



25 June 2024

Department of Regional Development, Manufacturing and Water  
Water, Planning and Science South Region  
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BUNDABERG QLD 4670  
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To whom it may concern

**Re: Issues for consideration in the review of the Burnett Basin water plan review - June 2024**

This is a properly made submission from the Bundaberg Ag-Food and Fibre Alliance (BAFFA), in response to the Preliminary public consultation notice on the proposed replacement of the Water Plan (Burnett Basin) 2014 – s44 of the Water Act 2000.

The Water Act requires that Water Planning balances economic, social and ecological outcomes.

In the Bundaberg Region, agricultural businesses and the processing industries that support them, have based long term investment decisions on the water reliability and water sharing arrangements embedded in the current Water Plan. As such, it is essential that as the Water Plan is renewed that the Department engage actively with water users and the Bundaberg Ag-Food and Fibre Alliance on the plan renewal and make appropriate policy decisions to support industries water reliability and existing water access.

The dam safety issues and infrastructure works at Paradise Dam have created a deal of uncertainty for the agricultural industry in the region and as such it is essential that the renewal of the Burnett Water Plan is undertaken in a way to support the region and minimise investment uncertainty.

### 1.1 Bundaberg Ag-Food and Fibre Alliance Ltd (BAFFA)

Bundaberg Ag-Food and Fibre Alliance Ltd (BAFFA) was formed to provide a united voice to advocate on behalf of the food, renewable fuel, foliage, and fibre sectors in the Bundaberg region. BAFFA provides opportunities for existing agricultural industry groups to discuss opportunities and the significant issues facing the agriculture sector in the Bundaberg region.

BAFFA offers a unified point of contact for government and investors to engage with the region's agricultural industry with the key aim of ensuring:

- Appropriate Government policy settings to enhance regional economic development, and
- To ensure that the Bundaberg region and its key industries receive appropriate capital infrastructure investment, funding and other resources to support agriculture in the Bundaberg Region.

In the 2021/2022 financial year Agriculture, Forestry and Fishing accounted for \$1.958 billion of gross value in the Bundaberg regional council area. The total for all industry sectors was \$9.248 billion. <sup>1</sup>

Intensive irrigated agriculture is the foundation of the Bundaberg economy and accounted for around \$1.727 billion or 18.6% of the total for the regions gross economic output. As well as direct employment on farm, the agriculture sector supports a range of jobs in processing, transport and other industries.

This submission considers issues in the proposed draft Water Plan relevant to members of BAFFA including:

- major landholders and holders of water entitlements for supplemented water, unsupplemented water, subartesian groundwater and overland flow within the plan area;
- owners of farming businesses;
- substantial local employers; and
- as members of the wider Burnett community.

## 1.2 Scope of the Submission

This submission focuses on areas covered by the Water Plan where BAFFA has a direct interest, that is:

- the Bundaberg Water Supply Scheme;
- the Lower Burnett and Kolan Water Management Area;
- the Coastal Burnett Groundwater Management Area (CBGMA); and
- overland flow in the Kolan, Lower Burnett, Elliott, Gregory and Isis catchments.

The submission also addresses possible provisions in the Water Plan for policy elements outside of the direct interest of BAFFA, that may impact on water management in the above areas.

The submission identifies issues:

- a) to be addressed directly in the proposed draft Water Plan;
- b) that are dealt with in the BWS Scheme Resource Operations Licence Operations Manual, but may be limited or affected by provisions in the Water Plan; and
- c) to be addressed in the Resource Operations Licence.
- d) Work that should be prioritised in the modelling and science undertaken by the Department to support appropriate planning and consultation as part of the Water Plan renewal.

## 1.3 Additional comment and further submissions

This submission has been developed in response to the information provided in the Burnett Basin Water Plan review and Replacement 11th June 2024 document (Department of Regional Development, Manufacturing and Water) and drawing from previous experience of water resource planning processes in the Burnett since 2000.

BAFFA anticipates that significant further information, including hydrologic, environmental and socio-economic assessments will become available prior to the release of the draft Water Plan to allow stakeholders additional informed comment on the issues to be addressed in the Water Plan.

In particular, BAFFA requests that as part of the Water Planning renewal process, the Department make available **all modelling** around the potential future impacts of climate change. The work completed by the Queensland Government as part of the Bradfield review shows that they have significantly more information on climate change impacts than what has been made available for the Burnett Region.

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<sup>1</sup> Source: [National Institute of Economic and Industry Research \(NIEIR\) ©2023](#). ©2023

It is essential that climate change modelling regarding the performance of water storage and water conveyancing infrastructure is made available. This information will be particularly important to ensure that key operational documents like the scheme operations manuals and the operational protocols are able to optimise economic and ecological outcomes in a changing climate.

It is important to recognise that this submission is preliminary based on currently available information - BAFFA may raise additional issues or provide further detail on issues identified in this submission, with Department of Regional Development, Manufacturing and Water prior to the next formal opportunity for comment or as part of the formal consultation process.

#### 1.4 Further Information

Further information or clarification can be provided on any aspects of this submission. Enquiries should be directed to Mr Dale Holliss, Executive Director BAFFA on 0417 009 236.

## 2.0 Feedback, Observations and Suggestions

### 2.1 Maintenance of current share of the total water resource

The commencement of the next cycle of water planning for the Burnett Basin provides an opportunity for further improvements in water management based on experiences, technical assessments and improved understanding of the issues relevant to both water entitlement holders and the environment.

Water users in the Burnett Region have made long term investment and business decisions based on the existing water plan, its rules and the water security that the plan underpins.

As such, an absolute fundamental requirement for the Water Plan renewal is that the planning process needs to acknowledge existing water entitlements that have previously been established and recognize their predefined share of the available resource.

All existing water entitlements should be viewed as perpetual and open-ended shares of the resource.

Equivalent shares of the resource between environment and water entitlement holders for the extended simulation period should be first established as the starting point for all further discussions in the development of the draft Water Plan to ensure the current share of the total water resource held by irrigators and water allocation holders is maintained.

### 2.2 Improving outcomes

BAFFA suggests that the following specific initiatives be modelled and considered:

- Change the water year to better match current water demand patterns within the existing crop mixes across the Bundaberg Irrigation Area.
- Development of a water sharing framework to support carryover of an unused portion of groundwater allocation from one year to the next within the Coastal Burnett Groundwater Management Area. (Note this may require investment in additional science and groundwater monitoring to enhance water plan outcomes.)
- Putting in place continuous share accounting for individual water allocation accounts. This will require better and more timely information for growers to help support this outcome.

- Explore opportunities to increase the level of participation of allocation holders in the Bundaberg region in the decision-making processes (particularly for the Bundaberg WSS and CBGMA) and that this role be formally included in the draft Water Plan.
- Undertake detailed climate change modelling (and make this information available to water users) to facilitate a comprehensive review of Scheme Operations Manuals and the Water Protocol, based on the changing climate, with the aim of enhancing economic and environmental outcomes under the Water Plan.
- Explore detailed science regarding the Water Plan rules regarding size of storages for overland flow dams with the aim of improving farm resilience and enhancing climate change resilience.

### 2.3 Improving objectives and performance indicators

The Water Plan 2014 specifies the following water allocation security objectives for medium priority users in the Bundaberg WSS:

- a) The supplemented water sharing index must be at least 90%; and
- b) The extent to which the supplemented water sharing index is less than 95% should be minimized.

It is critical to recognise that these objectives and the water availability that result, have framed long term investments made by water users in Burnett Region. Local employment and the overall economic success of the region are tied to these critical water security objectives.

Regardless of the potential impact of the proposed extended simulation periods, BAFFA requests that the target water sharing index for medium priority users in the Bundaberg WSS in the draft Water Plan be at least 95%.

### 2.4 Updating the Science

In developing the science work program for the renewal of the Burnett Basin Water Plan it is essential that the Department recognise that the Water Act requires a strong focus on; economic, social and ecological outcomes.

Previous water planning processes have focused far more effort on ecological science and undertaken limited social or economic science to inform appropriate water planning and policy decision making.

As a result, BAFFA formally requests appropriate science investments across all three outcomes are a key priority of the Burnett Water Plan renewal process. BAFFA would like to be directly involved in framing up the social and economic science based research and has access to important data and information sources to assist with this important work.

A key purpose of the Water Plan is to provide a framework for sustainably managing water and BAFFA supports the need to undertake comprehensive environmental assessments using the current best practice science to achieve this purpose.

The development of a new Water Plan provides an excellent opportunity to review the effectiveness of the current environmental provisions in the Water Plan (Burnett Basin) 2014 and to refine and improve on the existing environmental objectives using data collected as part of the monitoring program in the last 10 years.

Any proposed changes in environmental objectives, strategies and performance indicators need to be accompanied by hydrologic and socioeconomic assessments of the impact of these changes on existing water entitlement holders.

The likely risk of any environmental impacts needs to be weighed carefully against the social and economic benefits likely to accrue from maintaining or improving the performance of existing water entitlements.

It is essential that outcomes, strategies and performance indicators in the draft Water Plan are underpinned by rigorous social, economic, and environmental assessments using data and approaches relevant to the Burnett Basin.

If there are information gaps that in the critical water requirements for ecological assets, BAFFA **does not** support the use of the **precautionary principle** as the basis for setting environmental provisions in the draft Water Plan.

#### 2.4.1 Climate Change

BAFFA formally requests that the Department release all available climate change modelling as early as possible. In particular it is important that information regarding changes to timing and volume of rainfall are modelled regarding all existing water storages and simulations provided so that appropriate optimisations can be made to the Operations Manual and Protocols.

It is essential that the water resource planning process recognizes existing water entitlements as perpetual and open-ended shares in the water resource, to provide the required levels of security and certainty for irrigators and the Burnett Community that rely on the economic and social benefits provided through agriculture and its associated industries.

The impacts from any reductions/increases in the available water resource due to climate change need to be shared equally between the environment and consumptive users.

The State should look to use any unallocated reserves or unsold water entitlements to buffer and support the reliability of existing entitlement holders and protect the existing environmental objectives in the water plan. If there is a need to build additional resilience into the management of existing entitlements to counteract any **drying trends** (i.e. increased evaporation) under future climate change the Water Planning process should again make use of Unallocated Water Reserves or unsold water allocations to underpin the important regional development requirements of the Bundaberg Region.

In the case of the Bundaberg WSS, any additional infrastructure that may be developed (e.g. Ned Churchward Weir Stage 2) to provide for additional unallocated water, should also deliver an improvement in the performance of existing entitlements to assist in building additional resilience for existing entitlement holders.

BAFFA supports the use of a range of possible climate change scenarios for identifying vulnerabilities within the plan, including vulnerabilities contained within the water sharing rules and within the water allocations security objectives for supplemented, unsupplemented and groundwater entitlements in the Bundaberg region.

The sensitivity analysis should also include assessing the performance of alternative water sharing approaches (as identified in Section 2.2) under possible climate scenarios.

#### 2.5 First Nations and Water

BAFFA supports First Nations Communities and their connection to land and water. With appropriate support from Government, BAFFA and its members would be interested in developing economic opportunities in partnership with Local Traditional Owners.

Should the State wish to provide water rights to traditional owners this should not compromise water access from existing allocation or entitlement holders, and it should not adversely affect the achievement of the environmental outcomes of the existing Burnett Water Plan.

Should the State wish to provide Water Rights to First Nations Communities these water allocations should come from Unallocated Water Reserves in the plan or via State owned Nominal Allocation from the rebuilt Paradise Dam (when complete).

## 2.6 Water Entitlements

The information provided identifies 593 Surface Water Licenses of which 272 entitlements require amendment to state a volume.

This is a significant change for these allocation holders and as such, BAFFA requests that this element of the Water Plan renewal be the subject of a detailed consultative process and that BAFFA and the individual entitlement holders are consulted and involved in the policy decision making process.

Further detailed information on Government's policy proposals is required and as such BAFFA is not in a position at this stage to provide a comprehensive response to this policy proposal.

A critical issue which will need to be addressed in the Water Plan review is the management and size restrictions of overland flow on farm storages.

Many area-based licences to take water sites are part of overland flow storages in the Bundaberg region and can often be multi-purpose storages providing for overland flow capture; storage of CBGMA entitlements; storage of SunWater channel maintenance water and farm tailwater capture. For an individual storage, the proportion of each source of water stored each year could vary significantly, some of which may be metered and some not metered. Amendment to these licenses needs to recognize and allow for the multipurpose nature of these storages without adversely impacting on the opportunity to access each of the existing water entitlements.

BAFFA strongly endorses the conversion of licenses in the Coastal Burnett Groundwater Management Area B as well as parts of the Elliott, Gregory and Isis sub catchments.

### **Conversion of existing licences to water allocations for the Avondale Water Board**

Any changes to existing licenses in the Avondale Water Board area need to be considered, very carefully, if the sustainability of the water management arrangements are not to be placed at risk.

It is essential that BAFFA and the Avondale Water Board are at the table when the Department frames changes to policy in this region.

Transferring the water allocation to customers may leave the board in a weaker commercial position. It may be possible to reinforce the board's position with customer contracts but there would be costs associated with this approach.

The transfer of allocation to customers and their right to sell the allocation and transfer it from the board area may create problems in relation to shared operational and maintenance costs within the board area. Creating a separate zone for the board area and prohibiting permanent transfers out of that zone may be one way of dealing with this issue.

BAFFA requests that further consultation be held directly with the Avondale Water Board and BAFFA to identify options to establish allocations that will afford the necessary protection to the board and its customers, **prior** to the release of the new draft Water Plan.

## 2.7 Water Sharing and Trading

The existing trading arrangements in Burnett Water Plan are working appropriately.

In the remaking of the Water Plan it is essential that those arrangements, which industry is finding valuable are clearly retained.

It is essential that the Department continues to provide appropriate local and knowledgeable resources to support the existing trading system and that this is not affected by the renewal of the Water Plan.

## 2.8 Growing Water needs

The Queensland Energy and Jobs Plan is moving to advance key activities such as pumped Hydro and the Hydrogen Industry. BAFFA is eager to see the continued growth of the Bundaberg Economy and supports the necessary Net Zero Transition ahead.

However, it is essential that the Government protect the water security and reliability of current water allocation holders. New industries or new infrastructure should be supported by the State through the use of unallocated water reserves or via unsold allocations as Paradise Dam is rebuilt.

In some cases, use of the temporary transfer mechanism under commercial arrangements with existing nominal allocation holders will be an option.

Existing water entitlements, including the three types of unallocated water reserves should be viewed as perpetual and open-ended shares of the resource. Equivalent shares of the resource between environment and water entitlement holders for the extended simulation period should be first established as the starting point for all further discussions in the development of the draft Water Plan to ensure the current share of the total water resource held by irrigators is maintained.

## 2.9 Paradise Dam and Water Allocations

The Dam Safety and Infrastructure issues at Paradise Dam have been a significant issue for the Local Agriculture Industry for a considerable period of time. The uncertainty created, has been challenging for the sector, and as such it is essential that the Queensland Government use the Water Planning process to stabilise industry confidence in the Government and the Water Resource Planning framework more generally.

Key things to consider are as follows:

1. The existing Water Plan and water sharing arrangements, agreed with industry in 2020, need to be maintained and the existing share of the resource maintained until the infrastructure reinstatement is complete.
2. At a minimum the reinstated Paradise Dam needs to deliver at least the same resource reliability and security as the original dam, and
3. BAFFA and the water users need to be engaged actively by the Government and Sunwater in developing the water planning arrangements from the new structure as soon as possible. (In this process Industry will require access to detailed scenario and climate modelling and be involved in the development of operational manuals and system rules), and

4. The existing share of the resource including reliability needs to be protected through both the infrastructure delivery and the Water Planning processes which support the finalisation of the arrangements for the reinstated Dam.

Should you require further explanation or clarification please do not hesitate to contact me on 0417 009 236.

Yours faithfully

*Dale Holliss*  
Executive Director