

Resource Operations Licence
Water Act 2000



Name of licence

Cunnamulla Water Supply Scheme Resource Operations Licence

Holder

Sunwater Limited

Water Plan

The licence relates to the Water Plan (Warrego, Paroo, Bulloo and Nebine) 2016.

Water infrastructure

The water infrastructure to which this 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 Warrego River upstream of the Allan Tannock Weir (AMTD 124.8 km) to the upstream limit of the Cunnamulla Water Supply Scheme (AMTD 142 km).

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. Metering

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

3. Monitoring and reporting requirements

- 3.1. The licence holder must carry out and report on the monitoring requirements as set out in Attachment 2.
- 3.2. The licence holder must provide any monitoring data required under condition 2.1 to the chief executive within a stated time upon request.
- 3.3. 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.
- 3.4. The licence holder must ensure that the transfer of data and reporting are consistent with the Water Monitoring Data Reporting Standards¹.

4. Other conditions

- 4.1. 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 requirements for operational or emergency reporting prescribed in Attachment 2.

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

Commencement of licence

The licence took effect on 23 January 2006

Granted on 23 January 2006,

Amended under section 1259 of the *Water Act 2000* on 9 AUGUST 2021



Daniel Harris

Acting Executive Director, Water Policy

Attachment 1 Infrastructure details for Cunnamulla Water Supply Scheme

Table1 – Allan Tannock Weir–Warrego River at AMTD 124.8 km

Description of water infrastructure	
Description	Steel sheet-pile weir with three reinforced concrete terraces. Central full supply sheet-pile crest is 9.6m wide in overall sheet-pile width of approximately 130m. Maximum height is 4.5m from embankment crest to downstream toe.
Full supply level	EL 183.5 m AHD
Minimum operating level	EL 180.47 m AHD
Saddle dam(s)	Breakout structure: steel sheet-pile weir with concrete apron. Crest length approximately 55 m wide.
Fabridam	Nil
Gates	Nil
Storage volume and surface area	
Full supply volume	4770 ML
Minimum operating volume	500 ML
Storage curves / tables	Storage curves/tables: drawing nos 105517, 105518
Spillway arrangement	
Description of works	Weir: centrally located sheet-pile spillway section cut into the sheet-pile crest. Breakout structure: sheet-pile crest 55m wide.
Spillway level	Weir: EL 183.5 m AHD Breakout structure: EL 184.5 m AHD
Spillway width	Full supply sheet-pile spillway 9.6 m wide in overall sheet-pile width of approximately 130 m.
Discharge characteristics	DRDMW Toowoomba hydrographic section, Warrego River at Allan Tannock Weir, station-423202C, rating table-5.00 (16/01/1992 to 4/12/2012).
River inlet/outlet works and diversion works	
Description of works	River outlet: single 1070 mm diameter pipe 10 m long. Pipe discharge is controlled by a square sluice gate in the inlet structure.
Multi-level off-takes	Single-level off-take
Minimum operating level	Invert of 1070 mm inlet: EL 180.47m AHD
Discharge characteristics	Estimated maximum discharge capacity of outlet at full supply level is 300 ML/day
Fish transfer system	
Description of works	Nil

Attachment 2 Licence holder monitoring and reporting

Part 1 Monitoring requirements

Division 1 Water quantity

1 Streamflow and storage height data

- (1) The licence holder must record storage height and volume and stream flow data in accordance with Attachment 2, Table 1.
- (2) Storage inflows may be determined based upon a storage 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 by the licence holder and approved by the chief executive.

Table 1 Locations where continuous water data required

Location	Continuous time series height and volume data	Daily flow data
Allan Tannock Weir inflow		✓
Allan Tannock Weir headwater	✓	
Allan Tannock Weir tailwater		✓

2 Releases from Allan Tannock Weir

The licence holder must measure and record for each release of water from the storage—

- (a) the daily volume released, and
- (b) the reason for each release.

3 Stock and domestic releases from Allan Tannock Weir

The licence holder must record—

- (a) decisions made under section 2, and
- (b) the basis of each decision.

4 Announced allocations

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

- (a) the announced allocation,
- (b) the date announced allocations are determined, and
- (c) the value of each parameter applied for calculating the announced allocation.

5 Water taken by water users

The licence holder must measure and record for each water allocation as follows—

- (a) the total volume of water taken,
- (b) the total volume of water entitled to be taken, and
- (c) the basis for determining the total volume of water entitled to be taken.

6 Seasonal water assignment of a water allocation

The licence holder must record details of seasonal water assignment arrangements including—

- (a) the name of the assignee, volume and location of water that has been seasonally assigned by an assignor,
- (b) the name of the assignor, volume and location of water that has been seasonally assigned to an assignee, and
- (c) the effective date of the seasonal water assignment.

Part 2 Reporting requirements

7 Reporting requirements

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

- (a) annual reports, and
- (b) operational or emergency reports.

Division 1 Annual reporting

8 Annual report

- (1) The licence holder must submit an annual report to the chief executive within three months after the end of each water year.
- (2) The annual report must include—
 - (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) a summary of operational and emergency reporting,
 - (c) stream flow and storage height— all records in Attachment 2 section 1,
 - (d) records of releases from Allan Tannock Weir under Attachment 2 sections 2 and 3,
 - (e) the total volume of water taken by all water users, specified by zone, including—
 - (i) the total volume of supplemented water taken, and
 - (ii) the total volume of supplemented water entitled to be taken, and
 - (iii) the basis for determining the volume entitled to be taken.
 - (f) the total number of seasonal water assignment arrangements and the total volume of water seasonally assigned,
 - (g) all details of changes to infrastructure or the operation of the infrastructure that may impact on compliance with this licence and rules in the operations manual,
 - (h) details of any new monitoring devices used such as equipment to measure stream flow, and
 - (i) a discussion on any other issues that arose as a result of the implementation and application of this licence.

Division 2 Operational or emergency reporting

9 Operational or emergency reporting²

- (1) The licence holder must notify the chief executive upon becoming aware of—
 - (a) any of the following operational incidents—
 - (i) non-compliance by the licence holder with the rules given in this licence, and
 - (ii) instances of fish stranding, blue-green algae growth or bank slumping within the ponded area of Allan Tannock Weir or watercourses associated with the operation of this water supply scheme, and
 - (b) an emergency where, as a result of the emergency, the licence holder cannot comply with the conditions of this licence.
- (2) The licence holder must provide to the chief executive a report which includes—

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.

- (a) details of the incident or emergency,
- (b) 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, any rules specified in the operations manual that the licence holder is either permanently or temporarily unable to comply with due to the emergency.

Attachment 3 Glossary

Term	Definition
AHD	The Australian Height Datum, which references a level or height to a standard base level.
AMTD	Adopted Middle Thread Distance, is the distance in kilometres, measured along the middle of a watercourse, from a specific point in the watercourse to the watercourse's mouth, the watercourse's junction with the main watercourse or the border between the State and New South Wales.
Assignee	The person or entity to whom an interest or right to water is being transferred – for example, seasonally assigned.
Assignor	The person or entity who transfers an interest or right in water to an assignee – for example, a seasonal assignment.
EL	Elevation level.
Fish stranding	When fish are stranded or left out of the water on the bed or banks of a watercourse, on infrastructure such as spillways and causeways or left isolated in small and/or shallow pools, from which they cannot return to deeper water. This also applies to other aquatic species such as platypus and turtles.
Full supply volume	This is the volume of water in storage that corresponds to the full supply level.
Inlet	Infrastructure comprised of an entrance channel, intake structure and gate or valve, which allows for water to be taken from the ponded area of a dam, weir or barrage and discharged via an outlet into the watercourse downstream of the storage.
Licence holder	The holder of the resource operations licence for the Cunamulla Water Supply Scheme
Megalitre (ML)	One million litres.
Minimum operating level	This is the level below which water cannot be used to supply customers, either because there is insufficient hydraulic gradient or because of poor water quality and for environmental reasons.
Minimum operating volume	This is the storage volume corresponding to the minimum operating level.
Outlet	An arrangement on a dam or weir that allows stored water to be released downstream.
Ponded area	Area of inundation at full supply level of a storage.
Release	Water from a dam or weir that passes downstream from the dam or weir through the dam or weir outlet works.
Water user	The holder of a valid water entitlement.
Water year	The water year is the 12 month period beginning 1 July and ending 30 June.