

Understanding water resource planning

Water is essential for the wellbeing and quality of life of every Queenslanders. It also shapes and defines our unique environment.

This document is an everyday guide to Queensland's water resource planning process, which ensures that the state's future water needs are met by striking the appropriate balance between human consumptive needs and flows that support river health and other non-consumptive values.

It explains how the process is governed by the *Water Act 2000*, how the surface and groundwater resources of an area are assessed and how the community is engaged while a plan is developed.



The water act

Water is a fundamental and vital resource that underpins the prosperity and wellbeing of all Queenslanders.

The twin challenges of growth and climate change offer a stark reminder that our vital water resources are not in endless supply. We must ensure that the health of our rivers and groundwater reserves is maintained so that the needs of future generations are provided for in a fast-changing world.

The water resource planning process, prescribed under the *Water Act 2000* for meeting these challenges, has become Queensland's tried and tested framework for striking the correct balance. Water resource plans for 22 of the 23 priority catchments in Queensland are now complete. Each plan has a 10-year life, with the first plan, approved in 1999 for the Fitzroy Basin, now renewed.

Plans are developed to complement parallel state and national initiatives such as regional water supply strategies, the Reef Water Quality Protection Plan and the Caring for Our Country program. They are also consistent with the principles and goals of the National Water Initiative, agreed to in 2004 to replace the 1994 National Water Reform Agenda. Importantly, water resource plans are underpinned by the new culture of efficiency all Australians have come to understand.

The Act clearly sets out the relevant Minister's responsibility to plan for the state's future needs by securing supplies for social and economic needs—like towns, industry, irrigation and mines—while setting out strategies to support river health. To achieve this, the Act allows for water resource plans to be developed for any part of the state to ensure that water is equitably managed for each area's unique balance of water uses for the ensuing 10 years.

Water resource plans

Water resource plans, one for each catchment, provide a blueprint for future sustainability by establishing a framework to share water between human consumptive needs and environmental values. The provisions will also recognise and provide for non-consumptive uses like fisheries, grazing and tourism that are important for the state and regional economies.

They are developed through detailed technical and scientific assessment as well as extensive community consultation to determine the right balance between the many interests that rely on the state's water resources. Generally, a water resource plan will apply to a plan area's rivers, lakes, dams and springs and, if necessary, underground water and overland flow. In developing a plan, the size and nature of the resource is assessed to ensure that water is allocated within sustainable boundaries.

As subordinate legislation, the finalised water resource plan becomes a legal template specifying the outcomes and strategies that will be used to address the full range of social, economic and environmental goals for each plan area.

A resource operations plan is also developed to implement the water resource plan by setting out the day-to-day arrangements that will be used to put the strategies into effect.

The implemented water resource plan will:

- ensure that water is shared in a transparent way to protect consumptive and non-consumptive water uses
- secure water entitlements for the life of the water resource plan
- ensure that any new entitlements that are issued will not harm overall planning goals, including the security of existing entitlements and environmental flow provisions
- provide, where practicable, for existing entitlements to convert to tradeable water allocations, held as titled assets that can be traded to new locations or uses, separated from the land to which they were formerly attached
- provide for the health of rivers and ecological values dependent on groundwater.

What's included

Water resource plans detail the plan area, water to which the plan applies and what the plan aims to achieve, including:

- outcomes for water use, such as the needs of towns, agriculture, fisheries and industry
- outcomes for the environment, including, for example, the needs of specific plant and animal species, types of river habitat and, where groundwater management is addressed, the health of any dependent ecosystems

- strategies to achieve water use efficiency and the best possible environmental outcome
- monitoring and reporting requirements—to ensure that the implemented plans are working.

A flexible water market

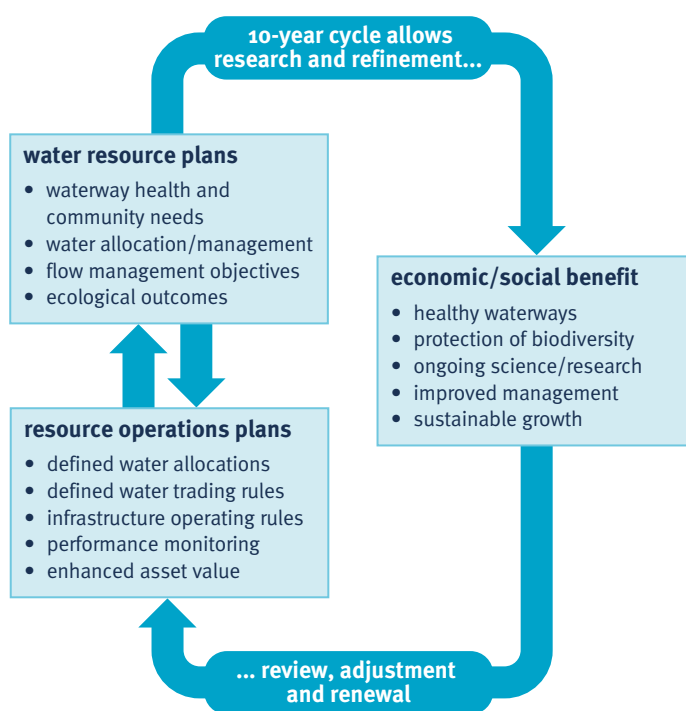
Wherever possible—and usually in developed areas of high water demand—the process provides for water entitlements to convert to tradeable allocations. Since little or no additional water is likely to be available for allocation in these areas, innovation and efficiency are of paramount importance. Water trading is a powerful driver for securing these goals.

Where allocations are to be created, a water resource plan must specify:

- environmental flow objectives—the flows necessary to sustain a healthy environment
- water allocation security objectives—the performance water users can expect from their allocations.

Together, these two types of objectives can be likened to the cadastral property boundaries and zoning constraints that underpin a robust real estate market. They enable water allocations to be managed with unprecedented flexibility—including allowing them to move to new locations or uses—confident in the knowledge that both values will be preserved.

The cycle of sustainability



A consultative process

Consultation is integral to the water resource planning process. Regional communities, industry and other stakeholders, including conservationists and indigenous groups, all have a role to play.

This consultative approach allows the economic, cultural and environmental aspirations and concerns of the people living in the catchment to be fully considered during the planning process.

Expert advice

Technical assessments are prepared to provide expert advice on relevant social, economic and environmental factors. The scientific advice is fully considered in developing a water resource plan.

Comment and feedback

Community submissions are invited during development of the water resource plan and resource operations plan. Relevant public notices and documents can be viewed on the Department of Environment and Resource Management's website, at business centres and at local government offices.

Renewal and replacement

As subordinate legislation, a finalised water resource plan applies for 10 years and must be replaced to ensure that it is relevant to the economic, social and general wellbeing of the people of Queensland and of the highest standard. The renewal process will be informed by a review of the effectiveness of the existing plan in meeting its goals. Through stakeholder involvement and technical reassessments of pertinent social, economic and environmental factors, strategies for addressing needs in the ensuing 10-year planning period will be explored and developed.

A water resource plan may also be replaced if its outcomes are not being achieved, or its objectives are no longer appropriate for the plan area.

Continuing improvement

As the planning cycle progresses, monitoring and reporting requirements, along with an improved understanding of resource sustainability issues (including the effects of climate change), will foster a greater understanding and community acceptance of the process and its goals.

Resource operations plans

Finalised water resource plans are put into effect by resource operations plans. The resource operations plan is developed to align with any implementation schedule in the water resource plan. A resource operations plan is developed in parallel with a water resource plan.

Planning in detail

Initially, a resource operations plan is likely to focus on areas where water use is greatest and may be expanded to other parts of the plan area. Issues addressed include water releases from dams, distribution to users, environmental flows and water trading rules. Water service providers like SunWater are invited to set out proposals about how their infrastructure will be operated for consistency with the water resource plan. This allows them to incorporate efficiency improvements into their operations, such as new products and services that might benefit their customers.

A dynamic market

Water trading—in areas where entitlements convert to tradeable water allocations—is proving its effectiveness in promoting water use efficiency and economic diversification, particularly by allowing the movement of water to where it is of most value.

Rules set out in the resource operations plan will ensure that overall planning goals are protected from the effects of trading and other aspects of flexible allocation management.

Elsewhere, entitlements will generally continue to be administered as licences that can change ownership only when land is bought and sold. However, resource operations plans generally explore the potential for water taken under licences to be seasonally assigned (temporarily traded). In some cases, permanent trades may be allowed.

Future use

The resource operations plan will also set out whether and how any identified reserves of unallocated water are to be made available.

Stakeholder and community input

As a part of developing a draft resource operations plan the department will ask for submissions and comment from water infrastructure operators and the broader community.

Ensuring the plan works

Once the resource operations plan is in effect, environmental health and other factors will be monitored to ensure that planning objectives are met.

Where plans are happening

Water resource plans are developed in catchments where human consumptive needs have had a measurable impact or where rivers have significant ecological or social values.

Generally development has been greatest in the state's southern and coastal catchments. By contrast, impacts arising from water resource development in some remote areas, several east-coast streams and many groundwater areas are considerably lower. To address the needs of each of these areas the water resource planning process will take into account their unique characteristics and their importance as national and state assets—whether at an economic or environmental scale.

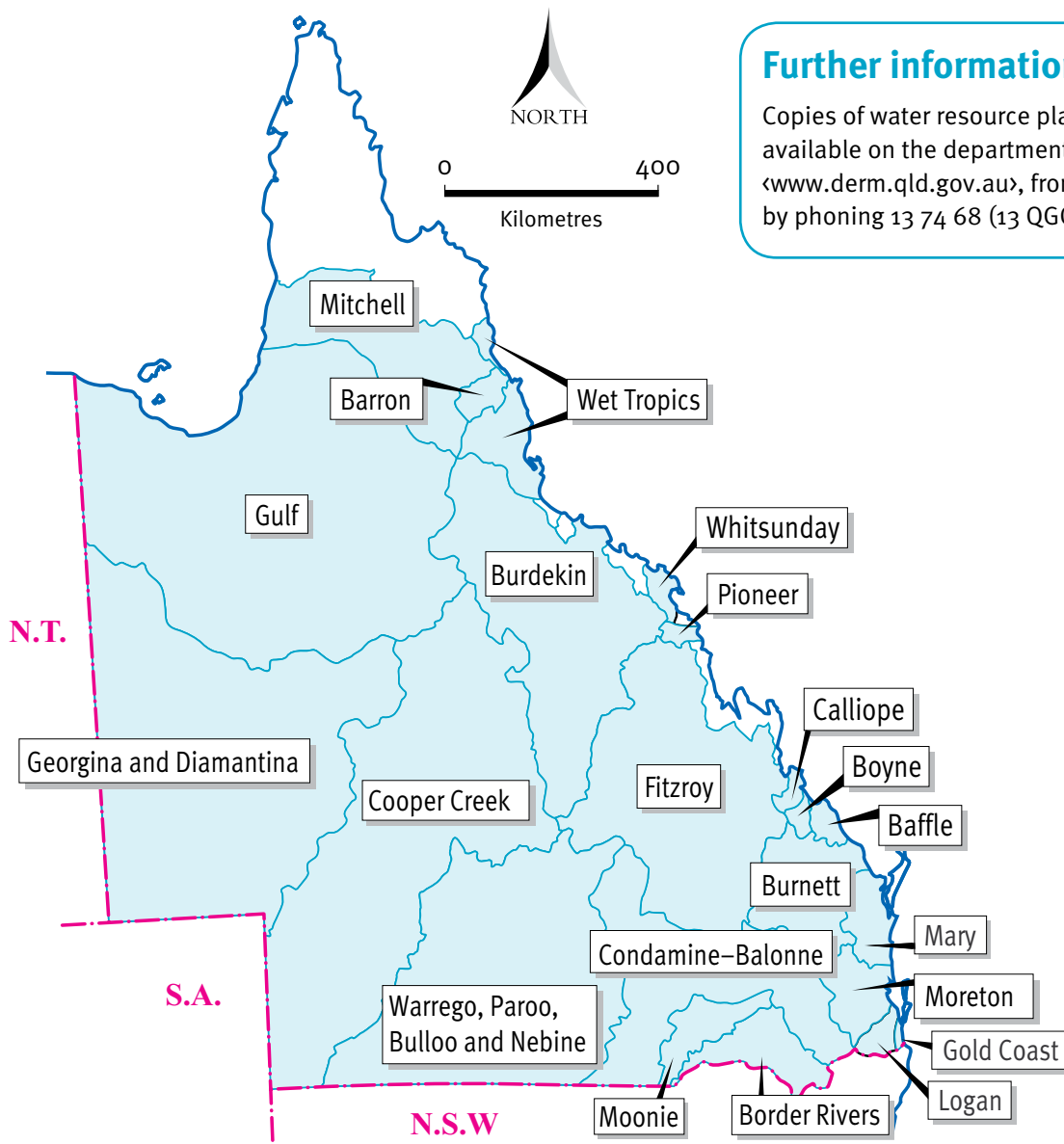
Priority groundwater areas, where resources are most at risk, are being progressively incorporated into water resource plans. Similar provisions exist for dealing with overland flow water.

How you can participate in the water resource planning process

Your comments and contributions to the water resource planning process are welcome.

Public participation is an essential part of the program and the department seeks to incorporate the cultural, economic and environmental interests of the community.

Information gathered and developed during the planning process is freely accessible and members of the public are encouraged to make formal submissions on release of the draft plans. All submissions are considered and collated prior to preparation of the final plans. Later, a report is prepared on the community consultation process to provide a record of the issues that were raised and how they were assessed and addressed.



Further information

Copies of water resource planning documents are available on the department's website <www.derm.qld.gov.au>, from departmental offices or by phoning 13 74 68 (13 QGOV).