Department of Climate Change, Energy, the Environment and Water

What we heard report

Section 60G of the *Water Management Act 2000* – method to calculate value of illegally taken water

September 2024

NSW GOVERNMENT

Acknowledgement of Country

Department of Climate Change, Energy, the Environment and Water acknowledges the traditional custodians of the land and pays respect to Elders past, present and future.

We recognise Australian Aboriginal and Torres Strait Islander peoples' unique cultural and spiritual relationships to place and their rich contribution to society.

Artist and designer Nikita Ridgeway from Aboriginal design agency – Boss Lady Creative Designs, created the People and Community symbol.

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Contents

Acknowledgement of Country ..... **ii**

1 Executive summary **4**

1.1 Background and context 4

1.1.1 Proposed new method for valuing illegally taken water 5

2 Engagement overview **5**

2.1 How we engaged 5

2.2 What we heard 7

Issues raised by industry and academic experts 7

Issues raised by environmental peak bodies 7

Issues raised by the community 8

3 Feedback summary and response **8**

3.1 Next steps 10

1 Executive summary

Section 60G of the *Water Management Act 2000* (the Act) allows the Natural Resources Access Regulator (NRAR) to charge a person if they take water illegally. The current method to calculate the value of the water does not appropriately represent its actual value. This results in inconsistent, and often very small values per megalitre (sometimes as low as $6.66 per megalitre), that do not discourage illegal water take.

A new method to calculate the value of illegal water take has been proposed. It uses a cascading process to determine a Volume Weighted Average Price (VWAP) of a megalitre of water (Figure 1), resulting in section 60G values that are closer to actual market value.

The Department of Climate Change, Energy, the Environment and Water (the department) hosted an online survey to collect feedback on the proposed new method from 4 March to 12 April 2024.

The department received 13 submissions and stakeholders were generally supportive of the proposed method. In instances where they were not supportive, stakeholders stated that the department did not go far enough and that fines or charges for illegal water take should be higher than what the proposed new method will generate. Table 1 summarises specific stakeholder feedback and the department's response.

1.1 Background and context

Under section 60G of the Act, if an individual is found to have illegally taken water, NRAR can impose a charge on them. The amount of the charge is based on the value of illegally taken water and can be up to 5 times that value. Section 60G charges are part of a suite of other enforcement tools and pathways available to NRAR under the Act.

Clause 20 of the Water Management (General) Regulation 2018 (the Regulation) details the current method for determining the value of illegally taken water. It can be summarised as:

- where published water trading prices are available, the value of water is the average weighted price at the time the water was taken (which corresponds to the water source that it was taken from)
- where no trade prices are published, the value of water becomes the published water access (entitlement) charge (PWAE charge).

When there is little or no trade of water at the water source, the value of the water is often determined by a PWAE charge. PWAE charges are small administrative charges (in some cases as low as $6.66 per megalitre) issued by the Independent Pricing and Regulatory Tribunal and do not represent the market value of water, resulting in inconsistent water values and an ineffective deterrence for illegal water take.

1.1.1 Proposed new method for valuing illegally taken water

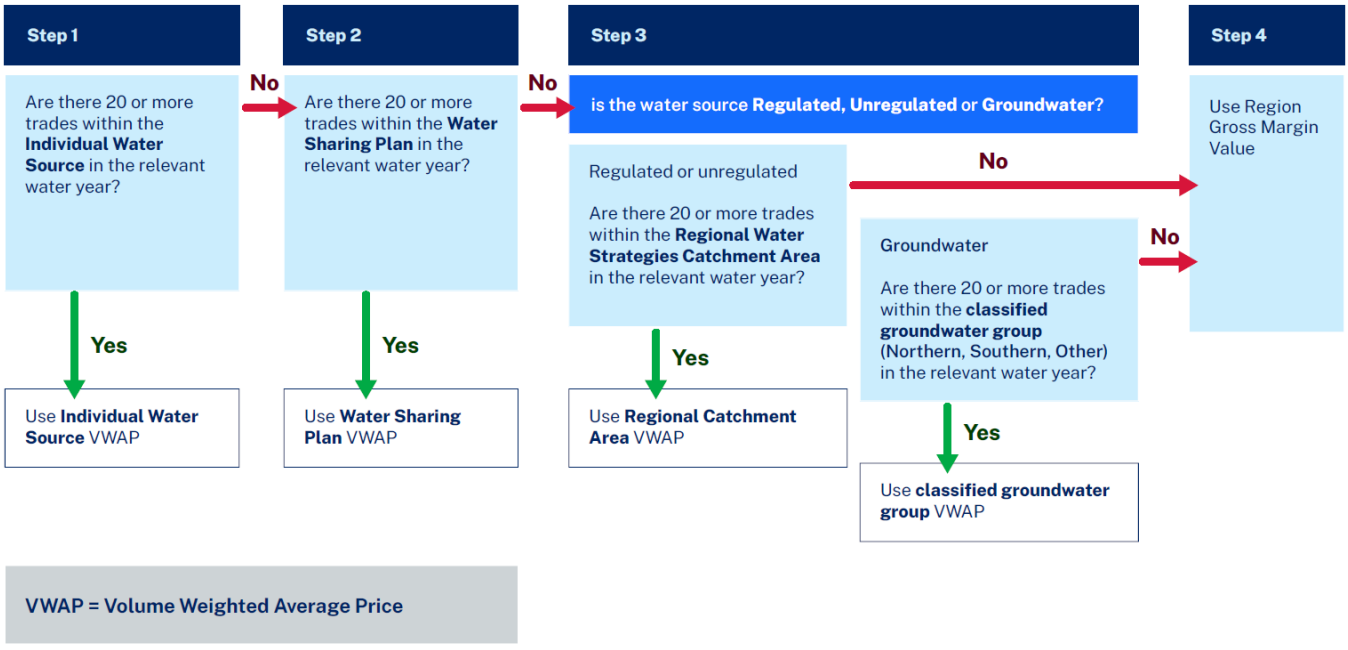
The proposed new method uses a cascading process to determine a Volume Weighted Average Price (VWAP) of a megalitre of water. VWAP is the average dollar per megalitre value of water traded, where each trade is weighted proportionally by the volume of water in the trade.

The method can be summarised as follows:

- where there are 20 or more trades within an individual water source in the relevant water year a VWAP is determined for that water source
- if there are less than 20 trades in a water source in a water year, trade data is taken for all water sources in the relevant water sharing plan (WSP) area to determine the VWAP
- if there are less than 20 trades within the WSP area, then all trade data in all water sources within the relevant water region are used to determine the VWAP
- if the 20-trade threshold is still not met, the value of water is equal to the prescribed region gross margin value.

A summary of the VWAP process is shown graphically in Figure 1.

Figure 1. The proposed new method



2 Engagement overview

2.1 How we engaged

From 4 March to 12 April 2024 the department hosted an online survey to collect feedback on the proposed new method for calculating the value of illegally taken water under section 60G of the Act. Respondents were asked to indicate:

- which stakeholder group best described them
- whether they supported the proposed new method, and any additional information to justify this position
- how they heard about the survey and demographic related questions.

The department used various channels to advertise the online survey, including:

- **print ads:** paid advertising in The Land and The Koori Mail
- **online:** posting on the NSW Government's Have Your Say website and a LinkedIn post
- **e-news articles**: in the department's Water News e-newsletter at the beginning and end of the survey period
- **email**: sent to water peaks when the survey opened and when it was extended.

The methodology used to engage with key stakeholders and the wider community about proposed changes to the method aligned with the department's principles for engagement:

- Purposeful: undertaken with a clear understanding of what was to be achieved and delivering on NSW Government priorities and the department's corporate goals
- Inclusive: identifying and enabling the participation of all relevant stakeholders
- Timely: allowing enough time for meaningful engagement, outlining timeframes up front and efficiently conducting engagement activities
- Transparent: explaining the engagement process, providing information to allow meaningful participation, and setting clear expectations around how participants' input would inform outcomes
- Respectful: acknowledging the needs, experience, perspective, and expertise of participants.

2.2 What we heard

The department received a total of 13 submissions:

- 5 were in support of the proposed changes
- 7 were not in support of the proposed changes
  - 4 of the 7 stated they did not support the method because they thought that the 'fines were not high enough'
- one indicated neither support nor opposition but provided feedback and commentary.

Most of those who indicated opposition to the method did so because they believed the charges were not harsh enough and that higher penalties are needed as a deterrent for water theft.

Table 1. Response breakdown

Stakeholder category	Number of submissions
Academic or industry expert	2
Environmental peak bodies	4
Community member	5
Aboriginal community representative	1
Government agency	1

Issues raised by industry and academic experts

Submissions received from industry and academic experts were supportive of the method. They commended the department for addressing the limited effectiveness of section 60G provisions and supported using a cascading calculation approach. They expressed concern that the method:

- might be sensitive to outliers (trades that are very high or very low)
- may be ineffective at the start of the water year (as there may not be sufficient trades yet).

Issues raised by environmental peak bodies

All environmental stakeholders saw the method as a significant improvement on the current situation but thought that it did not go far enough to deter or penalise offenders. They noted that the method focuses on assessing the productive value of stolen water and prioritised this over environmental and cultural losses downstream. The following suggestions were made by environmental stakeholders:

- a method for compensating the environment should be developed
- severe water theft should result in a permanent loss of water access entitlements

- the peak price, rather than the VWAP, should be used
- include other payments, such as the opportunity cost of the water taken and additional penalties if the illegal extraction interferes with water allocations
- outline the criteria and circumstances a charge would be imposed, to ensure transparency and consistency
- clarify that illegal take of water will always result in the debiting of an account (where a water access license is held) and a charge.

Issues raised by the community

Most community stakeholders agreed that market-based prices should be used to value stolen water and must be determined at the time of the theft. It was asserted that penalties or licence cancellations should benefit the environment and compensate water users for the loss caused by the theft. It was also asserted that repeat offenders should face increasing fines and lose the right to own a water licence.

There was also some confusion from community members about how the proposed method would apply to larger water users, such as mines. Some sought more information about the new proposed method to understand it better, and stressed the need to ensure any new regulation is not overcomplicated or overly burdensome for the current farming community in NSW.

3 Feedback summary and response

Table 2. Feedback summary and responses

Stakeholder group	Feedback summary	Department's response
Industry and academics	Submissions received from industry and academic experts were generally supportive of the proposed method. However, they expressed concern that the method: • might be sensitive to outliers (trades that are very high or very low) • may be ineffective at the start of the water year (as there may be insufficient trades).	Volume weighted average price (VWAP) is used by the department and WaterNSW and is publicly available on the NSW trade dashboard. An upper limit is applied to remove data outliers, equal to the mean plus three times the standard deviation of trade prices computed at the water source and water year level. There are no universally acceptable methods to calculate and determine the value of illegally taken water. Some methods, such as those to determine an average or median price, may produce an outcome that is weighted towards what large licence holders are paying for water, or towards what small licence holders are paying for water. The department has adopted the VWAP as part of the section 60G method to determine the value of illegally taken water as it is an established and commonly used and known

Stakeholder group	Feedback summary	Department's response
		system. For consistency, the department does not propose to change the use of VWAP.
Environmental peak bodies	Most environmental stakeholders saw the proposed method as a significant improvement on the current one but thought that it did not go far enough to deter or penalise offenders. They expressed disappointment that the method focuses on assessing the productive value of stolen water and prioritised this over environmental and cultural losses downstream. The following suggestions were made: • a method for compensating the environment should be developed • severe water theft should result in a permanent loss of water access entitlements • the peak price should be used • include other payments, such as the opportunity cost of the water taken and additional penalties if the illegal extraction interferes with water allocations • outline criteria and circumstances a charge would be imposed, to ensure transparency and consistency • clarify that illegal take will always result in the debiting of an account (where a water access license is held) and a charge.	NRAR follows a regulatory policy and prosecution guidelines to decide how to respond to breaches of water laws. This ensures consistency and fairness in actions. Illegally taken water may not always result in the debiting of an account or a charge. Part of NRAR's role is to educate, enable, and encourage people to actively comply with natural resource laws. When determining an appropriate compliance response, NRAR considers a person's attitude to compliance, including: • whether the behaviour is deliberate, reckless or involving consistent carelessness • voluntary remedial action taken to address the non-compliance, mitigate the harm and any mechanisms put in place to prevent a recurrence • cooperation demonstrated by the person involved • the person's willingness and ability to comply with the requirements. NRAR assesses each incident of water theft on a case-by-case basis. Information about the criteria and circumstances when a penalty would be imposed can be found in NRAR's Regulatory Policy.
Community	Most community stakeholders agreed that market-based prices should be used to value stolen	Charges under section 60G are not the only options available to NRAR when they conduct their compliance operations. NRAR has a range

Stakeholder group	Feedback summary	Department's response
	water and must be determined at the time of the theft. It was asserted that penalties or licence cancellations should benefit the environment and compensate users for the loss caused by the theft. It was also asserted that repeat offenders should face increasing fines and lose the right to own a water licence. There was some confusion about who the proposed new section 60G method would impact. One stakeholder enquired if mines would be affected.	of options available for responding to breaches of water law and serious breaches of water laws can lead to penalties of up to $1.1 million for an individual or $5.005 million for a corporation. Daily penalties also apply for each day an offence continues. Individuals can face up to two years in prison for some offences. Importantly, NRAR has the ability under the Act to impose a charge of up to 5 times the value of the water taken. The proposed new method is applicable to any person that illegally takes water. More information can be found in the fact sheet *Proposed new method to calculate the* value of water taken illegally.
Officer-level feedback from NSW government sector	The challenges in identifying objective reference values was acknowleged, especially in water sources with limited trade data. The gross margin per megalitre can vary significantly due to assumptions about price, yield, and costs. This margin requires qualification when used as an initial indicator of the value or potential benefit of illegal water use.	The department acknowledges the limitations of gross margin values, however gross margin values are only used as a last resort if there are fewer than 20 trades in a water source, water sharing plan area, or regional catchment area applicable to where the illegal water take has occurred.

3.1 Next steps

The department will seek an amendment of the Regulation to prescribe the new method. NRAR will be able to apply the new method for valuing water illegally taken after the regulation amendment process is complete.

To stay informed you can subscribe to Water News to receive updates from the department about this and other water management issues, including opportunities to have your say.