

Water Amendment Regulation (No. 1) 2014

Explanatory notes for SL 2014 No. 151

made under the

Water Act 2000

General Outline

Short title

The regulation may be cited as the *Water Amendment Regulation (No. 1) 2014*.

Authorising law

Sections 344, 353 and 1014 of the *Water Act 2000* (Water Act).

Policy objectives and the reasons for them

Water supply arrangements in the South East Queensland (SEQ) region have undergone significant reform and consolidation over the last decade. Bulk water is supplied by the bulk water supply authority (Seqwater—a State owned statutory authority) to council-owned water business that on-supply water to residential and non-residential customers via their reticulation networks.

The main purpose of chapter 2A (Water security and demand management) of the Water Act is to ensure the delivery of sustainable and secure water supply and demand management for the SEQ region and designated regions. The purpose is achieved by:

- (a) providing for the desired level of service (LOS) objectives for water security in the SEQ region and designated regions; and
- (b) requiring the bulk water supply authority and water service providers for designated regions to have a water security program including plans and strategies to facilitate the achievement of the desired LOS objectives.

The current desired LOS objectives for the SEQ region were established in 2012 as part of the Regional Water Security Program formerly made by the Minister for Energy and Water Supply under now repealed provisions of Chapter 2A of the Water Act.

These desired LOS objectives have been reviewed to ensure they remain appropriate for delivering water security for the SEQ region.

The policy objectives of the amendment regulation are to prescribe the desired LOS objectives for water security for the SEQ region in accordance with the outcome of this review, to ensure:

- water supplies are adequate to meet regional residential and non-residential needs over the long-term;
- clarity of how bulk water supply may be reduced during droughts; and
- the community's basic needs can be met under all circumstances, including in drought emergencies.

The amendment regulation will also specify additional content for the water security program which the bulk water security authority will develop to achieve the desired LOS objectives for the SEQ region.

Achievement of policy objectives

The amendment regulation will prescribe the desired LOS objectives for water security for the SEQ region, specifically outlining the level of performance for the bulk supply system, for supply of water to reticulated customers in the SEQ region.

The bulk water supply authority (Seqwater) must facilitate the achievement of the LOS objectives through the development of a long-term water plan—the water security program for SEQ, which it must develop within 12 months of the desired LOS objectives being prescribed under the amendment regulation.

Consistency with policy objectives of authorising law

The amendment regulation is consistent with the objectives of the authorising legislation, namely chapter 2A of the Water Act, and in particular section 344 which provides a regulation-making power to prescribe desired LOS objectives for water security for the SEQ region and section 353 which provides a regulation-making power to prescribe additional content for the water security program to achieve the desired LOS objectives.

Alternative ways of achieving policy objectives

A Discussion Paper and Consultation Regulatory Impact Statement (RIS) were released in December 2013, outlining proposed LOS objectives for the SEQ region. The review of the current LOS objectives for the SEQ region sought to:

- determine whether 375 litres per person per day is an appropriate water allowance for water planning purposes;
- reduce red tape by minimising reporting requirements for Seqwater;
- promote cost-effective operation of bulk water supplies by providing flexibility to optimise existing assets and prevent over-capitalisation of existing and future infrastructure; and
- facilitate an adaptive management approach of the SEQ bulk water supply system.

The current LOS objectives were determined when the SEQ region was exiting an extended period of drought and were based on the best available information. At that time there were a number of unknown factors including the level of future water demand post drought

conditions and the level of community acceptance for future use of water restrictions in response to drought.

The current LOS objectives are conservative, requiring the SEQ bulk water supply system to provide a regional average urban water allowance of 375 litres per person per day (which includes 230 litres per person per day for residential demand and 145 litres per person per day for non-residential demand).

Actual demand for water in SEQ in recent years has been much lower, for example in 2012-13 water use across the SEQ region averaged 253 litres per person per day (comprising 168 litres for residential and 85 litres for non-residential water use per person per day).

As such, the current demand LOS objective has potential to drive over investment in the bulk supply system because it is higher than actual water use.

The current LOS objectives were also considered ambiguous in relation to how bulk water supply may be reduced during drought and do not provide clarity on how this could affect residential and non-residential water users through medium level water restrictions. In addition, a number of operational parameters are specified in the current LOS objectives which may restrict Seqwater's ability to operate the bulk water supply system in the most efficient and cost-effective manner.

The Discussion Paper and RIS compared the existing LOS objectives (the status quo) for the SEQ region against a range of options relating to water security, water demand and restrictions on bulk water supply, including the option of no longer prescribing particular LOS objectives of an operational nature.

Significantly, the Discussion Paper and RIS proposed to:

- provide clarity around the effect of drought on SEQ residents, including by specifying a volume that must be able to be supplied from the bulk water supply system to residential customers during medium level water restrictions;
- a flexible approach to meeting the regional average urban water demand;
- not include a number of existing LOS objectives of an operational nature relating to drawn down levels of particular storages; and
- prescribe a new LOS objective to meet an essential minimum supply volume.

Benefits and costs of implementation

The proposed changes to the LOS objectives for the SEQ region will not materially impact on regulatory, compliance or administration costs, compared to costs presently incurred with the current LOS objective.

It is difficult to assess impacts and quantify the costs and benefits of the changes to the LOS objectives, as the LOS process itself does not drive operations. Seqwater, in the water security program, will outline measures and processes which will be used to facilitate the achievement of the LOS objectives. This will include how the bulk water supply system will be operated, future bulk water supply requirements and demand management measures. Such measures and processes can impact both the ongoing operational costs and future capital expenditure, thereby affecting future bulk water prices.

Water service is a dynamic process. The needs of the community and business can change over time and with these changes, water supply security planning needs to be adaptable. Providing for a more adaptive and flexible LOS framework, will allow Seqwater to optimise existing assets and prevent overcapitalisation of existing or future infrastructure.

Consistency with fundamental legislative principles

The regulation has been drafted with regard to fundamental legislative principles as defined in section 4 of the *Legislative Standards Act 1992*.

The prescribed desired LOS objectives must be reviewed at least every five years with new or revised LOS objectives potentially being recommended. In this regard, subordinate legislation is considered an appropriate and efficient legislative mechanism to achieve policy objectives, compared to primary legislation.

Consultation

As a mechanism to gain an understanding and appreciation of community expectations, a Discussion Paper was developed outlining a number of options for water supply security in SEQ. The options in the Discussion Paper addressed water security, water demand and bulk water supply during drought. Based on how water supply security has been managed since the end of the 2001-2009 drought, the Discussion Paper identified potential variations to the current LOS objectives particularly in relation to water restrictions.

On 23 October 2013, the “*Water security for South East Queensland – discussion paper on the review of the level of service objectives*” was released for public consultation. The Discussion Paper was also made available from the *Get involved* website.

As a supporting document of the Discussion Paper, a Consultation RIS was developed to provide an analysis and assessment of the impacts of the options being considered as part of the review of the LOS objectives. The Consultation RIS was made available on the Queensland Competition Authority’s and the Department of Energy and Water Supply’s (DEWS) websites on 19 December 2013. Consultation on the Discussion Paper and Consultation RIS closed on 17 January 2014.

Stakeholders were asked to comment on the proposed revised LOS objectives presented in the Discussion Paper.

A total of 18 submissions (consisting of 12 written responses and 6 survey responses) were received from members of the general public, Seqwater, water service providers, businesses, not-for-profit organisations, industries, special interest groups and local governments.

All submissions and survey responses received on the Discussion Paper and Consultation RIS were considered by DEWS. Most submissions supported a flexible framework for water supply security in SEQ. After consideration of all of the stakeholder submissions that were received, no changes were proposed to the original recommended options except in relation to water restrictions where non-residential water users were included.

A Decision RIS has been prepared which provides a summary and assessment of the key issues raised in the submissions and makes recommendations for each of the LOS objectives.

Notes on provisions

Short title

Clause 1 provides that the short title of the regulation is the *Water Amendment Regulation (No. 1) 2014*.

Regulation amended

Clause 2 provides that this regulation amends the *Water Regulation 2002*.

Insertion of new part 8

Clause 3 inserts new part 8.

Part 8 Desired level of service objectives and water security program

Division 1 Definitions for part 8

Section 82 Definitions for part 8

Section 82 provides definitions for part 8, including:

- bulk water supply system;
- minimum operating level;
- non-residential water use;
- residential water use; and
- the SEQ water security program.

Division 2 Desired level of service objectives

Section 83 Desired level of service objectives

Section 83 states that for section 344 of the Water Act, this division prescribes the desired LOS objectives for water security for the SEQ region.

Water demand

Section 84 Projected regional average urban demand

Section 84 prescribes the desired LOS objective relating to water demand.

Subsection (1) provides that the bulk water supply system is to be able to supply enough water to meet the ‘projected regional average urban demand’.

Under subsection (2)(a), the projected regional average urban demand is to be worked out by the bulk water supply authority (Seqwater) in collaboration with the SEQ service providers.

Seqwater must publicly publish the projection in the way stated in the SEQ water security program.

Under subsection (2)(b), the bulk water supply authority must assess annually whether the projected regional average urban demand or latest projected regional average urban demand is still current. The bulk water supply authority must publicly publish the outcome of the assessment in the way stated in the SEQ water security program.

Subsection (3) defines the ‘projected regional average urban demand’ for the section as—the demand, expressed in litres for each person for each day, for residential and non-residential water use that is estimated for the SEQ region for each year over the next 30 years.

This LOS objective for water demand differs from the current objective, in that it does not set a static urban demand volume (currently set at 375 litres per person per day for residential and non-residential use).

Total water demand is driven by the region’s population and the average water use per person. Factors such as rainfall, temperature, water restrictions, changes in consumer’s water behaviour, price of water and household income influence, and are all considered, when developing water demand forecasts.

Water demand forecasts estimate how much water a community is likely to use in the future. These forecasts support water supply security planning by ensuring the water supply is sufficient to meet the demand and enable adequate planning of water infrastructure.

Requiring the demand volume to be worked out and projected based on actual water usage across the SEQ region will ensure the bulk water supply system can meet actual demand over time and will avoid over-investment in bulk supply infrastructure or augmentation before it is needed.

To meet this LOS objective, Seqwater will be required to determine the projected regional average urban demand in collaboration with SEQ service providers, and then annually assess the accuracy of the demand forecasts, publishing the outcome of this assessment. If the annual assessment determines demand has changed or diverged, Seqwater would update the demand projection and publicly report on this.

Seqwater will need to outline the process for determining the projected regional average urban demand in collaboration with SEQ service providers, and the process to update and report on the demand projections as part of developing the water security program for the SEQ region.

Drought response

Section 85 Bulk water drought supply

Section 85 prescribes the desired LOS objectives relating to the supply of water from the bulk water supply system during droughts which may affect medium level water restrictions applying to residential and non-residential water use.

Subsection (1) provides that the bulk water supply system is to be able to supply enough water so that medium level water restrictions on residential water use:

- will not happen more than once every 10 years on average; and
- will not restrict the average water use for the SEQ region to less than 140 litres for each person for each day.

There must be sufficient bulk water available so that the frequency and severity of medium level water restrictions does not exceed the levels stated.

Subsection (2) provides that the bulk water supply system is to be able to supply enough water so that medium level water restrictions on non-residential water use that is incidental to the purpose of a business will not happen more than once every 10 years on average.

Under subsection (3), it is stated that there must be sufficient bulk water supply available so that medium level water restrictions on residential and non-residential water use are expected to last no longer than one year on average.

Subsection (4) defines ‘medium level water restrictions’ as being water restrictions imposed on residential and non-residential water use in response to drought, when the level in the bulk water supply system is between

- the drought response level; and
- the safe minimum storage level.

Subsection (4) also defines the meaning of ‘drought response level and ‘safe minimum storage level’. Both are to be determined by Seqwater in developing the water security program for the SEQ region.

The ‘drought response level’ is the level in the bulk water supply system that will be the trigger for taking action in response to drought such as reducing the supply of water from the bulk water supply system. This trigger level is not required to be a combined storage volume of all the bulk water storages in the SEQ region, for example, it may be limited to a combined storage volume of particular storages within the region.

Limiting the supply of water from the bulk water supply system, and consequential medium level water restrictions, is only one possible response among a suite of actions that may be undertaken in response to a drought.

The ‘safe minimum storage level’ is the level in the bulk water supply system that will be the trigger for taking more severe action in response to drought to minimise the risk of reaching minimum operating levels.

The LOS objectives for bulk water drought supply are different from the current LOS objectives. The LOS objectives clarify the volume of water the bulk water supply system is to be able to provide so that the medium level water restrictions applied to residential and non-residential water use do not exceed the specified severity. Medium level water restrictions on non-residential water use apply to non-commercial uses. This means that the bulk water supply system is to be able to provide sufficient water to its customers so that a business could expect to have medium level water restrictions applied only to its use of water that does not have a direct relationship with commercial gain, for example, watering a garden in the grounds of a factory.

The LOS objectives for bulk water drought supply also differ from the current LOS objectives by increasing the frequency that the bulk water supply may be reduced. This, in turn, could affect the frequency of medium level water restrictions for both residential and non-residential water use.

These new LOS objectives for bulk water drought supply will provide Seqwater with additional flexibility in determining appropriate limitations on the supply of water from the bulk water supply system. This is because the revised LOS objectives allow Seqwater to increase the frequency and severity of reducing bulk water supply, which could reduce the need for additional water supply infrastructure.

Section 86 Minimum operating levels and essential minimum supply volume

Section 86 prescribes two desired LOS objectives relating to water security.

Minimum operating level

Subsection (1) provides that each of the three storages - Baroon Pocket Dam, Hinze Dam and Wivenhoe Dam - must not reach its 'minimum operating level' more than once in every 10,000 years on average. The minimum operating level for each dam is stated in the resource operations plan relating to the storage, as the term is defined under section 82.

Baroon Pocket Dam, Hinze Dam and Wivenhoe Dam represent the three major bulk storages in each sub-region of the SEQ region. The minimum operating level LOS objective will provide an important safety net to help ensure sub-regional supplies across the SEQ region are maintained.

This LOS objective is consistent with the current LOS objective for minimum storage levels.

Essential minimum supply volume

Subsection (2) provides that the bulk water supply system will be able to supply the 'essential minimum supply volume' and will not be reduced to being able to supply only the essential minimum supply volume more than once in every 10,000 years on average.

Subsection (3) defines the 'essential minimum supply volume' as the volume needed to supply 100 litres for each person for each day for residential and non-residential water use.

The essential minimum supply volume is intended to provide fit for purpose water for basic domestic needs as well as for essential services, such as for power generation, health and safety needs.

An essential minimum supply volume LOS objective will drive the need for adequate weather independent supplies to be operational when required and ensure SEQ has a plan for a worst case scenario.

This is a new LOS objective.

Division 3 Water security program

Section 87 Content of water security program

Section 87 prescribes for section 353 of the Water Act, additional content for the water security program that Seqwater will develop to facilitate achievement of the desired LOS objectives for the SEQ region.

The additional content for the water security program relates to the ‘drought response level’ and the ‘safe minimum storage level’. Both of these are to be determined by Seqwater and stated in the water security program.

The ‘drought response level’ and the ‘safe minimum storage level’ are defined under section 85.

Amendment of schedule 17 (Dictionary)

Clause 4 ‘signposts’ the new definitions for part 8, in schedule 17 of the *Water Regulation 2002*.