

Groundwater temporary trades (71T Dealings)

This document provides information on the process for triaging and assessing groundwater temporary trades.

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 significant localised drawdown impacts. The Access Licence Dealing Principles Order 2004 provides a framework for managing dealings and sets the following principles:

- Dealings should not adversely affect environmental water and water dependent ecosystems.
- Dealings should not adversely affect the ability of a person to exercise their basic landholder rights, and should have no more than minimal impact on the ability of a person to take water using an existing approved bore or bores and any associated access licences
- Dealings should help to facilitate maximising social and economic benefits to the community of access licences.
- Dealing rules should allow maximum flexibility in dealings to promote the above objectives.

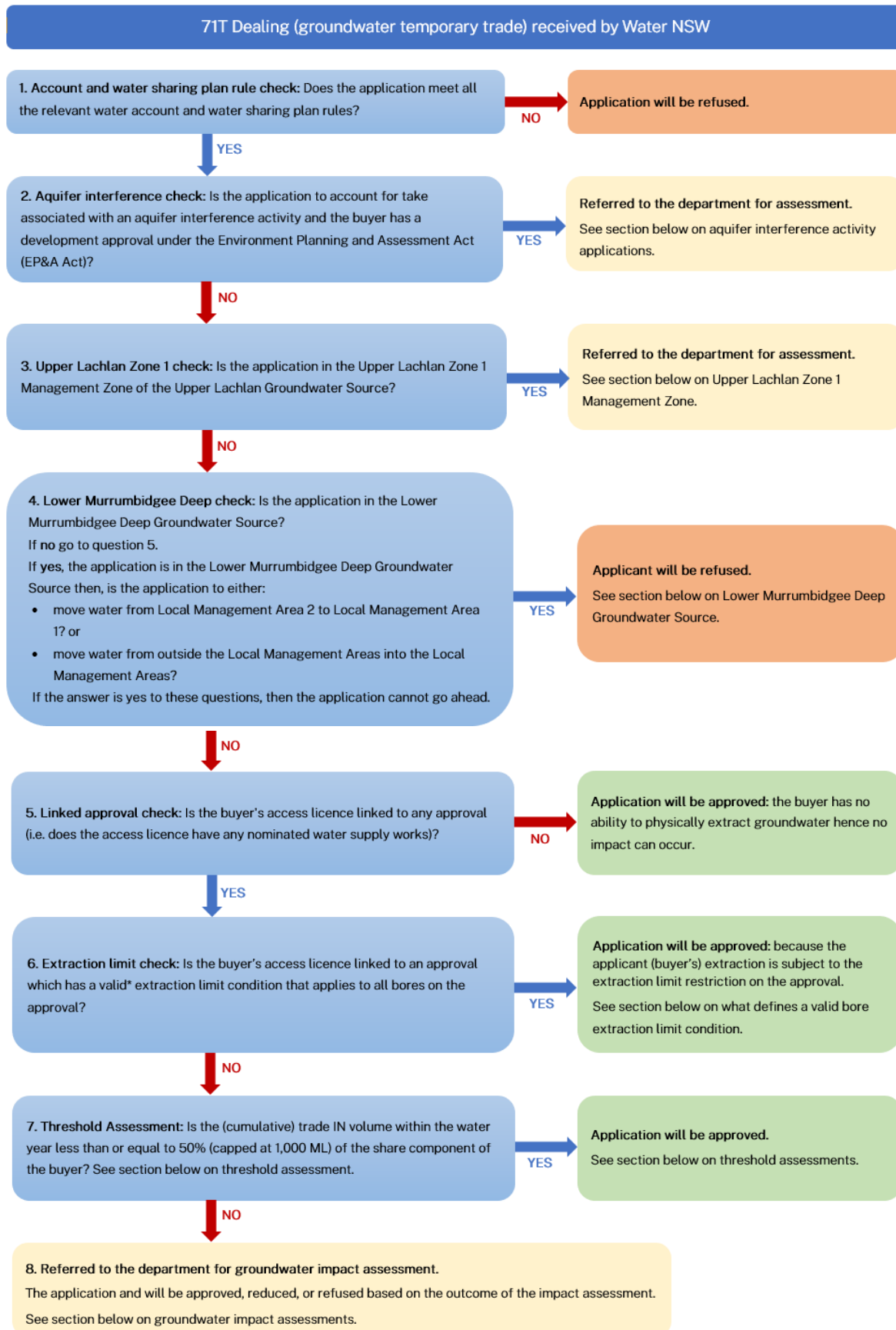
Determining the level of assessment required for a temporary trade is a balance between providing flexibility to licence holders to move water within the water sources and mitigating against unacceptable impacts on the aquifer and other users.

WaterNSW receives temporary trade applications and refers them, as required, to the Water Group in the NSW Department of Climate Change, Energy, the Environment and Water (the department) for impact assessment.

Temporary trades are generally determined within 10 business days of receipt of application.

Figure 1 shows the flow diagram of the process for triaging and assessing groundwater temporary trades.

Figure 1: Procedure for triaging and assessing groundwater temporary trades



Explanation of groundwater temporary trade triage and assessment process

Applications for aquifer interference and development consent customers

These are generally projects that require development consent under the NSW *Environmental Planning and Assessment Act 1979*, such as a mine or large-scale infrastructure project, where take is from an excavation for example, this take can be direct or induced. The take of groundwater is generally not directly from a bore for water supply.

Temporary trades applied for by customers who take groundwater through an aquifer interference activity are considered against a different assessment process.

These temporary trade applications are considered against the volume associated with the maximum predicted impact assessed and approved as part of the development consent held by the applicant (in this case the buyer).

To progress these applications, the applicant (buyer) must provide additional information to inform review of their application and answer an additional question for their application to proceed:

QUESTION: Is the total account water available for take by the applicant PLUS the requested temporary trade volume, equal to or less than the volume associated with the maximum predicted impact approved as part of the development consent?

Where the answer is YES:

The total account water available to take from the buyer's aquifer access licence account, including the trade volume, is equal to or less than the volume associated with the maximum predicted impact approved under the development consent, then:

- the applicant (buyer) must provide copies of, or links to, their development consent approval documents with the trade application.

The documents provided should include the report that details from the groundwater impact assessment and the maximum approved impact and associated take volumes. This could be the environmental impact assessment report, the groundwater modelling report, and/or water management plan, or identified sections of these reports.

Where the answer is NO:

The total account water available to take from the buyer's aquifer access licence account, including the trade volume, is greater than the volume associated with the maximum predicted impact approved under the development consent then:

- Where applicable, the trade volume applied for will be reduced so that the total account water available for take from the buyer's aquifer access license account (including the volume traded in) is equal to or less than the volume associated with the maximum predicted impact approved under the development consent.

A trade that results in the total account water available to take by the buyer greater than the maximum predicted impact approved under the development consent, may be considered if the applicant provides the following information with their application:

- a. An assessment of impact against the NSW Aquifer Interference Policy's minimal impact considerations at the volume greater than what has already been assessed as part of the development consent. This assessment must be carried out and documented by a suitably qualified hydrogeologist.
- b. Where the impacts determined by the assessment carried out in (i) above are greater than what was originally assessed and approved as part of the existing development consent, then evidence must be provided in writing that the relevant consent authority have been consulted and their requirements for impact greater (and associated water take) than what has been approved, have been addressed.

The consent authority (this could be the department, WaterNSW or a local council) may require a development modification, update of groundwater management and monitoring plans, new modelling, trigger action response plans and/or make good provisions.

The applicant must provide with their application the outcome of any such requirement such as further development consent and/or updated documentation.

The applicant must also provide evidence in writing if the consent authority has no requirements for update to the development consent or associated management plans.

The trade application may still be refused if the applicant has not adequately demonstrated assessment against the NSW Aquifer Interference Policy's minimal impact considerations or if the assessment shows impact greater than the minimal impact considerations, and where any consent authority requirements such as; development modification, update of groundwater management and monitoring plans, new modelling, trigger action response plans and/or make good provisions have not been sufficiently addressed.

Upper Lachlan Zone 1 Management Zone

Groundwater restrictions were introduced in the Upper Lachlan Groundwater Source - Upper Lachlan Alluvial Zone 1 Management Zone in 2020 following consultation with users due to declining groundwater levels.

Two restriction orders were put in place to restrict the take under aquifer access licences and impose trade restrictions (made under Section 324(2) of the Water Management Act 2000 and Access Licence Dealing Principles Order). The aim of these restrictions is to decrease extraction sufficiently to allow for water level recovery while providing for critical needs and communities relying on farm income.

The intention of the restrictions is to ensure that no more than 30% of the share components of the access licences is extracted from the Upper Lachlan Alluvial Zone 1 Management Zone within a water year. This means:

- The access licence holders can take (use or trade out) only 30% of their shares unless they trade in.
- Trade out means that a licence holder can only trade the unused portion of 30% of their share component.
- All temporary trades are referred to the department for impact assessment.

Lower Murrumbidgee Deep Groundwater Source local management areas

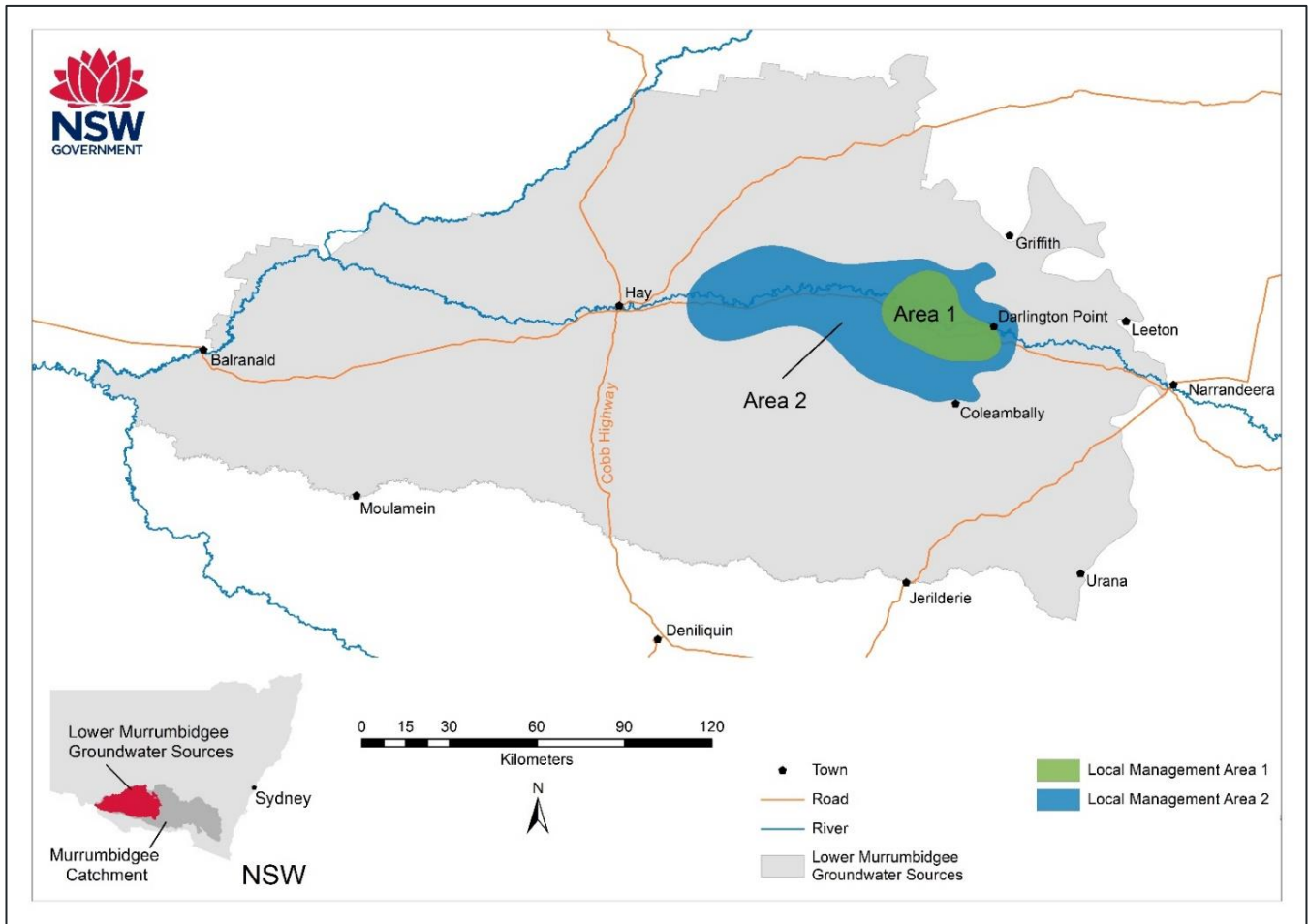
In 2007, an area between Hay, Coleambally and Griffith was identified as an area of concern due to cumulative impacts from groundwater extractions on the aquifer and other groundwater users.

The identification of this area of concern led to two trade management areas being established to assist in the management extractions at a local level. The following rules apply:

- Trade permitted within and out of Local Management Area 1
- Trade permitted within and out of Local Management Area 2
- Cannot trade from Local Management Area 2 to Local Management Area 1
- Cannot trade into the Local Management Areas

The local management areas in the Lower Murrumbidgee Deep Groundwater Source are below shown in Figure 2.

Figure 2 Lower Murrumbidgee Deep Groundwater Source local management area map



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 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 IN 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 the department 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 the department 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 the department 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 the department for impact assessment.

Impact assessment

Applications that are referred for impact assessment to the department are assessed against assessment criteria that consider the impact on third-party bores in the same and/or hydraulically connected groundwater sources,

as well as impact on surface water, groundwater dependant ecosystems, and/or the aquifer, where relevant to the groundwater source and type of aquifer being accessed by the applicant (buyer's) bores.

Some groundwater source specific impact assessment criteria may apply, refer to

<https://water.dpie.nsw.gov.au/our-work/allocations-availability/extraction-limits/managing-groundwater>

The department use a distance-drawdown impact analysis tool to undertake the assessment.

The assessment must pass all 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 any trade volume/s is assumed to be extracted.
- The impact is assessed over a 12-month period.
- The impact of pumping from the applicant's bore(s) only is considered (that is, the assessment does not include the cumulative impact of third-party production 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, industrial use etc where known.
- The most recent recovered water level that is relevant to the buyer's bores is considered in the assessment (where this information is available).
- 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 other assessments done in the area where available, or textbook values where no other data is available.

Additional information

[Trading water - WaterNSW](#)