

# **Draft Water Plan (Moreton) (Supply Scheme Arrangements) Amendment Plan 2018**

**Statement of intent**

**October 2018**

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## Foreword

I am pleased to release this statement of intent that accompanies the draft Water Plan (Moreton) (Supply Scheme Arrangements) Amendment Plan 2018 (draft water plan amendment).

The draft water plan amendment is now available for public review and comment. The aim of this document is to provide an overview of the draft water plan amendment, the issues raised during consultation, technical assessments undertaken to better understand the issues and how these have been addressed.

The draft water plan amendment aims to improve the current management of water in the Central Lockyer Valley Water Supply Scheme and support economic development, investment and jobs for the Lockyer Valley region.

In particular, this draft water plan amendment provides for sustainable volumetric limits to be placed on all water entitlements in the Central Lockyer Valley Water Supply Scheme and facilitates water sharing between entitlement holders during dry conditions. It also sets the framework to enable seasonal and permanent water trading so that water users have more flexibility in managing the water needs of their business.

Having clear and sustainable volumetric limits not only provides certainty to water users about their rights to water; it also provides a strong platform for any future new sources of water to be more readily integrated into the scheme if necessary.

The draft water plan amendment has been developed through extensive consultation with local water users, residents, business owners, council, Seqwater and industry groups. It has been informed by the best science available.

Thank you to those who have been a part of this process, particularly the technical working group. Your contributions have been invaluable in helping to shape the future of water resource management in the Central Lockyer Valley region.

I encourage anyone with an interest in the water resources of the Central Lockyer Valley region to read this statement of intent and supporting accompanying documents. Please contribute to the finalisation of this draft amendment by making a submission about any issues of interest or concern.

All properly made submissions will be considered in finalising the draft water plan amendment. Your feedback will ensure that the amended plan meets the needs of Seqwater, Central Lockyer Valley water users and others with an interest in this area.

Dr Anthony Lynham

Minister for Natural Resources, Mines and Energy

## **Acknowledgement of the Traditional Owners of the Moreton water plan area**

The Department of Natural Resources, Mines and Energy acknowledges and pays respect to the Traditional Owners in the Moreton area of Queensland. The contributions of earlier generations, including the Elders, who passed on their knowledge of natural resource management, are valued and respected.

The Department acknowledges that the Traditional Owners of this region have a deep cultural connection to their lands and waters and that there is a need to recognise Traditional Owner knowledge and cultural values in water planning.

## How to make a submission

You are invited to make a submission on issues you believe should be considered in finalising the draft Water Plan (Moreton) (Supply Scheme Arrangements) Amendment Plan 2018. If you support proposals in the draft water plan amendment or any of the associated supporting documents, you are also encouraged to make a submission to support the proposals you endorse. Anyone is invited to make a submission about—

- the draft water plan amendment
- the draft water management protocol amendment
- the draft water entitlement notice
- the operations manual.

Submissions must be made in writing and include the name, address and signature of the person or persons making the submission. An authorised officer (such as the executive officer or secretary of a committee) must sign submissions made by entities or interest groups. Respondents should clearly outline the document they are commenting on, the issues that their submission concerns, and include facts used to support the submission. Email and internet submissions will be accepted and are considered to have been 'written and signed'.

A submission form and the details for making a submission are available from the Business Queensland website at [www.business.qld.gov.au](http://www.business.qld.gov.au). Submissions made in any of the highlighted methods will be received up until the closing time and date.

All properly made submissions and any issues raised during consultation will be considered in finalising the draft water plan amendment. A report summarising the issues raised and how the issues were addressed will be released with the final water plan amendment.

A separate submission (Submission Form 2) can also be made by eligible surface water users.

### Submissions methods

Submissions must be made to the chief executive on or before 5pm, 18 January 2019.

Submissions can be made as follows:

- by printing and completing the submission form (available from the Business Queensland website at [www.business.qld.gov.au](http://www.business.qld.gov.au))
- online at [www.getinvolved.qld.gov.au](http://www.getinvolved.qld.gov.au)
- by email to [WRPMoreton@DNRME.qld.gov.au](mailto:WRPMoreton@DNRME.qld.gov.au)
- by post to:

Department of Natural Resources, Mines and Energy  
Chief Executive  
Water Planning South Region  
Attn: Water Plan Coordinator  
Gatton Research Station  
Locked Mail Bag 1009, MS 437, Gatton QLD 4343.

Submissions should identify any information that is considered confidential. The Queensland Government will endeavour to maintain the confidentiality of information that is identified in this way, however submissions are subject to the *Right to Information Act 2009* and information may be required to be released upon requests made under this Act. Furthermore, other legal obligations, such as the processes of the courts or natural justice, may also override confidentiality.

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## Summary

The Minister for Natural Resources, Mines and Energy has released a draft Water Plan (Moreton) (Supply Scheme Arrangements) Amendment Plan 2018. At the same time, a draft water entitlement notice (draft WEN), a draft water management protocol (draft protocol), a draft resource operations licence (draft ROL) and a draft operations manual have also been released by the chief executive to provide for consultation and public comment. These documents implement the draft water plan amendment.

The purpose of this document is to provide information on the intent and the effect of the draft water plan amendment. It explains how and why the water plan is being amended, the factors that were considered in the preparation of the draft water plan amendment, the key changes and the reasons behind them.

The water plan has been in place since March 2007 and was amended in 2009 and 2013 to address water allocation and management issues in other catchments in the plan area. The Central Lockyer Valley Water Supply Scheme (the scheme) is the only remaining water supply scheme in the Moreton plan area which is still managed under interim arrangements.

The key aim of the amendment is to finalise management arrangements for the scheme in a way that:

- support the current economic and employment profile in the Central Lockyer Valley region
- supports the existing agricultural industry and associated jobs
- ensures a more equitable share and management of the water resource across all water users in the scheme.

The draft water plan amendment also includes new provisions which apply to other parts of the plan area including—

- clearer limits on overland flow development that is permitted under the plan
- establishing a general reserve to make additional water available in the Lower Brisbane and Cabbage Tree Creek sub-catchments to support specific small scale water uses.

The release of the draft water plan amendment provides an opportunity for engagement with stakeholders about the Minister's proposals for the amended water plan. The information contained in this report is intended to promote informed feedback to aid the community's understanding of key elements of the draft water plan.

### Available Documents

Other relevant documents are—

- Notice of the availability of the Water Plan amendment for public review
- Draft Water Plan (Moreton) (Supply Scheme Arrangements) Amendment Plan 2-18
- Draft Moreton Water Management Protocol Amendment
- Draft Moreton Water Entitlement Notice
- Draft Operations Manual
- Draft Resource Operations Licence.

### Supporting technical Information

- Social and economic impacts of changes in water availability in Central Lockyer report
- Benefitted groundwater area technical report
- Groundwater model scenario report
- Surface water model scenario report.

### **Accessing the draft planning documents**

Copies of the draft water plan amendment, draft water entitlement notice, draft protocol amendment and supporting documents are available at [www.business.qld.gov.au](http://www.business.qld.gov.au) and searching for 'Moreton water plan'. Alternatively, copies of the documents may be inspected at the department's Gatton office or by contacting the department.

# 1. Introduction

## 1.1. Background to the water planning process

The *Water Act 2000* (the Water Act) provides the legislative framework for the sustainable planning, allocation and management of water resources in Queensland. It requires that all planning, allocation and use of water must 'advance sustainable management and efficient use of water'.

Water plans provide the principal mechanism for achieving the requirements of the Water Act, setting out detailed strategies and outcomes for water to be shared among water users, including the environment. The water planning framework consists of—

### Overarching legislation

- *Water Act 2000*.

### Subordinate legislation

- Water Regulation 2016
- Water plan.

### Statutory instruments

- water entitlement notice
- water management protocol.

### Other associated documents

- resource operations licence
- operations manual.

Under to the Water Act (s45), the Minister must consider the following in making a draft water plan amendment:

- regional plans made under the *Planning Act 2016* that apply to the plan area (see section 3.1)
- environmental values established under the Environmental Protection (Water) Policy 2009 (under the *Environmental Protection Act 1994*) (see section 3.2)
- the public interest (see section 3.4)
- the results of any public consultation undertaken prior the preparation of the draft water plan through the release of a statement of proposals (see section 2).

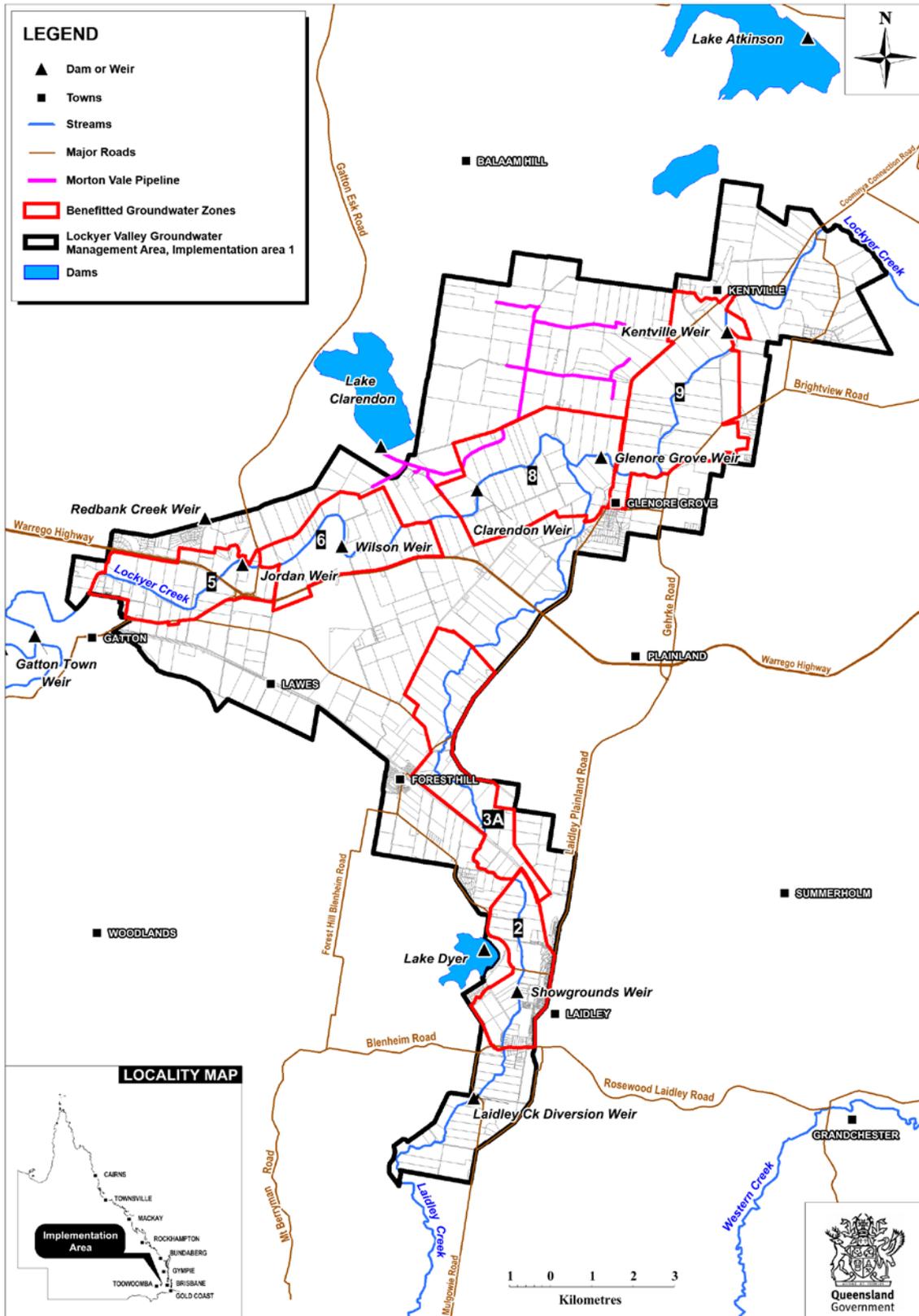
## **1.2. The intent of the draft water plan amendment and associated planning instruments**

The draft water plan amendment aims to improve the current management of water in the scheme and support economic development, investment and jobs for the Lockyer Valley region.

The scheme is located near Gatton in South East Queensland and was established in the 1980s. The scheme is owned and operated by Seqwater. It comprises two off-stream storages (Clarendon Dam near Gatton and Bill Gunn Dam near Laidley) and nine weirs that together function as infrastructure to support high value agriculture in the Central Lockyer Valley. A map of the scheme is provided in **Figure 1** below.

The scheme storages were established as opportunistic dams for diversion and storage of water during high flow events. Releases are made strategically from both dams as these natural flows reduce and/or stop. This extends the duration that scheme entitlement holders can take water from the Lockyer and Laidley Creeks. The releases, in combination with the recharge weirs, also recharge water to the alluvial aquifer that underlies and adjoins these creeks. The scheme consists of:

- surface water supplied direct to water users from Lake Clarendon (Clarendon Dam) and Lake Dyer (Bill Gunn Dam)
- surface water supplied to water users via the Morton Vale Pipeline from Lake Clarendon
- underground water in alluvial aquifers that are artificially recharged by water released from the dams through the series of instream recharge weirs (this water is known locally as 'benefitted groundwater').



**Figure 1- Central Lockyer Valley Water Supply Scheme**

A summary of the draft water plan amendment and associated planning instruments are detailed in the **table 1** below.

**Table 1 – Components of the targeted amendment to the Water Plan (Moreton) 2007 and supporting documents**

Planning document	Responsibility/ delegation for approval	Purpose
Water plan	Minister	<p>Amends the Water Plan (Moreton) 2007 to provide for:</p> <ul style="list-style-type: none"> <li>• a process for the conversion of entitlements to water allocations;</li> <li>• water allocation zones (surface water and underground water);</li> <li>• water allocation security objectives; and</li> <li>• a general reserve of unallocated water available in the Lower Brisbane and Cabbage Tree Creek sub-catchment areas.</li> </ul>
Draft water management protocol	Chief executive (Department of Natural Resources, Mines and Energy)	<p>Amends the current water management protocol (dated January 2018) and implements the draft water plan amendment by—</p> <ul style="list-style-type: none"> <li>• specifying permanent water allocation dealing rules for supplemented water allocations; and</li> <li>• providing the rules and process for releasing unallocated water from the strategic reserve.</li> </ul>
Draft water entitlement notice	Chief executive (Department of Natural Resources, Mines and Energy)	<p>A new document to detail the amendments proposed to convert existing scheme water entitlements to water allocations.</p> <p>If you are a water entitlement holder within the scheme, you will need to check the draft WEN as it is likely that the terms and conditions of your entitlement have changed as a result of this planning process. Water users affected by the draft WEN are encouraged to lodge a submission.</p>
Draft resource operations licence (ROL)	The final ROL is approved by chief executive and issued to the scheme owner and operator-Seqwater	<p>The draft ROL states specific conditions regarding infrastructure details, environmental management rules and the requirement to prepare an operations manual.</p> <p>The draft ROL is largely based on the details contained in the interim resource operations licence (IROL) which Seqwater currently operates under.</p> <p>Once approved by the chief executive, the resource operations licence will be issued to Seqwater and will replace the IROL.</p>
Draft operations manual	Prepared by the scheme owner and operator	<p>The draft operations manual has been prepared by Seqwater and states:</p> <ul style="list-style-type: none"> <li>• operating rules for the scheme;</li> <li>• water sharing rules e.g. announced allocations for water allocations; and</li> <li>• seasonal water assignment rules to allow temporary trading.</li> </ul> <p>Following consultation on the draft operations manual, Seqwater will submit a final version to the chief executive for approval.</p>

## 2. Statement of proposals

The water planning process formally commenced in October 2015 when the statement of proposals was released for public comment. The statement of proposals provided information about the purpose of the proposed amendment to the Water Plan (Moreton) 2007 to address water allocation and management issues associated with the scheme. The statement of proposals outlined the Minister's intention to—

- provide security for underground water entitlements i.e. consider establishing a water allocation security objective for underground water
- provide for the conversion of existing entitlements in the scheme to water allocations
- review boundaries of the supplemented underground water area
- review infrastructure operating and water sharing rules
- establish water trading rules.

Public meetings and targeted workshops with smaller groups of water users were held following the release of the statement of proposals. One hundred and fifty-two submissions were received from a wide range of interest groups, including local water users and entitlement holders, local government, industry bodies and community groups.

Key issues raised during this consultation are outlined in **Attachment 1** along with how the issues have been considered in the planning process.

Various meetings were held with stakeholder groups during the development of the draft water plan amendment to gather local knowledge of the water management values and issues of importance to all communities in the plan area.

The department met individually with most underground water entitlement holders in the scheme between April and June 2018. As the underground water entitlements do not have a volume or irrigated area defined, the purpose of these discussions was to review water use data with landholders and to discuss the on-farm factors to help inform the volumetric allocation process.

Some key points raised by entitlement holders during these discussions were—

- entitlement holders want the allocation process to be open and transparent
- the patterns of water use, crop types and cropping cycles are diverse
- bore depths and yields vary considerably across the benefitted area
- all properties to be given enough allocation to continue to operate as they have historically done
- allocations across the benefitted area to be based on a foundation of equitable distribution between properties, but properties have been bought based on the presence of highly capable bores, and this factor must form part of the water allocation process for individual properties
- identification and validation of trends in metered use over time.

### 3. Links with other government policy

In developing the draft water plan amendment, the Minister considered national, state and regional sustainable development goals and all sustainable management strategies and policies relevant to the plan area. Some of the key policies are described below.

#### 3.1 Regional plan

The South East Queensland Regional Plan 2017, also known as ShapingSEQ, applies to the scheme area. The draft water plan amendment will support the current ShapingSEQ goals, elements and strategies. In particular, “the sustain element” includes—

- Element 5: Water sensitive communities to ensure water management in SEQ will use innovative approaches in urban, rural and natural areas to enhance and protect the health of waterways, wetlands, coast and bays.
- Element 6: Natural economic resources to ensure the regions natural economic resources (including water) are managed sustainably and efficiently to meet the needs of existing and future communities.

In particular, the draft plan will support the efficient and equitable use of water through—

- setting clear and sustainable volumetric limits
- providing for water sharing arrangements during dry times
- enabling seasonal and permanent water trading that both provides flexibility for growers in meeting their water needs but also drives efficiency as water savings can be on-sold
- facilitating more efficient and effective operations of the water supply scheme
- providing increased protections for existing authorised users and environmental values.

#### 3.2 Environmental values and water quality objectives

The Water Act requires environmental values (EVs) established under the Environmental Protection (Water) Policy 2009 (EPP Water) to be considered when preparing a draft water plan.

EVs and water quality objectives (WQOs) were scheduled for the Lockyer Creek under the EPP Water in 2010 for both surface water and groundwater<sup>1</sup>. Surface waters were recently reviewed in 2017 on the basis of additional water quality monitoring data and publically released for comment. The consultation period for this review has closed and submissions are being considered. The draft plan is taking into consideration both the scheduled EVs and WQOs and the draft 2017 EVs and WQOs. The EVs that apply to the Central Lockyer region are presented in Table 2 for surface water and groundwater and mapped for the 3 major fresh surface waters; Lake Dyer (Bill Gunn Dam), Lake Clarendon and Upper Lockyer Creek.

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<sup>1</sup> ‘Groundwater’ as referred to in the EPP Water is the same as the definition of ‘underground water’ under the *Water Act 2000*. That is, “water that occurs naturally in, or is introduced artificially into, an aquifer”.

**Table 2 – EVs that apply in the Central Lockyer region for groundwater and surface water**

	Aquatic ecosystems	Irrigation	Farm Supply/Use	Stock Water	Aquaculture	Human consumer	Primary recreation	Secondary recreation	Visual recreation	Drinking water	Industrial use	Cultural, spiritual and ceremonial values
Lake Dyer	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓
Lake Clarendon	✓	✓	✓	✓	✓	✓	✓	✓	✓			✓
Upper Lockyer Creek	✓	✓	✓	✓		✓	✓	✓	✓	✓		✓
Groundwater	✓	✓	✓	✓						✓		✓

The rich fertile alluvium and ideal growing climate of the Central Lockyer supports high value agriculture particularly for vegetable and forage crops. Water in the scheme area (from both surface water and groundwater resources) therefore has high representation of human use environmental values particularly for irrigation and farm supply.

For this reason, most of the scheme area has been cleared for farming, urban development and industries. It is important to note that while water plans can support good water quality outcomes, water quality is influenced by a number of factors including land-based activities associated with urban and agricultural development.

Surface waters within the scheme area also support the aquatic ecosystems of Lowland Freshwaters. It has been determined that these waters are moderately disturbed in that the biological integrity of the ecosystem has been adversely affected by human activity to a relatively small but measurable degree. Most notable for the scheme area are the existing nine weirs which can reduce the amount of water leaving the scheme area and potentially retain sediments. WQOs have been established for these moderately disturbed Lowland Freshwaters and the provisions already contained in the Water Plan (Moreton) 2007 will ensure information about water availability and use, water quality and ecological monitoring is collected to assess the water plan's performance in meeting the WQOs.

Some groundwater dependent ecosystems have been mapped with moderate confidence close to the extent of Lockyer and Laidley Creeks. The water requirements of these groundwater dependent ecosystems (such as water requirements or species present) are have not been quantified however it is recognised that these ecosystems experience intermittent flow and fluctuating salinity, reflective of recharge the alluvium may be receiving from the existing scheme infrastructure. The draft water plan amendment does not propose any modification or addition to the existing infrastructure of the scheme which would potentially have further impacts to these groundwater dependent ecosystems or other environmental values. The draft water plan amendment will ensure that the conversion of entitlements to volumetric water allocations is sustainable and the operation of the scheme is compatible with EPP Water EVs/WQOs and applies best management practices to achieve better environmental outcomes.

### **3.3 Climate change**

Specific climate change modelling at the local scale of the scheme is not possible and so could not be undertaken as part of this amendment.

The modelling for the proposed amendments incorporates rainfall and evaporation considerations in its simulation period from 1890 to 2000 and so considers aspects of changing climate conditions. The proposed amendments have been modelled to ensure the existing environmental flow objective in the Water Plan has been met.

The strategies of the draft water plan amendment along with the operational rules in the operations manual are adaptive to take into account the climatic conditions on any given day. Additionally, setting volumetric limits along with opening up new water trading opportunities allows farms to manage and adapt to any effects of climate change at the farm scale.

Amendments to the Water Act through the introduction of the Minerals, Water and Other Legislation Amendment Bill 2018 were passed by Queensland Parliament on the 18 October 2018. These new laws will explicitly require the Minister to consider the implications of climate change when preparing water plans.

The statutory 10-year review of the water plan will consider if management strategies continue to be effective in light of more current estimates of the likely effects of climate change and better modelling techniques for the Moreton plan area as a whole.

### **3.4 Public interest**

The draft water plan amendment supports the current economic and employment profile of the Lockyer region by converting water entitlements to volumetric allocations. This reflects current business needs and provides for flexible and equitable management rules. Best management practices can then be applied both on farm and for the scheme to achieve better environmental outcomes and to support the scheme's social and cultural values.

### **3.5 Water pricing**

Currently, Seqwater's irrigation customers in the Central Lockyer (excluding Morton Vale Pipeline customers) are generally charged only Part B prices which are payable on the volume of water used. Part A prices are payable per megalitre of the volume of the customer's entitlement. Seqwater does not currently charge Part A prices because there are currently no volumes attached to water entitlements for irrigators.

It is expected that Seqwater will commence charging Part A prices for customers supplied by the Central Lockyer Valley scheme from 1 July 2019 as volumes will be attached to water allocations by late 2018-19. The government will set irrigation prices for 2019-20 based on recommendations made by the Queensland Competition Authority (QCA) in 2013 and in consultation with Seqwater and the QFF.

The QCA is expected to commence a new review to recommend irrigation prices to apply from 2020-21 to 2023-24 in October 2018. Stakeholders will be invited to make submissions.

### **3.6 Strategic business case**

Water in the Lockyer Valley is a complicated and challenging matter. The desire to take advantage of water and wastewater infrastructure, such as Wivenhoe Dam and the Western Corridor Recycled Water Pipeline, is something which has engaged a number of rural communities and producers in recent years. I acknowledge the work that the Lockyer Valley Regional Council has undertaken to date to prepare the draft pre-feasibility report.

The Council's pre-feasibility study helps to broadly outline potential additional water proposals. However, there are many complex matters to be considered regarding these project ideas. Their impact on dam safety, flood mitigation and South East Queensland water security are important matters which will need to be considered.

This is why the department commissioned a consultancy to prepare a strategic business case that identifies any feasible options for additional water supplies into the Lockyer Valley and Somerset region. Building Queensland is an assisting partner in this work to ensure there is strong leadership to guide the business case development. A project working group, chaired by the chair of the Lockyer Valley and Somerset Water Collaborative, provides external and internal stakeholders with an opportunity for input to the business case. This work will build on the various water studies that have been undertaken over time, including by council.

Building Queensland is the State Government's infrastructure advisor and they have the expertise and professional approaches to help stakeholders to access options, eliminate ideas that are not feasible and then advance those proposals which are feasible and in the overall community's interest.

The leadership and professional analysis provided by Building Queensland are invaluable in providing a focus for any future assessments so that they move forward in a direction that is consistent with the Government's policy agenda and provides stakeholders more certainty about the prospects of future water supply options.

Setting a sustainable platform of water entitlements is essential before any new water supplies could be imported into the Lockyer Valley to support economic development, investment and jobs for the region. The draft water plan amendment is therefore a critical step in moving forward with the development of a draft strategic business case proposed for release in April/May 2019.

This work will be a key input into investigations to be led by the Lockyer Valley Regional Council using the \$1.4 million received under the Maturing the Infrastructure Pipeline Program administered by the Department of State Development, Manufacturing, Infrastructure and Planning.

## **4. Preparing the draft water plan**

Hydrological and socio-economic assessments have been prepared to support the development of the draft water plan amendment. These assessments consider the impacts and effects of the conversion of water entitlements in the scheme to volumetric water allocations.

The technical reports will be made available by visiting the department's website at [www.business.qld.gov.au](http://www.business.qld.gov.au) and searching for 'Moreton water plan'. Please contact the department if you would like a copy of a report sent to you.

### **4.1 Social and economic values assessment**

To gain a better understanding of the value of water to irrigators in the scheme area and the social and economic impacts of any changes that could arise from changes to groundwater access, a socio-economic assessment was undertaken. An independent consultant was engaged and the study informed how the draft plan could best support the economic and employment profile of the area.

The assessment indicated that the value of water and the financial impact of a change in the availability of water varies significantly between irrigators. This is due to the significant diversity of crops produced by the region, differences in access to and quality of water sources, costs to access water, production technologies, soil types, scale of operation, financial leverage, extent of processing and risk management strategies employed.

The diversity of crop mixes, patterns of land use and land values reflect irrigators' understanding of the complexities of the underground water resource, the availability of water, soil types and markets. Irrigators are therefore most concerned about the impact of a reduction in the availability of water noting that any reduction would be associated with potential negative effects including reduced production capacity and loss of relative competitiveness, 'irreversible' reputational damage, reduced land values, and impacts to assets and capacity to borrow.

Considering the value of agricultural production in the Lockyer Valley and the flow on benefits provided to other industries, the assessment found that economic impacts in the region would be both directly and indirectly experienced. This conclusion directly supports the draft water plan amendment proposals for the setting of volumetric limits on water entitlements in a way that reflects the existing agribusiness water needs to sustain their existing commercial viability, which in turn underpins job security for residents in the Lockyer Valley. Job security is a particularly important outcome for this planning process as jobs associated with the agricultural industry significantly dominate the employment profile of the valley.

### **4.2 Hydrological assessment**

Hydrological models developed by the Department of Environment and Science are used to support water planning in the Central Lockyer area and have informed the draft water plan amendment. The use of the models ensures that decisions made about the allocation and management of water in the scheme continue to be supported by the best available science.

The Central Lockyer Valley IQQM surface water model was used to test the effect of various surface water operational rules on the performance of supplemented water allocations. A new base case has been developed to help define water allocation security objectives which protect existing entitlement holders from impacts resulting from future rule changes.

The Central Lockyer Valley MODFLOW groundwater model simulation period covers recent flood events and the Millennium drought ensuring the model is representative of a wide range of hydrological conditions. It was used in conjunction with a groundwater management package to assess groundwater level responses to a range of groundwater allocation and water sharing management scenarios. As the two models are independent of each other, the groundwater model does not reflect recharge changes associated with surface water management changes.

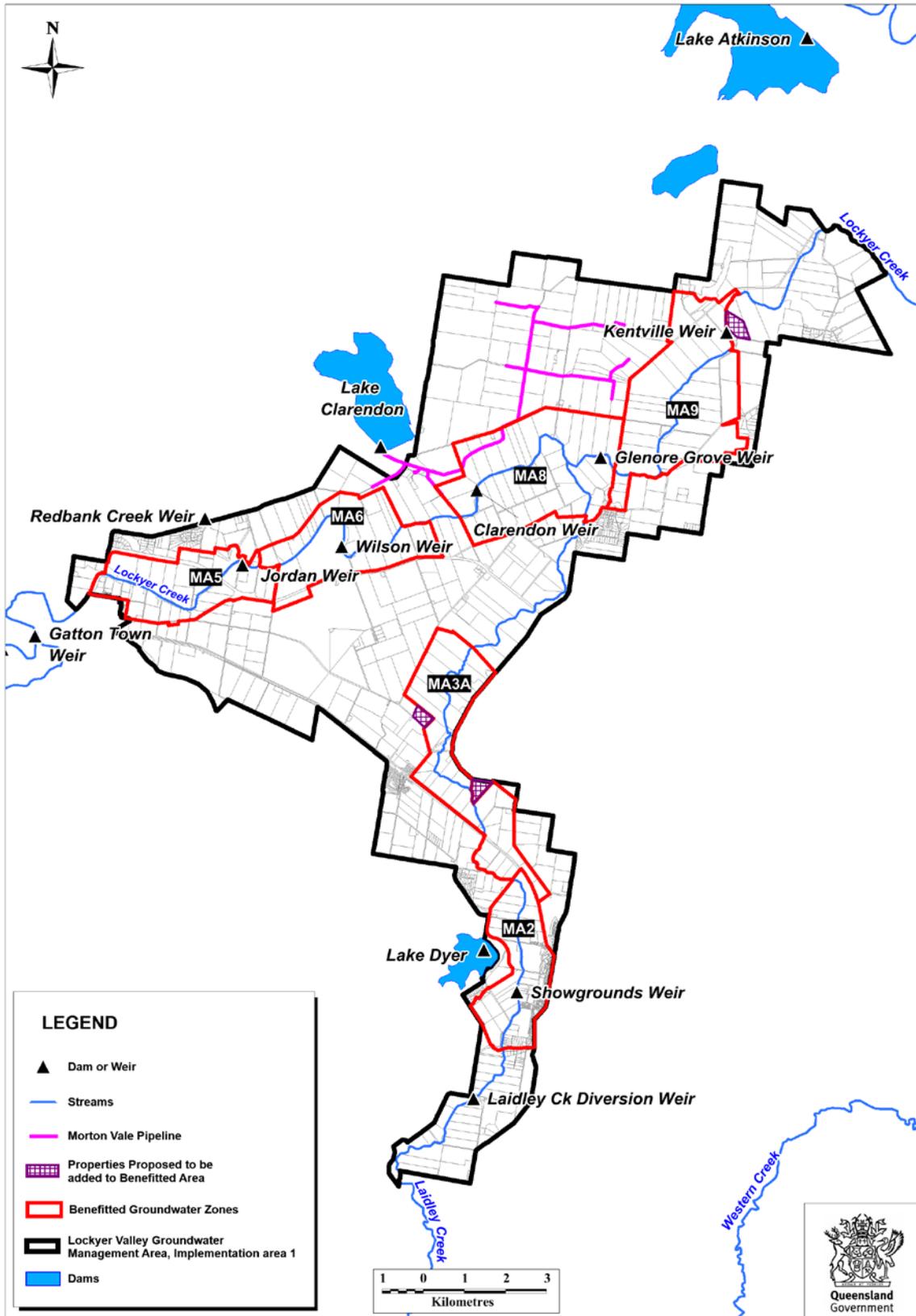
You can request a copy of the hydrologic models used in the draft water plan amendment. The models can be purchased for a fee under a licence agreement.

### **4.3 Benefitted groundwater area boundary assessment**

The draft water plan amendment identifies two new properties along Laidley Creek and one downstream of Kentville weir as receiving recharge benefit from the scheme. The draft water plan amendment expands the benefitted area to include these three properties.

Releases are made from Lake Dyer and Lake Clarendon into Laidley and Lockyer creeks to provide recharge to the alluvial aquifer that underlies and adjoins these creeks and to provide surface water for pumping. In 1991, the benefitted groundwater area was set based on an understanding at that time of the benefits of releases down Laidley Creek and into Lockyer Creek from Bill Gunn Dam. In 1997, following the commencement of releases from Lake Clarendon, the benefitted groundwater area was expanded to include that area that would benefit from releases down Lockyer Creek. This area was identified in the Central Lockyer IROL.

Additional technical groundwater information and data was collected as part of this amendment. The data evaluated those areas within the scheme that receive benefit since the initial setting of the benefitted groundwater area in 1991 and 1997 and identified the additional areas also receiving benefit. A map of the boundary of the benefitted groundwater area is provided in **Figure 2**. It is acknowledged that landholders receive varying degrees of benefit which is due to a combination of factors, including the variability in the characteristics of the aquifer across the valley.



**Figure 2- Benefitted groundwater area and properties proposed for inclusion**

## **5. Draft water plan provisions—Central Lockyer Valley Water Supply Scheme**

A key outcome of this draft water plan amendment is the conversion of existing water entitlements in the Central Lockyer Valley Water Supply Scheme to tradeable water allocations. Converting a water entitlement to a water allocation permanently separates the water from the land. The water allocation can be bought, sold and mortgaged against, similar to a land title.

If you hold a water entitlement that is being converted to a water allocation, you may need to contact your financial institution.

The details of all water licences being converted to water allocations are provided in the draft WEN.

### **5.1 Granting water allocations—surface water**

The draft water plan amendment converts 113 existing surface water entitlements within the scheme to tradable water allocations.

Seven IWAs which state a volume will be converted to water allocations with the same volume.

The remaining 106 IWAs state the area which may be irrigated (in hectares) and do not state a volume. These area-based IWAs will be converted at the 3.4ML/Ha conversion factor consistent with the conversion rules that are already stated in the current Water Plan (Moreton) 2007 and have been in place since the plan commenced but not implemented as yet.

The Minister recognises that with the passage of such time, IWA holders may have developed their business based on accessing more water than the 3.4ML/ha provides. The draft water plan amendment therefore provides an opportunity in such instances for the IWA holder to apply for an additional volume of water under the draft water plan amendment submissions process.

Existing entitlement holders who can demonstrate that the 90th percentile value of historic surface water use for their area-based IWA exceeds that of the proposed nominal volume are eligible to apply for an additional volume of water. The draft water plan amendment also states the matters (criteria) to be considered by the chief executive in deciding any additional volume to be granted.

The additional volume of water may be accessed as either surface water or underground water (provided that the holder also holds an underground water entitlement) to provide some flexibility to growers in how the additional water might best serve their existing business needs. Allowing the water to be taken as underground water also provides the chief executive with options to spread the additional water amongst different water sources to manage any local availability concerns.

A separate submission form is required for additional water and is available on the department's website or by contacting the department. An independent referral panel will be established to consider all submissions for additional water based on a number of criteria including, but not limited to, the following—

- access to available sources of water by the specific existing agricultural enterprise including from existing entitlements and other sources (i.e. overland flow water or recycled water);
- demonstrated water use including from other sources of water for the specific existing agricultural enterprise;
- water efficiency practices used by the agricultural enterprise that relate to the demonstrated water use;

- employment directly supported by the specific existing agricultural enterprise;
- past investment in irrigation infrastructure or water use efficiency technology for use in the agricultural enterprise;
- the total volume of water that can be effectively managed by the agricultural enterprise's infrastructure;
- evidence of agricultural production supply contracts, or part thereof, directly attributable to the specific existing agricultural enterprise;
- if the request is for the additional volume of water to be added to an underground water entitlement, then:
  - the extent to which the agricultural enterprise is dependent on groundwater or any other source of water; and
  - the local availability of groundwater or the ability of the holder to access other sources of water for the agricultural enterprise.

This ensures a consistent and transparent approach for considering submissions for additional water.

The draft water plan aims to support the continued growth of the economic and employment profile of the Central Lockyer area by ensuring that water users can access additional water where it can be demonstrated that the surface water volume proposed to be allocated is insufficient to meet the historic water requirements of an existing agricultural enterprise.

## **5.2 Morton Vale Pipeline**

The draft water plan amendment grants Seqwater a water allocation for 3,507 ML to supply the current Morton Vale Pipeline users. This draft amendment replaces the current provision which states an intent to grant interim water allocations to water users that have a contractual arrangement for water supplied by the Morton Vale Pipeline.

The scheme supplies 3,507 ML of surface water from Lake Clarendon via the Morton Vale Pipeline to users. These water users do not hold water rights recognised under the Water Act and instead rely on historical arrangements as their 'security' of water access. Contract arrangements for the Morton Vale Pipeline are complex and vary between users. This is considered to be the most appropriate approach for ensuring these users are transitioned to contemporary water management arrangements under the Water Act.

The draft water plan requires that these existing water use agreements and supply contracts are considered in deciding water allocation dealing rules for Morton Vale Pipeline. The water allocation dealing rules are stated in the draft water management protocol and enable Seqwater's allocation for Morton Vale Pipeline to be subdivided and transferred to individual users as soon as formal supply arrangements between users and Seqwater are in place. The draft plan proposals therefore provide a pathway for these water allocations to move to end users.

## **5.3 Granting water allocations—underground water**

The draft water plan amendment converts 152 underground water licences to water allocations with an annual volumetric limit. These entitlements are currently authorised to take underground water from the benefitted groundwater area of the scheme and includes the three new properties that have been identified (section 4.3). These licences do not currently state a nominal volume and only specify the lot and plan which may be irrigated.

Water licences that are held by Lockyer Valley Regional Council will be converted to a water allocation and allocated five ML. These licences are currently not used by the council, so a volume has been identified that could service community purposes, such as watering a small sports field or a community park.

As the Central Lockyer supports a diverse range of agricultural enterprise, it requires flexibility in the way water resources are allocated and used. The approach for converting water licences which state a purpose of irrigation to water allocations considers the variations in the type and availability of water supply across the catchment and the way individual farms are operated. The volume allocation methodology for underground water aims to ensure that the water requirements and risk management strategies of the current agricultural enterprise are supported.

The methodology for converting underground licences to water allocations is—

- Step 1—Identify the 90<sup>th</sup> percentile value of metered water use data by reviewing all historic metered water data available for an enterprise over a 27 year period from 1992 to 2017.
- Step 2—Divide the 90<sup>th</sup> percentile value by the licensed irrigable hectares (this is land that can be irrigated under the licence/s held by the enterprise as determined by geology mapping and spatial imagery data or as specified on the licence).
- Step 3—Assign the calculated value from step 2 to a volumetric conversion category in Table 3 below:

**Table 3 Volumetric conversion value**

<b>Historic ML per ha (using 90th percentile value)</b>	<b>New conversion rate</b>
Less than or equal to 2ML per hectare	Increase to 2ML per hectare
Greater than 2ML per hectare but less than or equal to 3 ML per hectare	Increase to 3ML per hectare
More than 3ML per hectare	No change – 90 <sup>th</sup> percentile value is retained

- Step 4—For volumetric conversion categories of less than 3ML per ha (as stated above), the volumetric conversion figure for the enterprise will be determined by multiplying the irrigable area obtained in step 2 by the conversion rate obtained in step 3. For those that are in the volumetric conversion category of more than 3ML per ha, the volumetric conversion figure for the enterprise will be the 90<sup>th</sup> percentile value of historic water use.

Where a converting licence states a source parcel which is stated on 2 or more converting licences which are not held by the same owner (i.e. more than one person shares the same bore/s), the volume for the water allocation must not be more than the highest recorded maximum water use and will be determined:

- by agreement between the licence holders
- or
- By the chief executive considering the water use by each holder of a converting water licence during the HOU consideration period.

Due to the variability in metered use data over the 27 year period, the 90<sup>th</sup> percentile is considered to be a suitable basis for the conversion methodology. The 90<sup>th</sup> percentile provides a volume that is better than or equal to 90 per cent of the recorded metered use. This value will reflect use from dry periods through to wet years, but it does not take into account the highest record of take. The data that falls between the 90<sup>th</sup> to 100<sup>th</sup> percentiles may contain potential outliers or years of unusually high use. Assigning allocations considering these outliers for all underground water entitlements would be unsustainable when totalled together. A summary of the allocated volumes and licensed irrigable hectares determined under the methodology is provided in Table 4 below.

**Table 4 Allocated volumes and licenced irrigable hectares**

Groundwater zone	Licensed irrigable hectares (Ha)	Volume allocated (ML)	Average (ML/Ha)
2	373	1,311	3.5
3a	624	1,724	2.8
5	492	1,958	3.0
6	655	1,990	2.8
8	1,181	3,297	2.8
9	920	3,390	3.7
Total for scheme	4,255	13,670	3.2

#### 5.4 Water allocation security objectives

The draft water plan amendment changes the water allocation security objectives (WASO) for surface water users in the scheme and proposes a new WASO for underground water allocations in the scheme.

WASOs provide a measure of how allocations would have been expected to perform using simulated historical data, assuming full use of existing water entitlements. They do not represent a prediction or guarantee of future performance of water allocations in any particular year. Instead, actual performance will depend on prevailing climatic factors, water demand distribution patterns and water users' decisions about using their water allocations.

These objectives aim to ensure that future decisions about the allocation and management of water will protect the probability of water users being able to obtain water under a water allocation. Future water resource development would only be approved if it is consistent with the WASOs.

The WASO for each groundwater zone is that the maximum volume allocated cannot be exceeded. This ensures the security of existing entitlements by ensuring that the allocation for each zone will not be increased.

Currently, the draft plan proposes the following WASOs for each groundwater zone—

For Groundwater zone 2—1 311 ML#

For Groundwater zone 3a—1 724 ML#

For Groundwater zone 5—1 958 ML#

For Groundwater zone 6—1 990 ML#

For Groundwater zone 8—3 297 ML#

For Groundwater zone 9—3 390 ML#

As an indication of how much water growers in each of these zones could expect to have access to on average, for the full 13, 670 megalitres of proposed entitlement, the average annual diversion for the modelled period is 9240 ML. This means that the volume taken from the aquifer each year averages to be approximately 67 percent of the total entitlement volume.

The WASOs for surface water must not be less than the stated performance indicator expressed as the monthly water sharing index. The Monthly water sharing index is the percentage of months in the historical modelled period in which an entitlement holder is able to receive their full volume.

The performance indicators for the surface water WASOs are—

For Laidley Creek—35%

For Lockyer Creek—45%

For Morton Vale Pipeline—76.7%

Currently, the Moreton Water Plan states the following two WASOs for surface water users in the scheme—

- for water allocations in Laidley Creek, the extent to which the monthly supplemented water sharing index is less than 50% be minimised
- for water allocations in Lockyer Creek the extent to which the monthly supplemented water sharing index is less than 65% be minimised.

The original WASO for Lockyer Creek set in the Water Plan (Moreton) 2007 included the users on the Morton Vale Pipeline. The Morton Vale Pipeline users experience a level of reliability higher than stream users on Lockyer Creek due to their priority of supply reflected in the water sharing rules from Lake Clarendon. This was artificially elevating the Lockyer Creek WASO and was therefore not a meaningful and representative indication of water security for Lockyer Creek water users. As the Morton Vale Pipeline users will now be granted a water allocation as part of this amendment, these users will now have a separate WASO expressed as a per cent of monthly supplemented WSI.

The original WASO for Laidley Creek set in the Water Plan (Moreton) 2007 did not consider announced allocation rules to share water from Lake Dyer to the Lockyer Creek in the lower part of the scheme.

The proposed WASOs for Lockyer Creek and Laidley Creek are now more indicative of the security of surface water in the scheme. There are other factors that have changed the WASOs—

- A greater volume of water has been assigned to IWA holders (3.4 ML per hectare), which has increased the modelled volume and has resulted in a reduction of the overall system performance when compared with the previous water plan WASO.
- The introduction of trading and the movement of water within trading zones may at times have an effect on performance and these potential effects need to be allowed for.
- The model now includes an announced allocation calculation for surface water users which more accurately represents the way the scheme is managed. This considers the amount of water available for release from Lake Dyer or Lake Clarendon.

## 5.5 Trading zones

The draft water plan amendment proposes six surface water zones and six underground water trading zones. Zones are also used to define where trading can occur.

The surface water zones are—

- Zone 1 - Upstream of Clarendon Weir (AMTD 57.2km) to AMTD 70.9km on Lockyer Creek, including; the section of Redbank Creek to Redbank Creek pump station (incorporating Jordan 2 weir).
- Zone 2 - Upstream of Kentville Weir (AMTD 46.4km) to Clarendon Weir (AMTD 57.2km) on Lockyer Creek, including the upper extent of Glenore Grove ponded area on Laidley Creek (AMTD 3.0) and Glenore Grove Lagoon/Laidley Creek Billabong.
- Zone 3 - Upper extent of Glenore Grove ponded area on Laidley Creek (AMTD 3.0) to AMTD 19.1km on Laidley Creek.
- Zone 4 - Lake Clarendon diversion channel, and Lake Clarendon.
- Zone 5 - Lake Dyer diversion pipeline to Laidley Creek diversion Weir (AMTD 20.9km) and Lake Dyer.
- Zone 6 - Morton Vale Pipeline system including Lake Clarendon offtake.

Underground water zones all receive recharge benefit from the dams and weirs and have been grouped according to the access or proximity to underground water recharge using a combination of factors including—

- geological structure
- hydrogeological boundaries
- location of recharge zones and their recharge contribution
- underground water levels and contours
- dam release data
- property boundaries.

The six benefitted groundwater trading zones are—

- Groundwater zone 2 and 3A—associated with releases from Lake Dyer to Laidley Creek and recharge in Showgrounds weir and along Laidley Creek.
- Groundwater zone 5 and 6—associated with releases from Lake Clarendon to Lockyer Creek and recharge in Jordan's Weir I, Jordan's Weir II, Wilsons Weir and the upstream area of Clarendon Weir.
- Groundwater zone 8 and 9—associated with releases from Lake Clarendon and Lake Dyer and recharge from the downstream area of Clarendon weir, Glenore Grove Weir and Kentville Weir.

In developing the underground water trading zones, data from irrigation bores and the department's monitoring bores was evaluated. The data was compared with the locations of the recharge zones identified in the Central Lockyer groundwater model and the results of technical reports, geological mapping and expert knowledge on how the alluvial underground water system operates.

The identification of trading zones facilitates the movement of water entitlements within zones either permanently or seasonally to provide flexibility for water users. Permanent trading of water allocations involves the permanent transfer of a water allocation title to someone else, similar to the sale of a land title. These dealings must be registered in the Water Allocations Register. The decision to permanently trade all or part of a water allocation is entirely up to the holder of that allocation.

The draft operations manual states the rules which will allow for temporary or seasonal trading of water allocations within zones. All or part of the water allocation can be seasonally assigned to another person or place for up to 12 months to meet short-term water needs. All trades will require approval by Seqwater.

## 5.6 Water sharing rules

For surface water and underground water, the water sharing rule is an *announced allocation*. The announced allocation has been developed to reflect the need for flexible water management arrangements for the diverse range of agricultural enterprises in the scheme.

There are six surface water zones including Morton Vale to which the proposed water sharing rules apply. The rules utilise an assessment of usable volume of Lake Dyer and Lake Clarendon, a high/low underground water level assessment to calculate the reserve volume for the Morton Vale priority group, and a volume of water set aside for underground water recharge. The remaining water is allocated to surface water users. The six surface water zones are combined into four groups, based on the Laidley Creek, Lockyer Creek, Laidley / Lockyer confluence, and Morton Vale sections of the scheme. A separate announced allocation is assigned for each.

For underground water users, the announced allocation strategy for each of the six zones will inform irrigators of aquifer levels.

For the purposes of the announced allocation or water sharing rules the historical 2007 underground water levels have been adopted as a minimum or 0% aquifer storage capacity. The peak underground water levels achieved in the 2011 – 2014 period were then adopted as 100% aquifer storage capacity.

The water sharing rules aim to maximise the full productive capacity of the aquifer and the water supply scheme when water is available. This is achieved by announcing 100% allocation when the aquifer storage level has been determined to be more than 45% capacity.

As water levels fall below 45% storage capacity, announced allocations will progressively decrease until an announced allocation of 40% is reached. This lowest stage of announced allocation is set at a realistic level to allow for individual allocation holders to manage water use at low groundwater levels according to their individual on-farm management strategies. The announced allocation will not drop below 40% regardless of whether groundwater levels drop below the 2007 historical levels.

## 5.7 Operation of the CLVWSS

The draft operations manual provides day to day rules required to operate the scheme. In addition to water trading rules and water sharing rules, the draft operations manual also provides the following:

- Water release rules—

These prescribe the purposes for which water may be released from Lake Dyer and Lake Clarendon. Water may be released for underground water recharge, operational and maintenance purposes, and for Morton Vale Pipeline users.

- Water diversion rules—

These rules determine when water can be diverted from the creeks into the dams. Water may be harvested into Lake Dyer and Lake Clarendon when there is sufficient flow in Laidley and Lockyer creeks, respectively, expected to overtop Kentville Weir which is the bottom of the scheme. The draft operations manual amends the wording in the IROL to allow greater operator flexibility in managing diversions.

In preparing the draft operations manual, Seqwater has undertaken investigations on operational improvements to deliver the best possible and cost-effective outcomes for the scheme and its customers. Seqwater is exploring improvements to scheme operations including installing automated water level monitoring equipment on Kentville Weir to assist with operational decision making. In addition, Seqwater will continue to implement their meter renewal program to ensure all meters are operating accurately.

Furthermore, Seqwater is currently reviewing the efficiency of the scheme particularly in relation to waterharvesting into the dams, siltation of the diversion weirs and availability of information for making operational decisions.

## 5.8 Compliance with environment flow objectives

Performance indicators and environmental flow objectives (EFOs) aim to protect the health of natural ecosystems from decisions made under the plan by minimising changes to natural flow conditions at particular nodes or locations. The indicators relate to periods of no flow, low flow and medium to high flow. There are no changes proposed to the existing EFOs stated in the water plan.

All mandatory EFOs are met under the proposals of the draft water plan amendment.

Consistent with the non-mandatory EFOs of the existing plan, the draft water plan amendment plan aims to minimise the extent of dry spells. There are 3 ranges of dry spells – 1 to 3 months; 3 to 6 months; and greater than 6 months – that are set for the Lockyer Creek just upstream of its junction

with the Brisbane River (referred to as Node G). For the 1 to 3 month period, the plan requires that the extent to which the number of such dry spell periods exceeds 112 occurrences is to be minimised. Through the use of water sharing rules and setting volumetric limits on water entitlement under the draft water plan amendment, the extent of exceedance will be minimised to 114 dry spells (less than a 1 percent increase in statistics).

For periods of 3 to 6 months and greater than 6 months, the counts of these dry spells fit within the range stated in the plan.

## 5.9 Monitoring and reporting

There are no changes proposed to the existing monitoring and reporting provisions in the water plan. These provisions require the chief executive to collect and make available information about water availability and use, water quality and ecological monitoring, to assess the water plan's performance and evaluate the effectiveness of the management strategies in the plan. The data we collect is used to:

- support the development of water plans
- prepare the Minister's report.

The Minister's report is prepared at least every 5 years for the life of the plan. These reports are a water plan's 'health check' and help determine if our rules and strategies have been successful in improving performance of the scheme. Information gathered will also inform future amendments and the statutory 10-year review of the plan (due in 2026) as part of ongoing adaptive management throughout the life of the plan.

Seqwater's requirements for monitoring and measuring under the operations manual will also support more efficient and effective operation of the water supply scheme. Seqwater will be required to produce a report in the 5th year of the plan amendment that evaluates the effectiveness of scheme including:

- an assessment of the effectiveness of Seqwater's groundwater recharge operations in delivering improved groundwater availability and security for customers;
- a statement on the metering and measurement actions Seqwater has taken to enhance water use measurement in the scheme and how effective that has been in more accurately accounting for water use to bring greater confidence and transparency in the water accounting of the scheme;
- an evaluation about the effectiveness of announced allocation rules in providing improved water supply security for water allocation holders; and
- identification of any improvements made to increase the responsiveness of water harvesting events and how those actions have improved scheme performance.

The report will also identify recommendations for changes to further enhance the scheme's operation.

This monitoring and reporting requirements will establish a baseline and the monitoring and reporting framework set within a stable base of volumetric water entitlements. The combination of information obtained from measuring devices and monitoring provides water users with a more informed, flexible and responsive scheme that maintains their security to access but also certainty and transparency surrounding future water resource management decisions.

## **6. Draft water plan provisions—Moreton plan area**

### **6.1 Overland flow provisions (OLF)**

The draft water plan amendment makes some minor amendments to the existing overland flow provisions to provide clarity on new overland flow works. In all sub-catchments within the Moreton water plan area, no new overland flow licences will be issued for dams that hold more than five megalitres. This is particularly important in underground water areas where overland flows contribute to the recharge of the aquifer and therefore incremental growth in overland flow water development can progressively erode those natural recharge benefits over time.

### **6.2 General reserve for the Lower Brisbane and Cabbage Tree Creek sub-catchment areas**

The draft water plan amendment proposes to establish a general reserve of 100 ML available in the Lower Brisbane and Cabbage Tree Creek sub-catchment areas. The process for releasing water from the general reserve will be specified in the Water Regulation 2016.

The general reserve volume reflects the volumes of water on entitlements that have been surrendered in the area. At the time of commencement, the water plan assumed existing water licences would remain current. By reflecting volumes which have been surrendered since commencement of the water plan, this new reserve does not increase the total volume of water available for consumptive use under the plan nor will it negatively impact plan objectives.

This reserve is intended to support small scale water uses and in particular, water use for community benefits such as irrigation of sporting fields by not-for-profit organisations; as well as small scale commercial businesses, such as a nursery. There are restrictions around making this reserve available so that this policy intent is met.

## **7. Consultation and submission process**

The chief executive, in developing the final water plan amendment and associated planning instruments, will review and consider all information provided in properly made submissions and any referral panel recommendations.

The Minister has set an extended submission period in response to requests from stakeholders to provide extra time.

Extensive community consultation will now occur to support the release of the draft water plan amendment. The department invites conversations with individuals and stakeholder groups on the draft water plan's amendment provisions. Information sessions will be held to provide interested parties the opportunity to discuss any aspect of the draft water plan amendment and associated instruments. The locations and times of these information sessions are available by visiting [www.business.qld.gov.au](http://www.business.qld.gov.au) and searching for 'Moreton water plan'. All interested parties are encouraged to attend information sessions in the plan area. Representatives from the Department of Natural Resources, Mines and Energy, and Seqwater are available.

The release of this statement of intent, the draft water plan amendment and associated planning instruments, also provides an opportunity for anyone interested in this process to review the materials and provide feedback.

Submissions which support aspects of any of the documents as well as those that suggest improvements, are encouraged. All properly made submissions will be considered prior to finalisation of all of the documents. Submission Form 1 should be used if you are making a submission about any aspect of the draft water plan amendment or associated planning instrument.

Submission Form 2 should be used by those eligible surface water users who can clearly demonstrate why the preliminary volume shown in the draft WEN is not sufficient to meet the historic water requirements of the authorisation holder's enterprise.

Both submissions forms are available by visiting [www.business.qld.gov.au](http://www.business.qld.gov.au) and searching for 'Moreton water plan'.

### **7.1 Referral panel**

The Water Act requires the chief executive to establish an independent referral panel to review particular issues raised in submissions. Issues raised in submissions relating to (a) a draft water entitlement notice; (b) a proposed operations manual; or (c) proposed water allocations and water licences to be granted, amended or refused; will be referred to an independent referral panel. The referral panel will review the submissions and provide recommendations to the chief executive to consider when finalising the draft WEN and approving the draft operations manual.

An independent referral panel will not be established if the submission requests a change to the draft water entitlement notice that would be inconsistent with the water plan that the draft is to implement; or (b) the draft should be amended in accordance with the submission.

## **7.2 Approval of the final water plan and associated planning instruments**

The draft water plan amendment and associated planning instruments will be finalised following the submission period, review of submissions and any referral panel considerations. The chief executive will consider all properly made submissions and the referral panel's recommendations when finalising the water plan amendment for consideration by Governor-in-Council for approval. Once approved, the new water plan amendment will become a statutory rule and replace the existing water plan. The approval of the water plan amendment will be published in the Queensland Government Gazette.

A consultation report which summarises the issues raised during the consultation process and how they were addressed will be released following finalisation of the water plan amendment.

## Attachment 1

### Summary of issues raised on the statement of proposals and how they have been considered in developing the draft water plan amendment

Key issue	Consideration in the planning process
<p>Further details and evidence on the rationale for the proposed amendments to be provided</p>	<p>The department has continued to engage with stakeholders to discuss the objective of the proposed amendments. From April to June 2018, almost all groundwater and surface water entitlements holders in the scheme area were contacted by the department to discuss the amendment, their individual water needs and views on volumetric entitlements.</p> <p>Some key points raised by entitlement holders during these discussions were—</p> <ul style="list-style-type: none"> <li>• entitlement holders want the allocation process to be open and transparent</li> <li>• the patterns of water use, crop types and cropping cycles are diverse</li> <li>• bore depths and yields vary considerably across the benefitted area</li> <li>• all properties to be given enough allocation to continue to operate as they have historically done</li> <li>• allocations across the benefitted area to be based on a foundation of equitable distribution between properties, but properties have been bought based on the presence of highly capable bores, and this factor must form part of the water allocation process for individual properties</li> <li>• identification and validation of trends in metered use over time.</li> </ul> <p>The department has considered these points in developing the approach for allocating volumes and developing water management arrangements by considering:</p> <ul style="list-style-type: none"> <li>• metered use over time</li> <li>• variability of use across the benefitted area</li> <li>• variability of water availability across the benefitted area</li> <li>• water requirements and flexibility required to support current agricultural enterprises.</li> </ul>
<p>Concern that the allocation process and volumetric water allocations will be lower than volumes irrigators require</p>	<p>The aim of the draft plan is to establish volumetric water allocations which support the current economic profile, investment and jobs in the Central Lockyer. To achieve this, the department has utilised best available water use data to determine a volume which supports current business requirements.</p> <p>Surface water entitlement holders will be provided the opportunity to provide further information through the formal submissions process to access additional volumes of water if the proposed volumes is not sufficient to meet their historical water use. Furthermore, groundwater users will be provided an opportunity to provide information to demonstrate if the proposed irrigated area to be used for the conversion required amendment.</p>

<p>Water trading was not supported by some residents due to pricing fear which may push farmers out of the market</p>	<p>The department acknowledges that water trading may not be supported by some residents or that there may be some concerns regarding water trading. The department will continue to work with stakeholders and to provide relevant information to address any concerns or questions regarding water trading.</p> <p>The ability to trade water allocations provides farmers with increased flexibility to manage their assets, their business and their lifestyles. In fact, trading can provide further opportunities to move to higher value crops or expand the current business enterprise.</p>
<p>Science and data validity are of concern to some, particular in relation to determining volumetric water allocations. Residents asked for further information regarding modelling and accuracy of monitoring bores</p>	<p>The proposed method for establishing volumes on the 152 underground water allocations takes into account the complexity and variation of how underground water is currently taken across the scheme and aims to deliver a water allocation which will support current farming practices within sustainable limits.</p> <p>The departmental data collection and storage and monitoring network Quality Management System is accredited to ISO: 9001 (2015) standard.</p> <p>The department will provide supporting information during the draft consultation process regarding modelling and monitoring bores and how these were utilised to inform water management arrangements.</p>
<p>Consultation needs to be more open and transparent. It was requested for consultation to be provided in languages other than English</p>	<p>The department endeavours to provide open and honest consultation with a focus on a dialogue with stakeholders. During recent one-on-one consultations the department provided Vietnamese speaking interpreters (from our internal staff) for some of our Vietnamese stakeholders. Although stakeholders noted this was not essential, it did make communication easier. The department will continue to work closely with stakeholders on an individual basis to ensure that aspects of the draft plan and the submission process are understood and meet their communication requirements.</p>
<p>Socio economic study and impacts of water allocations was requested</p>	<p>The department engaged consultants Marsden Jacob Associates to gain a better understanding of the value of water to irrigators and the social and economic impacts of any changes that could arise from changes to underground water access.</p> <p>This study has been used to inform how the new management arrangements can best support the economic and employment profile of the area.</p>