajarra

Winton

Muttaburra

Aramac

Longreach

Illfracombe

Barcaldine

Alpha

Emerald

Isisford

Blackall

Tambo

Boilua

Bedourie

Windorah

Birdsville

BOULIA SHIRE

WINTON SHIRE

BARCALDINE SHIRE

LONGREACH SHIRE

DIAMANTINA SHIRE

BARCOO SHIRE

BLACKALL TAMBO SHIRE

GEORGINA RIVER

JESSAMINE CREEK

BURDEKIN RIVER

SUTOR RIVER

DIAMANTINA RIVER

THOMPSON RIVER

BARCOO RIVER

Mine Exploration

Rivers

Roads

3 REGIONAL WATER STRATEGY

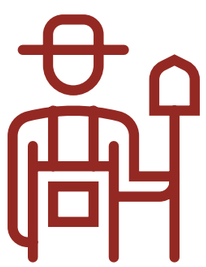
THE REGIONAL WATER STRATEGY SEEKS TO:

- ☑ Ensure current water resources are utilised to their maximum potential
- ☑ Secure additional water to support new opportunities
- ☑ Lock in funding for water infrastructure

RAPAD's primary role is to advocate for the maximum sustainable development of available water resources to enable long-term economic development and diversification in Central West Queensland.

MAXIMIZING USE OF CURRENT RESOURCES

To make best use of the region's water resources, the following needs to occur:



LANDHOLDER SUPPORT

CURRENT SITUATION

Most landholders are not aware of the opportunities that exist for water-based development.

ACTION REQUIRED

Landholders need to be supported to identify place-based opportunities and understand the benefits of pursuing them.

WATER TRADING

CURRENT SITUATION

Water trading rules are poorly understood, leading to scarce water resources not being properly valued or used.

ACTION REQUIRED

Water trading rules need to be simplified and water users need to be better informed of their options.

UNALLOCATED WATER

CURRENT SITUATION

There are large volumes of water currently being held in "reserve" which aren't being used productively.

ACTION REQUIRED

Unallocated water needs to be released to support development opportunities.

"Considering the complexities of the different layers of regulations, we've never dared to dream about the development opportunity on our land"

Local grazier in the Winton Shire

SECURING ADDITIONAL WATER FOR DEVELOPMENT

Water resources in the Far Central West are more restrictive than other catchments in Queensland.

0.3% of water in the Gerogina, Diamantina and Cooper catchments can be productively used

Vs

20%+ Average in resource use in developed catchments

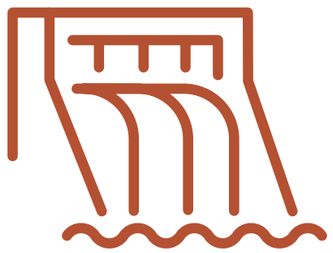
- ☑ To realise the region's development potential, considerably more water than is currently available is required.
- ☑ When water plans are updated, they need to expand the volumes of water available for productive use.

TIMELINE FOR WATER PLAN REVIEW:

- BURDEKIN WATER PLAN – **UNDER REVIEW**
- GEORGINA AND DIAMANTINA PLAN – **DUE 2024**
- GREAT ARTESIAN BASIN PLAN – **DUE 2027**
- COOPER CREEK PLAN – **DUE 2031** ← **EARLY REVIEW REQUIRED**

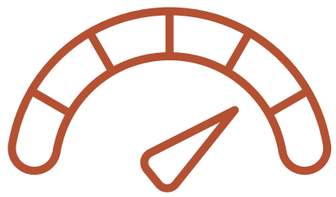
INFRASTRUCUTRE FOR WATER SECURITY

To improve the reliability of water resources, the following infrastructure is needed:



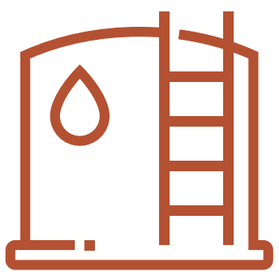
THOMSON RIVER WEIRS

Longreach is the only community in the Central West that is unable to draw upon groundwater for town water supply. Additional in-stream water storage is essential for Longreach's future development. Investing in raising the weirs in Longreach by 1 m will increase storage volume by 28%.



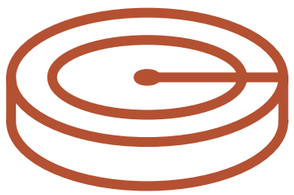
WATER FLOW MONITORING

Quality decision-making requires quality data. However, there is limited water flow monitoring points in many areas of the Central West. Investing in water flow monitoring will provide confidence in water resource availability and enable better environmental protection.



OFF-STREAM STORAGE

Water flows in the Central West follow a boom and bust cycle. In order to sustainably develop, landholders need tailored advice on how to build off-stream storages and how to appropriately harvest water in peak flows.



RECYCLED SEWERAGE FOR HYDROGEN

If the region is to achieve net-zero emissions, it will require local production of green hydrogen for heavy vehicle transport. Producing green hydrogen requires the use of non-potable water, which can be supplied through upgrades to local sewerage treatment plants.

For more information, contact:

Remote Area Planning and Development Board (RAPAD)
Phone: 07 4652 5660
Email: rapad@rapad.com.au
Mail: PO Box 592Longreach QueenslandAustralia 4730

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