Resource Operations Licence  
*Water Act 2000*

**Name of licence**  
Maranoa River Water Supply Scheme Resource Operations Licence

**Holder**  
SunWater Limited ACN 131 034 985

**Water plan**  
The licence relates to the Water Plan (Condamine and Balonne) 2019.

**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 watercourses listed in table 1 for the distribution of supplemented water.

**Table 1: Watercourses to be used for distribution of supplemented water**

<table>
<thead>
<tr>
<th>Watercourse</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maranoa River</td>
<td>The Maranoa River upstream of Neil Turner Weir (AMTD 222.2) to the upstream limit of the Maranoa River Water Supply Scheme (AMTD 229.2 km)</td>
</tr>
</tbody>
</table>

**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. **Change in rate of release from infrastructure**
   2.1. The licence holder must minimise the occurrence of adverse environmental impacts by ensuring that any change in the rate of release of water from a storage occurs incrementally.

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 unless an
alternative method of measuring the taking of water is approved in writing by the chief executive.

4. Monitoring and reporting requirements

4.1. The licence holder must carry out and report on the monitoring requirements as set out in attachment 2.

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 Standards.\(^2\)

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 requirements for operational or emergency reporting prescribed in attachment 2.

Commencement of licence

The licence took effect on 15 December 2008

Granted on 12 December 2008,

Amended on 3 August 2012, 18 August 2014 and 22 February 2019

David Wiskar

Executive Director, Water Policy

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\(^1\) The Water Monitoring Data Collection Standards can be inspected at any of the department’s offices or accessed online at: <www.dnrm.qld.gov.au>

\(^2\) The Water Monitoring Data Reporting Standards can be inspected at any of the department’s offices or accessed online at: <www.dnrm.qld.gov.au>
Attachment 1  Infrastructure details for Maranoa River Water Supply Scheme

Table 1 – Neil Turner Weir—Maranoa River at AMTD 222.2 km

<table>
<thead>
<tr>
<th>Description of water infrastructure</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Description</td>
<td>Concrete cascade weir</td>
</tr>
<tr>
<td>Full supply level</td>
<td>EL 334.60 m AHD</td>
</tr>
<tr>
<td>Minimum operating level</td>
<td>EL 330.90 m AHD</td>
</tr>
<tr>
<td>Saddle dam(s)</td>
<td>Nil</td>
</tr>
<tr>
<td>Fabridam</td>
<td>Nil</td>
</tr>
<tr>
<td>Gates</td>
<td>Nil</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Storage volume and surface area</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Full supply volume</td>
<td>1470 ML (based on a siltation survey in 1996. The initial design capacity was 1960 ML.)</td>
</tr>
<tr>
<td>Minimum operating volume</td>
<td>12 ML</td>
</tr>
<tr>
<td>Storage curves / tables</td>
<td>Drawing number: 110947, 110948</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Spillway arrangement</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Description of works</td>
<td>Crest slab with four cascading deck slabs</td>
</tr>
<tr>
<td>Spillway level</td>
<td>EL 334.60 m AHD</td>
</tr>
<tr>
<td>Spillway width</td>
<td>136 m (approximately)</td>
</tr>
<tr>
<td>Discharge characteristics</td>
<td>To be advised</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>River inlet/outlet works and diversion works</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Description of works</td>
<td>Single 750 mm outlet pipe with a 600 mm sluice valve</td>
</tr>
<tr>
<td>Multi-level off-takes</td>
<td>Single-level off-take</td>
</tr>
<tr>
<td>Cease-to-flow levels</td>
<td>330.9 m AHD</td>
</tr>
<tr>
<td>Discharge characteristics</td>
<td>The estimated maximum discharge capacity of the outlet works at Neil Turner Weir is 230 ML/day. Drawing Number: 71361.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Fish transfer system</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Description of works</td>
<td>Nil</td>
</tr>
</tbody>
</table>
Attachment 2  Licence holder monitoring and reporting

Part 1  Monitoring requirements

Division 1  Water quantity

1  Releases from water storages
The licence holder must measure and record for the storage outlet —
(a) the daily volume released;
(b) the release rate, and for any change in the release rate—
   (i) the date and time of the change; and
   (ii) the new release rate; and
(c) the reason for each release.

2  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.

3  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.

Division 2  Impact of infrastructure operation on natural ecosystems

4  Water quality
In accordance with condition 4.3, the licence holder must monitor and record water quality in relation to the relevant infrastructure listed in attachment 1.

5  Bank condition
(1) The licence holder must inspect banks for evidence of collapse and/or erosion within the ponded areas and downstream of the storage listed in attachment 1, following instances of—
(a) rapid water level change; or
(b) large flows through the storage; or
(c) other occasions when collapse and/or erosion of banks may be likely.
For subsection (1), downstream of the relevant infrastructure means the distance of influence of storage operations.

6 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 in attachment 1 to determine if any instance is associated with the operation of that infrastructure.

Part 2 Reporting requirements

7 Reporting requirements
The licence holder must provide—
(a) Annual reports;
(b) Operational reports when required; and
(c) Emergency reports when required.

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) water quantity as described in section 9;
(b) details of the impact of infrastructure operation on natural ecosystems as required under section 10; and
(c) discussion on any issues that arose as a result of the implementation and application of the rules and requirements of this licence.

9 Water quantity reporting
(1) The licence holder must include in the annual report—
(a) the total annual volume of water taken by all water users, specified by zone and for the scheme, including—
(i) the total volume of water taken;
(ii) the total volume of water entitled to be taken; and
(iii) the basis for determining the total volume entitled to be taken.
(b) the total quarterly volume of water taken by each water user as follows—
(i) the 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.
(c) releases from storage—all records referred to in section 1;
(d) details of seasonal water assignments, including—
(i) the total number of seasonal water assignments; and
(ii) the total volume of water seasonally assigned.
(2) The annual report must also include—
(a) all details of changes to the storage and delivery infrastructure or the operation of the storage and infrastructure that may impact on compliance with this licence;

(b) details of any new monitoring devices used such as equipment to measure stream flow; and

(c) a discussion on any other issues that arose as a result of the implementation and application of the resource operations licence.

10 Impact of infrastructure operation on natural ecosystems

The licence holder must include in the annual report—

(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 the storages;

   (ii) results of any investigations of fish stranding downstream of the storages; and

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

(d) a discussion and assessment of water quality issues; and

(e) water quality—all records referred to in section 4.

Division 2 Operational reporting

11 Operational reporting

(1) The licence holder must notify the chief executive within one business day—

(a) upon becoming aware of any of the following operational incidents—

   (i) a non-compliance by the licence holder with this licence or with the operating and supply arrangements in the approved operations manual for this licence; and

   (ii) instances of fish stranding or bank slumping within ponded areas associated with the infrastructure or downstream of the infrastructure to which this licence relates;

(b) of any arrangements for addressing circumstances where the licence holder is unable to supply water allocations;

(c) upon becoming aware of instances where the take of supplemented water from a waterhole results in the waterhole being drawn down to more than 0.5 metres below its natural cease to flow level.

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

(a) the incident;

(b) the conditions under which the incident occurred;

(c) any response or activities carried out as a result of the incident
Division 3  Emergency reporting

12  Emergency reporting

For any emergency where, as a result of the emergency, the licence holder cannot comply with the conditions of this licence, the licence holder must—

(a) notify the chief executive upon discovery of the emergency; and

(b) provide a report to the chief executive within five business days of notification, including—

(i) details of the emergency;

(ii) the conditions under which the emergency occurred;

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

(iv) any rules and requirements under this licence that the licence holder is either permanently or temporarily unable to comply with due to the emergency.

3 This does not preclude requirements for dam safety under the Water Act 2000 and any other applicable legislation.
## Attachment 3  Dictionary

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>AHD</td>
<td>The Australian Height Datum, which references a level or height to a standard base level.</td>
</tr>
<tr>
<td>AMTD</td>
<td>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.</td>
</tr>
<tr>
<td>Assignee</td>
<td>The person or entity to whom an interest or right to water is being transferred – for example, seasonally assigned.</td>
</tr>
<tr>
<td>Assignor</td>
<td>The person or entity who transfers an interest or right in water to an assignee – for example, a seasonal assignment.</td>
</tr>
<tr>
<td>Cease to flow level</td>
<td>For a waterhole, the level at which water stops flowing from a waterhole over its downstream control.</td>
</tr>
<tr>
<td>EL</td>
<td>Elevation level.</td>
</tr>
<tr>
<td>Fish stranding</td>
<td>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.</td>
</tr>
<tr>
<td>Full supply volume</td>
<td>This is the volume of water in storage that corresponds to the full supply level.</td>
</tr>
<tr>
<td>Inlet</td>
<td>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.</td>
</tr>
<tr>
<td>Licence holder</td>
<td>The holder of the resource operations licence for the Maranoa River Water Supply Scheme</td>
</tr>
<tr>
<td>Megalitre (ML)</td>
<td>One million litres.</td>
</tr>
<tr>
<td>Minimum operating level</td>
<td>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.</td>
</tr>
<tr>
<td>Minimum operating volume</td>
<td>This is the storage volume corresponding to the minimum operating level.</td>
</tr>
<tr>
<td>Outlet</td>
<td>An arrangement on a dam or weir that allows stored water to be released downstream.</td>
</tr>
<tr>
<td>Ponded area</td>
<td>Area of inundation at full supply level of a storage.</td>
</tr>
<tr>
<td>Release</td>
<td>Water from a dam or weir that passes downstream from the dam or weir through the dam or weir outlet works.</td>
</tr>
<tr>
<td>Water user</td>
<td>The holder of a valid water entitlement.</td>
</tr>
<tr>
<td>Water year</td>
<td>The water year is the 12 month period beginning 1 July and ending 30 June.</td>
</tr>
</tbody>
</table>