

Compliance with water management principles - Water Sharing Plan for the Greater Metropolitan Region Groundwater Sources 2023

This document details how the department has complied with the water management principles outlined in the *Water Management Act 2000* in the development of the *Water Sharing Plan for the Greater Metropolitan Region Groundwater Sources 2023*.

Making a water sharing plan requires the approval of the NSW Minister for Water and the agreement of the NSW Minister for Environment and Heritage. When making a plan, section 9 of the *Water Management Act 2000* (the WM Act) requires the ministers to:

- take all reasonable steps to promote the water management principles and
- give priority to the water management principles relating to water sharing in the order they are set out under s5(3) of the WM Act.

The water sharing management principles under s5(3) of the WM Act are (in order of priority):

1. Sharing water from a water source must protect the water source and its dependent ecosystems.
2. Sharing water from a water source must protect basic landholder rights.
3. Sharing or extraction of water under any other right must not prejudice the principles set out in points 1 and 2.

The Minister for Water gained the agreement of the Minister for Environment and Heritage to make the *Water Sharing Plan for the Greater Metropolitan Region Groundwater Sources 2023* (the plan). In making the plan, the ministers ensured that they promote the water management principles of the WM Act and prioritise its water sharing principles appropriately.

How water sharing in the plan protects the water source and dependent ecosystems

In the plan, there are 2 key mechanisms for protecting water sources and dependent ecosystems:

- **Long-term average annual extraction limit (LTAAEL)** for each water source. On a long-term average annual basis, all water above these limits is protected for environmental benefit.
- **Specific, operational plan rules** in the plan that aim to protect explicit ecosystem functions and /or environmental assets in the water sources. The tables below give details of the rules for the Greater Metropolitan Region Groundwater plan.

How water sharing in the plan protects basic landholder rights

The plan also protects basic landholder rights, allowing landholders to exercise these under part 1 of Chapter 3 of the WM Act. The plan gives priority to current and future basic landholder rights by ensuring any compliance action for extraction and diversion limits does not apply to these rights.

How we have considered climate change in replacing the plan

Water sharing plans are made for a period of 10 years, with plan review and remake providing an opportunity to apply an adaptive process to respond to climate change. Current climate change modelling does not provide a clear view on the likelihood of change within the 10-year period of the plan. As a result, predicted climate change was not generally considered in the replacement of this water sharing plan and no amendments have been recommended to deal specifically with predicted climate change within this replacement plan.

However, there are actions within the NSW Water Strategy and the NSW Groundwater Strategy that are applicable to the Greater Metropolitan Region, that seek to incorporate climate change considerations into the water sharing plan framework in the future. Some of these include:

- Priority 4 in the NSW Water Strategy to increase resilience to changes in water availability due to climate variability and change. This includes the recognition of the need to develop a set of methodologies to incorporate climate risk into water sharing plan and water management decision making.
- Action 1.3 of the NSW Groundwater Strategy to review and update approaches to sustainable groundwater extraction

As this climate change work progresses, future water sharing plan reviews provide a structured and regular regulatory opportunity to assess and build in any changes recommended as an outcome of these broader actions. Of note and depending on the risk these outcomes may identify to the water management areas, the Minister can amend a plan at any time with the concurrence of the Minister for the Environment, if it is in the public interest to do so.

How we have promoted water management principles

The NSW Government has taken all reasonable steps to promote the water management principles set out in the WM Act and to make the Greater Metropolitan Region Groundwater plan reflect these principles. Refer to the tables below for details.

Table 1. How the plan changes promote the water management principles of section 5(3)(a) – Sharing of water from a water source must protect the water source and its dependent ecosystems

How we have promoted the principle in Section 5(3)(a)	Relevant plan provisions
The plan ensures water is committed and identified as planned environmental water by establishing:	See below
<ul style="list-style-type: none"> environmental flow provisions that provide a physical presence of water in the water source 	Part 6
<ul style="list-style-type: none"> a long-term average annual extraction limit to create a long-term average annual commitment of water as planned environmental water. 	Part 4
In particular, the plan:	See below
<ul style="list-style-type: none"> includes objectives, strategies and performance indicators which measure the effectiveness of plan rules. 	Part 2
<ul style="list-style-type: none"> establishes the rules and arrangements for preserving planned environmental water that is in excess of the long-term average annual extraction limits. These limits consider the risks to the groundwater source and dependent ecosystems and reserves a volume of rainfall recharge to protect them 	Part 4 Division 2
<ul style="list-style-type: none"> establishes rules for making of an available water determination in accordance with the priorities in the WM Act and ensuring extraction is managed within the long-term average annual extraction limit 	Part 4 Division 1 and 2
<ul style="list-style-type: none"> establishes access rules for works on waterfront land to protect very low flows for environmental purposes 	Part 6, Division 3
<ul style="list-style-type: none"> establishes the rules for managing the construction and use of supply works to prevent unacceptable impacts on groundwater dependent ecosystems (GDEs) and wetlands at a local scale. These rules are based on published Australian guidelines for water bore construction and technical assessment of pumping impacts on GDEs 	Part 7 Part 9 Division 4
<ul style="list-style-type: none"> prohibits groundwater supply works within specified distances of where acid sulphate soils are likely to occur 	Part 7
<ul style="list-style-type: none"> prohibits or conditions the construction of works near sources of contamination as informed by the Australian guidelines for water bore construction. 	Part 9, Division 4

Table 2. How the plan changes promote the water management principles of section 5(3)(b) – Sharing of water from a water source must protect basic landholder rights (BLR)

How we have promoted the principle in Section 5(3)(b)	Relevant plan provisions
The plan protects basic landholder rights by:	See below
<ul style="list-style-type: none"> establishing rules for making of available water determinations in accordance with the priorities in the WM Act 	Part 4
<ul style="list-style-type: none"> protecting low flows from licensed extraction for the environment and basic landholder rights take. 	Part 6, Division 3
<p>Extraction is managed to the LTAAEL by first setting aside water for BLR and then applying an available water determination to ensure the sum of BLR and licensed extraction do not exceed the long-term average annual extraction.</p> <p>The plan protects basic landholder rights by establishing the rules for managing the construction and use of water supply works to prevent unacceptable impacts on take from BLR bores at a local scale. This is informed by the Australian guidelines for water bore construction and the imposition of bore extraction limits to meet the published impact criteria.</p>	Parts 4, 7 and 9 Division 4

Table 3. How the plan changes promote the water management principles of section 5(3)(c) – Sharing or extraction of water under any other right must not prejudice the principles set out in paragraphs (a) and (b).

How we have promoted the principle in Section 5(3)(c)	Relevant plan provisions
The rules previously discussed in this document ensure the principles for the protection of planned environmental water and basic landholder rights are upheld.	As above
Planned environmental water is that volume of water that is in excess of the LTAAEL. Extraction is managed to the LTAAEL by first setting aside water for BLR and then applying an available water determination to ensure the sum of BLR and licensed extraction do not exceed the long-term average annual extraction.	Part 4

Table 4. How the plan changes promote the water management principles of section 5(2)(a) – Water sources, floodplains, and dependent ecosystems (including groundwater and wetlands) should be protected and restored and, where possible, land should not be degraded

How we have promoted the principle in Section 5(2)(a)	Relevant plan provisions
The plan aims to protect and restore dependent ecosystems through the provision of water for the environment and contains rules to:	See below
<ul style="list-style-type: none"> specify the objectives, strategies and performance indicators that measure the effectiveness of plan rules 	Part 2
<ul style="list-style-type: none"> identify planned environmental water by specifying LTAAELs 	Part 4
<ul style="list-style-type: none"> establish the rules and arrangements for preserving planned environmental water above LTAAELs 	Parts 4
<ul style="list-style-type: none"> establish the rules for managing the construction and use of supply works to prevent unacceptable impacts on GDEs and wetlands at a local scale. These rules are based on published Australian guidelines for water bore construction and technical assessment of pumping impacts on GDEs 	Part 7
<ul style="list-style-type: none"> establish daily cease to take rules that protect very low flows in connected rivers and streams for environmental purposes. 	Part 6

Table 5. How the plan changes promote the water management principles of section 5(2)(b) – habitats, animals and plants that benefit from water or are potentially affected by managed activities should be protected and (in the case of habitats) restored

How we have promoted the principle in Section 5(2)(b)	Relevant plan provisions
<p>The plan:</p> <ul style="list-style-type: none"> protects and restores animals and habitats through water for the environment and the same provisions set out above in respect of section 5(2)(a) 	Parts 2, 4, 6, 7, 9 and 10
<ul style="list-style-type: none"> enables rules relating to the management of waters in coastal sands or restrictions on access to be added or amended 	Part 10
<ul style="list-style-type: none"> enables newly identified groundwater dependent ecosystems to be added and protected by plan rules. 	Part 10

Table 6. How the plan changes promote the water management principles of section 5(2)(c) – the water quality of all water sources should be protected and, wherever possible, enhanced

How we have promoted the principle in Section 5(2)(c)	Relevant plan provisions
The plan aims to protect and enhance water quality by:	See below
<ul style="list-style-type: none"> prohibiting ground water supply works where acid sulphate soils are likely to occur 	Parts 6, 7 and 9
<ul style="list-style-type: none"> prohibiting or conditioning the construction of works near sources of contamination as informed by the Australian guidelines for water bore construction and the NSW contaminated sites register 	Parts 6, 7 and 9
<ul style="list-style-type: none"> applying standards to water bore construction to prevent contamination of and between aquifers and prevent flow of saline water between aquifers. This is informed by the Australian guidelines for water bore construction 	Parts 6, 7 and 9
<ul style="list-style-type: none"> establishing daily cease to take rules that protect very low stream flows in connected surface water sources for environmental purposes including water quality. 	Parts 6, 7 and 9

Table 7. How the plan changes promote the water management principles of section 5(2)(d) – the cumulative impacts of water management licences and approvals and other activities on water sources and their dependent ecosystems, should be considered and minimised

How we have promoted the principle in Section 5(2)(d)	Relevant plan provisions
<p>We manage the cumulative impact of licences through rules limiting total extraction. The long-term average annual extraction limits established by the plan protect water within the water sources for environmental purposes.</p> <p>Long-term average annual extraction limit compliance provisions reduce water availability where the extraction limits have been exceeded.</p>	Part 4
<p>The plan provides setback rules to limit construction of new bores within defined distances from identified GDEs.</p>	Part 7
<p>Access licence dealing rules allow for a variety of dealings (trade) within specified environmental constraints. For example, prohibiting or restricting trade of licences into water sources assessed as having high risks to instream values.</p>	Part 8

Table 8. How the plan changes promote the water management principles of section 5(2)(e) and (f) – geographical and other features of Aboriginal significance should be protected

How we have promoted the principle in Section 5(2)(e) and (f)	Relevant plan provisions
The plan specifies social, cultural, and Aboriginal objectives, strategies and performance indicators which will provide measurable evidence of whether outcomes have been achieved.	Part 2
The plan provides for applications for groundwater Aboriginal cultural licences. The plan provides for applications for groundwater Aboriginal community development licences in certain water sources.	Part 5
The plan recognises requirements for water consistent with the exercise of native title rights.	Part 3
The plan gives priority to current and future basic landholder rights by targeting extraction limit compliance actions to aquifer access licences only. This allows BLR extractions to increase. BLR includes native title rights.	Part 4
The plan provides setback rules to limit construction of new bores within defined distances from identified groundwater dependent culturally significant areas.	Part 7
The <i>Access Licence Dealing Principles Order 2004</i> also applies to assessment of dealings (trade) of groundwater entitlements and allocations. Dealings are only approved if they do not adversely affect geographical and other features of indigenous significance, or major cultural, heritage or spiritual significance.	<i>Access Licence Dealing Principles Order 2004</i>
The plan provides for its amendment if there is a determination of native title in future.	Part 10

Table 9. How the plan changes promote the water management principles of section 5(2)(g) – the social and economic benefits to the community should be maximised

How we have promoted the principle in Section 5(2)(g)	Relevant plan provisions
The plan maximises the social and economic benefits to the community and contains provisions to:	See below
<ul style="list-style-type: none"> specify economic and social strategies and performance indicators which will provide measurable evidence of whether outcomes have been achieved 	Part 2
<ul style="list-style-type: none"> establish defined long-term average annual extraction limits which provide an amount of water for community and economic benefit 	Part 4

How we have promoted the principle in Section 5(2)(g)	Relevant plan provisions
<ul style="list-style-type: none"> establish the percentage of licence shares for each category of licence that may be allocated to water accounts and subsequently taken under licence in any one water year 	Part 4
<ul style="list-style-type: none"> enable applications for licences including Aboriginal cultural and Aboriginal community development licences 	Part 5
<ul style="list-style-type: none"> provide rules for trade of licensed entitlement and account water to allow the market to drive improved economic outcomes 	Part 8
<ul style="list-style-type: none"> support social and community requirements by reserving water for BLR (including native title rights), domestic and stock needs, and urban water needs, before making water available for lower priority uses. 	Part 6

Table 10. How the plan changes promote the water management principles of section 5(2)(h) – the principles of adaptive management should be applied, which should be responsive to monitoring and improvements in understanding of ecological water requirements

How we have promoted the principle in Section 5(2)(h)	Relevant plan provisions
The Natural Resources Commission audits and reviews the plan at 10-year intervals, to inform whether the plan rules are being applied and remain fit for purpose.	WM Act sections 43A and 44
The plan includes a set of objectives, strategies, and performance indicators. Monitoring of these indicators could trigger an earlier review of the plan, if necessary.	Part 2
The plan enables newly identified groundwater dependent ecosystems to be added and protected by plan rules.	Part 10

More information

To read the water sharing plan and supporting fact sheets, visit water.dpie.nsw.gov.au/plans-and-programs/water-sharing-plans/status/greater-metropolitan-region

To read the manual for making water sharing plans, refer to the published document www.industry.nsw.gov.au/___data/assets/pdf_file/0009/492453/replacement-water-sharing-plan-manual.pdf