

Department of Regional Development, Manufacturing and Water

# Georgina and Diamantina water plan review

Statement of proposals

May 2024

rdmw.qld.gov.au

#### Acknowledgement of Country

The Department of Regional Development, Manufacturing and Water respectfully acknowledges the Traditional Custodians of Country. We recognise the ongoing spiritual and cultural connection Aboriginal peoples and Torres Strait Islander peoples have with land, water, sea and sky. We pay our deep respects to their Elders past and present, support future leaders, and acknowledge First Nations peoples' right to self-determination.

This publication has been compiled by Water Resource Management, Department of Regional Development, Manufacturing and Water.

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# Introduction

The Georgina and Diamantina water plan has reached its maximum life of 20 years and is due to expire on 5 August 2024. To continue sustainable management of water resources in the plan area, we need to review it and make a new one.

To give enough time for the water plan review the Minister for Water is considering extending the expiry of the current plan for three years.

#### Important information about the area

The <u>Georgina and Diamantina water plan area</u> in central far west Queensland forms part of the Queensland section of the **Lake Eyre Basin** (the Basin).

The water plan works with the <u>Lake Eyre Basin Intergovernmental Agreement 2001</u>. This agreement recognises the ecological, pastoral, tourism and cultural significance of the Basin, which extends into Queensland, South Australia, New South Wales and the Northern Territory.

The water infrastructure in the area is minimal. There are no major water storages within the Georgina and Diamantina water plan area. There are only five water licences. Streams basically flow naturally. Water is mostly used for livestock grazing, town water supply and domestic purposes.

Part of the water plan area is in the <u>Northwest Minerals Province</u>, known for its production of copper, cobalt and vanadium. There is potential for further expansion of mining these and other rare earth minerals. The demands for water may therefore increase in the future to support this.

We need to find ways to best meet future demands for water, and make sure existing water users, cultural values and environmental water needs are met. To do this, we are reviewing and replacing the Georgina and Diamantina water plan and would like to hear what you think.

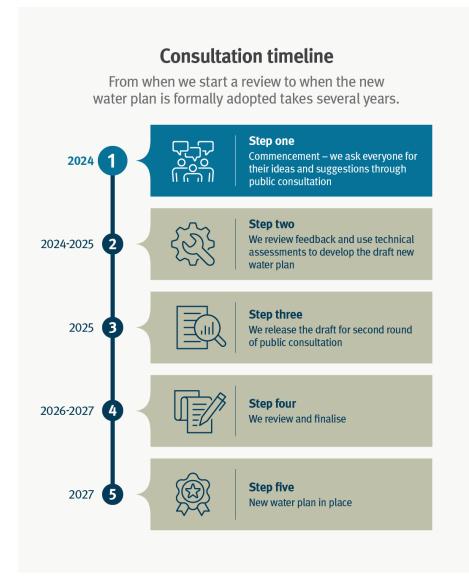
## How to give your feedback

We want your feedback on the key topics detailed in this document. Let us know what other things you think we should consider as we review and replace the water plan.

After reading through the information in this document, we welcome you to have your say by sending a written submission to us by **16 August 2024.** Follow the 'Have your say' instructions at the end of this document.

We will be meeting directly with the community throughout the review process. If you would like to express interest in being part of the Georgina and Diamantina water plan working group to help shape the new water plan, please let us know when you provide your submission.

The scope of this review is limited to the management and allocation of water. Any issues or comments relating to the assessment or approval of infrastructure proposals should be referred to the Office of the Coordinator-General.



# About the water plan

This plan meets the water needs of several urban and regional centres including Birdsville, Camooweal, Dajarra, Duchess and Urandangi. Town water supply is primarily sourced from groundwater bores, some of which are free-flowing artesian bores managed under the <u>Great Artesian</u> <u>Basin and Other Regional Aquifers (GABORA) Water Plan 2017</u>.

Right now, the main uses for water in the water plan area are agriculture (stock grazing), mining and town water supply. Other water uses in the region include those for social, economic or cultural values.

The plan needs to cater for water-related cultural values of First Nations peoples in the water plan area and helps them achieve their social and spiritual aspirations.

It makes sure any development of new water infrastructure is done in an ecologically sustainable way. This protects the important environmental processes, ecological needs (for plants and animals) and heritage values that exist in the area.

Part of the plan area is in the <u>North West Minerals Province</u> known for its production of copper, cobalt and vanadium. There is potential for further expansion of mining these and other rare earth minerals.

# How we manage water – watercourses, overland flow and groundwater

As part of the review, we have a chance to reconsider how we manage water in the area. The Georgina and Diamantina water plan sets the rules for allocation and use of:

- surface water in watercourses (rivers, streams, creeks etc), lakes and springs
- overland flow water
- groundwater.

A total of 6,108ML of this water is allocated through five entitlements (water licences).

#### Water in watercourses, lakes and springs

Most entitlement holders in the Georgina and Diamantina take their water directly from the watercourses. This is called **unsupplemented** water use.

There are no major water storages (dams) that supply **supplemented** water for urban use, agriculture or mining activities in the water plan area.

People do not need a water entitlement to access water when:

- their land parcel is next to or intersected by a watercourse (these are called riparian landholders)
- they are using the water for domestic or stock purposes.

This type of water access is authorised in Queensland under the Water Act 2000 (the Act).

All water taken for purposes other than stock or domestic within the Georgina and Diamantina region must be measured. This means that these water entitlement holders must have a <u>valid water meter to</u> <u>measure their water usage</u>.

As we review the water plan, we can consider limiting the taking of water for stock or domestic uses in **non-riparian** areas (land parcels that do not border or intersect with a watercourse). This may be needed to protect other water uses or to achieve certain outcomes of the water plan.

Do you think we should change the rules for taking water for stock or domestic purposes and/or limit the taking of this water?

## Overland flow

<u>Overland flow</u> is water that runs across the land after rainfall, either before it enters a watercourse, after it leaves a watercourse as floodwater, or after it rises to the surface naturally from underground.

The Georgina and Diamantina water plan allows for the taking overland flow water without a water entitlement, if the water is being taken:

- for stock or domestic use
- to satisfy the requirements of an authority under the *Environmental Protection Act* 1994, for example, to manage contaminated agricultural runoff.

Taking overland flow water for other purposes would require a water entitlement in the form of a water licence.

Overland flow water is taken using 'works' such as pumps, dams and/or tanks.

The current water plan started in 2004. If you had existing works to take overland flow already in place then, you can continue to take water provided the department has been notified (<u>using this form (PDF, 332.0KB</u>)) of these works.

Submit a <u>works notification</u> to us if you already have overland flow works and the water is not used for stock or domestic purposes, if you have not already notified the department about these works.

This excludes works that allow taking overland flow water only for stock or domestic purposes.

If you're building a storage to capture overland flow water, you will need to check if the works are <u>assessable or accepted development</u>. You should contact your <u>local office</u> for more information.

As part of this review, we will conduct a scientific assessment to identify overland flow storages across the water plan area.

Do you think we should change the rules for taking overland flow water?



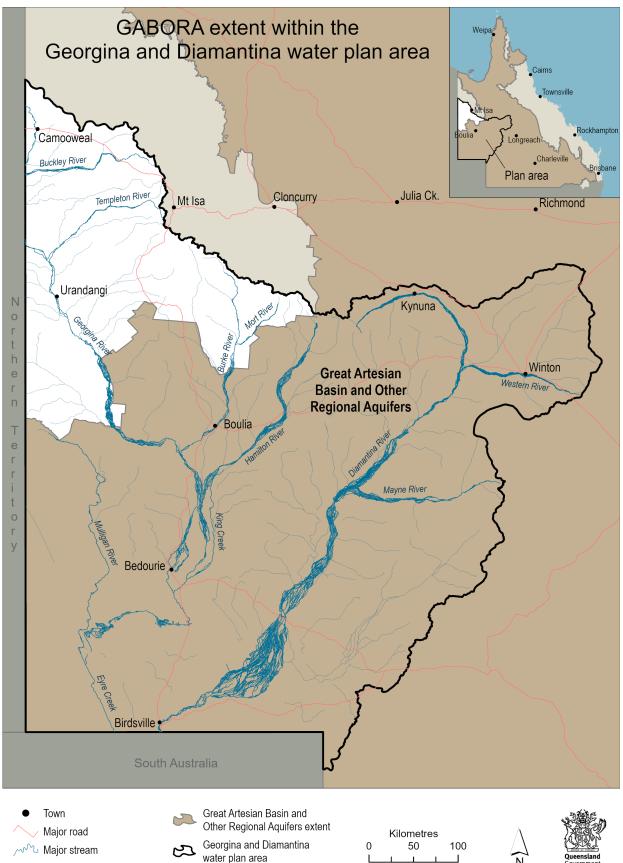
#### Groundwater

Groundwater or underground water is the water beneath the earth's surface that occurs in pore spaces and fractures of rock formations called aquifers. In the Georgina and Diamantina it is managed in three ways:

- the water plan manages underground water in aquifers that connect with surface water
- the <u>Water Regulation 2016</u> manages underground water in aquifers located within the two declared areas-the Greater Western and the Upper Georgina underground water areas-that are not part of the Great Artesian Basin (GAB)
- underground water in GAB aquifers is managed under the <u>Water Plan (Great Artesian Basin</u> and Other Regional Aquifers) 2017. GAB aquifers are under the Georgina and Diamantina aquifers in most parts of the water plan area, except for the upper Georgina River catchment.

In the following map, you can see that the GAB (indicated in the darker shade) lies under most of the Georgina and Diamantina catchment area.

Figure 2: Map showing the overlap between the Georgina and Diamantina, and the Great Artesian Basin and Other Regional Aquifers water plan areas



Find out more about the full extent of Queensland's portion of the GAB.

In some parts of the Georgina and Diamantina, groundwater connects with surface water. Because these water resources are so closely interconnected, we manage them in the same way.

This means that if you take water from an aquifer that is connected to surface water, you must have a licence. This rule does not apply for water used for stock or domestic purposes.

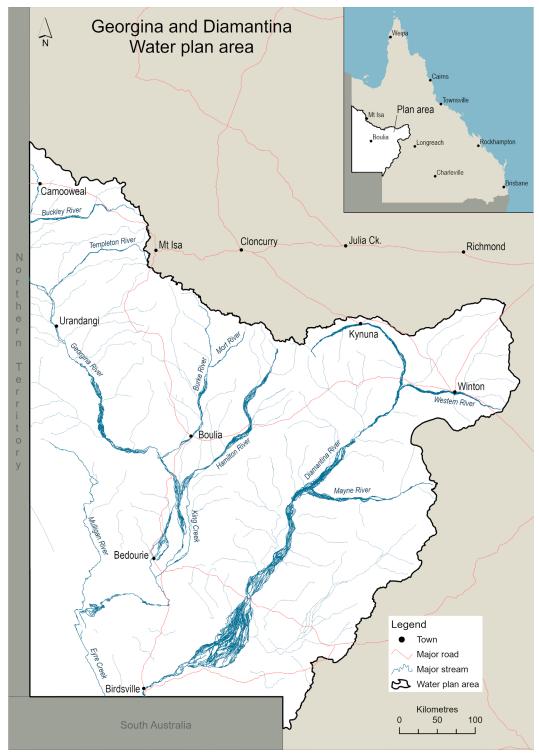
We will do scientific assessments to give us more information about groundwater hydrology in the plan area. We will use this information to better manage groundwater resources.

Do you think we should change the arrangements for managing groundwater in the Georgina and Diamantina?

#### The water plan area

The Georgina and Diamantina water plan area covers approximately 266,000 km<sup>2</sup> in the central far west Queensland and includes the catchments of the Georgina, Diamantina and Hay rivers.

The water plan borders the <u>Cooper Creek</u> and <u>Gulf</u> water plan areas.



Explore the Georgina and Diamantina and its surrounding water plan areas via the <u>Queensland Globe</u> <u>water plan map</u> (use Google Chrome for best results).

We don't intend to expand the water plan area or amalgamate this water plan with any other water plan areas.

Do you think we should change the boundaries of the plan area?

# Updating the science

Since the water plan was made in 2004, significant new scientific information has been collected on the water requirements of ecosystems. The ability to monitor stream flows and groundwater levels has also improved.

New knowledge comes from:

- ecological assessments
- social and economic assessments
- engagement with First Nations peoples
- climate change assessments.

This new information will be used to update the water plan.

Our areas of focus for water planning science are arranged across eight themes which are all influenced by climate change and uncertainty. This is detailed in our <u>Water planning science plan</u> and our <u>storymap</u>.

#### Figure 4: Our water planning science themes



Do you have any suggestions for updating the science that's involved in this water plan?

# Climate change

There has been changes in rainfall and climate since the current plan was established in 2004. We will be reviewing the Georgina and Diamantina hydrology (the scientific study of how water moves, is distributed and is managed) to determine how water availability has changed since then.

We will undertake technical assessment to evaluate possible future impacts of climate change to water availability in the region.

Read in detail how we manage climate change risks.

Queensland's water plans in a variable and changing climate identifies climate impacts across each of the water plan areas. For example, on pages 50 and 51 there's a snapshot of observed and projected climate trends for the Georgina and Diamantina water plan area. This snapshot includes two scenarios – high greenhouse gas emissions (RCP8.5) and lower greenhouse gas emissions (RCP4.5) – for the years 2030 and 2050. They indicate:

- average daily temperatures are projected to increase between 1 and 2 degrees centigrade
- average annual rainfall is projected to increase up to 3 per cent for the high emissions scenario
- average annual rainfall is projected to increase in 2030 by 4 per cent and in 2050 by 1 per cent for the lower emissions scenario
- average annual potential evapotranspiration (PET) is projected to increase between 6 and 15 per cent.

Figure 5: A snapshot of projected climate changes for the Georgina and Diamantina water plan area. Source: pages 50 and 51 of <u>Queensland's water plans in a variable and changing climate</u>.



What rainfall and climate-related impacts have you been experiencing? For example, you may have experienced increased water use, evaporation losses or drying waterholes.

# First Nations and water

First Nations peoples have a significant and deep connection to land and waters. With this comes a wealth of cultural knowledge that can be used to better protect and manage natural resources. Therefore, it is vital that cultural knowledge, as well as cultural, environmental, and economic values

and aspirations of Aboriginal peoples and Torres Strait Islander peoples are incorporated into water plans.

The current water plan includes outcomes for supporting water-related cultural values and to support the economic and social aspirations of First Nations peoples. However, the <u>latest Minister's</u> <u>performance assessment report</u> highlighted that we need to do more work to better understand the local cultural values that relate to water in the Georgina and Diamantina so we can cater for them.

During the water plan review, we will be engaging with First Nations peoples to ensure we have a better understanding of cultural water needs, social and economic aspirations. This will result in dedicated cultural outcomes in the new water plan and inform the settings for future Indigenous unallocated water reserves.



## Improving outcomes

The current water plan includes goals that we've set strategies to achieve. In a water plan, we call these goals 'outcomes'.

For example, one of the outcomes is to make water available to sustain current levels of, and to support growth in, economic activity in the water plan area while recognising the social and cultural values of communities in the basins. A strategy (or way) to achieve this outcome is to consider how much water can be allocated to the individual users from unallocated water reserves established under the plan while protecting the existing users including the environment.

Across Queensland there are 23 water plans with multiple outcomes. We will review how effective the current Georgina and Diamantina water plan is at meeting its outcomes and work to standardise similar outcomes across all plans where that's possible. That will make all water plans easier to understand and implement.

The Georgina and Diamantina water plan currently does not include any stand-alone social, economic, environmental or cultural outcomes. We will be working closely with all key stakeholders to develop these outcomes. This will involve engaging with local First Nations representatives to identify cultural values and address these by including specific cultural outcomes in the water plan.

What suggestions do you have for improving the outcomes currently in the water plan or adding additional outcomes for consideration?

# Identifying unallocated water

<u>Unallocated water</u> is our term for water that is in the system and available for future needs. That means it can be released (or allocated) to future projects without affecting water available for current water users, cultural values or the environment.

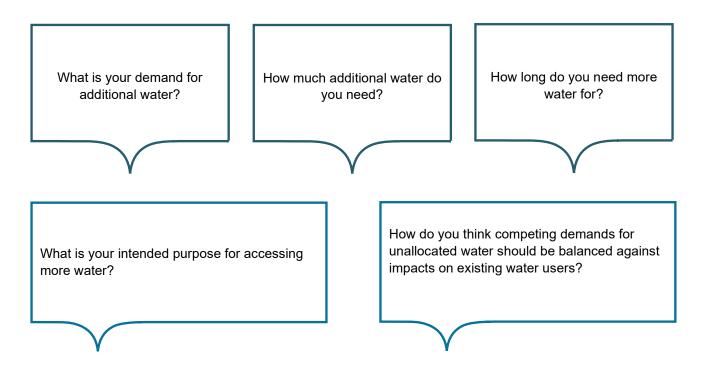
Right now, the Georgina and Diamantina water plan includes 13,500ML of unallocated water. Of this, 12,000ML could be released for any purpose and 1,500ML could only be released for projects of state significance. None of this has been released.

Additional water for town water supply may be provided through the plan review.

Demand for water from the critical minerals industry, agriculture industry, urban needs and First Nations peoples may increase in the future.

Water trading is not available in this water plan area. Accessing unallocated water reserves is the only option to meet some of the demand for additional water.

During this review, we will assess the demand for additional water supplies and consider the volumes and arrangements for unallocated water.



# Growing water needs

The Minister's performance assessment report identified changing needs that must be addressed.

We need to review how sharing water is balanced between all water interests, including the environment, cultural and downstream users.

We need to balance growing demand for water to use in urban development, agriculture, cultural activities and in the critical minerals industries with the known impacts of those industries and all the other identified interests and values. The whole of the water plan area must be considered as a system.

The water plan review will use technical assessments to consider:

• existing water entitlement holders

- cultural values
- the environment
- consistency with the Lake Eyre Basin Agreement Act 2001.

We want to understand your views on how we should prioritise competing demands for water and how we can cater for the growing demands without impacting existing water uses and values.

How should the water plan prioritise competing demands for water?

How should the water plan cater for the growing demand for water without impacting on existing values and users?

# Have your say

Our first round of public consultation is open.

Everyone interested in water management in the Georgina and Diamantina is welcome to provide a written submission by **16 August 2024**.

Your submission can include anything you would like us to consider as part of the water plan review. This could be issues you have with the current water plan or the reasons we're replacing the water plan.

Include as much detail as possible.

You can include your contact details if your are happy for us to contact you to talk about your submission.

If you are interested in being part of the Georgina and Diamantina water plan working group to help shape the new water plan, please let us know when you provide your submission.

#### To make a submission, please use the option that suits you:

Fill out the submission form online or on paper

Email NorthWPS@rdmw.qld.gov.au

Phone 1800 822 100

Post a written submission to:

Department of Regional Development, Manufacturing and Water Attn: Water Planning and Science, North Region, PO Box 304, Longreach Qld 4730



# Attachment 1: Submission form Georgina and Diamantina water plan review

Your contact details	
Surname	
First name(s)	
Address	
Postal address (if different)	
Organisation	
Position	
Telephone	Mobile
Email	
Signature(s)	Date
Which interest group do you primarily represent? (You may select more than one)	

□ Irrigator(surface water)	Riparian landholder	□ Research/academic
<ul> <li>Irrigator (groundwater)</li> </ul>	Horticultural interests	Tourism industry
Dryland farmer	□ Local government	Commercial fisher
□ Grazier	<ul> <li>Stock and domestic water user</li> </ul>	Recreational fisher
□ Mining industry	Environmental interests	□ Small business
□ Water service provider	Commerce/development	NRM Board/Catchment
□ Aboriginal peoples	<ul> <li>Torres Strait Islander peoples</li> </ul>	
□ Community group (please specify)		

□ Industry group (please specify)

 $\Box$  Other (please specify)



In which part of the water plan area are you located? (select all relevant options)			
	Diamantina River		Georgina River
	Other (please specify)		
Wha	at type of water access do you have? (select all re	elevar	it options)
	Water licence to take surface water		Water supply agreement
	Groundwater		Water harvesting
	Overland flow		
	Other (please specify)		
Would you like to express interest in being part of the water plan working group to help shape the new water plan? If yes, please ensure you've provided your contact details above			
	Yes		No
The scope of this review is limited to the management and allocation of water. Any issues or comments relating to the assessment or approval of infrastructure proposals should be referred to the Office of the Coordinator-General. Visit: <a href="http://www.statedevelopment.qld.gov.au/coordinator-general">www.statedevelopment.qld.gov.au/coordinator-general</a>			

We are collecting this personal information from you, including information about your name and address for use in the Georgina and Diamantina water plan review. The *Water Act 2000* authorises us to collect this personal information. We will only use your information for this purpose. It will otherwise not be used or disclosed unless authorised or required by law. Your personal information will be handled in accordance with the *Information Privacy Act 2009*. Read about our privacy policy.



## How we manage water in the plan area

Should we change arrangements for managing overland flow water?	
	□ No
If yes, please provide any additional details.	
Should we change the arrangements for managing g	groundwater?
	□ No
If yes, please provide any additional details.	
The water plan area	
Should we change the boundaries of the water plan	area?

	□ No
If yes, please explain how.	



## Climate change

What impacts have you experienced?		
For example, you may have come across some of these issues:	If you can, give us examples of how you have mitigated climate change impacts.	
□ increased water use		
increased evaporation losses from water storages and water courses		
waterholes drying up or holding water for less time		
□ Other (please specify)		



## First Nations peoples and water

How is water significant to your culture and cultural practices?

What do you see happening on your Country that is impacting on your cultural and social practices?

How would you address these issues?

Can you give specific examples of economic opportunities for First Nations peoples that could be provided through access to water?



#### Improving outcomes

What suggestions do you have for improving the current outcomes of the water plan?

What other outcomes should we consider in the review of the water plan?

#### Identifying unallocated water

What is your demand for additional water?	
How much additional water do you need?	
Where do you need water from?	
How long do you need more water for?	
What is your intended purpose for accessing more water?	

How do you think competing demands for unallocated water should be balanced against impacts on existing water users?



#### **Growing water needs**

How should the water plan prioritise competing demands for water?

How should the water plan cater for the growing demand for water without impacting on existing values and users?

#### More detailed submission

You are welcome to provide more details.

Please select this box and attach a detailed submission if more space is required.

 Please provide your submission by 16 August 2024

 Email:
 NorthWPS@rdmw.qld.gov.au

 Post:
 Department of Regional Development, Manufacturing and Water Attn: Water Planning and Science, North Region PO Box 304

#### For more information:

Longreach QLD 4730.

**Website:** Scan the QR code or go to www.rdmw.qld.gov.au and search 'Georgina and Diamantina water plan review' **Phone:** 1800 822 100.

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