Resource Operations Licence

Water Act 2000

Queensland Government

Name of licence

Mary Valley Water Supply Scheme Resource Operations Licence

Holder

Queensland Bulk Water Supply Authority

Water plan

The licence relates to the Water Plan (Mary Basin) 2006.

Water infrastructure

The water infrastructure to which the licence relates is detailed in Attachment 1.

Authority to interfere with the flow of water

The licence holder is authorised to interfere with the flow of water to the extent necessary to operate the water infrastructure to which the licence relates.

Authority to use watercourses to distribute water

The licence holder is authorised to use the watercourses listed in Table 1 for the distribution of supplemented water, including sections of tributaries where supplemented water is accessible

Table 1 – Use of watercourses for distribution

Watercourse	Description
Calico Creek	Extending from AMTD 0.6 km to the supplementation point (AMTD 8.9 km);
Mary River	Extending from AMTD 85.0 km to the confluence with Yabba Creek (AMTD 226.7 km);
McIntosh Creek	Extending from AMTD 1.2 km to the supplementation point (AMTD 6.3 km);
Pie Creek	Extending from AMTD 0.0 km to the supplementation point (AMTD 9.1 km); and
Yabba Creek	Extending from AMTD 0.0 km upstream to, and including, the impounded area of Borumba Dam.

Conditions

1. Requirement for operations manual

1.1. The licence holder must operate in accordance with an approved operations manual.

1.2. The approved operations manual must include—

1.2.1. operating rules for water infrastructure;

1.2.2. water sharing rules; and

1.2.3. seasonal water assignment rules.

2. Environmental management rules

2.1. The licence holder must comply with the requirements as detailed in Attachment 2.

3. Metering

3.1. The licence holder must meter the taking of water under all water allocations and seasonal water assignments managed under this licence.

4. Monitoring and reporting requirements

4.1. The licence holder must carry out and report on the monitoring requirements as set out in Attachment 3.

4.2. The licence holder must provide any monitoring data required under condition 4.1 to the chief executive within a stated time upon request.

4.3. The licence holder must ensure that the monitoring, including the measurement, collection, analysis and storage of data, is consistent with the Water Monitoring Data Collection Standards[1].

4.4. The licence holder must ensure that the transfer of data and reporting are consistent with the Water Monitoring Data Reporting Standards1.

5. Other conditions

5.1. The operating and supply arrangements, and the monitoring required under this licence do not apply in situations where implementing the rules or meeting the requirements would be unsafe to a person or persons. In these circumstances, the licence holder must comply with the operational or emergency reporting requirements prescribed in Attachment 3.

5.2. The licence holder is required to collect and make publicly available through an industry accepted digital channel, updated at least monthly, details of each seasonal water assignment managed under this licence, including sale price, the volume of water assigned and the location of where the water was assigned to and from.

5.3. The licence holder must provide the chief executive information about seasonal water assignments as directed by the chief executive within the stated time upon request.

This Resource Operations Licence is subject to the conditions attached.

Commencement of licence

The licence took effect on 5 September 2011.

Granted on 5 September 2011
Amended under section 186 of the *Water Act 2000* on 17/10/2022

Bernadette McNevin
Director, Water Management and Use, South Region

1 The Water Monitoring Data Collection Standards and the Water Monitoring Data Reporting Standards can be accessed online at www.business.qld.gov.au

Attachment 1 Infrastructure details for Mary Valley Water Supply Scheme

Table 1 – Borumba Dam—Yabba Creek AMTD 31.1 km

Description of water infrastructure	
Description	Concrete faced rockfill with spillway on left bank.
Full supply level	EL 135.01 m AHD
Storage capacity	
Full supply volume	46 000 ML
Minimum operating volume	1 200 ML
Storage curves/tables	202667A, 202668A
Spillway arrangement	
Description of works	Spillway—spiral 'super elevated' spillway chute.
Levels	Spillway elevation—EL 135.01 m AHD
Spillway width	101.0 m
Discharge characteristics	Capacity 3140 m^3/second, drawing no: A3-139056
River inlet/outlet works	
Description of works	Outlet conduit bifurcates in the outlet structure into two 1.07 m diameter pipes. Each pipe is fitted with a butterfly valve and a dispersion type discharge regulator. The inlet is a concrete structure, which provides a means of closing off the inlet by lowering a steel bulkhead gate
Inlet	Single level inlet to outlet conduit.
Cease to flow levels	River outlet invert level 111.47 m AHD.
Discharge characteristics	Not available at the time of publication.
Fish transfer system	
Description of works	None installed

Table 2 – Imbil Weir—Yabba Creek AMTD 10.9 km

Description of water infrastructure	
Description	Concrete weir
Full supply level	EL 77.17 m AHD
Storage capacity	
Full supply volume	46 ML
Minimum operating volume	5 ML
Storage curves/tables	F36520
Spillway arrangement	
Description of works	No separate spillway, surplus water flows over the full width of the crest.
Levels	EL 77.17 m AHD
Spillway width	Not available at the time of publication.
Discharge characteristics	Not available at the time of publication.
River inlet/outlet works	
Description of works	Outlet works consist of two 0.91 m x 1.37 m openings controlled by hardwood dropboards.
Inlet	No separate inlet works.
Cease to flow levels	Dropboards are not removed, so effective minimum operating level is EL 77.17 m AHD. Invert of dropboard structure is at EL 76.26 m AHD
Discharge characteristics	Not available at the time of publication.
Fish transfer system	
Description of works	None installed.

Attachment 2 Environmental management rules

1 Change in rate of release from infrastructure

The licence holder must minimise the occurrence of adverse environmental impacts by ensuring that any change in the rate of release of water occurs incrementally.

Attachment 3 Licence holder monitoring and reporting

Part 1 Monitoring requirements

Division 1 Water quantity

1 Streamflow and infrastructure water level data

(1) The licence holder must record water level and volume and streamflow data in accordance with Table 1.

(2) Infrastructure inflows may be determined based upon an infrastructure inflow derivation technique supplied by the licence holder and approved by the chief executive.

(3) Tailwater flows may be estimated using the release curve developed for the discharge works that has been supplied by the licence holder and approved by the chief executive.

Table 1 – Locations where continuous water data recording required

Location	Water level and volume data	Daily flow data
Borumba Dam inflow		✓
Borumba Dam headwater	✓	
Borumba Dam tailwater		✓

2 Releases from infrastructure

The licence holder must measure and record for each release of water from Borumba Dam—

(a) the daily volume released and component volumes for each release;

(b) the release rate, and for each change in release rate—

(i) the date and time of the change; and

(ii) the new release rate;

(c) the device used for each release; and

(d) the reason for each release.

3 Water diversions

(1) The licence holder must record daily volumes of water diverted from the Mary River to Pie Creek, McIntosh Creek and Calico Creek.

(2) The daily volumes of water diverted under subsection (1) may be recorded as a combined volume.

4 Announced allocations

The licence holder must record details of announced allocation determinations,

including—

(a) the announced allocations for medium and high priority water allocations;

(b) the date announced allocations are determined; and

(c) the value of each parameter applied when calculating the announced allocation.

5 Seasonal water assignment of a water allocation

The licence holder, upon consent to a seasonal water assignment, must record details of seasonal water assignment arrangements, including—

(a) the name of the assignee and the assignor;

(b) the volume of the assignment;

(c) the location—

(i) from which it was assigned; and

(ii) to which it was assigned;

(d) the effective date of the seasonal water assignment; and

(e) the sale price.

6 Water taken by water users

The licence holder must record the total volume of water taken by each water user for each zone as follows—

(a) the total volume of water taken each quarter;

(b) the total volume of water entitled to be taken at any time; and

(c) the basis for determining the total volume of water entitled to be taken any time.

Division 2 Impact of infrastructure operation on natural ecosystems

7 Water quality

The licence holder must monitor and record water quality data in relation to Borumba Dam.

8 Bank condition

(1) The licence holder must inspect banks for evidence of collapse and/or erosion within the ponded area and downstream of Borumba Dam following instances of—

(a) rapid water level changes;

(b) large flows through infrastructure; or

(c) other occasions when collapse and/or erosion of banks may be likely.

(2) For subsection (1), downstream of the relevant infrastructure means the distance of influence of infrastructure operations.

(3) Any instances of bank slumping and/or erosion observed must be investigated to determine if the instability was associated with the nature or operation of the infrastructure.

9 Fish stranding

The licence holder must record and assess reported instances of fish stranding in watercourses and ponded areas associated with the operation of Borumba Dam to determine if any instance of fish stranding is associated with the operation of that infrastructure.

Part 2 Reporting requirements

10 Reporting requirements

The licence holder must provide the following reports in accordance with this part—

(a) quarterly reports;

(b) annual reports for the previous water year; and

(c) operational reports or emergency reports.

Division 1 Quarterly reporting

11 Quarterly reporting

(1) The licence holder must submit a quarterly report to the chief executive after the end of each quarter of every water year.

(2) The report must contain the following data—

(a) streamflow and infrastructure water level—all records referred to in section 1;

(b) daily volumes released from infrastructure referred to in section 2;

(c) water diversions—all records referred to in section 3;

(d) water quality—all records referred to in section 7;

(e) a summary of bank condition monitoring and incidences of slumping carried out in accordance with section 8; and

(f) for each quarter, the total volume of water—

(i) taken for each zone; and

(ii) entitled to be taken for each zone.

Division 2 Annual reporting

12 Annual report

(1) The licence holder must submit an annual report to the chief executive after the end of each water year.

(2) The annual report must include—

(a) water quantity monitoring results as required under section 13;

(b) details of the impact of infrastructure operation on natural ecosystems as required under section 14;

(c) a discussion on any issues that arose as a result of operating in accordance with this licence; and

(d) a summary of sale price disclosure information and other seasonal water assignment information as per section 5.

13 Water quantity monitoring

The licence holder must include in the annual report made under section 12—

(a) a summary of announced allocation determinations, including—

(i) an evaluation of the announced allocation procedures and outcomes; and

(ii) the date and value for the initial announced allocation and for each change made to an announced allocation;

(b) the total annual volume of water taken by each water user, specified by zone, namely—

(i) the total volume of supplemented water taken;

(ii) the total volume of supplemented water entitled to be taken; and

(iii) the basis for determining the volume entitled to be taken;

(c) details of seasonal water assignments, namely—

(i) the total number of seasonal water assignments; and

(ii) the total volume of water seasonally assigned;

(d) all details of changes to infrastructure or the operation of the infrastructure that may impact on compliance with the rules in this licence; and

(e) details of any new monitoring devices used, such as equipment to measure streamflow.

14 Impact of infrastructure operation on natural ecosystems

The licence holder must include in the annual report made under section 12—

(a) a summary of environmental considerations made by the licence holder in making operational and release decisions;

(b) a summary of the environmental outcomes of the decision, including any adverse environmental impacts;

(c) a summary of bank condition and fish stranding monitoring and assessment, including—

(i) results of investigations of bank slumping and/or erosion identified in ponded areas and/or downstream of infrastructure undertaken in accordance with section 8;

(ii) results of investigations of fish stranding downstream of infrastructure; and

(iii) changes to the operation of infrastructure to reduce instances of bank slumping and/or erosion and/or fish stranding;

(d) a discussion and assessment of the following water quality issues—

(i) thermal and chemical stratification in each water storage associated with infrastructure;

(ii) contribution of the water storage and its management to the quality of water released;

(iii) cumulative effect of successive water storages associated with infrastructure on water quality;

(iv) cyanobacteria population changes in response to stratification in each water storage; and

(v) any changes to the monitoring program as a result of evaluation of the data.

Division 3 Operational or emergency reporting

15 Operational or emergency reporting[2]

(1) The licence holder must notify the chief executive—

(a) within one business day of becoming aware of any of the following operational incidents—

(i) a non-compliance by the licence holder with the conditions of this licence;

(ii) instances of fish stranding and/or bank slumping within the ponded areas or downstream of Borumba Dam or watercourses associated with the operation of this water supply scheme; and

(iii) a decision being made to introduce a reduced fully supply level under section 399B of the *Water Supply (Safety and Reliability) Act 2008*.

(b) upon making a decision relating to—

(i) an initial announced allocation and/or its revision;

(ii) any restrictions on the taking of medium priority water; and

(iii) details of any arrangements for addressing circumstances where they are unable to supply water allocations;

(c) of an emergency where, as a result of the emergency, the licence holder cannot comply with the conditions of the licence.

(2) The licence holder must provide the chief executive upon request, and within the timeframe requested, a report which includes details of—

(a) the incident or emergency;

(b) the conditions under which the incident or emergency occurred;

(c) any responses or activities carried out as a result of the incident or emergency; and

(d) in relation to an emergency only, report any requirements under this licence that the licence holder is either permanently or temporarily unable to comply with due to the emergency.

(3) The licence holder must provide the chief executive with a summary of any other non-compliances by the licence holder with the rules given in this licence.

(4) The licence holder must provide the chief executive with relevant supporting information used in making a decision relating to—

(a) an initial announced allocation and/or its revision; and

(b) any restrictions on the taking of medium priority water.

2 This does not preclude requirements for dam safety under the *Water Supply (Safety and Reliability) Act 2008*, *Water Act 2000* and any other applicable legislation.

Glossary

Term	Definition
AHD	The Australian height datum which references a level or height to a standard base level.
AMTD	Adopted Middle Thread Distance. The distance in kilometres, measured along the middle of a watercourse, from the mouth or junction.
Announced allocation	For a water allocation managed under a resource operations licence, this means a number, expressed as a percentage, used to determine the maximum volume of water that may be taken in a water year under the authority of a water allocation.
Assignee	The person or entity to whom an interest or right to water is being transferred (e.g. seasonally assigned).
Assignor	The person or entity who transfers an interest or right in water to an assignee (e.g. a seasonal assignment).
Component volumes	The volume of water associated with a particular release. For example, a component volume may be released via a fish way or valve.
EL	Elevation level.
Fish stranding	Refers to fish that are stranded or left out of water on the bed or banks of a watercourse, on infrastructure such as spillways and causeways, or isolated in small and or shallow pools, from which they cannot return to deeper water. This also applies to other aquatic species.
Infrastructure	A dam, weir or other water storage and any associated works for taking or interfering with water in a watercourse, lake or spring.
Inlet	Infrastructure comprised of an entrance channel, intake structure and gate or valve, which allow for water to be taken from the storage and discharged into the watercourse downstream of the storage.
Location	For water allocation, means the zone from which water under the water allocation can be taken. For a water licence, means the section of the watercourse, lake or spring abutting or contained by, the land described on the water licence at which water may be taken.
Megalitres (ML)	One million litres.
Minimum operating level	The level or elevation of water within the ponded area of a dam weir or barrage below which water cannot be released or taken from the infrastructure under normal operating conditions.
Minimum operating volume	The specified minimum volume of water within the ponded area of a storage, dam, or weir below which water cannot be released or taken from the infrastructure under normal operating conditions.
Ponded area	Area of inundation at full supply level of storage.
Quarter or quarterly	Three-monthly intervals commencing at the start of the water year.
Tailwater	The flow of water immediately downstream of a dam or weir. Tailwater includes all water passing the water storage, for example controlled releases and uncontrolled overflows.