

Resource Operations Licence

Water Act 2000



Name of licence

Teddington Weir Water Supply Scheme Resource Operations Licence

Holder

Fraser Coast Regional Council

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 Tinana Creek from Teddington Weir at AMTD 15.8 km to the upstream limit of the ponded area of Talegalla Weir for the distribution of supplemented water.

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

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

3. Metering

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 Standards¹.
- 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

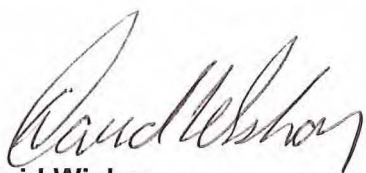
- 5.1. There must be an inter-scheme trading and bulk water transfer agreement between the resource operations licence holder for the Lower Mary River Water Supply Scheme and the resource operations licence holder for the Teddington Weir Water Supply Scheme as set out in attachment 4.
- 5.2. The operating 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 requirements for operational or emergency reporting prescribed in attachment 3.

Commencement of licence

The licence took effect on 5 September 2011.

Granted on 5 September 2011

Amended under section 1259 of the *Water Act 2000* on 6 April 2021



David Wiskar

Executive Director, Water Policy

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

Attachment 1 Infrastructure details for Teddington Weir Water Supply Scheme

Table 1 – Teddington Weir—Tinana Creek AMTD 15.8 km

Description of water infrastructure	
Description	Mass concrete gravity weir with central ogee spillway
Full supply level	EL 8.66 m AHD
Storage capacity	
Full supply volume	3710 ML
Minimum operating volume	400 ML
Storage curves/tables	Drawing No 222035 (June 2004)
Spillway arrangement	
Description of works	Mass concrete 'Ogee' type crest centrally located in embankment
Levels	EL 8.66 m AHD
Spillway width	50.7 m
Discharge characteristics	Not available at the time of publication.
Inlet/outlet works	
Description of works	River outlet: two 686 mm diameter pipes
Inlet	Single level off-take only
Cease to flow levels	EL 2.99 m AHD
Discharge characteristics	Not available at the time of publication
Fish transfer system	
Description of works	Fish ladder on the right bank

Table 2 – Talegalla Weir—Tinana Creek AMTD 37.5 km

Description of water infrastructure	
Description	Mass concrete 'Ogee' type crest centrally located in embankment
Full supply level	EL 14.49 m AHD
Storage capacity	
Full supply volume	385 ML
Minimum operating volume	0 ML
Storage curves/tables	Not available at the time of publication
Spillway arrangement	
Description of works	Spillway: mass concrete ogee type crest centrally located in embankment
Levels	EL 14.49 m AHD
Spillway width	17.6 m
Discharge characteristics	Not available at the time of publication
River inlet/outlet works	
Description of works	Not available at the time of publication
Inlet	Single siphon off-take
Cease to flow levels	EL 10.31 m AH
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 reduction or increase in the rate of release of water from storages in the Teddington Weir Water Supply Scheme occurs incrementally.

Attachment 3 Licence holder monitoring and reporting

Part 1 Monitoring requirements

Division 1 Water quantity

1 Stream flow and storage water level data

- (1) The licence holder must record storage water level and volume and stream flow data in accordance with attachment 3, 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 time series water data recording required

Location	Water level and volume data	Daily flow data
Teddington Weir inflow		✓
Teddington Weir headwater	✓	
Teddington Weir tailwater		✓

2 Releases from storages

The licence holder must measure and record for each release from Teddington Weir—

- (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 Announced allocations

The licence holder must record details of announced allocation determinations, including—

- (a) the announced allocations for medium priority water allocations;
- (b) the date announced allocations are determined; and
- (c) the value of each parameter applied when calculating the announced allocation.

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

5 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 storage operation on natural ecosystems

6 Water quality

The licence holder must monitor and record water quality data in relation to Teddington Weir.

7 Bank condition

- (1) The licence holder must inspect banks for evidence of collapse and/or erosion within the ponded area and downstream of Teddington Weir following instances of—
 - (a) rapid water level changes; or
 - (b) large flows through infrastructure; or
 - (c) other occasions when collapse and/or erosion of banks may be likely.
- (2) The distance downstream is the distance of influence of storage operations.
- (3) Any instances of bank slumping or erosion observed must be investigated to determine if the instability was associated with the nature or operation of the infrastructure.

8 Fish stranding

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

Part 2 Reporting requirements

9 Reporting requirements

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

- (a) quarterly reports;
- (b) annual reports; and
- (c) operational or emergency reports.

Division 1 Quarterly reporting

10 Quarterly reporting by the licence holder

- (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) stream flow and storage water level—all records referred to in section 1;
 - (b) daily volumes released from storages referred to in section 2;
 - (c) water quality—all records referred to in section 6;
 - (d) a summary of bank condition monitoring and incidences of slumping carried out in accordance with section 7;
 - (e) 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

11 Annual reporting

- (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 required under section 12;
 - (b) details of the impact of storage operation on water quality required under section 13; and
 - (c) a discussion on any issues that arose as a result of the implementation and application of the rules and requirements of this licence.

12 Water quantity monitoring

The licence holder must include in the annual report under section 11—

- (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) for the water year, 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 assignment arrangements; and
 - (ii) the total volume of water seasonally assigned;
- (d) all details of changes to infrastructure or the operation of 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 stream flow.

13 Impact of storage operation on natural ecosystems

The licence holder must include in the annual report under section 11—

- (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 or erosion identified in ponded areas or downstream of infrastructure;
 - (ii) results of investigations of fish stranding downstream of infrastructure; and
 - (iii) changes to the operation of infrastructure to reduce instances of bank slumping, erosion 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

14 Operational or emergency reporting²

- (1) The licence holder must notify the chief executive—
 - (a) within one business day of becoming aware of any of the following operational incidents—
 - (a) a non-compliance by the licence holder with the rules given in this licence; and
 - (b) instances of fish stranding or bank slumping within the ponded areas or downstream of storages listed in attachment 1 or watercourses associated with the operation of this water supply scheme;
 - (b) upon 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; and
 - (c) 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 with a report which includes details of—
 - (a) the incident or emergency;
 - (b) the conditions under which the incident or emergency occurred;
 - (c) responses or activities carried out as a result of the incident or emergency; and
 - (d) in relation to an emergency only—
 - (a) notify the chief executive on discovery of the emergency; and
 - (b) 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.

Attachment 4 Rules for inter-scheme trading and bulk transfer agreement

1 Inter-scheme trading and bulk water transfer agreement

- (1) There must be an inter-scheme trading and bulk water transfer agreement between the licence holder for the Teddington Weir Water Supply Scheme and the resource operations licence holder for the Lower Mary River Water Supply Scheme.
- (2) The agreement must address—
 - (a) licence holder monitoring and reporting requirements;
 - (b) meter reading and water charges;
 - (c) a change of location of a water allocation between zone LMRS1 in the Lower Mary River Water Supply Scheme and zone TESTW in the Teddington Weir Water Supply Scheme;
 - (d) seasonal assignment of water between zone LMRS1 in the Lower Mary River Water Supply Scheme and zone TESTW in the Teddington Weir Water Supply Scheme; and
 - (e) transfer of water from the Lower Mary River Water Supply Scheme to the Teddington Weir Water Supply Scheme.
- (3) Subsection (2) does not limit matters that may be dealt with by the inter-scheme trading and bulk water transfer agreement.

Attachment 5 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.
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 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.
Multi-level inlet	An inlet arrangement on a dam or weir that allows stored water to be released downstream from selected levels below the stored water surface.
Ponded area	Area of inundation at full supply level of storage.
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.