

Moonie (SS25)

INITIAL SDL ASSESSMENT RESULT

The Authority is **confident** that the SDL continues to reflect an environmentally sustainable level of take and **proposes the SDL is maintained.**

It is recognised that the extent, nature of and planning for continued monitoring, evaluation and assessment is tailored by the Queensland government for the management of local and site-specific areas of concern to maintain environmental outcomes.

It is important that the impacts of a changing climate continue to be actively considered for this Unit.

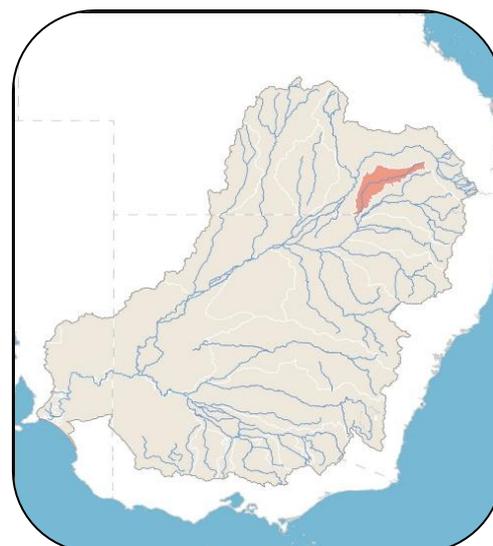


Figure 1: Moonie (SS25) SDL Resource Unit

The Authority has assessed whether the Sustainable Diversion Limit (SDL) for the Moonie SDL Resource Unit (the **Unit**) continues to support environmental outcomes and reflect an environmentally sustainable level of take (ESLT).

This Assessment Summary provides an overview of the factors which are relevant to that work and the Authority's initial view. This Unit has minimal diversions, and the flow regime is relatively intact. Therefore, the lite assessment approach has been applied. The approach uses a subset of the Multiple Lines of Evidence information base to inform the initial assessment. Current monitoring condition, drivers and climate change risks have been considered.

Information on the Lines of Enquiry and methodology used in this assessment available in the *Summary of Assessment Approach* and the *SDL Assessment and Response Framework*. Information on the *Basin Plan Review Discussion Paper* and process for making a submission are available on the MDBA website.

About this Unit (as at June 2024)

Ramsar sites	None
Contribution to Basin Water	0.8% of the Murray-Darling Basin
Key waterways	The Moonie River (542km); Teelba Creek
Water storages	Thallon Weir (0.2 GL)
Significant groundwater connections	Not applicable

The [Water Resource Plan \(WRP\)](#) that supports this Unit commenced on 24 September 2019. The WRP includes the rules and arrangements that Queensland are using to manage this Unit and maintain sustainability. Further information on water recovery for this SDL Resource Unit is available at the Department of Climate Change, Energy, the Environment and Water's [surface water recovery factsheet](#).

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Current Condition

Figure 2 below summarises the observed environmental condition in the Unit (as at June 2024).

As can be seen the Authority assessed that all themes except Other species, were in moderate condition but that confidence in the evidence base was low. No rating could be determined for Other species, because of a lack of data.

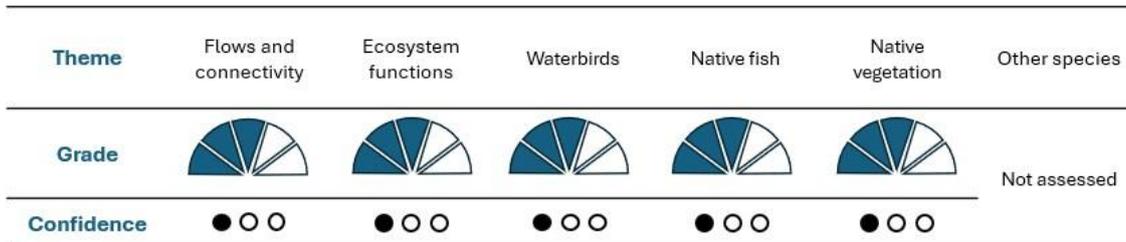


Figure 2. Environmental condition assessment in the Unit. **Figure 2.** Environmental condition assessment in the Unit. Across each theme environmental condition is graded as *Very Poor*, *Poor*, *Moderate*, *Good* or *Very Good* or not assessed (as indicated by segments) and confidence in this grading is assessed as *Low*, *Medium*, *High* or *data deficient* (as indicated by dots). The data deficient grading relies heavily on expert elicitation to address data paucity. Other species refers to animals including frogs, platypuses and turtles.

Environmental outcomes under a fully implemented Basin Plan

No further water recovery is required and the Basin Plan is considered fully implemented in this Unit. The flow regime remains relatively intact and will support the needs of those water-dependent ecosystems.

Environmental outcomes under a climate impacted future

For a description of anticipated climate impacts across the Basin see the *Surface Water Assessment Approach* published on the MDBA website.

Initial Assessment

As noted, the current assessment reflects that flow regime requirements for the six themes are currently supported by the SDLs.

On the balance of all three Lines of Enquiry, the Authority is **confident** that the SDL reflects an environmentally sustainable level of take and is supporting the Basin Plan's environmental outcomes under full implementation conditions with none of the themes having been identified as at risk.

It is also the case that the Basin Plan settings in connection with monitoring, evaluation and assessment activities warrant review as they apply to this Unit. Other relevant factors include planning by the Queensland government for the management of local and site-specific areas of concern to maintain environmental outcomes.

Consideration of Response

It is recognised that ongoing monitoring, evaluation and assessment will be important, as will planning for and supporting delivery of environmental watering events to maintain environmental outcomes.

Whilst this assessment has not identified any at risk themes, the Discussion Paper engages with well-known challenges at a sub-Basin and Basin scale including river connectivity and the connection between rivers and their floodplains, water delivery challenges and physical constraints, native fish decline and the impacts of invasive species. The risks of a changing climate continue to be actively considered in the Basin.

Evidence

In addition to the standard evidence sources presented in the *Summary of Assessment Approach* the following specific evidence sources were used for this Unit:

- [Moonie catchment | Murray–Darling Basin Authority](#)
- [Murray-Darling Basin Authority 2012, Hydrologic modelling to inform the proposed Basin Plan - methods and results, MDBA publication no: 17/12, Murray-Darling Basin Authority, Canberra.](#)
- [Murray-Darling Basin Authority 2011, The proposed “environmentally sustainable level of take” for surface water of the Murray-Darling Basin: Methods and outcomes, MDBA publication no: 226/11, Murray-Darling Basin Authority, Canberra.](#)