

# Impact Analysis Statement

A Summary Impact Analysis Statement (IAS) must be completed for all regulatory proposals. A Full IAS must also be completed and attached for proposals that have significant impacts. Once completed, the IAS must be published.

## Summary IAS

### Details

<b>Lead department</b>	Department of Regional Development, Manufacturing and Water
<b>Name of the proposal</b>	Replacement of Water Plan (Mary Basin) 2006, Mary Basin Water Management Protocol and issuing of a Mary Basin Water Entitlement Notice.
<b>Submission type</b>	Summary IAS
<b>Title of related legislative or regulatory instrument</b>	Water Plan (Mary Basin) 2024, Mary Basin Water Management Protocol and May Basin Water Entitlement Notice.
<b>Date of issue</b>	17 April 2024

## Background

Water, a valuable common property resource, requires regulation to prevent over-utilisation and potential harm to the environment, economy, and society. The *Water Act 2000* (the Act) stipulates that 'all rights to the use, flow, and control of all water in Queensland are vested in the state' (section 26). This legislation provides the framework for sustainable planning, allocation, and management of water resources in Queensland, emphasising the advancement of sustainable water management and efficient water use.

Water plans, developed under the Act, are essential tools for the sustainable management and allocation of water resources across Queensland. Water plans can apply to rivers, lakes, springs, overland flow, and underground water, tailoring strategies to each plan area to balance the needs of water users, including towns, agriculture, industries, and the environment. Water plans establish a transparent framework for managing and allocating water resources within each catchment area for the economic, physical, and social wellbeing of the people of Queensland. The stages in the water planning life cycle are outlined in Figure 1. A water plan may include unallocated water reserves which can be made available for future use if they won't compromise the security of existing users or the environmental values within a catchment. This can also include unallocated water for Indigenous purposes, which specifically supports the cultural, social, and economic aspirations and values of the Aboriginal peoples and Torres Strait Islander peoples within that catchment.



Figure 1. Stages in the water plan development process

The existing Water Plan (Mary Basin) 2006 area covers approximately 15,700km<sup>2</sup>, containing the Mary, Burrum, Noosa, Maroochy, and Mooloolah River catchments with an estimated 2019 population of 490,000 people (Figure 2). The existing water plan regulates water in a watercourse, lake or spring across the Mary Basin and sub-artesian water in the Cooloola Sandmass underground water management area, supporting a variety of industries including significant agricultural production, urban use, a growing tourism industry and fisheries.

The Mary Basin is constantly evolving. Between 2009 and 2017, irrigated agriculture land use declined by 16%. There was notable shift towards irrigated perennial horticulture like fruit and nut trees, while areas used for irrigated pastures and seasonal horticulture decreased. Intensive land uses increased by 4,000 hectares during this period, driven by growth in rural residential. The transition of rural and agricultural land to residential use

emerged as a key driver of land and water use change. The 2015/16 agricultural census highlighted sugar cane's dominance in crop value, while horticulture production, including lemons, mandarins, oranges, avocados, pineapples, and blueberries, was also significant. Notably, macadamia trees replaced significant areas of sugar cane and fruit tree crops. Future water demand implications include the need for increased security to ensure a stable water supply for the growing urban population and service-based industries, particularly in the tourism and recreation sectors. The rise of new drought-intolerant crops, especially macadamias, is also a factor to consider.

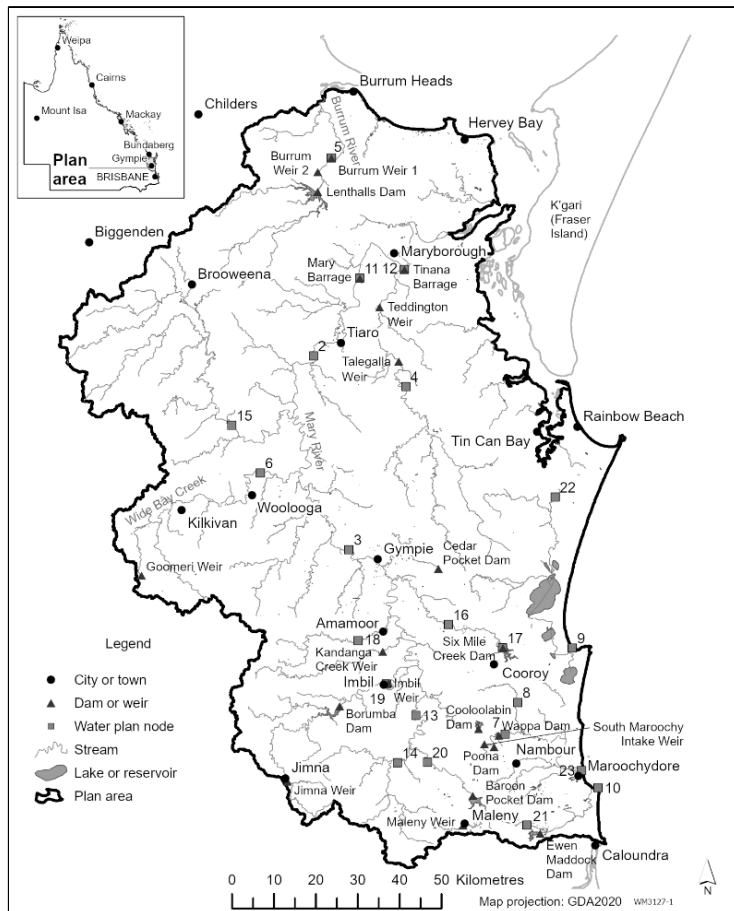


Figure 2. Mary Basin Water Plan Area

## The problem

Water plans have a 10-year life cycle unless they are replaced or repealed under the Act. Water plans are intended to be reviewed and replaced after 10 years to respond to the changing and emerging needs and demands for water users and the environment. In 2021, the existing water plan was due to expire, but this was postponed until 28 May 2024 to allow for sufficient time to address changes in legislation, to incorporate new scientific insights (hydrologic, socioeconomic, cultural, and environmental) and to conduct community consultation to meet the evolving needs of the plan area. The expiration of the existing water plan poses the risk of removing a crucial catchment-specific framework for sustainable water management and water resource decision making in the Mary Basin. Not having a water plan in place might jeopardise the security of existing water entitlements, eliminate safeguards for flows that support ecosystems, and lead to market failure. This would result in

cost impacts on existing social and economic investments dependent on water and would not advance the sustainable management of water under the Act.

Section 49 of the Act requires the Minister to report on the effectiveness of each water plan and its implementation at least every five years. The 'Minister's performance assessment report for the Water Plan (Mary Basin) 2006' (September 2019), indicated that the existing water plan has been effective in achieving many of the plan outcomes; however it also highlighted the following issues that would need to be addressed in the development of the replacement water plan:

- providing for future urban growth in the water plan area
- providing water for agricultural expansion
- more flexible arrangements for water users
- ensuring the protection of threatened species such as the Mary River turtle, Mary River cod, white-throated snapping turtle and Australian lungfish
- the hydrological model requiring updating to include the last 20 years of climatic data, including drought periods
- the need for further consultation with traditional owners to better understand current and emerging cultural water needs.

The report also outlined that in the last five years, the Department of Regional Development, Manufacturing and Water (DRDMW), has investigated several reports of unauthorised take or non-compliance with the contents and conditions of entitlements, such as water licences and water allocations in the plan area. These were minor instances and have been dealt with in accordance with the standard departmental compliance response procedures.

Technical reports compiled during the replacement water plan development identified that the major trends impacting the plan area are:

- concentration of land use for irrigated perennial horticulture crops, potentially increasing water demand and lowering drought tolerance
- population growth, especially in the Mooloolah and Maroochy River subcatchments, coastal subcatchments, and areas in the Southeast Queensland water grid
- threats to environmental values and potential effects of climate change.

The plan area holds significant values for both consumptive and non-consumptive water use, likely leading to increased demand, heightened requirements for water security, and water quality considerations for multiple user groups. Key values and user groups encompass:

- town potable and commercial water users, which will likely drive population and employment growth in the plan area in the medium-term
- agricultural water uses, which remain significant drivers of the economy, potentially facing increased exposure to drought as crops transition to high value horticulture
- cultural and economic values associated with traditional owners
- environmental service values, including provisioning services to the commercial and recreational fishing and aquaculture sectors, non-use values associated with tourism and recreation, and the significant value of the Great Barrier Reef.

Additionally, the current water licensing arrangements are not consistent with the contemporary principles for conversion of water licences to entitlements under the National Water Initiative (NWI) and the Act framework. For example, one of the NWI principles is that

‘Water for consumptive use should be allocated to water users by tradeable water access entitlements. As such, the modernisation of water licences and water markets are required.’

Other considerations for water plans include regional plans under the *Planning Act 2016*; environmental values defined in the Environmental Protection (Water and Wetland Diversity) Policy 2019; public interest; feedback from public consultation; the impacts of climate change on water availability; and the cultural interests of traditional owners. National, state, and regional sustainable development goals, including the NWI, *Environment Protection and Biodiversity Conservation Act 1999*, South East Queensland Regional Plan 2017, Wide Bay Burnett Regional Plan 2023, Reef 2050 Water Quality Improvement Plan, Queensland Energy and Jobs Plan, South East Queensland’s Water Security Program 2016-2046, and the Queensland Non-Urban Water Measurement Policy, must be considered.

## Objectives of government action

The objective of a water plan is to advance the sustainable management of Queensland’s water. In formulating a water plan, the Minister is mandated to consider multiple factors outlined in section 43 of the Act. The replacement water plan complies with section 43 of the Act, as it -

- identifies the water to which it applies and specify the desired economic, social, cultural, and environmental outcomes
- incorporates cultural outcomes in the replacement water plan to encompass respectful plan outcomes, Indigenous unallocated water reserves, and ongoing traditional owner participation in water management
- states the volume of unallocated water reserved with considerations for future demand for water that include plans by water service providers for future infrastructure and town water supply programs. For the Mary Basin consideration is also given to Seqwater’s Water Security Program in 2023
- outlines arrangements for environmental water provisions, including updates in strategies and objectives to align with new scientific findings and updated hydrologic model for the plan area
- includes water trading zones and modernised water allocation security objectives (WASOs) and performance indicators to balance flexibility and water security
- states measures contributing to the plan outcomes that will address challenges in the existing water plan, such as subcatchments requiring measured entitlements
- modernises unsupplemented water licences to provide improved clarity, consistency, and flexible access to water for water users while also enabling improved management options and facilitating seasonal water trading
- enhances the protection of environmental and cultural values for identified watercourse reaches
- aligns the water plan with contemporary government strategies

Many of these objectives and the intent behind the decisions are available in further detail in the draft replacement water plan statement of intent. Various statutory instruments, as illustrated in Figure 3, are used to implement the changes in the replacement water plan.

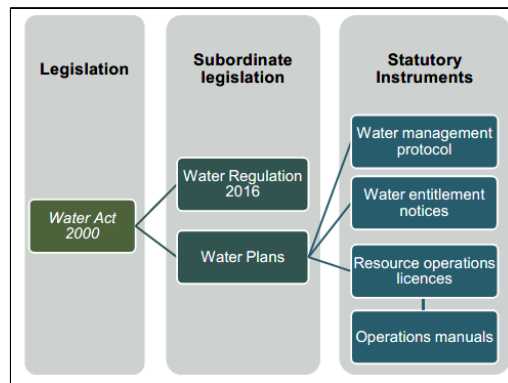


Figure 3. The water planning framework

The modernisation of water licences will be applied through a water entitlement notice (WEN) and the water management protocol provides further details and rules for the management of water licences, including seasonal water assignments and unallocated water. A draft water management protocol and draft WEN were made available for public comment with the draft replacement water plan, allowing the public and entitlement holders to discern how the objectives, outcomes, and strategies were intended to be implemented. The final water management protocol and WEN will be released with the replacement water plan. Post the release of the final water plan, Resource Operation Licence (ROL) holders will adjust their Resource Operation Licences and Operation Manuals to align with the replacement water plan if required.

## What options were considered?

Due to specific requirements outlined under the Act and other applicable legislation and policy, there is limited discretion in developing regulatory options.

Policy options considered are:

**Option 1 (undesirable):** Replace the existing water plan with no changes to its contents.

This option does not meet the current requirements of the Act and would not achieve the objectives of government action. The existing water plan:

- does not include consideration for Aboriginal peoples and Torres Strait Islander peoples' cultural values and uses of water
- does not include consideration of climate change
- would not account for the latest scientific information available including hydrological modelling, and
- would not consider latest regional plans and environmental policy.

**Note** – the Act would require cultural matters and climate change to be included in the replacement water plan.

**Option 2 (preferred option):** Develop a replacement water plan with outcomes to meet the current requirements of the Act whilst minimising regulatory burden.

A replacement water plan would implement improved mechanisms for decision-making to balance contemporary social, economic, cultural, and environmental considerations. Many of

the existing water plan policies would remain, however some key changes result in regulatory impacts. Key changes would include:

- the recognition of cultural values and interests of traditional owners in relation to the water resources for the plan area
- the establishment of new areas for mandatory measurement of water licences prior to 31 December 2034, which will incur a cost to most water users
- the amendment of water licences via a WEN to provide:
  - clearly defined shares of the available water resource
  - security, equity, and certainty for water users who share and rely on the same water resource
  - the ability for area-based water licence holders to expand irrigated areas by removing the area specified and replacing with a volume allowed to be taken
  - improved accounting, compliance, and enforcement capabilities.
- the introduction of seasonal water assignments (SWA) for water licences to provide the ability for water licence holders to be able to temporarily assign water to other water users, providing flexibility
- the specification of significant watercourse reaches to protect areas of high environmental and cultural value from future releases of unallocated water
- changes to unallocated water (UAW) to ensure volumes do not impact on existing users including the environment and provide for future growth.

This option for the replacement of the existing water plan will ensure the effective sustainable management of water resources in the catchment. Several provisions remain unchanged in the replacement water plan, yet several contemporary policies have been introduced, reflecting a changing plan area and changes to the Act. The regulatory impacts of the changes between the existing and replacement water plans have some impacts that decision makers should be aware of.

**Option 3 (undesirable):** Develop a replacement water plan with outcomes to meet the current requirements of the Act, including the regulation of all water in the plan area.

This option would consist of the regulation proposed in option two, however it would also include additional regulation of both overland flow water and groundwater, as regulated in some other plan areas.

## What are the impacts?

### Option 1 (undesirable):

The impacts of this option have been outlined in the previous section under option one. The option does not sustainably manage the plan area's water resources and as such does not meet the requirements of the Act.

### Option 2 (preferred):

In this option, the replacement water plan will have varying impacts on the plan area. Many of the suggested changes to policy in the replacement water plan are a result of legislative requirements or the implementation of existing policies for which the regulatory impact has already been assessed. The impact analysis will focus on the impact of regulatory changes implemented by the Department of Regional Development, Manufacturing and Water (DRDMW) in the replacement water plan, not specified under other legislation.

### **Replacement Water Plan Outcomes:**

The Act mandates, under section 43, that a water plan must express the desired economic, social, cultural, and environmental outcomes for the management and allocation of water covered by the plan. The existing water plan outlines general outcomes (sections 11 to 12) and ecological outcomes for specific areas within the plan (section 13).

Following technical assessments conducted during the pre-planning phase and stakeholder engagement, the outcomes for the replacement water plan have been redefined to encompass general, economic, social, cultural, and environmental outcomes. The replacement water plan reflects modernised water plan outcomes, incorporating specific cultural considerations and additional factors related to key ecological assets, the waters of the Great Barrier Reef, the Ramsar-listed Great Sandy Strait wetland, and the impacts of climate change on water availability. It also includes new outcomes to support growth in industries such as agriculture, power generation, and tourism.

The benefits of these changes lie in providing improved clarity and incorporating additional considerations under the Act. While these updated outcomes do not have direct regulatory impacts, their implications will be thoroughly examined under the relevant sections of the plan.

### **Measures for achieving water plan outcomes:**

#### ***Monitoring, evaluation and reporting strategy***

The replacement water plan outlines the necessity for formulating a Monitoring, Evaluation, and Reporting Strategy (MERS). This strategy serves to establish a clear connection between the water plan outcomes—covering general, social, economic, environmental/ecological, and cultural aspects—and the corresponding plan strategies designed to attain them. The MERS is instrumental in identifying knowledge gaps essential for assessing the replacement water plan outcomes. It encompasses evaluation questions, monitoring objectives, and the information to be gathered throughout the water plan's lifespan to facilitate its evaluation. This includes determining whether the replacement water plan has successfully achieved its intended outcomes.

The implementation of the MERS necessitates the development of monitoring programs incurring costs for the department. While the exact cost remains unquantified as the MERS is yet to be developed, the identification of knowledge gaps will guide future monitoring efforts. External parties can contribute to the adaptive management cycle of water planning by providing relevant information through existing monitoring or research programs, mitigating the cost to government.



## ***Metering***

Metering of water entitlements actively taking water is fundamental to improving how water is managed in a water plan area. Knowledge of metered water use can improve water use efficiency, ensure compliance with water licence volumes, and provide community and investment confidence that water is being managed fairly and sustainably.

The replacement water plan mandates the installation of meters for all water entitlements by the end of the plan's 10-year lifespan (excluding stock and domestic supply), starting from its effective date. Currently, the Cooloola Sandmass underground water management area and four subcatchments within the replacement water plan area already have metering in place, and this regulation will now extend to impact the remaining 16 subcatchments. Additionally, new water entitlements created through the release of unallocated water will be required to have meters installed in line with the regulation.

These requirements align with the Queensland non-urban water measurement policy, which is being implemented statewide, and have been incorporated into the replacement water plan. There are standards surrounding the quality and types of meters that can be installed, which are listed in the department's Queensland interim water meter standard for non-urban metering, however these standards are informed by the federal Metrological Assurance Framework 2. Meters must be installed as per these standards, validated by an authorised meter validator at the entitlement holder's expense. Since these are existing standards and policies being adopted in the replacement plan, a comprehensive impact analysis is beyond the scope of this statement.

By setting a specific date for the implementation of metering across the remaining 16 subcatchments, the replacement water plan provides certainty for license holders regarding the installation deadline. It is important to note that once a water meter is installed, there is an obligation on the entitlement holder to report meter readings no more frequently than biannually (usually annually), and water meters must undergo revalidation every five years, incurring an ongoing cost to the water licence holder. While there is an upfront cost associated with meter installation, the extended lead time allows license holders to incorporate this cost into their future business plans.

The installation of water meters incurs a cost to the entitlement holder and places an obligation to report meter readings, however there are many benefits to the installation of meters:

- once installed and validated for an entitlement, license holders can participate in the seasonal water assignment market, offering the opportunity to sell their unused entitlement and offset any associated costs
- allows for people to obtain additional water through seasonal water assignment for economic development, if needed
- enables the accurate monitoring and tracking of water usage, providing data for informed decision making on crop and irrigation management, facilitating improved water use efficiency leading to potential cost savings
- holds water users accountable for their consumption, promotes responsible use and ensures fair distribution of water resources

- provides accurate water use pattern data to support scientific assessment for future water planning
- the requirement for metering to meet the State's water resource management standards
- effectively managing the water resource will provide for greater achievement of the Act purposes.

## **Objectives and performance indicators**

### ***Performance indicators***

A performance indicator is a hydrologic data calculation used to assess whether a target level (the objective) set in a water plan is being achieved. The replacement water plan establishes objectives for each performance indicator. For example, these indicators inform decision making for new infrastructure, the release of unallocated water, assessments of changes to water allocations, amendments to water licences, or modifications to how supply storages are operated.

The new performance indicators and objectives aim to maintain a level of protection for environmental flows and water allocation holders, comparable to the existing water plan. A fact sheet explaining the modernised performance indicators was released with the draft replacement water plan.

The primary changes involve modernising the performance indicators and introducing additional reporting nodes across the replacement water plan area to enhance decision-making. Importantly, these additional nodes require no extra infrastructure installation, and thus, these changes have no regulatory impact.

## **Strategies for achieving water plan outcomes for surface water**

### ***Significant watercourse reaches***

After conducting ecological monitoring and engaging in stakeholder consultations, specific significant watercourse reaches have been identified in the replacement water plan (Figure 4). These reaches encompass noteworthy waterholes and sections of watercourses that play a vital role in supporting ecological habitats and promote cultural values. The replacement water plan, along with associated water management protocol provisions, establishes transparent decision-making rules. These rules apply to all new entitlements granted through the unallocated water process, specifically for locations within these identified significant watercourse reaches, requiring minimum passing flow conditions.

Importantly, this regulation has no impact on current water license holders. However, it does impose minimum passing flow conditions on granted water licences through future releases of unallocated water, affecting the availability of water to new license holders during times that meet these flow conditions. Although there is an impact relative to current license holders, this process enables the release of unallocated water in these significant watercourse reaches while carefully balancing environmental and cultural needs, rather than excluding these areas from the future release of unallocated water.

Note that water entitlement located in significant watercourse reaches through the seasonal water assignment market does not carry the additional flow conditions that are imposed on future releases of unallocated water, mitigating the impact on individuals and entities looking to obtain water in these areas.

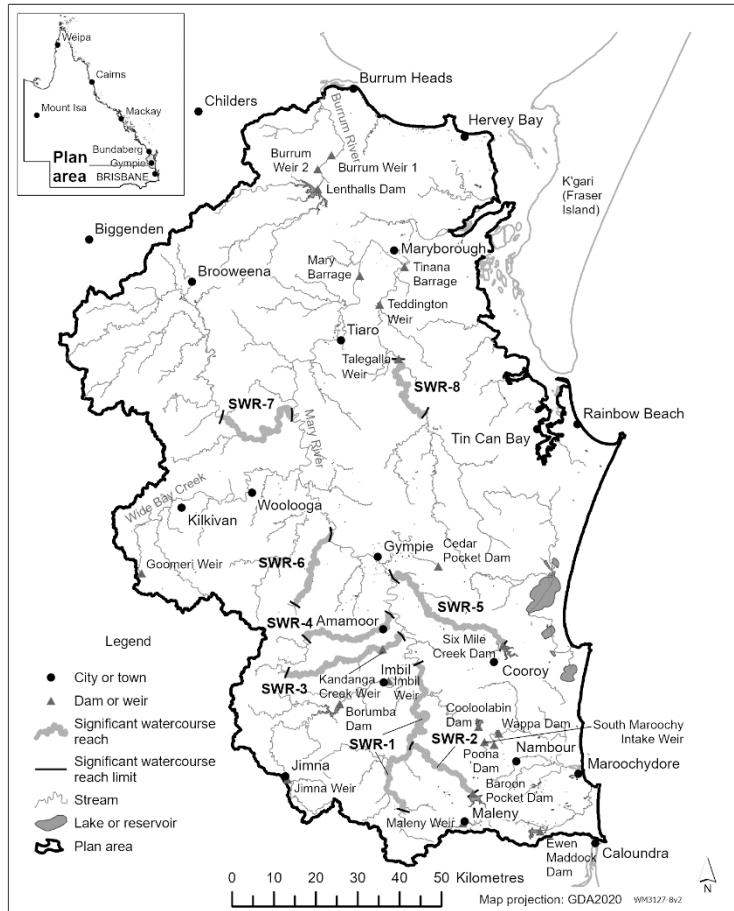


Figure 4. Location of significant watercourse reaches

## Unallocated Water

The replacement water plan establishes reserves of unallocated water (see Figure 5) to fulfill both current and future demands in areas where water resources are not fully allocated. Changes to the volumes of unallocated water reserves have a significant impact on the replacement water plan area. However, it is important to note that unallocated water volumes are reviewed to assess future water demands for the replacement water plan area. Therefore, the regulatory impacts are beyond the scope of this analysis.

The modifications to unallocated water include:

- strategic reserves to meet demand for significant projects, urban supply, and promote regional development
- Indigenous reserves to address cultural values, needs, and aspirations
- improved distribution of general reserves for any purpose across the replacement water plan area

The specified volumes of unallocated water were determined through a socioeconomic assessment, hydrologic assessment, cultural assessment and environmental assessment as well as extensive consultation with the community, stakeholders, and traditional owners within the plan area. Changes to unallocated water volumes have positive social and economic impacts, supporting the aspirations of traditional owners. The considerations for releasing unallocated water have been modernised in line with the replacement water plan outcomes, with specific attention given to environmental factors.

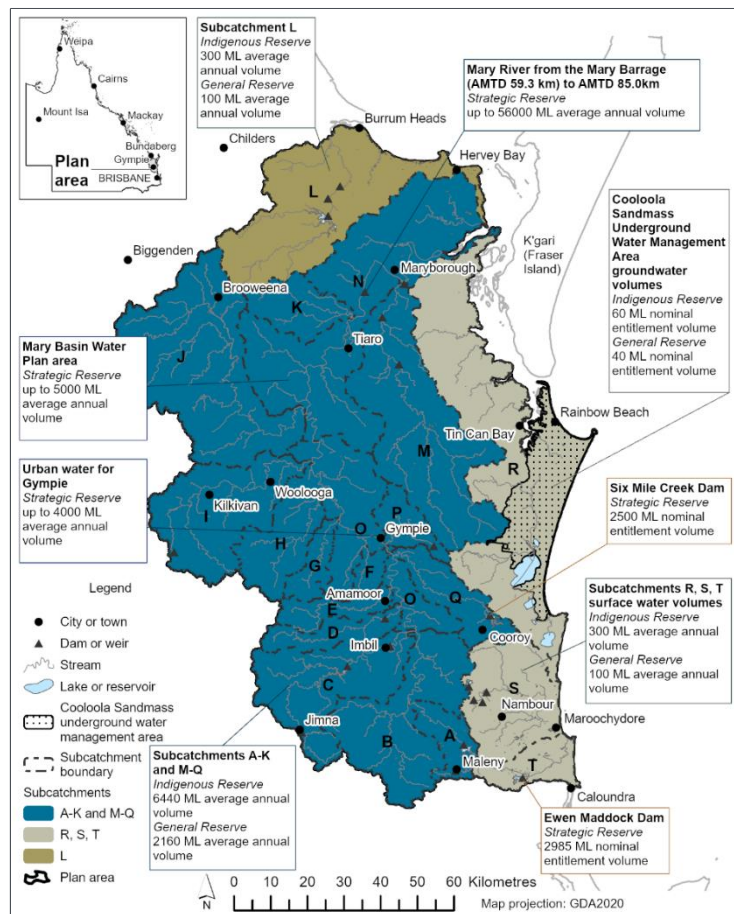


Figure 5. Map showing the unallocated water reserves by purpose for sub-catchments

## Water licences

The transition of over 1000 water licences to a volumetric entitlement with an established maximum rate of take is a significant change outlined in the replacement water plan. These changes are implemented through a Water Entitlement Notice (WEN) and align with modern water licensing frameworks. Key WEN amendments include:

- amending all water licences to take water by establishing nominal entitlements and requiring maximum rates of take
- amending water licence conditions to be consistent with the replacement water plan
- amending water licence purposes to ‘any,’ ‘stock and domestic,’ ‘urban,’ or ‘relief’

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Of the 1000+ water licences undergoing amendments, 172 were originally issued with a volumetric condition specifying the maximum volume that can be taken in a water year in addition to a maximum irrigation area. Per section 48(3)(a) of the replacement water plan, the conditioned volume is retained as the nominal entitlement and therefore there is no regulatory impact to these entitlement holders regarding their licenced nominal entitlement.

The replacement water plan addresses various water entitlement issues to bring them in line with the current legislative framework. It aims to enhance flexibility and fairness in entitlement access, clarify details and conditions for entitlement holders, and establish clear rules for water dealings. These adjustments are designed to improve security and equity by refining water licence specifications, enhancing measurability, and strengthening compliance capabilities. Additionally, they offer increased flexibility in entitlements and improved resource availability to meet varying demands.

The conversion of area-based (hectare) surface water licences to volumetric entitlements in the replacement water plan area enhances transparency and water management. It establishes clearly defined shares of the available water resource. Volumetric water licences are consistent with how water entitlements are specified across the state, providing security, equity, and certainty for water users. This change also improves the flexibility of how water can be used by water licence holders, such as removing limitations on the area of land that can be irrigated.

It is important to note that the draft replacement water plan and draft WEN provided water licence holders the opportunity to make submissions on any changes proposed to their water licences, where each individual submission was considered using a consistent approach based on the requests made and supporting information supplied. Further information regarding submissions made on the amendments to water licences can be found in section 3.6 (Water licences) and section 5 (Water entitlement notice) of the Minister's consideration report.

The key components of the amendment of water licences with regulatory impacts are:

- purpose
- nominal entitlement
- maximum rate of take
- conditions
- the unbundling of water licences
- seasonal water assignments.

### ***Water licence purpose:***

- most water licences will have the purpose of 'any'. Town water supply licences will have the purpose of 'urban' and existing non-riparian stock and domestic water licences will retain the purpose of 'stock and domestic'

Impacts of the change to water licence purposes:

- changing the purpose to 'any' from the current specific purpose listed on the water licence will have no negative impacts on the water licence holder. This allows for

more flexibility as this purpose allows for any variety of water uses, for example, irrigation, aquaculture, intensive feedlots, commercial.

- there are no impacts from changing the purposes of urban, and stock and domestic, other than providing consistency across licences.

***Water licence nominal entitlement:***

The methodology for the amendment of water licences to specify a nominal entitlement has been developed after consideration of various matters including hydrological modelling, water entitlement performance, crop water demands, water use efficiency, existing water entitlement content and conditions, previous conversions in the water plan area, data from entitlements already metered within the water plan area and extensive consultation with affected water users. The details and reasoning surrounding the conversion of licences to a volumetric nominal entitlement can be found in the draft water plan statement of intent (section 4.3.3).

The finalisation of the Mary WEN and subsequent amendments, replacement, granting and conversion of water licences can potentially impact the property rights of existing users under the *Human Rights Act 2019*.

If an entitlement holder considered their proposed volumetric entitlement limited their current use under their pre-amended entitlement, they were encouraged to provide supporting information with a submission on their proposed entitlement during the consultation period. Initial review of submissions identified a number of submissions where additional supporting information could assist the department's assessment of a submission. If further information was required, entitlement holders were contacted by the department and opportunity was given to supply additional information. Additional time was given for any supplementary information to be provided to the department. The Minister has considered all properly made submissions as required under section 47(1) of the Water Act, and one late submission.

Where sufficient information was provided to demonstrate that an increased nominal entitlement volume did not reflect the take of authorised water under the existing water licence, the chief executive was able to decide new amended volumes. Where the submissions lacked supporting evidence and there was some uncertainty of information to support a decision, submissions were reviewed by the Water Act Referral Panel under section 74 of the Water Act. Submissions for 44 water licences were forwarded to the Water Act Referral Panel on the basis the chief executive did not agree with the submission. The Water Act Referral Panel subsequently made recommendations for consideration by the department.

Review of all the submissions received for additional water licence volume and the Water Act Referral Panel recommendations resulted in the following:

- 38 licence submissions being supported in full and amended
- 17 licence submissions being supported in part and amended
- 26 licences submissions were not supported and not amended
- 14 licence submissions were considered inconsistent with the water plan, and not supported and not amended
- 1 water licence submission was removed from the WEN due to a water licence dealing between draft and final WEN

For water licences that already stated an annual volume in the licence conditions, this volume was retained on the amended water licence as consistent with their existing entitlement right. Of the 1000+ licences being amended, 172 were originally issued with a volumetric condition specifying the maximum volume that can be taken in a water year (typically less than 6 ML/ha). 13 of the 172 made a submission seeking a revised volume of 6 ML/ha. Under s48(3)(a) of the draft replacement water plan the conditioned volume is retained as the nominal entitlement, thus any submission seeking an increase is considered inconsistent with the replacement water plan.

Despite this process, the final WEN could be considered to engage and potentially limit the right to own, and not to be arbitrarily deprived of, property recognised in section 24 of the *Human Rights Act 2019*. Not all requests for increases to the nominal entitlement were supported by the Chief Executive. Despite the rigour underpinning the methodology to work out a nominal entitlement (volumetric limit) as part of the content of a water licence, it may not be sufficient for the purpose for which the water is required by the existing water licence holder. Therefore, a section 13 analysis of human rights has been undertaken in the Water Plan (Mary Basin) Human Rights Certificate 2024 in line with the requirements of the *Human Rights Act 2019*.

Decisions for increased volume were made in a fair and equitable process through submissions from water licence holders to demonstrate authorised activity under the pre-amended water licence. Where necessary, an independent referral panel were used to review submissions and make recommendations on the draft WEN to the Chief Executive.

Whilst not all water licence holders had their submissions for increased nominal entitlement supported, the introduction of seasonal water assignment provides a means to obtain additional water entitlement on a seasonal basis if required.

**Maximum rate of take:**

- water licences with a purpose of 'any' will have a maximum rate of take calculated by dividing the nominal entitlement volume of the water licence by 30 and will be expressed in ML/day. This provides equal access per megalitre for all water licences. Assessment suggests that the resulting rate of take would likely exceed maximum daily crop demand in the water plan area.

Impacts of standardising the maximum rate of take:

- many of the current water licences do not have a rate of take specified. This means that when the licensee wishes to change the pump works used to take water, the development approval process under the *Planning Act 2016* (Planning Act) is triggered. This is onerous and time consuming for both the licensee and the department and subjects the licensee to significant cost. Inclusion of a rate of take negates the Planning Act trigger, eliminates a cost, and avoids licensee confusion regarding applicable replacement pump works.
- management by ML per day will provide improved flexibility for water licence holders to choose how and when water is taken (i.e., optimal pump design, using off-peak tariffs or solar power, pumping into a storage during flow events).

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- by establishing equal access of all entitlements enables development of simple water management rules and administration of those rules, including seasonal water assignment trading process.

### **Water licence conditions:**

- some water licences across the replacement water plan area have specified water licence conditions that manage how water is taken under the entitlement. These conditions are largely still required. A review has been done to ensure that:
  - the conditions are measurable and enforceable
  - the conditions are consistent with standardised water licence condition wording
  - redundant conditions are removed.
- an additional condition (2.97) has been applied to 133 water licences with access conditions not tied to a gauging station. This states 'The chief executive may require the installation of an approved device to measure and record water in the watercourse. Such records must be made available to the chief executive upon request.'

### Impacts of changes to the water licence conditions:

- the removal of redundant conditions and standardising of wording has no regulatory impact and provides clarity for water licence holders. It also assists departmental staff with interpretation, communication and issuing of water licence conditions in the future if required under the unallocated water release process.
- the additional condition 2.97 applied to 133 water licences under the WEN may have a financial impact on those water licence holders if the chief executive requires the installation of an approved device in the watercourse. These devices support the sustainable management of water including waterway health, management, and compliance. These may be implemented based on a risk assessment indicating the need to more closely monitor adherence to licence flow conditions. It is expected that this condition may be enforced and impact upon a small proportion of the water licence holders after consideration of the risks to downstream users and the environment.

### **Unbundled water licences:**

Existing multi-purpose water licences that had separate water access conditions on the same licence were replaced into two separate water licences, and as such, there is an additional water licence fee imposed on these licence holders. Unbundling of licences provides clarity for complying with water licence conditions and enables improved management options for the licence holder. This affects five water licence holders in the replacement water plan area, where five licences were unbundled into ten water licences. There are no less restrictive and reasonably available ways to achieve the purpose. Retaining the single multi-purpose licences would not be enforceable and would constrain opportunities for seasonal water assignment. Alternatively, additional conditions may have been placed on the licence, but this would have further restricted access to the entitlement holder. It is therefore considered that the benefits of separating these licences outweigh the cost to the licence holders.



### **Seasonal water assignments**

The replacement water plan and amendment of water licences to state a nominal entitlement facilitates the inclusion of seasonal water assignment (SWA), also known as temporary trading of water licences, which support economic growth and flexibility for water users. The rules for SWA of water licences are outlined in the water management protocol and are based on facilitating productive use of water licences while limiting the risk to impacting existing users and the environment.

SWA of unused entitlement volume is permitted within the same water management area only (based on the existing sub-catchments), with the exception that SWA may be undertaken from water management area A (Obi Obi Creek subcatchment) to water management area B (Upper Mary River subcatchment).

Water may be seasonally assigned to either downstream or upstream location within a water management area, within the prescribed nominal entitlement volume limits outlined in the protocol;

- the prescribed volume limits do not apply for SWA between contiguous land parcels
- the water management protocol outlines the rules for applying rate of take and conditions on SWA
- the take of both assignor and assignee must be measured
- the Chief Executive may impose conditions on a SWA
- water under a SWA cannot be transferred to a water supply scheme area
- there are restriction points outlined in the protocol preventing impacts of SWA on urban water supply

Seasonal water assignment promotes the use of water that may have been previously underutilised. This may have some localised impacts through increased take however enables increased economic activity within the water management area. Risks can be mitigated through the implementation of water sharing rules during times of low water availability.

There are minimal regulatory impacts from the introduction of this voluntary market however to participate, the water entitlements must be measured. The introduction of SWA provides a flexible platform for trading water entitlements, enabling water users to adapt to changing seasonal conditions and optimise water use during crucial growth stages. This flexibility supports agricultural productivity and contributes to economic transactions related to water, fostering efficient allocation and economic growth in the region. The market serves as a valuable risk management tool, allowing water users to respond effectively to unforeseen challenges such as droughts. Additionally, the water market encourages sustainable water management practices, promotes innovation, and helps address water scarcity issues by reallocating water to areas facing shortages during specific seasons. Effective regulation ensures that water trading aligns with sustainable resource management goals, minimising negative environmental impacts. The introduction of seasonal water assignments mitigates any perceived negative impacts to water licence holders who have changed from an area-based entitlement to volumetric entitlement by providing seasonal access to additional water via a water market process supported by best practice regulation and transparent water accounting.

## Miscellaneous

### ***Water sharing rules for unsupplemented water***

Water sharing rules in a water plan outline the principles and mechanisms for allocating and distributing water resources among various users and stakeholders within a specified area. These rules play a crucial role in balancing competing demands for water and promoting sustainable water management practices, particularly during times of low water availability.

The replacement water plan creates a head of power for water sharing rules, however this is not imposing any obligation or removing rights and as such there is no regulatory impact. The water management protocol outlines that water sharing rules may be developed in consultation with water licence holders in respective water management areas and that in deciding water sharing rules, the chief executive must consider the matters defined in section 54 of the replacement water plan.

### **Option 3 (undesirable):**

This option would consist of the regulation proposed in option two, however it would also include additional regulation of both overland flow water and groundwater, as regulated in some other plan areas.

### **Overland flow (OLF):**

Management of overland flow was not implemented in the existing water plan as it was concluded that current development was not significant enough to warrant inclusion on a risk based approach to regulation, and it was unlikely that further development within the life of the existing plan would impact on the plan outcomes. It was recommended that ongoing monitoring of OLF development trends be undertaken.

There are substantial impacts for regulating OLF, involving detailed assessment of the level of development, imposing an obligation on landholders to advise the department. Limitations may be imposed on future development, potentially impacting economic growth. This activity would also impose costs to the government for administration, including compliance.

An assessment was completed to inform the review and replacement of the existing water plan to determine if the risks from OLF development has changed.

Levels of OLF development has been assessed as posing a low risk to the replacement water plan's outcomes. However, OLF is managed in catchments bordering the replacement water plan area—to the north (Burnett Basin) and south (Moreton)—where the following limitations apply:

- Burnett Basin water plan limits construction of new OLF works > 20ML in the Coastal Burnett Overland Flow Area
- Moreton Water Plan limits construction of new OLF works > 5ML

In these areas continued unregulated development posed significant risk to the availability of water for existing water entitlement holders, and flow dependant natural ecosystems. The

Mary Basin plan area physical characteristics are not conducive to the extensive development of OLF and as such, the costs outweigh the benefits of regulation.

OLF development will continued to be monitored over the life of the replacement plan.

### **All Groundwater:**

Assessments of non-managed groundwater resource units and GDEs were undertaken in 2018. It was concluded there is minimal risk to groundwater resources, existing users, groundwater/surface water interaction and/or GDEs in unmanaged areas. Groundwater in the Cooloola Sandmass underground water management area is managed due to the risk posed to the resource in this area.

Groundwater across the remaining areas of the Mary basin is characterised by:

- complex geology with low yielding localised aquifer formations that are commonly discontinuous with variable and/or marginal water quality
- no major productive groundwater resource units or regional groundwater flow systems
- limited development of, or potential for, non-prescribed activities (e.g., irrigation)
- high density of bores in the south-east peri-urban subcatchments
- no known issues regarding groundwater levels, water quality, groundwater/surface water interaction, Groundwater Dependent Ecosystem (GDE) impacts and bore supplies or pumping interference
- limited groundwater monitoring network

There are substantial impacts for regulating all groundwater across the replacement water plan area, involving the issuing of a notice of works to landholders imposing an obligation to advise the department of the level of development. Water licences would need to be issued for groundwater extraction and limitations would then be imposed on future development, potentially impacting economic growth. This activity would also impose costs to the government for administration, including compliance and ongoing limitations to landholders. The cost of regulating all groundwater across the plan area outweighs the benefits.

Groundwater will continued to be monitored during the life of the replacement water plan.

### **Who was consulted?**

Community and stakeholder engagement has been incorporated through all stages in developing the replacement water plan, water management protocol and water entitlement notice. The first round of public consultation was undertaken following the preliminary public consultation notice, released 27 May 2021. On 28 May 2021, the expiry of the existing water plan was extended to 24 May 2024, to allow additional time to consult with traditional owners, complete technical assessments, and to consider feedback and submissions received.

### **Consultation on the preliminary public consultation notice:**

There were 85 meetings undertaken during the preliminary public consultation (PPC) period, from June 2021 and September 2022 (Appendix A, Table 1). Sixteen stakeholder groups participated in the consultation period.

Ninety-five submissions were received during the PPC consultation period. Submissions were received from a range of stakeholders including local water users and water entitlement holders, industry users, water service providers, representative bodies, local government, environmental groups, traditional owners and tourism, and recreational users. Key issues raised through the PPC submission process within scope of the water plan include:

- establishment of a Community Reference Panel and/or requested extensive consultation to be undertaken
- amendment of water licences to volumetric entitlements—majority supportive with some concerned on methodology
- reconsideration of unallocated water volumes—strategic reserve, urban growth, cultural volume and for water to be made available for water harvesting
- provision for environmental flows for iconic species, Ramsar-listed Great Sandy Strait declared wetland, low flows, and infrastructure operating rules to provide for environmental flows
- implementation of metering/compliance
- establishment of water trading—permanent, seasonal
- consideration of climate change and the effect on available water
- protection of existing entitlements.

Using the information provided in the technical reports and feedback from the PPC submissions, the draft replacement water plan, draft water management protocol and draft water entitlement notice were produced, incorporating these considerations, which are outlined in the impacts section of option two.

A second round of consultation occurred with the release of the draft replacement water plan, draft water management protocol and draft water entitlement notice from 22 February to 26 May 2023.

### **Consultation on the draft water plan**

The consultation undertaken on the draft replacement water plan included:

- targeted consultation sessions with key stakeholders and community representatives
- targeted engagement with traditional owners within the plan area
- awareness raising through social media and the department's website
- by-appointment meetings with interested individuals
- briefing with other State Government departments

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- dedicated email and phone contacts to have questions answered by the department
- formal submission process.

Thirty-five meetings were held to inform the development of the final replacement water plan and final water management protocol. Targeted consultation sessions were held with a range of stakeholder groups, refer to Table 2 (Appendix A) for more detail.

Targeted communication products were released in February 2023, and can be accessed through the [Library Services catalogue on the departments Mary Basin water plan website](#). This series of information sheets detail several key issues and topics, including:

- climate change projections for the catchment,
- cultural values, cultural outcomes, and the engagement process with the traditional owners of the plan area
- hydrologic assessment and the hydrologic model
- modernised water entitlements, seasonal assignment of water licences, and water licence amendments
- performance indicators (environmental flow objectives/EFOs and water allocation security objectives/WASOs)
- Resource Operation Licence (ROL) holders, and Water Supply Schemes (WSS)
- underground water (Cooloola Sandmass underground water management area)
- water licence volumes and making a submission on the draft Water Entitlement Notice (WEN)

As required under the Act, the Minister has published a Ministers consideration report stating the considerations made in finalising the plan including:

- the submissions received on the draft replacement water plan; and
- whether or not matters raised in submissions were addressed and, if addressed, how the matters were addressed.

This document will be published on the departments website and can be referred to if further detail is required.

### **Engagement with traditional owners**

Preliminary engagement activities were undertaken with traditional owners to inform the development of the draft replacement water plan. Discussions were held with community leaders and other traditional owners across the Mary Basin on a wide range of topics, not all of which can be addressed through water planning. Topics included cultural values of the waterways, concerns from traditional owners about water and water management, changes that have been observed, and aspirations for the future. As a result of this engagement, three recommendations were provided:

- recognition of traditional owners of the plan area as legitimate stakeholders in water planning, particularly for advice on cultural water requirements

- investigate opportunities to provide access to consumptive and non-consumptive water for economic and cultural purposes
- support continual engagement and involvement of traditional owners in water planning.

Further consultation was undertaken after the draft replacement plan was released to ensure the views of traditional owners were adequately captured through replacement water plan outcomes, Indigenous reserves of unallocated water and unallocated water release processes. The plan promotes further engagement with traditional owners to implement releases of unallocated water and improved understanding of water related cultural values.

## What is the recommended option and why?

It is considered that option two generates the greatest net benefit to the community and is the most effective way to advance the sustainable management of Queensland's water as set out in the Act whilst minimising the level of regulation imposed on the water plan area.

The changes incorporate up-to-date science and improved outcomes in line with the Act. The implementation of metering enables improved compliance and data collection of water use to inform the development of future water plans. Updated performance indicators and the inclusion of significant watercourse reaches provide clear decision-making tools to monitor the performance of the replacement water plan and ensure responsible release of the updated unallocated water volumes. The modernised water licences provide more clarity, flexible and equitable entitlement access and ensure fair and sustainable water use. It introduces a seasonal water assignment market, allowing market forces to improve the efficiency and use of water within the plan area on a seasonal basis. The incorporation of a head of power for water sharing rules provides the ability to develop, in consultation with stakeholders, formal water sharing rules for the equitable access to the water resource across relevant catchments.

The department has a compliance strategy which involves the release of annual compliance plans. These are published on the department's website, providing guidance and clarity to water users about complying with the water act and water plans.

An internal departmental implementation plan has been developed to ensure effective implementation of the replacement water plan. The purpose of this implementation plan is to provide the actions required by the department and other government agencies to ensure the replacement water plan is implemented within agreed timeframes. The replacement water plan also specifies the development of a Monitoring, Evaluation, and Reporting Strategy (MERS) within 12 months of the effective date of the plan. This strategy helps monitor the progress and effectiveness of the replacement water plan in achieving its outcomes. Additionally, [section 49 of the Act](#) requires the Minister to report on the effectiveness of each water plan and its implementation at least every five years, ensuring the replacement water plan remains effective and relevant over its life.

The decision to not regulate overland flow and groundwater in the catchment, other than the Cooloola Sandmass underground water management area, is due to the assessed low risk to these resources. This ensures that there is no unnecessary regulatory burden imposed by the replacement water plan.

**Impact assessment**

Type of cost	First full year	First 10 years**
<b>Direct costs – Compliance costs</b>	Unable to quantify the direct costs due to the complexity of the regulation. Qualitative assessments have been provided in this impact assessment.	Unable to quantify the direct costs due to the complexity of the regulation. Qualitative assessments have been provided in this impact assessment.
<b>Direct costs – Government costs</b>	Unable to quantify the direct costs due to the complexity of regulation. Qualitative assessments have been provided in this impact assessment. The direct government costs are already accounted for in the standard operational budget.	Unable to quantify the direct costs due to the complexity of regulation. Qualitative assessments have been provided in this impact assessment. The direct government costs are already accounted for in the standard operational budget.

**Signed**



Linda Dobe  
 Acting Director-General  
 Department of Regional Development,  
 Manufacturing and Water  
 Date: 8 April 2024



Glen Butcher MP  
 Minister for Regional Development and  
 Manufacturing and Minister for Water  
 Date: 17 April 2024

## Appendix A

Table 1. Consultation groups – Preliminary Public Consultation

Stakeholder Group	2021							2022							TOTAL		
	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul		Aug	Sep
1 Irrigator meetings	✓	x4									x4						12
2 Metered Areas group															x3		0
3 Seqwater				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		12
4 Sunwater				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		12
5 Sunwater Lower Mary River Water Supply Scheme Customer Advisory Board						✓											1
6 Queensland Conservation Council				✓						✓				✓			3
7 Environmental interest groups						✓				✓				✓			3
8 QLD Farmer Federation																	0
9 Peak industry bodies											✓				✓		2
10 Jinibara Peoples Aboriginal Corporation	✓						✓						✓			✓	4
11 Butchulla Aboriginal Corporation			✓				✓						✓			✓	4
12 Butchulla Native Title Aboriginal Corporation				✓			✓						✓			✓	4
13 Kabi Kabi Peoples Aboriginal Corporation			✓				✓						✓			✓	4
14 Widgee Water Advisory Committee																	0
15 Obi Obi Water Advisory Committee																	0
16 Mary River Catchment Coordinating Committee (Lower and Upper)				✓		✓				✓				✓		✓	5
17 Amamoor Water Advisory Committee																	0
18 Gympie Regional Council						✓					✓			✓		✓	4
19 Noosa Shire Council							✓				✓			✓		✓	3
20 Fraser Coast Regional Council				✓	✓	✓			✓	✓	✓	✓	✓	✓	✓		10
21 Sunshine Coast Regional Council																	0
22 QLDHydro																	0
23 Burnett Mary Regional Group																	0
24 Other Government agencies										✓	✓						2
<b>TOTAL</b>	<b>2</b>	<b>4</b>	<b>2</b>	<b>6</b>	<b>3</b>	<b>7</b>	<b>7</b>	<b>2</b>	<b>3</b>	<b>7</b>	<b>11</b>	<b>3</b>	<b>7</b>	<b>7</b>	<b>8</b>	<b>6</b>	<b>85</b>



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**Table 2. Consultation groups - draft consultation period**

Stakeholder Group		2023				TOTAL
		Feb	Mar	Apr	May	
1	Irrigator meetings		✓	x2	x4	7
2	Metered Areas group		✓			1
3	Seqwater	✓				1
4	Sunwater	✓		✓		2
5	Sunwater Lower Mary River Water Supply Scheme Customer Advisory Board					0
6	Queensland Conservation Council		✓			1
7	Environmental interest groups		✓			1
8	QLD Farmer Federation		✓			1
9	Peak industry bodies		✓			1
10	Jinibara Peoples Aboriginal Corporation			✓		1
11	Butchulla Aboriginal Corporation		✓			1
12	Butchulla Native Title Aboriginal Corporation		✓			1
13	Kabi Kabi Peoples Aboriginal Corporation		✓	✓		2
14	Widgee Water Advisory Committee		✓			1
15	Obi Obi Water Advisory Committee		✓			1
16	Mary River Catchment Coordinating Committee (Lower and Upper)		✓		✓	2
17	Amamoor Water Advisory Committee		✓			1
18	Gympie Regional Council	✓				1
19	Noosa Shire Council	✓				1
20	Fraser Coast Regional Council		✓			1
21	Sunshine Coast Regional Council		✓		✓	2
22	QLDHydro	✓			✓	2
23	Burnett Mary Regional Group			✓		1
24	Other Government agencies			✓	✓	2
<b>TOTAL</b>		<b>5</b>	<b>15</b>	<b>7</b>	<b>8</b>	<b>35</b>