

71T Dealings – groundwater temporary trade in the Lower Namoi Groundwater Source

Information on the triage and assessment process for groundwater temporary trades for the Lower Namoi Groundwater Source

71T Dealings (or temporary trades) allow access to additional allocation by moving available account water from one licence account to another. Groundwater trades can result in extraction being concentrated in one part of a groundwater source and this has the potential to result in significant localised drawdown impacts.

The *Access Licence Dealing Principles Order 2004* requires that the impact of Dealings are managed with a balance between managing impacts on the environment, the aquifer and other users, with social and economic benefits.

Determining the level of assessment required for a temporary trade is a balance between providing flexibility to licence holders to move water within the water sources and mitigating against unacceptable impacts on the aquifer and other users.

WaterNSW receives temporary trade applications and refers them, as required, to the NSW Department of Planning and Environment - Water Group (DPE Water) for impact assessment.

Changes to how temporary trades are processed in the Lower Namoi Groundwater Source from 1 July 2023 to 30 June 2024

Introduction of the state-wide groundwater temporary trading triage and assessment process

From 1 July 2023 the state-wide groundwater temporary trading triage and assessment process applies to 71T Dealing applications in the Lower Namoi Groundwater Sources. The triage is outlined in Figure 1.

Trade areas

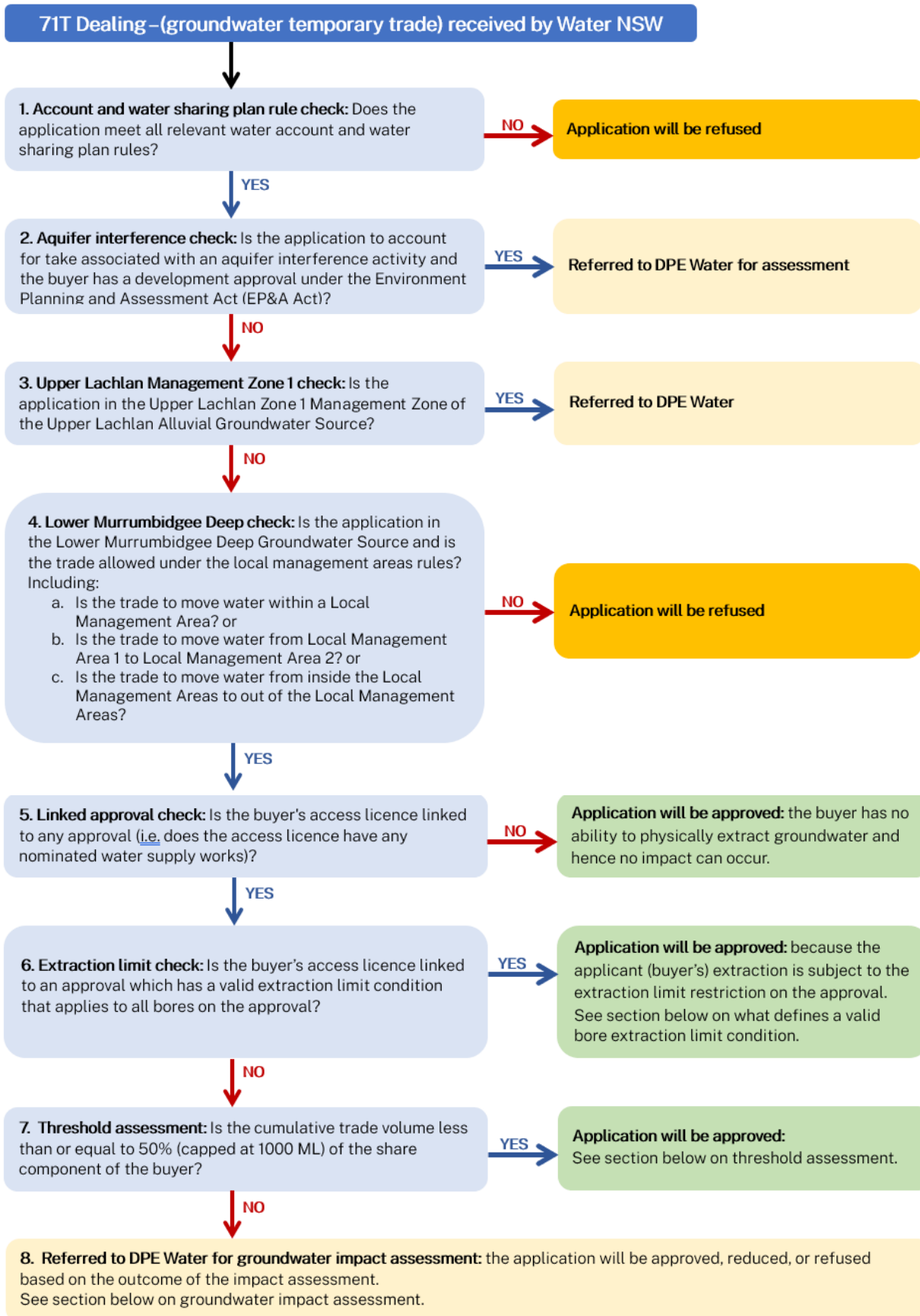
The rules related to the trade areas for the Lower Namoi Groundwater Source no longer apply with the introduction of the state-wide groundwater temporary trading triage and assessment process.

For temporary trade in the Lower Namoi Groundwater Source there are now no restrictions from where water can be traded to and from. This is because applications are now subject to the triage rules and impact assessment for some applications.

Third-party bore impact assessment criteria

From 21 August 2023 to 30 June 2024, the impact assessment criteria for third-party bores **will not** be applied to applications that require impact assessment. The impact on the aquifer criteria and impact on groundwater dependant ecosystems and surface water sources will be applied where applicable.

Figure 1: Groundwater temporary trade triage



Extraction limit condition

An extraction limit condition is a discretionary condition that applies to a water supply work approval limiting the volume that can be taken (extracted), generally over a water year, by a bore, bores or combined from an approval.

For an extraction limit condition to be valid for the purpose of temporary trade assessment, the condition must restrict the total volume that can be extracted over a water year in megalitres (ML)/year, and the restriction must apply to all bores authorised under that approval.

Limits that are expressed in litres/sec are generally considered invalid in this context.

Threshold assessment

Applications that get to Step 7 in the triage (Figure 1) may be approved where the (cumulative) trade volume is less than or equal to 50% (capped at 1,000 ML) of the share component of the buyer.

Examples of how this is applied include:

Example 1

- Trade: 500 ML from Seller A to Buyer B
- Buyer B's access licence = 1000 Shares
- 50% of 1000 = 500: up to 500 ML can be traded into Buyer B's access licence without impact assessment for the water year
- Previous trade/s to Buyer B's access licence = none
- Total traded in volume = 500 which is equal to the threshold of 500 ML for Buyer B's access licence
- The 500 ML trade is approved.

Note – any further trades to Buyer B's access licence will be sent to DPE Water for impact assessment. Future trades could be approved in full, reduced to a volume that passes the impact assessment, or refused, depending on the outcome of the assessment.

Example 2

- Trade: 2,000 ML from Seller C to Buyer D
- Buyer D's access licence = 3,000 Shares
- 50% of 3,000 = 1,500 (capped at 1,000): up to 1,000 ML can be traded into Buyer D's access licence without impact assessment for the water year
- Previous trade/s to Buyer D's access licence = 500
- Total traded in volume: 500 (previous trade) + 2,000 (current applied for volume) = 2,500 which is greater than the threshold of 1000 ML for Buyer D's access licence
- The application is referred to DPE Water for impact assessment. This trade could be approved in full, reduced to down to 500 ML (the volume remaining for Buyer D's access licence threshold of 1,000 ML) depending on the outcome of the impact assessment.

Note – any further trades to Buyer D’s access licence in the current water year will be sent to DPE Water for impact assessment. If 500 ML were approved for this trade, then no further trades will pass the impact assessment for Buyer D.

Applications to zero share access licences

Where a temporary trade application involves a buyer with a zero-share access licence linked to an approval and there is no valid bore extraction limit condition on the approval, then each temporary trade application is sent to DPE for impact assessment.

Impact assessment

Applications in the Lower Namoi Groundwater Source that are referred for impact assessment to DPE Water are assessed against assessment criteria that consider the impact on the aquifer and impact on surface water and groundwater dependant ecosystems where applicable. The impact assessment criteria that apply in the Lower Namoi Groundwater Source are listed in Table 1.

Table 1: Lower Namoi temporary trade assessment criteria applicable to 30 June 2024

Impact on the water table (unconfined system)*	Impact on the semi-confined/confined systems
<ol style="list-style-type: none"> 1. Additional drawdown cannot be greater than 2 metres at any: <ol style="list-style-type: none"> a) Third order or higher streams. b) Groundwater Dependant Ecosystem identified in the water sharing plan. 	<ol style="list-style-type: none"> 1. Extraction of available account water must not cause the groundwater level to drop below 40% of the Total Available Drawdown at a distance of 200 metres from the applicant’s water supply work (production bores).

* The impact on the water table criteria only apply to limited circumstances where the applicant’s (buyer’s) bore/s are shallow and the depth to water table in the area is also shallow (generally less than 20 m below ground level).

The total available drawdown is determined as the pre-1990 mean recovered water level to the base of the productive aquifer, calculated from the most relevant monitoring bore data to the applicants (buyer) bores.

DPE Water use a distance-drawdown impact analysis tool to undertake the assessment.

The assessment must pass the impact assessment criteria to be approved in full. The trade volume applied for may be reduced or refused based on the outcome of the assessment.

The following factors are considered in the impact assessment:

- The buyer’s total available account water plus the trade volume is assumed to be extracted.
- The impact is assessed over a single year.
- The impact of the buyer’s bore/s only is considered (that is, the assessment does not include the impact of third-party bores in the area).

- The pumping period for irrigation bores is assumed to be 182 days for the purpose of the assessment. A different pumping schedule (such as 365 days) may be considered for example, for town water supplies, mine water supply or industrial use where known.
- The most recent recovered water level that is relevant to the buyer’s bores is considered in the assessment.
- Hydraulic parameters relevant to the groundwater source and aquifer type at the buyer’s bores are applied in the assessment. The best available information is used to inform hydraulic parameters and is sourced from; local pumping test data, regional model parameters, and/or from other assessments done in the area where available, or textbook values where no other data is available.

Further information

[Managing decline in groundwater levels - Water in New South Wales \(nsw.gov.au\)](https://www.nsw.gov.au/groundwater/groundwater-decline)

[Trading water - WaterNSW](https://www.water.nsw.gov.au/)