

Resource Operations Licence

Water Act 2000

Name of licence

Proserpine River Water Supply Scheme Resource Operations Licence

Holder

Sunwater Limited

Water plan

The licence relates to the Water Resource (Whitsunday) Plan 2010.

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.

Table 1 – Use of watercourses for distribution

Watercourse	Description
Proserpine River	From, and including, the impounded area of Peter Faust Dam (AMTD 57.7 km) downstream to the Proserpine River (AMTD 25.7 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. 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 those 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.

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

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 reporting requirements for operational or emergency prescribed in Attachment 3.
- 5.2. The licence holder may, at any time, submit an interim program or an amendment to an existing program to the chief executive for approval in accordance with Attachment 4, if the holder proposes to operate in a way that does not meet the requirements of this licence.
- 5.3. Where there is conflict between the requirements of this licence and an approved program, the program prevails for the time it is in place.
- 5.4. 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 the sale price, the volume of water assigned and the location of where the water was assigned to and from.
- 5.5. The licence holder must provide the chief executive information about seasonal water assignments as directed by the chief executive within the stated time upon request¹.

This Resource Operations Licence is subject to the conditions attached.

Commencement of licence

The licence took effect on 12 December 2011.

Granted on 12 December 2011.

Amended under section 186 of the *Water Act 2000* on 12 April 2022.

Ian Gordon
Director, Divisional Support, Water Operations

Attachment 1 Infrastructure details for Proserpine River Water Supply Scheme

Table 1 – Peter Faust Dam—Proserpine River AMTD 57.7 km

Description of water infrastructure	
Description	Dam with an earth and rock fill embankment 530 m long and 56 m high
Full supply level	EL 85.60 m AHD
Minimum operating level	EL 53.10 m AHD
Saddle dam(s)	Nil
Fabridams	Nil
Gates	Nil
Storage volume and surface area	
Full supply volume	491 400 ML
Minimum operating volume	970 ML
Storage curves / tables	Drawing no: A3-213324
Spillway arrangement	
Description of works	Reinforced concrete ogee spillway crest. Pipe discharge is controlled on the downstream end by two 1200 mm diameter butterfly valves and two 750 mm diameter cone dispersion valves.
Spillway level	Crest EL 85.60 m AHD Two 1200 mm diameter outlets. Invert EL 48.39 m AHD. River outlet construction conduit EL 47.80 m AHD blanked off.
Spillway width	30 m
Discharge characteristics	Spillway capacity 22.87 m ³ /s (water level at 86.07 m AHD) Drawing No: A3-101613 Spillway capacity 1 660 m ³ /s at 92.6 m AHD (maximum water level).
River inlet/outlet works	
Description of works	The river outlet is controlled by two 1200 mm diameter butterfly valves and two 750 mm diameter cone dispersion valves, the Kelsey Creek outlet by one 900 mm diameter butterfly valve and one 600 mm gate valve.
Inlet	Reinforced concrete inlet tower with full height removal screens and baulks facing upstream. Pipe conduit 2400 mm diameter to valve house. Baulks allow multi-level off-take.
Cease to flow level	EL 53.1 m AHD
Maximum discharge rate	1728 ML/day (Two outlet valves @ 10m ³ /s)
Fish transfer system	
Description of works	Nil

Attachment 2 Environmental management rules

1 Change in rate of release from Peter Faust Dam

- (1) The licence holder must minimise the occurrence of adverse environmental impacts (for example, fish stranding and bank slumping) by ensuring that any reduction or increase in the rate of release of water from Peter Faust Dam occurs incrementally.
- (2) The licence holder must prepare and maintain operating procedures that demonstrate that arrangements are in place to ensure that the requirements under subsection (1) are met.

2 Quality of water downstream of Peter Faust Dam

- (1) When making a release from Peter Faust Dam, the licence holder must draw water from the off-take level that optimises the quality of water released.
- (2) The licence holder must prepare and maintain operating procedures that demonstrate that arrangements are in place to ensure that the requirements under subsection (1) are met.

Attachment 3 Licence holder monitoring and reporting

Part 1 Monitoring requirements

Division 1 Water quantity

1 Stream flow and storage water level data

The licence holder must record storage water level and flow data in accordance with Attachment 3, Table 1.

Table 1 – Locations where continuous time series storage water level data or height and flow data are required

Location	Continuous time series storage water level data	Continuous time series height and flow data
Peter Faust Dam Headwater	✓	
Peter Faust Dam Tailwater		✓

2 Releases from storages

- (1) The licence holder must measure and record for the storage mentioned in Attachment 1—
 - (a) the daily volume released;
 - (b) the release rate, and for any change in release rate—
 - (i) the date and time of the change; and
 - (ii) the new release rate;
- (2) In addition to the requirements under subsection (1), for storage outlets with selective withdrawal capabilities, the licence holder must record—
 - (a) the reason for each release of water; and
 - (b) the inlet level used and reason for deciding to release from that particular inlet level.

3 Announced allocations

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

- (a) the announced allocations for priority groups A, A1, A2 and A3 water allocations;
- (b) the date announced allocations are determined; and
- (c) the value of each parameter applied when calculating the announced allocation.

4 Carryover

The licence holder must record details of—

- (a) the volume of water carried over by a water allocation holder into the next water year; and
- (b) the total volume of water carried over from the previous water year into the next water year.

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 at any time.

6 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 assignee and the assignor;
- (b) volume of the assignment;
- (c) and location—
 - (i) from which it was assigned;
 - (ii) to which it was assigned;
- (d) the effective date of the assignment; and
- (e) the sale price.

Division 2 Impact of storage operation and distribution of water on natural ecosystems

7 Water quality

The licence holder must monitor and record water quality data in relation to relevant infrastructure listed in Attachment 1.

8 Bank condition

- (1) The licence holder must inspect banks for evidence of collapse and/or erosion within the ponded areas of each storage listed in Attachment 1 and downstream reaches, following instances of—
 - (a) rapid water level changes; or
 - (b) large flows through storage; or
 - (c) other occasions when collapse and/or erosion of banks may be likely.
- (2) For subsection (1), the distance downstream is the distance of influence of infrastructure operations.
- (3) Any instances of bank slumping or erosion observed must be investigated to determine if 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 the infrastructure listed in Attachment 1 to determine if any instance is associated with the operation of that infrastructure.

Part 2 Reporting requirements

10 Reporting requirements

The licence holder must provide—

- (a) quarterly reports;
- (b) annual reports for the previous water year; and
- (c) operational or emergency reports.

Division 1 Quarterly reporting

11 Quarterly report

- (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 should contain the following data—
 - (a) streamflow and storage level data— all records referred to in section 1;
 - (b) releases from the storage— daily volumes released referred to in section 2;
 - (c) for each quarter, the total volume of water taken for each zone and entitled to be taken for each zone;
 - (d) water quality as required under section 7; and
 - (e) a summary of bank condition monitoring and instances of slumping carried out as required under section 8.

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 required section 13;
 - (b) details of the impact of storage operation on aquatic ecosystems as required under section 14;
 - (c) a discussion on any issues that arose as a result of the implementation and application of the rules and requirements of this licence; and
 - (d) a summary of sale price disclosure and other supporting information for seasonal water assignments, as per Attachment 3, Part 1, Division 1(6).

13 Water quantity monitoring

The licence holder must include in the annual report—

- (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 made to an announced allocation.
- (b) for the water year, the total annual volume of supplemented water taken by each water user, specified by zone, namely—
 - (i) the total volume of water taken for each zone;
 - (ii) the total volume entitled to be taken for each zone; and
 - (iii) the basis for determining the total volume of water entitled to be taken in each zone.
- (c) for the water year, the total annual volume of supplemented water taken by all water users, specified by zone, namely—
 - (i) the total volume of water taken;
 - (ii) the total volume of water entitled to be taken; and
 - (iii) the basis for determining the volume of water entitled to be taken.
- (d) seasonal water assignments, namely—
 - (i) the total number of seasonal water assignment arrangements; and
 - (ii) the total volume of water seasonally assigned.
- (e) the volume of water carried over for the Proserpine River Water Supply Scheme including—
 - (i) the total volume of water carried over to the water year from the previous water year; and
 - (ii) the total volume of water carried over from the water year to the next water year.
- (f) all details of changes to the storage and delivery infrastructure, or the operation of storage and delivery infrastructure that may impact on compliance with rules in this plan; and
- (g) details of any new monitoring devices used such as equipment to measure stream flow.

14 Impact of storage operation on natural ecosystems

(1) The licence holder must include in their annual report—

- (a) a summary of environmental considerations made by the licence holder in making operational and release decisions under Attachment 2, section 1 and 2 of this licence; and
- (b) a summary of the environmental outcomes of the decision including any adverse environmental impacts.

(2) The annual report must include a summary of bank condition and fish stranding monitoring and assessment including—

- (a) results of investigations of bank slumping or erosion identified in ponded areas and/or downstream of the storage;
- (b) results of any investigations of fish stranding downstream of the storage; and

- (c) changes to the operation of the storage to reduce instances of bank slumping, erosion or fish stranding.
- (3) The annual report must include a discussion and assessment of the following water quality issues as per Attachment 2, section 1 and 2 of this licence—
- (a) thermal and chemical stratification in the storage;
 - (b) contribution of the storage and its management to the quality of water released;
 - (c) cumulative effect of the storage on water quality;
 - (d) cyano-bacterial population changes in response to stratification in the storage; and
 - (e) any proposed changes to the monitoring program as a result of evaluation of the data.

Division 3 Operational or emergency reporting

15 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—
 - (i) non-compliance by the licence holder with the conditions of this licence;
 - (ii) instances of fish stranding or bank slumping within supplemented watercourses to which this licence relates; and
 - (iii) a decision being made to introduce a reduced full supply level under section 399B of the *Water Supply (Safety and Reliability) Act 2008*;
 - (b) 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 to the chief executive upon request, and within the timeframe requested, a report which includes details of—
- (a) 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;
 - (d) in relation to an emergency only, 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—
- (a) notify the chief executive within one business day —
 - (i) upon setting an initial announced allocation or resetting an announced allocation during the water year; and
 - (ii) with details of any arrangements for addressing circumstances where they are unable to supply water allocations;

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.

- (b) provide the chief executive with relevant supporting information used in making a decision under subsection (a)(i) and (ii).
- (4) The licence holder must notify the other scheme licence holder(s) within one business day after becoming aware of an operational incident or emergency that may impact the other scheme licence holder.

16 Stream flow and storage water level data

The licence holder must record storage water level and flow data in accordance with Attachment 3, Table 1.

Attachment 4 Interim programs

1 Submission of interim program

The licence holder may, at any time, submit an interim program to the chief executive for approval, where—

- (a) an emergency or operational incident results in an inability to comply with the rules or requirements of this licence. The interim program must include a timetable and methods to be used; or
- (b) the submitted program relates to the Water Monitoring Data Collection Standards, the program must include the accuracy methods to be used.

2 Implementing and publishing an interim program

Following approval of the program by the chief executive, the licence holder must—

- (a) implement and operate in accordance with, the interim program; and
- (b) make public details of the interim program on its internet site.

Glossary

Term	Definition
AHD	The Australian Height Datum (AHD) adopted by the National Mapping Council of Australia for referencing a level or height back to a standard base level.
AMTD	Adopted Middle Thread Distance (AMTD) is the distance in kilometres (km) that a specific point in the watercourse is from the watercourse's mouth or junction with the main watercourse and is measured along the middle of a watercourse.
Announced allocation	Announced allocation means a number, expressed as a percentage, which is 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 that transfers an interest or right to water to an assignee (e.g. a seasonal assignment).
Carryover	The volume of water permitted to be carried over from the unused portion of the water entitlement at the end of the previous water year. The volume available to the entitlement holder is adjusted to account for storage losses.
Discharge	The rate at which a volume of water passes a point in a stream or pipeline per unit of time. This could be measured in litres per second (L/s), cubic metres per second (m ³ /s) or in megalitres per day (ML/day).
Elevation (EL)	The elevation of a geographic location is its height above a fixed reference point, often the mean sea level.
Emergency	An occurrence that, by nature of its severity, extent or timing might be regarded as an emergency (for example contamination of water supply, structural damage to infrastructure or a danger to human health).
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, turtles and any rare or threatened species.
Full supply volume	The specified maximum volume of water within the ponded area of a dam, weir or barrage, which corresponds to the full supply level.
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 a water allocation, location means the zone from which water under the water allocation can be taken.
Megalitre (ML)	One million litres.
Minimum operating level	The operating level below which water cannot be used to supply customers, either because there is insufficient hydraulic gradient or because of poor water quality for environmental reasons.
Multi-level off-take	An off-take arrangement that allows stored water in Peter Faust Dam to be released downstream from selected levels below the stored water surface.
Other Scheme licence holder	For this licence, the term 'other scheme licence holder' means— a) the distribution operations licence holder within the Proserpine River water supply scheme for Six Mile Creek Irrigators Co-operative Limited; and b) the distribution operations licence holder within the Proserpine River water supply scheme for Kelsey Creek Water Co-operative Limited.
Ponded area	Area of inundation at full supply level of a storage.
Quarter or quarterly	Three monthly intervals commencing at the start of the water year.
Water user	The holder of a valid water entitlement associated with this licence.
Zone	A geographic location defined by a reach of a watercourse. Zones define the location of a water allocation and operational arrangements under this licence. Zones are defined in the Water Resource (Whitsunday) Plan 2010.