

Summary of proposed amendments: Three Moon Creek Interim Resource Operations Licence

April 2021

Background

Sunwater has recently made an application to the Department of Regional Development, Manufacturing and Water to amend the Three Moon Creek Water Supply Scheme (WSS) Interim Resource Operations Licence (IROL). These amendments have been developed in consultation with customers and the Three Moon Creek Irrigation Advisory Committee (IAC) as communicated in November 2020.

Below is a summary of the proposed amendments to the Three Moon Creek IROL. A factsheet is also available on the Sunwater website, here: bit.ly/ThreeMoonCreekIROL

Details surrounding the application for changes to the Three Moon Creek IROL are detailed in a public notice by the Queensland Government, found here: bit.ly/QldGovPublicNotice

For more information on the proposed amendments, a copy of the draft Three Moon Creek IROL is available here: bit.ly/DraftThreeMoonCreekIROL

Summary of proposed IROL amendments

Summary of amendments	Reason why the amendment is required
Minor amendments and corrections <ul style="list-style-type: none"> Amend all occurrences of “SunWater” to “Sunwater”. Amend all occurrences of “Natural Resources, Mines and Energy” to “Regional Development, Manufacturing and Water”. Amend all occurrences of “DNRME” to “DRDMW”. 	Modernise to reflect ROLs in the Burnett Basin.
Section 4.0 Monitoring and Reporting	Modernise to reflect ROLs in the Burnett Basin.

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<ul style="list-style-type: none"> Link to the Departments water monitoring data collection and reporting standards. Clarify requirements to operating Cania Dam in instances where it is unsafe to do so. 	
<p>Schedule 1 – Water Infrastructure and Operating Arrangements</p> <ul style="list-style-type: none"> Update Tables 1.1 to 1.6 to align with formatting of Burnett Basin ROLs, inclusion of drawing numbers and maximum release rates. Update tables to reflect changes to the release decisions under the operating rules for Cania Dam. Removal of old information regarding maximum, average and minimum releases. Update AMTD in S1.7 table row two, column two, "110.1" to "130.6". 	<p>Modernise to reflect ROLs in the Burnett Basin.</p>
<p>Schedule 2 – Interim Water Allocation, Management and Sharing</p> <ul style="list-style-type: none"> Replace Table 1 to point to the Departments water management system. S2.3, Table 3 - AMTD and location definition of newly established management zones. Maps of each newly established management zone. S2.4 – New operating rules for release decisions from Cania Dam. S2.5 – New water sharing rules to align with the new operating rules and set specific groundwater bores for determining underground water announced allocations when storage levels in Cania Dam are below EL 312.69 m AHD. Clarifying surface water extraction during a release decision. Establishing seasonal water assignment, rules, including the requirement for price capture. 	<p>Establishing management zones and seasonal water assignment rules, as well as setting new operating rules and new water sharing rules.</p> <p>Management zones Change from lineal AMTD specifications to polygons that capture the full lateral extent of the scheme area. Zones are considered areas of like characteristics used for the implementation of water sharing and trading rules. These proposed management zones facilitate the proposed seasonal water assignment rules.</p> <p>Extensive consultation with existing customers, including the Three Moon Creek IAC to refine zone boundaries has occurred.</p> <p>Cania Dam operating rules The current rules allow for one or two annual releases up to a combined maximum volume of 13,500 ML when the storage level in Cania Dam is above 26,700 ML (EL 319.18 m AHD or 30% storage capacity). When Cania Dam is below 26,700 ML only a winter release of up to 6,000 ML can be made, if available. These releases are to be made to the downstream weirs where they recharge the groundwater aquifer and allow for opportunistic surface water use.</p> <p>The IAC and other customers have identified that holding water in Cania Dam can be inefficient, particularly in dry</p>

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	<p>times, noting the groundwater aquifer could store more water. In these circumstances, the releases have not made it to Mulgildie Weir due to groundwater recharge along the waterway. Customers also considered the two releases (per year) strategy ineffective, with a preference for a single larger release. Release thresholds were reduced to maximise the benefit of available water by storing in the aquifer.</p> <p>This application is proposing a more flexible arrangement to the release rules to allow for water to be stored in the aquifer, where possible.</p> <ul style="list-style-type: none"> • The full release of 13,500 ML will remain available, but the release level threshold has been reduced to 18,500 ML (EL 316.3 4m AHD or 21%). • When the level in Cania Dam falls below 18,500 ML, Sunwater must make a partial release of anywhere from 6,000 ML to 13,500 ML, based on the level in the dam. • If the level in Cania Dam is between 7,500 ML (EL 310.31 m AHD or 8.5%) and 11,000 ML (EL 312.69 m AHD or 12.5%) Sunwater may consult with the IAC to make a partial release of between 2,500 ML and 6,000 ML. This release can reduce the volume in the dam down to 5,000 ML. • If the level in Cania Dam is below 7,500 ML (EL 310.31m AHD or 8.5%) at the start of the water year, all water in the dam is reserved for high priority use. In this scenario, up to 2,500 ML may be released for high priority per year. This reserve allows for two high priority releases (i.e. two consecutive years), with the understanding that the dam level can be drawn down to dead storage. <p>Allowing for flexibility in releases from Cania Dam to recharge the aquifers has several advantages and promotes equity of access across the scheme. The advantages include:</p> <ul style="list-style-type: none"> • increasing the volume available – the new operating rules for Cania Dam will tend to raise bore water levels and improve access to groundwater; • broadening availability – allowing recharge will tend to spread the benefits of water access more equitably across the scheme and include those entitlement holders who are furthest downstream; and • Prolonging duration of access – allowing recharge will prolong the storage as groundwater will not be subject to surface evaporation losses. It will also help to ensure that access to water is possible throughout the water year.

Water sharing rules

Cania Dam levels that determine Announced Allocations (AA) have been reduced to ensure alignment with the proposed operating rules. When levels in Cania Dam fall below 11,000 ML (EL 312.69 m AHD), groundwater AA will be determined by zone based on the water levels in the aquifer. Three monitoring bores per zone will be used. They each have been assigned a target water level. If at least two of the three monitoring bores meet or exceed the target water level, the AA will be 50%. If at least two of the three bores indicate below the target water level, the AA will be 25%. Once an AA has been declared it cannot be reduced.

Seasonal water assignment rules

The IROL has basic seasonal water assignment rules that allow temporary trading at Sunwater's discretion. The IAC and scheme customers have requested clear trading rules.

The proposed seasonal water assignment rules aim to allow customers greater certainty around whether a trade can occur and what factors Sunwater must consider before accepting a trade. These rules have been developed in consultation with the IAC.

- Permitted trades – Small, low risk trades that have been deemed to not require further assessment. These trades can be processed within one to two business days, providing customers with certainty that the trade will occur and be processed quickly. When the AA for medium priority groundwater is 75% or above, one permitted trade per customer per year will be allowed subject to limits specified in the IROL. Permitted trades will allow irrigators to manage their water with increased effectiveness. These rules have been based on historical trades between customers, and approximately 75% of historical trades would fall within the proposed 'permitted trade' rules.
- Self-trades – This is to reflect current practices for the few IWA holders who have both surface water and groundwater stated on their allocation or who hold an IWA for both. Self-trades (trading water between water accounts for the same customer) will continue to be allowed under a permitted trade arrangement, providing clarity and enabling Sunwater to provide efficient processing times.
- Prohibited trades – When medium priority groundwater announced allocations are at or below 50%, all temporary trading between zones will be prohibited. This level represents historical lows in the Three Moon Creek groundwater aquifer at which point any trades

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	<p>would potentially impact negatively on other customers.</p> <ul style="list-style-type: none"> Assessed trades – If the trade is not specifically permitted or prohibited, Sunwater has set up a transparent framework for accepting and assessing all other trades in Three Moon Creek. Within the amended IROL, Sunwater has proposed assessment guidelines that it must apply before accepting or rejecting an application for a seasonal water assignment. The idea of the assessment guidelines is to ensure that a trade will not create unacceptable impacts on other water users. Assessed trades will have a longer processing time, but with clear guideline in place this process should provide more clarity, consistency and equity for water users. <p>These proposed rules prepare the IROL for an easier transition to ROL and Operations Manual arrangements in the future.</p>
<p>Schedule 3 – Monitoring and Reporting</p> <ul style="list-style-type: none"> Modernise to reflect ROLs in the Burnett Basin New requirement to capture seasonal water assignments, including capturing price data. 	<p>Modernise to reflect ROLs in the Burnett Basin</p>

Making a submission

If you would like to make a submission in support of the proposed amendments or raise any issues, details of how to make a submission are found [here](#). Closing date for submissions is **Monday 24 May 2021**.

More information

Should you wish to discuss the proposed changes in further detail, please contact Camille Jendra from the Department of Regional Development, Manufacturing and Water on (07) 4131 2374. For general enquiries, please contact customer support on 13 15 89 Monday-Friday 8.30am-4.30pm or email customersupport@sunwater.com.au.