



**Office
of Water**

Guideline to the policy for groundwater transfers in inland NSW outside water sharing plan areas



What does this Policy do?

The new Policy for groundwater transfers in inland NSW outside water sharing plan areas provides an opportunity across inland NSW for new or expanding enterprises to obtain access to groundwater through the water market without resulting in growth-in-use.

The Policy also standardises groundwater transfer rules across inland NSW for groundwater licences not covered by a water sharing plan.

These new rules replace the rules that exist in the following systems:

- Border Rivers inland alluvium,
- Peel River inland alluvium,
- Upper Macquarie inland alluvium,
- Upper Lachlan inland alluvium
- Upper Murray inland alluvium.

Why was the Policy made?

In December 2008, two orders were made which embargo new applications for groundwater licences for all groundwater not covered by water sharing plans in the inland part of NSW. Details of the embargo orders are shown in the table below.

Table 1. Summary of details for inland NSW groundwater embargo orders

Order	Legislative basis	NSW Government Gazette order publication date	Groundwater source*	Gazette electronic publication details**
Order No. 1*	Section 113A of the Water Act 1912	19 December 2008	Highly committed groundwater	See Government Gazette of NSW, week 52, Dec 2008, from p.12941 (p.3 of pdf)**
Order No. 2*	Section 113A of the Water Act 1912	22 December 2008	All remaining inland groundwater not included in: Embargo Order gazetted 19 December 2008, or a water sharing plan	See Government Gazette of NSW, week 52, Dec 2008, from p.12497 (p.9 of pdf)**

* For a list of the Groundwater Management Areas (GWMAs) included in the embargo orders, see the NSW Office of Water website.

**The [Government Gazette](#) of NSW can be accessed online

Where the embargo orders apply, an application for a new water licence for groundwater under the *Water Act 1912* cannot be lodged unless it fits within one of the exemptions specified in the relevant order or in the *Water Act 1912*. The embargo orders also do not apply to applications for bores for groundwater to meet basic landholder rights for domestic and stock use under s. 52 of the *Water Management Act 2000*. Follow the link above to the Government Gazette to see all the exemptions in the orders.

Generally, new or expanding businesses requiring groundwater in inland NSW now need to obtain it from an existing licence holder.

Where do the new rules apply?

The new rules apply in the inland part of NSW. Under the Policy, there are two broad groups of Groundwater Management Areas (GWMAs) – Schedule 1 and 2, which match the Embargo Orders #1 and #2. These GWMAs are listed in Table 4 at the end of this document. The groups are based on general characteristics, primarily based on an assessment of their level of commitment relative to their estimated sustainable yield. There are different rules applying to the GWMAs listed in each of these schedules.

What are the new rules?

There are different rules applying to each of these two schedules. In summary the new rules allow for:

Schedule 1 GWMAs

- No permanent transfer of water, and
- Temporary transfers of only the unused portion of the *active groundwater* component of an individual's announced allocation volume of water.
- History of extraction is based on either State Water's meter records or self-assessment by the proponent in accordance with the NSW Office of Water's Policy for groundwater transfers in inland NSW outside water sharing plan areas. See *Requirements for establishing the history of groundwater extraction* below.

Schedule 2 GWMAs

- Permanent transfer of the *whole entitlement volume*, irrespective of usage and
- Temporary transfer of any unused portion of announced allocation volume for the water year.

There are standard rules that apply to all groundwater transfers listed in Table 2. There are also area-specific transfer rules listed in Table 3.

Table 2. Standard transfer rules applicable to Schedule 1 and 2 Groundwater Management Areas (GWMA)

1. Transfers are only permitted in those GWMAs subject to a declared transfer scheme made under section 117J of the Water Act 1912.
2. Transfers are only permitted if they have been approved by the NSW Office of Water (hereafter the Office) or State Water following appropriate assessment.
3. Each application will be assessed based on the principles, requirements, conditions and rules stated in the Policy.
4. Permanent or temporary transfers can only occur within a GWMA, or a zone within a GWMA where applicable.
5. Applications for transfer will be considered on a case by case basis in the context of the Policy and the outcomes of any individual transfer assessments. Environmental and hydrogeological assessment undertaken for transfers may result in the transfer application being refused or conditions applied.
6. Permanent and temporary transfers of licensed stock and/or domestic entitlements, and town water supply entitlements are not permitted.
7. Transfers that involve a change of purpose will be considered on a case by case basis.
8. Transfers may only occur if the seller holds a licence that has a volumetric entitlement.

9. The transfer cannot be finalised unless a valid licence is held by the seller and buyer under NSW water legislation and the conditions of the seller's licence are being complied with at the time the application is made.

10. No application for transfer will be accepted if the seller's licence is:

- a) under suspension or not current, except in the case of non-payment of fees or charges and where the transfer of the water will go towards payment of such fees or charges, or where a transfer will rectify an account balance where more water has been extracted than was available in the water account at the time of extraction, or
- b) due for renewal and the renewal process has not been completed, except where the relevant fees, forms and supporting documentation which would enable completion of any outstanding renewal process has been supplied to the Office.

11. All transferred water together with existing allocation will be subject to any carryover provisions for its respective GWMA or zone.

Note: If the GWMA or zone has no carryover provisions, temporary transfers must be used in the water year in which they are transferred or they will be forfeited at the end of that water year.

12. Permanent transfers include the entitlement and the balance of any water held in the account for that licence. Where part of a licence is permanently transferred, the pro-rata portion of the account water will be transferred with the entitlement, unless alternative arrangements are made by the parties and approved by the Office.

13. Water subject to a transfer application is not available for extraction until the buyer and the seller have been notified that the transfer has been approved and the buyer's licence has been amended or if they do not have a licence prior to the transfer, a licence has been granted and the work to which that licence relates has been constructed in accordance with the conditions of the licence.

Table 3. Specific transfer rules for Schedule 1 and 2 Groundwater Management Areas (GWMAs)

Schedule 1 GWMAs	Schedule 2 GWMAs
<p>No permanent transfer will be granted in these GWMAs.</p> <p>Approval may be considered for a temporary transfer of a volume of water.</p> <p>The maximum volume that may be temporarily traded out will be the “active groundwater volume”. This is the maximum volume of groundwater debited from a property account in any one year from 2001/02 to 2008/09 capped to the existing licensed entitlement.</p> <p>This volume will be the “history of groundwater extraction” (HoE) <u>plus</u> any allocation transferred out during the year of maximum debit.</p> <p>The HoE component of the “active groundwater volume” for a property will be “the maximum extraction for any one water year in the period 2001/02 to 2008/09, capped to the existing licensed entitlement”.</p> <p>State Water metering records will be used to determine the HoE where these records are available.</p> <p>Where metered extraction records are not available from State Water, the Minister may accept the seller’s self-assessment of their HoE, for the purposes of a temporary transfer.</p> <p>In these cases, the seller is required to submit with their application an assessment of their HoE (based on the <i>Requirements for establishing the history of groundwater extraction</i> on the following page), verified by an independent assessor.</p> <p>Where State Water metering records are unavailable and a licence holder is unable to provide sufficient information to support their assessment of the HoE for any year, the HoE for that year will be assessed as zero megalitres.</p> <p>When a temporary transfer occurs, the inactive component of the seller’s allocation account cannot be traded or used. This will be achieved through the varying of the transferor’s licence conditions under s. 117J of the <i>Water Act 1912</i>.</p> <p>All buyers of temporarily transferred water must have a working meter fitted to their works before a temporary transfer will be approved. If the seller’s works are not equipped with a meter, the seller must either install a meter or provide a statutory declaration attesting to their intention not to extract from their works in that year any volumes of groundwater that have been temporarily transferred during that water year.</p>	<p>Permanent and temporary transfers of groundwater are permitted in these GWMAs.</p> <p>Approval may be considered for a temporary transfer of a volume of water.</p> <p>The volume that may be temporarily traded out at any point in time is the unused water under that licence.</p> <p>All buyers of temporarily transferred water must have a working meter fitted to their works before a temporary transfer will be approved. If the seller’s works are not equipped with a meter, the seller must either install a meter or provide a statutory declaration attesting to their intention not to extract from their works in that year any volumes of groundwater that have been temporarily transferred during that water year.</p> <p>Licence holders may permanently transfer out water within their GWMA up to their entitlement volume specified on their Part 5 <i>Water Act 1912</i> licence.</p>

How long will the Policy apply?

The Policy will apply until a water sharing plan commences operating in the relevant GWMA, unless the Minister decides otherwise.

What is the transfer process?

Applications to temporarily transfer water are to be lodged with State Water, while the Office will receive all applications for permanent trades for assessment. Applications will be assessed to ensure that they:

- Comply with legislative, accounting and supply requirements, and
- Do not compromise the environment or the rights of existing users.

For further information on the transfer process, go to Licensing under the Water Act 1912 on the website

Requirements for establishing the history of groundwater extraction

State Water metering records will be used to determine the history of groundwater extraction (HoE) where these records are available.

Where metered extraction records are not available from State Water, the Minister may accept the seller's self-assessment of their HoE, for the purposes of a temporary transfer, as follows:

1. The seller's self-assessment of their HoE pumped from the bore(s) for the period 2001/02 to 2008/09 can be determined using either:
 - a) private meter records kept by the applicant. Data should be tabulated and clearly show the annual figures used to determine HoE. A comparison should also be made with other records (see section 2 below) to provide supporting information to satisfy the independent assessor of the veracity of the metered data, OR
 - b) if no private meter records are kept by the applicant, then one of the methods described in section 2 below. If adopting one of these methods, the data should also be tabulated and clearly show the annual figures used to determine HoE.
2. If utilising Method (1)(b) to self-assess the HoE, one of the following methods is acceptable:
 - Hour meter – pump running hours and calibrated megalitres of groundwater pumped per hour can be used to determine the total volume pumped each year.
 - Power usage – obtained from the relevant power authority and calibrated power consumption per running hour of the motor can be used to determine pump running hours. Pump running hours and calibrated megalitres of groundwater pumped per hour can be used to determine total volume pumped each year. Usage for other purposes (such as household, industrial, surface water pumps, etc) has to be clearly accounted for.
 - Fuel usage – where records exist, fuel consumption and calibrated fuel consumption per running hour of motor can be used to determine pump running hours. Pump running hours and calibrated megalitres of groundwater pumped per hour can be used to determine total volume pumped each year. Usage for other purposes (such as farm machinery, surface water pumps, etc), has to be clearly accounted for.
 - Area of irrigated crop – irrigated area and crop water usage can be used to determine an estimate of groundwater usage. The following information needs to be provided:
 - Irrigated crop area for each crop type for each water year, through satellite imagery or other evidence
 - Total crop water requirement figures (e.g. ML/ha) for each of the above crop types, i.e for particular soil types, from Industry & Investment NSW, CSIRO or other agency.

- Identification of the nearest Bureau of Meteorology rainfall recording station and the rainfall for that station occurring during the growing season for each of the crop types
 - Provide details of any other non-groundwater volumes used to irrigate the crops
 - A water budget calculation based on this information that results in a determination of groundwater usage in each water year.
- Other – the production levels for those commercial and industrial purposes that have calibrated megalitres of groundwater pumped per unit of production can be used to determine total volume of groundwater pumped each year. Use of any non-groundwater volumes must clearly be accounted for.

The HoE provided in the application must be verified by an independent assessor. An independent assessor is a professional person, not related to the applicant, who is qualified in, and has a minimum of 5 years experience in any of the following fields: agronomy, soil science, agricultural science, engineering, hydrology, hydrogeology or environmental science.

The independent assessor's report must meet the following requirements:

- Be of a standard acceptable to State Water and the Office.
- Provide proof of meter installation e.g. receipts, photographs, where relevant.
- Be signed by the independent assessor.

The seller must submit the independent assessor's report together with their application to transfer. This package of information must include:

- A. The details of bore(s) from which water is to be transferred, including:
 - Licence number(s)
 - Bore construction details (depth, diameter, casing, screened interval, water level information)
 - Summary of pumping test data where available
 - Pump details (make, diameter, pumping rate, rating curves)
 - Meter details if available (type, date last calibrated, other)
- B. The seller's self-assessment of their HoE, verified by the independent assessor and whether Method (1)(a) or (1)(b) was adopted.
- C. All supporting information from (2) used to determine the seller's HoE.

Where State Water metering records are unavailable and a licence holder is unable to provide adequate information to support their assessment of the HoE for any year, the HoE for that year will be assessed as zero megalitres.

Further questions and answers:

1. Is it correct that the restriction on using the inactive component of a licence applies only for the year in which a transfer out occurs? For example, if a 600 ML licence has an historical usage of 400 ML, and the licence holder transfers the whole 400 ML out, will it result in the inactive component of 200 ML being restricted from being used or traded for that year?

Yes. Restriction on using the inactive component applies for the year in which transfer out occurs. The inactive component will be "frozen" for that year. However, the licence holder can use up to their full entitlement i.e. up to 600 ML on their own property in subsequent years, providing they don't transfer out any water in that water year.

2. How will the carryover provisions apply once the rules are implemented? For example, if someone transfers in allocation but doesn't use it, can that be carried over to the next year?

Carryover will be allowed in accordance with the carryover provisions applying to the individual licence. If the unused or remaining allocation is less than the permitted carryover, then carryover can occur. Any water in excess of this amount will be forfeited.

3. Is the Office going to advise all licence holders of their HoE once these rules are implemented - or only when a licence holder wants to trade?-

A determination will be made on a licence holder's HoE only when that licence holder wants to trade. Notification of individual HoE will not be provided to all licence holders. Licence holders will be advised of their HoE when a trade application is processed and a condition will be placed on the licence restricting trade of inactive water for the remainder of the water year. The HoE will be determined in accordance with the *Requirements for establishing the history of groundwater extraction* above.

4. Can a licence holder who already has a bore on their property and a property entitlement of say, 600 ML with a HoE of 400 ML, apply for a zero share component licence for a bore elsewhere on their property and transfer the other 200 ML of allocation to that bore, providing no increase in the property entitlement is being sought?

The two inland groundwater embargo orders made in 2008 do not allow applications for new bores on the same property. Unless the application falls within another exemption in the order, under the *Water Act 1912* or under the *Water Management Act 2000* then an application cannot be made for a new bore on the same property. Note however that bores to access domestic and stock water in accordance with basic landholder rights under s. 52 of the WMA are not affected by the embargo orders.

Table 4. Groundwater Management Areas (GWMA)

Schedule 1: Highly committed GWMA	
GWMA (with broad scale metering records held by State Water)	GWMA No.
Peel Valley Alluvium	5
Upper Macquarie Alluvium	9
Cudgegong Valley Alluvium	10
Upper Lachlan Alluvium	11
Mid Murrumbidgee Alluvium	13
Billabong Creek Alluvium	14
Upper Murray Alluvium	15
Lower Murray Alluvium (d/s Corowa)	16 (shallow)
Belubula Valley Alluvium	21
Border Rivers Alluvium	22

Schedule 1: Highly committed GWMA's	
GWMA's (without broad scale metering records)	GWMA No.
Coolaburragundy-Talbragar Valley	19
Bell Valley	20
Miscellaneous Alluvium of the Barwon Region (these have been renamed just recently to: Macintyre River Alluvium (upstream of Dumaresq) Ottleys Creek Alluvium Upper Gwydir Alluvium Zone 1 Upper Gwydir Alluvium Zone 2 Manilla River Alluvium Currabubula Creek Alluvium Werris Creek Alluvium Quipolly Creek Alluvium Quirindi Creek Alluvium	23
Lower Darling Alluvium	45
Upper Darling Alluvium	46
Bungendore Alluvium	54
GAB Alluvial	63
Castlereagh Alluvium	66
Orange Basalt	801
Young Granite	802
Yass Catchment Fractured Rock	806
Peel Valley Fractured Rock	819
Oxley Basin – The parishes of Goran, Brothers, Howes Hill, Calala, Merrigula, Tamarang, Trinkley, Coolanbilla, Springfield, Weston, Doona, Mema, Rodd, Pringle, Lawson, Moredevil, Coomoo Coomoo, Yarraman, and Kickerbell in the County of Pottinger. The parishes of Windy, Telford, Hudson and Moan in the County of Bucklan.	608
Lachlan Fold Belt – The parishes of Galambine, Wilbertree, Eurundury and Bumberra in the County of Phillip.	811

Schedule 2: Not highly committed GWMA's	
GWMA's	GWMA No.
Gunnedah Basin	604
Oxley Basin Remainder (i.e. area not listed in Schedule 2)	608
Western Porous Rock	612
Great Artesian Basin Cap Rock	620
Inverell Basalt	803
New England Fold Belt	805
Lachlan Fold Belt Remainder	811
Warrumbungle Basalt	813
Liverpool Ranges Basalt	814
Kanmantoo Fold Belt	817
Adelaide Fold Belt	818

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The NSW Office of Water, in the Department of Environment, Climate Change and Water, manages the policy and regulatory frameworks for the State's surface water and groundwater resources to provide a secure and sustainable water supply for all users. The Office also supports water utilities in the provision of water and sewerage services throughout New South Wales.

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