Department of Environment and Resource Management

Regional water security program for south-east Queensland

Revision 1

March 2010





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Program under Section 360M (1) (b) of the Water Act 2000

I hereby make a revised regional water security program for the south-east Queensland region. The program is based on advice sought and received from the Queensland Water Commission.

Dated this 5th day of March, 2010

<u>Stephen Robertson MP</u> Minister for Natural Resources, Mines and Energy and Minister for Trade

Authority to make the regional water security program for southeast Queensland

On 13 November 2006, the then Deputy Premier, Treasurer and Minister for Infrastructure, acting under the provisions of section 1141(1) of the *Water Act 2000* (Act), made a regional water security program for the south-east Queensland (SEQ) region.

In accordance with section 360D(1)(b), 1141 (4B) and (4C) of the Act, the Queensland Water Commission was directed to give advice on regional water security options for the purpose of updating or revising the SEQ regional water security program. The gazette notice (Queensland Government Gazette No. 60 Vol. 349) was made on 24 October 2008.

In accordance with section 360M (1)(b) of the *Water Act 2000*, this regional water security program revision has been made to help achieve water security for the SEQ region based on the commission's advice addressing matters in section 360J of the Act. The program is a revision to the Regional Water Security Program for south-east Queensland (13 November 2006).

The program commences 5 March 2010 and will be in force until such time as it is updated or revised by the Minister.

2. The program area

The program area is shown in Schedule 1 and encompasses the local government areas of:

- Brisbane City Council
- Gold Coast City Council
- Ipswich City Council
- Lockyer Valley Regional Council
- Logan City Council

- Moreton Bay Regional Council
- Redland City Council
- Scenic Rim Regional Council
- Somerset Regional Council
- Sunshine Coast Regional Council

3. Desired levels of service objectives for the SEQ region

The government adopts the following desired levels of service objectives for the supply of water from water supply works for the program area:

- During normal operations, sufficient water will be available to meet an average total urban demand of 375 litres per person per day (including residential, non-residential and system losses), of which 230 litres per person per day is attributed to residential demand.
- Sufficient investment will occur in the water supply system with the objective of ensuring that :
 - medium level restrictions will not occur more than once every 25 years on average
 - medium level restrictions need only achieve a targeted reduction in consumption of 15 per cent below the total consumption volume in normal operations
 - the frequency of triggering drought response infrastructure will be not more than once every 100 years on average
 - the frequency that the total volume of water stored by all key water grid storages will
 not decline to 10 per cent of their combined total water storage capacity more than
 once every 1000 years on average
 - the total volume of water stored by all key water grid storages must not be permitted to reach five per cent of the combined total water storage capacity of these storages
 - Wivenhoe, Hinze and Baroon Pocket dams must not be permitted to reach minimum operating levels.

- It is expected that medium level restrictions will last longer than six months no more than
 once every 50 years on average.
- 4. Water supply works or sewerage necessary for achieving the desired levels of service objectives

The water supply works for the program area are those that supply a declared water service for the SEQ region as declared under the *Water Act 2000*, regardless of whether or not those works are in the program area. This includes works to be completed as described in Table 1.

The sewerage to which the program applies is the sewerage associated with the Western Corridor Recycled Water Scheme feedwater.

5. Demand management for water in the region

The program supports the commission's ongoing approach to demand management in SEQ, particularly permanent water conservation measures (PWCM) and accompanying education and communication campaigns.

No demand management initiatives will be incorporated into the program at this time.

6. Implementation of levels of service and modification of existing water supply works or sewerage or the building of new works

The projects listed in Table 1 that modify existing water supply works or sewerage, or require the building of new works, are required to be implemented to achieve the desired levels of service objectives, as specified in Section 3 of this program.

Table 1: Works to be completed

Project	Description	Status	Service provider
Hinze Dam Stage 3	Raising of the Hinze Dam wall to improve flood mitigation and provide an additional water supply of 16 megalitres per day (ML/d).	In progress. Due for completion by 31/12/2010	Queensland Bulk Water Supply Authority
Northern Pipeline Interconnector Stage 2	Construction of a two-way bulk water pipeline from Landers Shute to Noosa Water Treatment Plant with associated works, including the installation of reverse flow capability in the Northern Pipeline Interconnector Stage 1. Following completion, stages 1 and 2 together will be capable of transporting up to 65 ML/d of water in either direction between Noosa and Morayfield.	Committed project. Target completion 31/12/2011	Southern Regional Water Pipeline Company Pty Ltd
Wyaralong Dam	Construction of a new dam on Teviot Brook at Wyaralong to provide an additional water supply of 50 ML/d.	In progress. Due for completion by 31/12/2011	Queensland Water Infrastructure Pty Ltd
Wyaralong Water Treatment Plant	Construction of a water treatment plant in the vicinity of the Cedar Grove Weir. Stage 1 to treat up to 75 ML/d. Stages 1 and 2 to treat up to 150 ML/d.	Yet to commence. Stage 1 target completion 31/12/2012. Stage 2 target completion as required.	Department of Infrastructure and Planning, and Queensland Bulk Water Supply Authority
Wyaralong Water Treatment Plant to Karawatha Reservoir, connecting works	Construction of a bulk water pipeline from Wyaralong Water Treatment Plant to the Southern Regional Water Pipeline, and from the Southern Regional Water Pipeline to Karawatha Reservoir capable of transporting up to 130 ML/d of water.	Yet to commence. Target completion 31/12/2012	Southern Regional Water Pipeline Company Pty Ltd

7. Cost sharing and pricing arrangements and preferred ways of cost sharing

In 2008, the Queensland Government announced a ten year price path for bulk water prices for SEQ following analysis and recommendations by the Queensland Water Commission. Prices have been fixed for the first five years, from 2008–09 to 2012–13, and indicative prices have been published for the following five years to 2017–18.

There are no significant direct costs associated with the introduction of permanent water conservation measures. However, there are potentially significant financial benefits for the users of the SEQ Water Grid if demand can be contained and future infrastructure delayed.

Current cost sharing arrangements will remain in place, as will the first five years of the bulk water price path (2008–09 to 2012–13).

The second five years of the price path will take into account any substantial variations from the initial assumptions, based on changes to regional demand patterns and any revisions to this program. These include the cancellation of Traveston Crossing Dam and the likely cost and time of the next augmentation source and drought response. It will also take into account other factors such as population forecasts and costs of finance at the time.

8. Definitions

Drought response infrastructure means planned infrastructure to respond to a severe drought, triggered when all key water grid storages reach 30 per cent of the combined total water storage capacity of these storages.

Key water grid storages are all of Baroon Pocket Dam, Ewan Maddock Dam, Cooloolabin Dam, Wappa Dam, Lake McDonald, Somerset Dam, Wivenhoe Dam, North Pine Dam, Lake Kurwongbah, Leslie Harrison Dam, Hinze Dam and Little Nerang Dam.

Medium level restrictions means commission water restrictions that achieve a targeted reduction in consumption of 15 per cent below the total consumption volume in normal operations, triggered when all key water grid storages reach 40 per cent of the combined total water storage capacity of these storages.

Minimum operating levels means the storage levels for:

- Wivenhoe Dam when the volume of stored water is 11 600 ML
- Hinze Dam when the volume of stored water is 2180 ML
- Baroon Pocket Dam when the volume of stored water is 4500 ML.

Normal operations means the mode of SEQ water grid operation when the total volume of water stored by all key water grid storages is greater than 40 per cent of the combined total capacity of these storages.

SEQ region has the meaning defined in the Water Act 2000.

Sewerage has the meaning defined in the Water Act 2000.

Water supply works has the meaning defined in the Water Act 2000.

Western corridor recycled water scheme feedwater means:

- sewage entering a sewerage network that provides source water for wastewater treatment plants at Bundamba, Gibson Island, Goodna, Luggage Point, Oxley and Wacol
- treated wastewater exiting wastewater treatment plants at Bundamba, Gibson Island, Goodna, Luggage Point, Oxley and Wacol.

Schedule 1: Program area

