

Report card for the Wianamatta-South Creek Water Source

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Water source context

Water Sharing Plan:	Greater Metropolitan Region Unregulated River Water Sources
Extraction Management Unit:	Hawkesbury and Lower Nepean Rivers
Management Zones:	Eastern Creek Management Zone Lower Wianamatta-South Creek Management Zone Upper Wianamatta- South Creek Management Zone
Area:	62,831.7 ha
Inflowing water source:	Nil
Receiving water source:	Upper Hawkesbury River Water Source

River flows

	Eastern Creek Management Zone
Low flow index:	45.7 ML/day (80 th percentile)
Flow records:	Eastern Creek at Riverstone gauge (212296)
	Lower Wianamatta-South Creek Management Zone
Low flow index:	0.8 ML/day (80 th percentile)
Flow records:	South Creek at Richmond Road gauge (212297)
	Upper Wianamatta- South Creek Management Zone
Low flow index:	0.8 ML/day (80 th percentile)
Flow records:	South Creek at Great Western Highway gauge (212048)

Basic landholder rights

Domestic and stock rights estimate:	1230.1 ML/yr
Native title rights:	0 ML/yr

Licensed water entitlements

Total surface water entitlement:	6,752.8 ML/yr (48.4 ML/yr domestic and stock licences, 6,704.4 ML/yr unregulated river licences)
Local water utilities entitlement:	0 ML/yr
Major utilities entitlement:	0 ML/yr
Proportion of extraction management unit:	5%

Rules

Managing access licences

Each water access licence has its own share component (volume of the licence) and a water allocation account that acts like a bank account where water is credited or debited.

- Water is credited to an account by an available water determination or if water is traded in (purchased) during the year from other licence holders
- Water is debited from the account when water is extracted or traded out (sold). Total extraction from a work (pump, bore, etc.) will be measured via metering or logbooks.

Carryover and individual account limits

For a major water utility access licence account – carryover is not permitted.

Domestic and stock, unregulated river and aquifer access licence accounts - carryover is permitted up to 1 ML per unit share or 100% of share component (where expressed in ML) at the end of each water year.

Domestic and stock, unregulated river and aquifer access licences - the maximum water account debit in any 3 consecutive water years is the volume of water allocated to the account over those 3 years from available water determinations plus any adjustments made for allocation assignments (trades) or water allocation re-credited into the account.

Table 1. Draft rules for granting access licences

Type	Current rules	Proposed rules
<p>There are limited purposes for which a new licence will be granted. It is anticipated that most water needs will be sourced from the market. One reason a licence may be granted is for Aboriginal cultural purposes. Other reasons are identified in Clause 10 of the Water Management Act General Regulation 2018.</p>		
Aboriginal cultural access licence	Permitted to a limit of 10 ML/yr.	No change.
Aboriginal community development access licence	<p>Lower South Creek Management Zone Permitted, to a combined limit of 402 ML/yr</p> <p>Upper South Creek Management Zone Permitted, to a combined limit of 48 ML/yr</p>	<p>Lower South Creek Management Zone Prohibited.</p> <p>Upper South Creek Management Zone Prohibited</p> <p>Eastern Creek Management Zone Prohibited</p>

Table 2. Draft surface water access rules

Type	Current rules	Proposed rules
<p>River flow can be viewed on WaterNSW Real-time Data website. Search for a gauge under Rivers and Streams.</p>		
Cease to pump	<p>Lower South Creek Management Zone Cease to pump when no visible flow at the pump site. No take when flows are in the very low flow class.</p> <p>Upper South Creek Management Zone Cease to pump when no visible flow at the pump site. No take when flows are in the very low flow class. No take 24 hours after a cease to pump event.</p>	<p>Lower South Creek Management Zone Cease to pump when no visible flow at the pump site. No take when flows are in the very low flow class. No take 24 hours after a cease to pump event</p> <p>Upper South Creek Management Zone No change.</p> <p>Eastern Creek Management Zone Cease to pump when no visible flow at the pump site. Cease to pump when flows are in the very low flow class. No take 24 hours after a cease to pump event.</p>

Type	Current rules	Proposed rules
Flow classes	<p>Lower South Creek Management Zone</p> <p>Very Low Flow Class: ≤ 3 ML/day</p> <p>A Class: $>3 - \leq 58$ ML/day</p> <p>B class: >58 ML/day</p> <p>Upper South Creek Management Zone</p> <p>Very Low Flow Class: ≤ 0.2 ML/day</p> <p>A Class: $>0.2 - \leq 6.2$ ML/day</p> <p>B Class: >6.2 ML/day</p>	<p>Lower South Creek Management Zone</p> <p>Very Low Flow Class: ≤ 7.7 ML/day</p> <p>A Class: $>7.7 - \leq 45.4$ ML/day</p> <p>B class: >45.5 ML/day</p> <p>Upper South Creek Management Zone</p> <p>Very Low Flow Class: ≤ 0.3 ML/day</p> <p>A Class: $>0.3 - \leq 6.3$ ML/day</p> <p>B Class: >6.3 ML/day</p> <p>Eastern Creek Management Zone</p> <p>Very Low Flow Class: ≤ 10 ML/day</p> <p>A Class: $>10 - \leq 64.5$ ML/day</p> <p>B Class: >64.5 ML/day</p>
Extraction from an in-river pool	Must cease pumping if the in-river pool is below full capacity.	No change.
Extraction from an authorised in-river dam pool	Rules specified on the water supply work approval for the in-river dam.	No change
Off-river pools (natural pools, lakes or lagoons)	Extraction from natural pools can only occur if the pool is 100% full.	No change.

Table 3 Exemptions from surface water access rules

Type	Current rules	Proposed rules
Health and hygiene	For an access licence specified in Schedule 2 of the plan, no more than 20 kl/day for the following reasons: <ul style="list-style-type: none"> fruit washing cleaning of dairy plant and equipment for the purposes of hygiene poultry watering and misting cleaning of enclosures used for intensive animal production for the purposes of hygiene. 	Exemption now applies to both fruit and vegetable washing
Domestic use	For domestic consumption under a domestic and stock access licence, up to 1 kl/day.	No change.
Harvestable rights	From a run-off harvesting dam.	No change.
Specific purpose	For an access licence specified in Schedule 2 of the plan.	No change.

Table 4 Draft rules for constructing surface water supply works

Type	Current rules	Proposed rules
In-river dams	<p>Lower South Creek Management Zone Permitted</p> <p>Upper South Creek Management Zone Permitted</p> <p>Eastern Creek Management Zone Permitted</p>	<p>Lower South Creek Management Zone No change.</p> <p>Upper South Creek Management Zone No change.</p> <p>Eastern Creek Management Zone No change.</p>
Works near coastal wetlands listed under <i>State Environmental Planning Policy (Resilience and Hazards) 2021</i>	No current rule.	Prohibited within 3km upstream of a Ramsar wetland or 200m of a coastal wetland identified on the Coastal Wetlands and Littoral Rainforest Area Map available on the NSW Planning Portal at www.planningportal.nsw.gov.au .

Table 5 Draft water trading (dealing) rules

Type	Current rules	Proposed rules
Trading covers conversion of access licence to a new category (for example from unregulated river to aquifer), assignment of rights dealings (trading of a licence), share component dealings between water sources (trading of entitlement between water sources), water allocation dealings (trading an annual allocation) and water supply works dealings (relocation of an extraction point).		
INTO water source	Prohibited.	No change
WITHIN water source	Permitted.	Permitted except into the Upper Wianamatta-South Creek Management Zone
Surface water to groundwater	Prohibited	No change
Groundwater to surface water	Prohibited	No change
Convert to high flow	<p>Lower South Creek Management Zone Permitted to a combined limit of 414 unit shares.</p> <p>Upper South Creek Management Zone Permitted to a combined limit of 88 unit shares.</p>	<p>Lower South Creek Management Zone Prohibited</p> <p>Upper South Creek Management Zone Prohibited</p> <p>Eastern Creek Management Zone Prohibited</p>

Key factors for decisions

- There are several changes to how water is being managed in the Wianamatta-South Creek Water Source. A factsheet detailing these changes can be found [here](#).
- The Upper South Creek and Lower South Creek water sources are proposed to become part of the single Wianamatta-South Creek Water Source. Upper South Creek and Lower South Creek will be kept as management zones with some changes to their existing boundaries.
- A new management zone, the Eastern Creek Management Zone is proposed in the Wianamatta-South Creek Water Source. This management zone will be used to manage extraction in areas that receive releases from the Quakers Hill sewage treatment plant.
- Trade is not allowed into this water source as likelihood of extraction from low flows impacting the ecological values in the area is high. Downstream trade out of the Wianamatta-South Creek Water Source is allowed and should reduce this risk.
- **Upper Wianamatta-South Creek Management Zone**

- The Upper Wianamatta-South Creek Management Zone has low ecological values, high likelihood of extraction from low flows impacting the ecological values, with medium overall risk to low flows.
- We propose to change the flow class in the Upper Wianamatta-South Creek Management Zone due to the high likelihood rating. The very low flow class has been increased from 0.2 ML/day (92nd percentile) to 0.3 ML/day (90th percentile). Unregulated river licence holders will only be able to take water when flows are above this level, approximately 90% of the time. This change has been proposed to help mitigate risks to the environment.
- High flows in this management zone are less than 20 ML/yr. This volume is not large enough to sustain high flow extraction. As such it is proposed that high flow conversions and the granting of Aboriginal Community Development Licences (which take from high flows) are no longer allowed.
- The current water sharing plan does not allow trade into the Upper Wianamatta-South Creek Management Zone. It is proposed to retain these rules due to the continuing high risk to low flows in this area. Trade out of the Upper Wianamatta-South Creek Management Zone is allowed and should help reduce the overall risk.
- **Lower Wianamatta-South Creek Management Zone**
 - The Lower Wianamatta-South Creek Management Zone has medium ecological value, high likelihood of extraction from low flows impacting the ecological values, with high overall risk to low flows.
 - We propose to change the flow class in the Lower Wianamatta-South Creek Management Zone due to the high-risk rating. The very low flow class has been increased from 3 ML/day to 7.7 ML/day. Unregulated river licence holders will only be able to take water when flows are above this level. This change has been proposed to help mitigate risks to the environment.
 - Peak daily demand is higher than the available volume of high flows in this management zone. The available volume is not large enough to sustain high flow extraction. As such it is proposed that high flow conversions and the granting of Aboriginal Community Development Licences (which take from high flows) are no longer allowed.
 - It is proposed to allow trade into the management zone so long as the trade occurs in a downstream direction. This considers the high likelihood in the water source with the downstream movement of entitlement maintaining or improving this metric.
- **Eastern Creek Management Zone**
 - A risk assessment has not been completed for the new Eastern Creek Management Zone. Risk values from the Lower Wianamatta-South Creek Management Zone apply. The Eastern Creek Management Zone has medium ecological values high likelihood with high overall risk to low flows.
 - We propose to establish flow classes in the Eastern Creek Management Zone based on flows at the Eastern Creek at Riverstone gauge (212296).

- The very low flow class will be set at 10 ML/day. Unregulated river licence holders will only be able to take water when flows are above this level. This change has been proposed to help mitigate risks to the environment.
- Peak daily demand is higher than the available volume of high flows in this management zone. The available volume is not large enough to sustain high flow extraction. As such it is proposed that high flow conversions and the granting of Aboriginal Community Development Licences (which take from high flows) are no longer allowed.
- It is proposed to allow trade into the management zone so long as the trade occurs in a downstream direction. This considers the high likelihood in the water source with the downstream movement of entitlement maintaining or improving this metric.

Public exhibition

The Department of Planning and Environment seeks feedback from the public on the suitability of the proposed rules for this water source.

The draft Greater Metropolitan Region Unregulated River Water Sharing Plan and supporting fact sheets are available from the department's [Public Exhibition website](#).