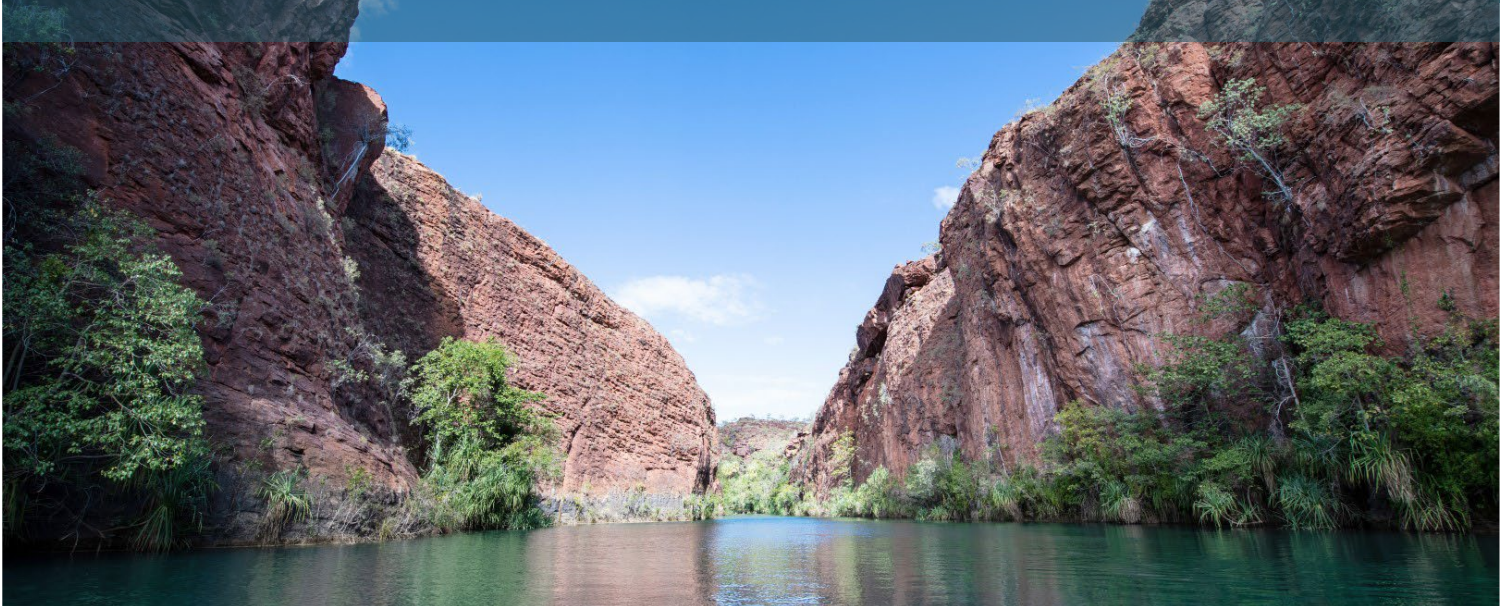




Queensland
Government

Department of Regional Development,
Manufacturing and Water



Gulf water plan review

Statement of proposals

March 2024

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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Gulf water plan review

Introduction

The [Gulf water plan area](#) in North West Queensland is a region of major industry growth with increasing demands for water to support new irrigated agriculture and need to access [critical minerals](#) (such as copper, vanadium and tungsten). Each year, almost 25,000 gigalitres of water from the area flows into the Gulf of Carpentaria to support economic and environmentally significant fisheries.

We need to find ways to best meet the growing demands for water, while making sure existing water users, cultural values and environmental water needs remain supported. This was highlighted in the latest [Minister's performance assessment report](#) for the water plan.

To do this, we are reviewing and replacing the [Water Plan \(Gulf\) 2007](#) (the water plan) and we would like to hear what you think.

For more background on this review process and water planning in Queensland, visit www.business.qld.gov.au and search for 'developing water plans'.

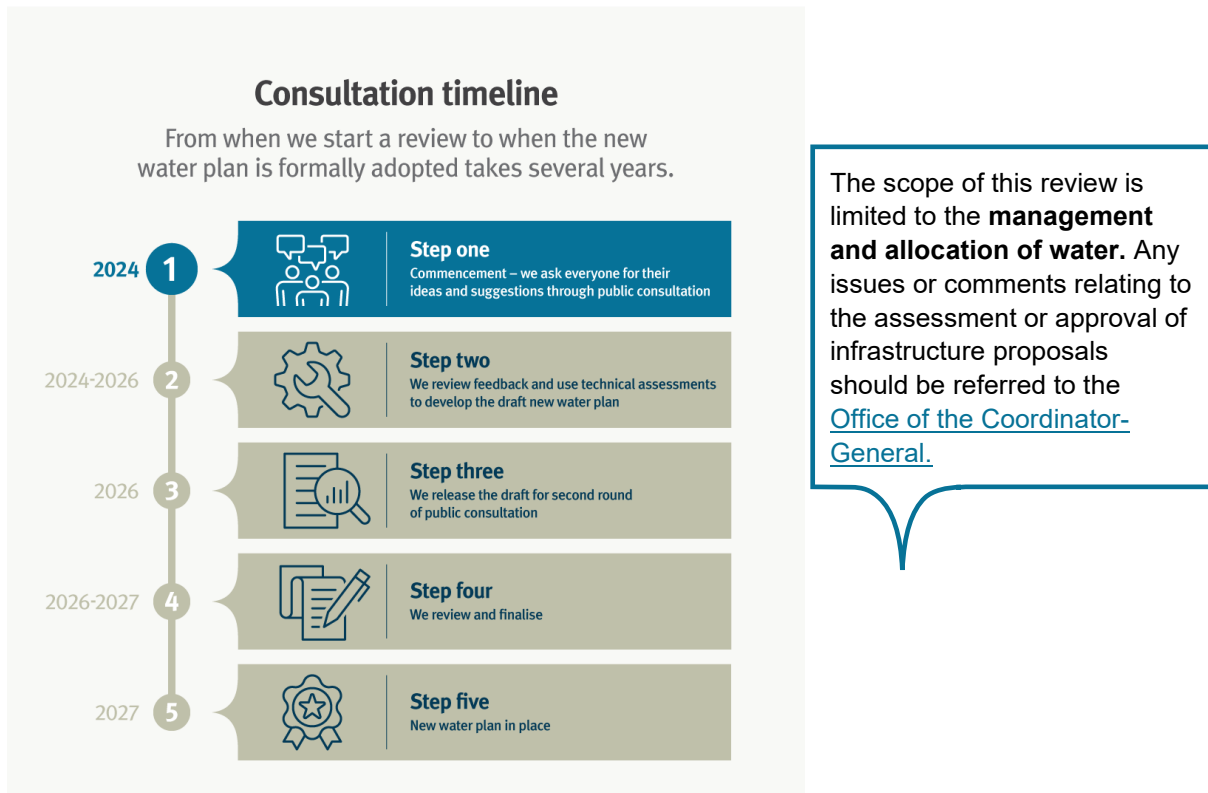
How to give your feedback

We want your feedback on the key issues 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 **17 July 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 Gulf water plan working group to help shape the new water plan, please let us know when you provide your submission.

Figure 1: The Gulf water plan review timeline.



About the Gulf water plan

The Gulf water plan supports the water needs of several urban and regional centres including Mount Isa, Georgetown, Richmond, Croydon, Hughenden, Burketown, Normanton, Karumba, Julia Creek and Cloncurry.

Right now, the main uses for water in the water plan area are the small-scale irrigation industry, mining activity in the Mount Isa area and urban use. Other water uses with a social, economic, or cultural value include recreational and commercial fisheries in the Gulf of Carpentaria and a growing tourism industry.

The Gulf water plan aims to support water-related cultural values of First Nations peoples in the plan area and to help them achieve their social and economic aspirations.

The water plan ensures 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.

The Gulf water plan area is a major part of the [North West Minerals Province](#). It's known for the production of copper, cobalt and vanadium. There's potential for further expansion of mining cobalt, copper, graphite, vanadium and other rare earth minerals.

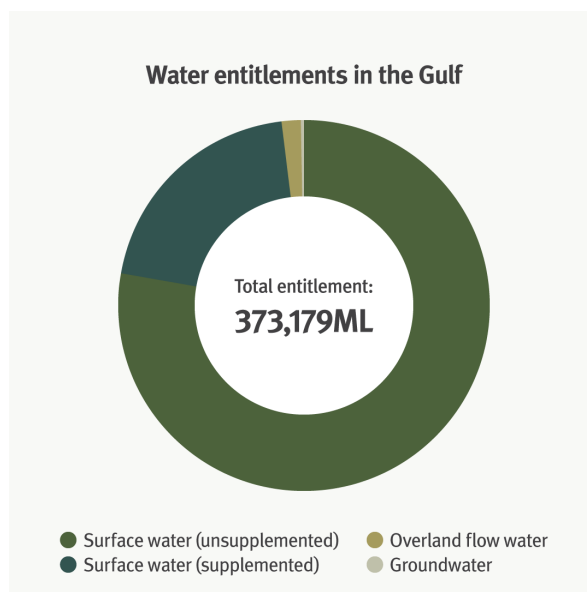
How we manage water in the Gulf – watercourses, overland flow and groundwater

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

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

A total of 373,179ML of this water is currently allocated through entitlements.

Figure 2: Water entitlements in the Gulf



Water in watercourses, lakes and springs

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

In this region, the highest amount of unsupplemented surface water entitlements come from the Flinders River water management area. This is followed by the Lower Leichhardt River subcatchment and the Gilbert River water management area (see map of the Gulf catchments and subcatchments).

Figure 3: Gulf catchments and subcatchments

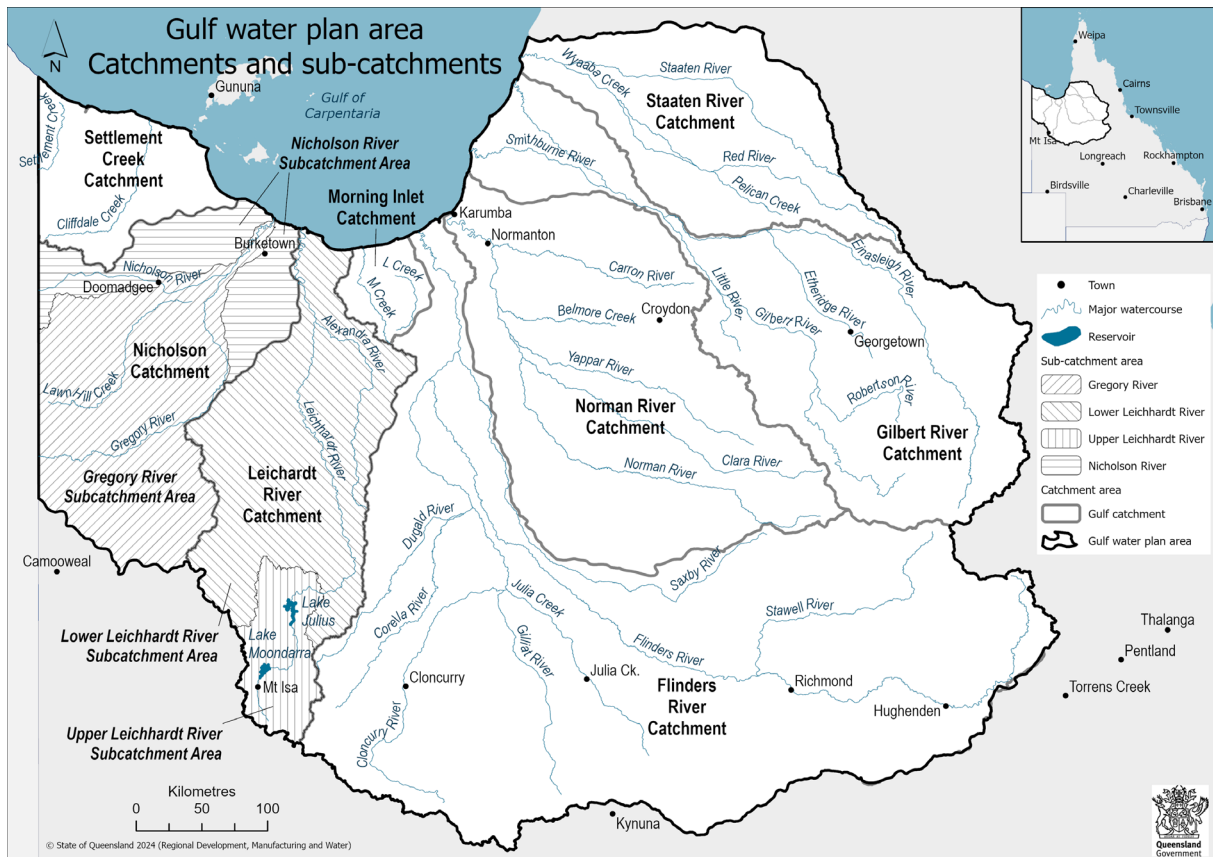
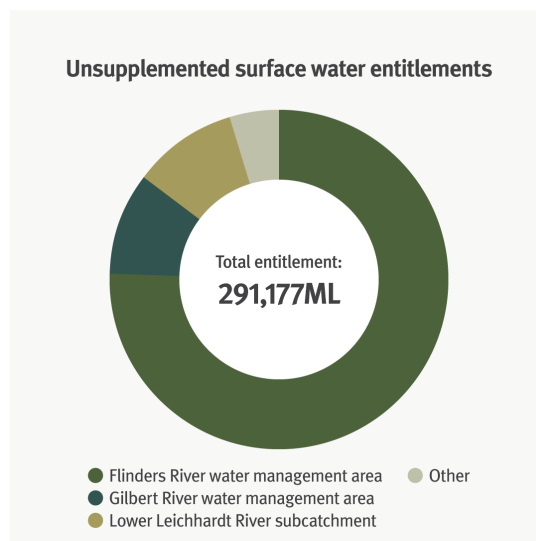


Figure 4: Unsupplemented surface water entitlements in the Gulf

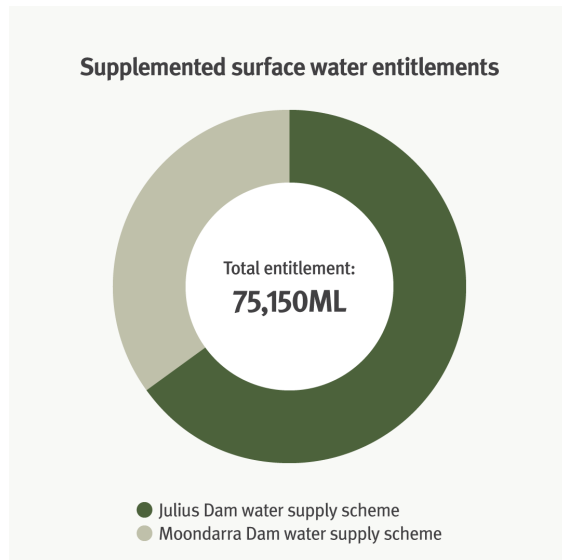


Unsupplemented water licences within the Gilbert River and Flinders River catchment areas are regulated as **metered entitlement areas**. This means that entitlement holders in these areas must have a valid water meter to measure their water take.

There are two major dams—Moondarra Dam and Julius Dam—that supply supplemented water for urban use and mining activity. These dams are a part of two water supply schemes:

- the Moondarra Dam Water Supply Scheme managed by the Mt Isa Water Board
- the Julius Dam Water Supply Scheme owned and operated by Sunwater.

Figure 5: Supplemented water in the Gulf



Overland flow

[Overland flow](#) 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 Gulf water plan regulates the taking of overland flow water by limiting the volume capacity of any new storage, such as a dam or water tank (called 'new works' in the water plan).

If you're building storage to capture this water, these rules don't apply if:

- it is for stock or domestic use
- it is, under 250ML (any purpose)
- it is to satisfy the requirements of an authority under the *Environmental Protection Act 1994*.

Submit a [works notification](#) to us if you already have overland flow works that can hold more than 250 megalitres and the water's not used for stock or domestic purposes.

Do you think we should change the overland flow limit? If so, please provide details of your thoughts.

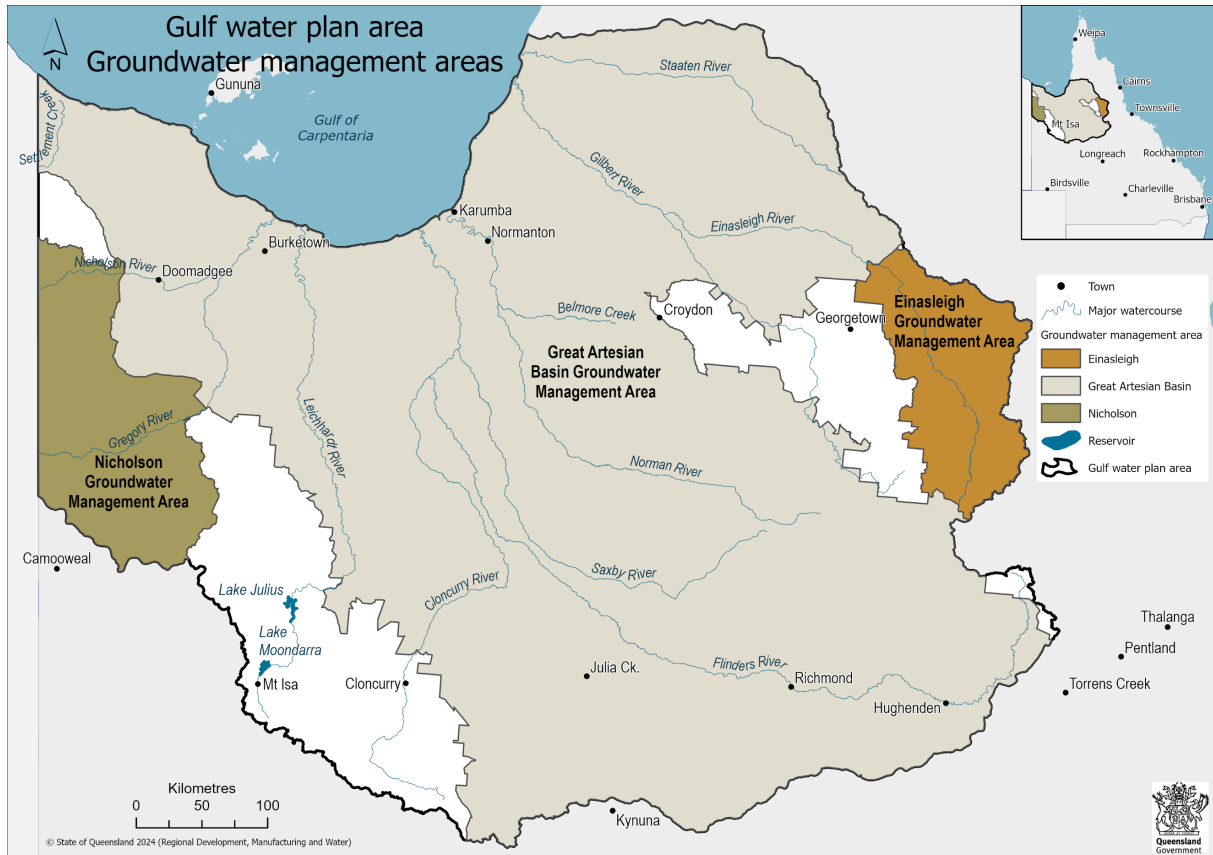
Groundwater

In some parts of the Gulf, groundwater is closely connected to surface water. Because they're so closely interconnected, we manage them in the same way.

This means that any water user drawing from an aquifer that is under or within 1km of a declared watercourse will require a water licence to take water. This rule does not apply for water used for stock or domestic purposes.

We will be conducting scientific assessments to give us more information about groundwater hydrology in the Gulf. We will use this information as we consider any ways to better manage groundwater resources.

Figure 6: Groundwater management areas in the Gulf



Do you think we should change the arrangements for managing groundwater in the Gulf? If so, please provide details of your thoughts on this.

The water plan area

The Gulf water plan area covers 317,048 km² in far North-West Queensland and includes the catchment areas of the Flinders River, Gilbert River, Leichhardt River, Morning Inlet, Nicholson River, Norman River, Staaten River and Settlement Creek.

The water plan borders the Georgina and Diamantina, Cooper Creek, Burdekin Basin and Mitchell water plan areas.

Figure 7: Location of the Gulf water plan area



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

Updating the science

Since the water plan was made in 2007, 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.

We are developing a new hydrological model that will incorporate the additional stream flow data and other information derived from:

- ecological modelling and assessment
- social and economic assessment
- engagement with Aboriginal peoples and Torres Strait Islander peoples
- climate change assessment.

This new information will be used to update the water plan, including water allocation security objectives and environmental flow objectives to ensure sustainable water management.

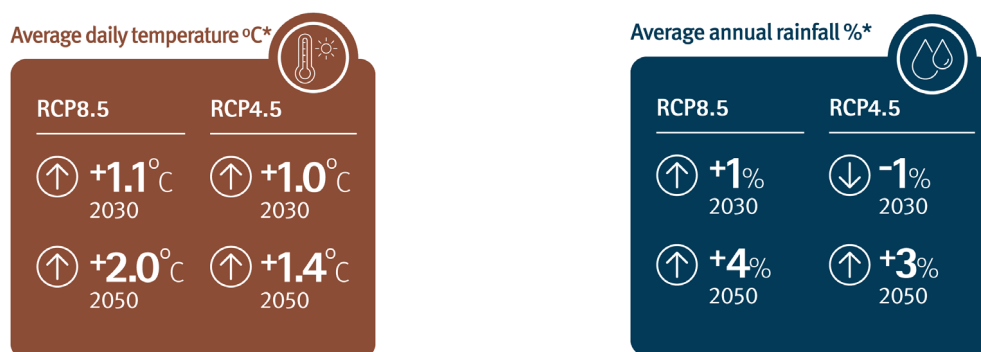
Climate change

There has been changes in rainfall and climate since the current plan was established in 2007. We will be reviewing the Gulf hydrology (the scientific study of how water moves, is distributed and is managed) to determine how water availability has changed since then.

We will use hydrological modelling and climate change projections to evaluate possible future impacts of climate change for the region. [Queensland's water plans in a variable and changing climate](#) provides further information on the climate impacts across each of the water plan areas.

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

Figure 8: A snapshot of climate change projections in the Gulf (source: Queensland's water plans in a variable and changing climate)



If you can, give us examples of how you have mitigated climate change impacts.

First Nations and water

Aboriginal peoples and Torres Strait Islander 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 latest [Minister's performance assessment report \(PDF, 1.6MB\)](#) highlighted that we need to do more work to better understand the local cultural values that relate to water in the Gulf 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.



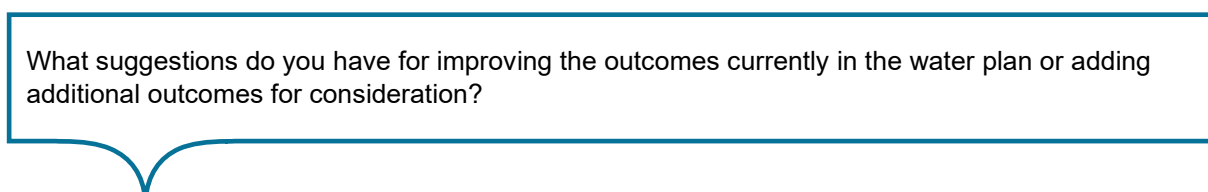
Improving outcomes

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

For example, one of the economic outcomes is to support tourism in the area, by protecting water flows needed in areas such as the Gulf of Carpentaria. A strategy to achieve this is to consider how much water flow is needed to maintain these areas when we allocate water entitlements.

Across Queensland there are 23 water plans with multiple outcomes. We will review how effective the Gulf water plan is at meeting the 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 Gulf water plan currently doesn't include any stand-alone cultural outcomes that reflect the local Aboriginal peoples and Torres Strait Islander peoples' values, aspirations and uses of water. We will be working closely with local First Nations representatives to identify cultural values and address these by including specific cultural outcomes in the water plan.



Identifying unallocated water

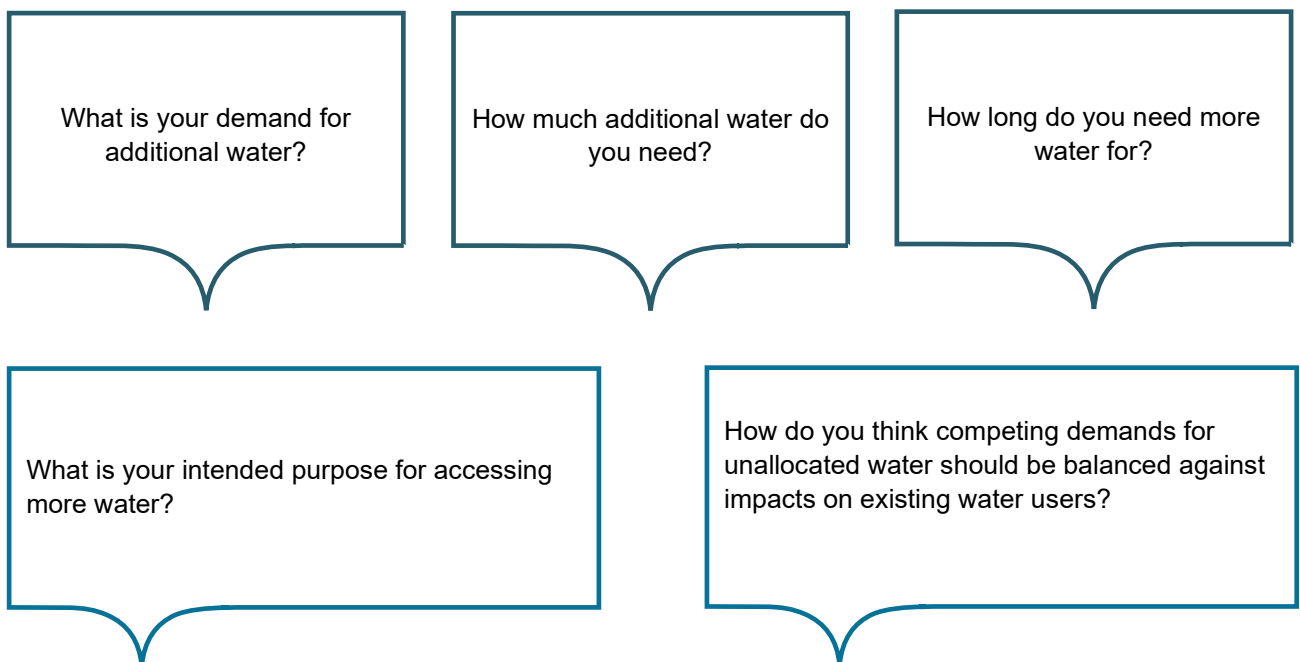
The Gulf water plan currently includes unallocated water reserves for [Indigenous, strategic](#) and [general](#) purposes. Specifying volumes of [unallocated water](#) means they can be released to meet future demand without affecting water available for current water users, cultural values or the environment.

The Gulf water plan was amended in 2015 to identify 755 gigalitres of unallocated water in the Flinders and Gilbert river catchments, and provide options to make this water available to support the expanding irrigation industry without compromising existing water users. Since these changes, 119,360ML of unallocated water has been granted as water entitlements.

Demand for water from the critical minerals industry, agriculture industry, urban needs and First Nations peoples is increasing. These needs are competing for water which is not increasing in availability.

Unallocated water reserves are one option to meet some of the demand for additional water, another is to purchase water from a person or entity who currently owns an entitlement.

During this review, we will be assessing the demand for additional water supplies and considering the volumes and arrangements for unallocated water to better support cultural outcomes and economic growth.



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 end-of-system fisheries in the Gulf.

We need to balance growing demand for water to use in urban development, new irrigated agriculture 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.

A [Regional Water Assessment \(RWA\)](#) will run in parallel with the water plan review to identify the most viable options (infrastructure or non-infrastructure) for supporting future economic growth and water security in the Gulf water plan area.

The water plan review will use scientific modelling of the cumulative impacts and risks from a range of different water availability scenarios. For example, one option that has been raised is providing the ability to harvest additional water from very large flow events. The review process will test these types of scenarios for impacts on:

- existing water entitlement holders
- cultural values
- the environment
- the Gulf of Carpentaria and the associated fishing industry.

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?

Water entitlements

The Queensland water legislation administers a range of water entitlements and authorisations which are important to consider in the review. These entitlements include water licences and water allocations.

Water licences

A water licence is an authority to take water and/or interfere with the flow of water (for example a weir interferes with a watercourse). A water licence is usually attached to a parcel of land and subject to an expiry.

Within the Flinders and Gilbert river water management areas an application may be made to transfer all or part of a water licence to take surface water or overland flow water. We call these relocatable water licences.

Water allocations

A water allocation authorises the holder to take a certain volume of water from a particular water source, such as a watercourse or aquifer. Allocations have a separate title, similar to a land title, and they can be bought and sold on the [water trading market](#). They can also be used as a mortgageable asset.

Water allocations provide long-term security because:

- they do not have an expiry date
- they specify a nominal volume of water that can be taken which is considered as the allocation's long-term water share.

Water allocations support additional businesses through water trading without compromising other water needs in the catchment.

We want to know how current water licences are working for water users in the Gulf. Do you think we should change more water licences to water allocations? This will work best if all water licences in a water management area are converted to water allocations.

Do you have concerns about what it might mean to change your water licence to a water allocation? If so, what are they?

How does your current water entitlement impact on your decision making around water trading?

Do you think greater transparency around trading of water allocations would be useful in the Gulf?

Water trading

[Water trading](#) allows:

- current water users to buy and sell water to suit their business
- new businesses to buy water.

In Queensland, water can be traded either permanently or temporarily on a seasonal basis (called a 'seasonal assignment'). Water trading in the Gulf can be done with:

- water licences that are attached to a parcel of land (also called a 'relocatable water licence')
- water allocations that are not attached to land.

Where water trading is allowed

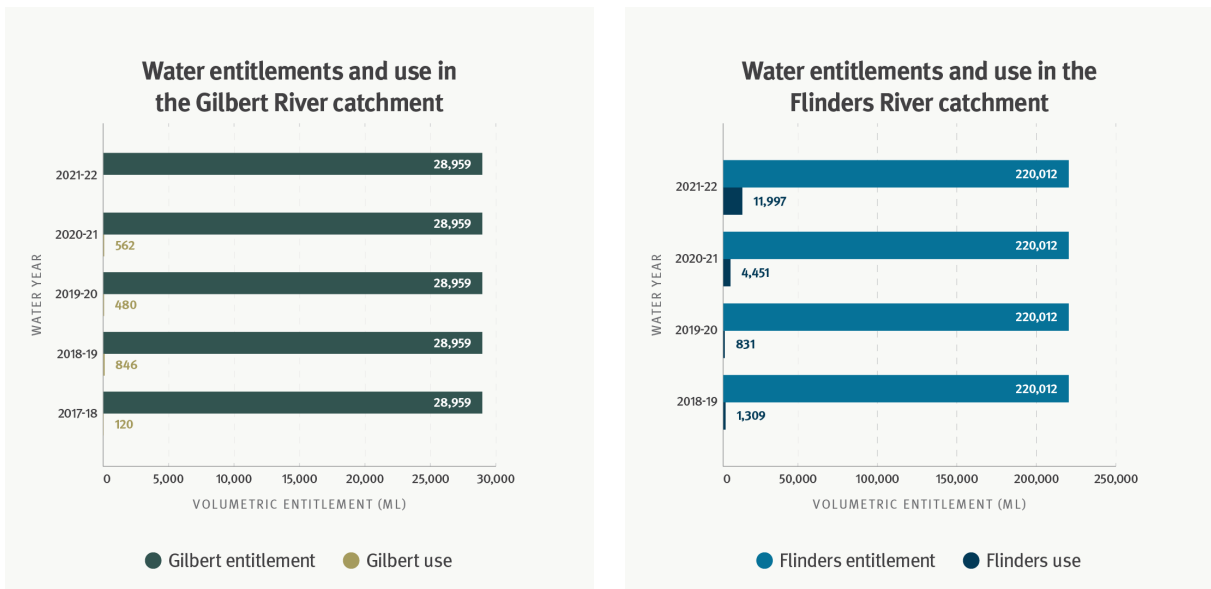
There are currently two water management areas within the water plan area where water trading is allowed—the Gilbert River and Flinders River water management areas.

Figure 9: Water trading zones in the Gulf



Most water users in the Gulf are not currently using their full water entitlements (see graphs). Despite this, water trading in the Gulf is low.

Figure 10: Water entitlement use in the Gilbert River and Flinders River catchments



Over the last five years, there were four permanent water licence trades in the Flinders and one seasonal assignment in the Gilbert catchment.

No water allocations have been traded (permanently nor temporarily) in the water plan area.

If we change or add new trading rules, we will need to assess whether the current gauging station network is sufficient to monitor water flows.

Why are there so few water trades in this market? Tell us what you think would improve how this market works and what would make it easier for you to trade.

What barriers have stopped you from trading water in the Flinders River or Gilbert River catchments?

What suggestions do you have for improving water trading in the Gulf?

Have your say

Our first round of public consultation is open.

Everyone interested in water management in the Gulf is welcome to provide a written submission by **17 July 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 you are happy for us to contact you to talk about your submission.

If you are interested in being part of the Gulf 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 this 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 156, Mareeba Qld 4880

Attachment 1 Submission form

Gulf water plan review

Title and surname

First name(s)

Address

Postal address (if different)

Organisation

Position

Telephone

Mobile

Facsimile

Email

Signature(s)

Date

Which interest group do you primarily represent? (You may tick more than one box)

- | | | |
|--|--|---|
| <input type="checkbox"/> Irrigator (surface water) | <input type="checkbox"/> Riparian landholder | <input type="checkbox"/> Research/academic |
| <input type="checkbox"/> Irrigator (underground water) | <input type="checkbox"/> Horticultural interests | <input type="checkbox"/> Tourism industry |
| <input type="checkbox"/> Dryland farmer | <input type="checkbox"/> Local government | <input type="checkbox"/> Commercial fisher |
| <input type="checkbox"/> Grazier | <input type="checkbox"/> Stock and domestic water user | <input type="checkbox"/> Recreational fisher |
| <input type="checkbox"/> Mining industry | <input type="checkbox"/> Environmental interests | <input type="checkbox"/> Small business |
| <input type="checkbox"/> Water service provider | <input type="checkbox"/> Commerce/development | <input type="checkbox"/> NRM Board/Catchment |
| <input type="checkbox"/> Community group (please specify)
..... | <input type="checkbox"/> Aboriginal peoples | <input type="checkbox"/> Industry group (please specify)
..... |
| <input type="checkbox"/> Other (please specify) | | |

In which part of the water plan area are you located? (You may tick more than one box.)

<input type="checkbox"/> Flinders River	<input type="checkbox"/> Nicholson
<input type="checkbox"/> Gilbert River	<input type="checkbox"/> Norman River
<input type="checkbox"/> Leichhardt	<input type="checkbox"/> Settlement Creek
<input type="checkbox"/> Morning Inlet	<input type="checkbox"/> Staaten River
<input type="checkbox"/> Other (please specify)	

What type of water access do you have?

- Supplemented surface water allocation
- Water supply agreement
- Unsupplemented surface water allocation
- Water harvesting
- Overland flow
- Underground water
- Other (please specify)

Would you like to express interest in being part of the Gulf 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: www.statedevelopment.qld.gov.au/coordinator-general

How we manage water in the Gulf

Do you think we should change the overland flow limit?

- Yes
- No

If yes, please provide any additional details.

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Do you think we should change the arrangements for managing groundwater in the Gulf?

- Yes
- No

If yes, please provide any additional details.

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The water plan area

Do you think we should change the water plan area?

- Yes
- No

If yes, please provide any additional details.

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Climate change

**What rainfall and climate-related impacts have you been experiencing?
For example, you may have come across some of these issues:**

- increased water use
- increased evaporation losses from water storages and water courses
- waterholes drying up or holding water for less time.

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If you can, give us examples of how you have mitigated climate change impacts.

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First Nations and water

How is water significant to your culture and cultural practices?

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

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How would you address these issues?

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

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Improving outcomes

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

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

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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?**

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

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Growing water needs

How should the water plan prioritise competing demands for water?

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

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Water entitlements

Should we change more water licences into water allocations? *This will work best if all water licences in a water management area are converted to water allocations.*

- Yes
- No

What concerns do you have about what it might mean to change your water licence to a water allocation?

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How does your current water entitlement impact on your decision making around water trading?

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Do you think greater transparency around trading of water allocations would be useful in this plan area?

- Yes
- No

Water trading

Why are there so few water trades in this market?

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What would improve how this market works?

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What barriers have stopped you from trading water in the Flinders or Gilbert catchments? For example, you may have come across some of these issues:

- You didn't know water trading was allowed.
- It is difficult to find a seller or a buyer.
- The trading rules are too restrictive.

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Department of Regional Development,
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