

# Connecting and diversifying our water supplies—the South East Queensland Water Grid

Construction of the South East Queensland Water Grid is well advanced—nearly 75 per cent complete with 325 kilometres of pipeline laid. The water grid is a network of two-way pipelines that will transport water from areas of water surplus to areas that face a shortfall. It will allow the coordinated use of all major bulk water sources in the region. The project includes more than 450 kilometers of pipeline, two new dams, upgrades of existing dams, a desalination plant and three advanced water treatment plants.

The South East Queensland Water Grid is the largest urban drought response in Australia and is progressing on time and on budget. This initiative will help to secure water supply for South East Queensland now and for the future. The South East Queensland Water Grid will realise the state government's commitment to ensuring better management of water supplies in times of drought. It will achieve this by reducing the region's reliance on traditional sources of water and diversifying supply to include climate-independent and climate-resilient water supplies.

The following section outlines the key projects being advanced to establish the water grid.

## Western Corridor Recycled Water Project

Construction is well underway on the \$2.5 billion Western Corridor Recycled Water Project, Australia's largest recycled water project and one of the largest advanced water treatment projects in the world.

The project includes approximately 200 kilometres of pipeline and three advanced water treatment plants at Bundamba, Gibson Island and Luggage Point. It will provide up to 232 megalitres per day of purified recycled water to the region's supply—approximately 35 per cent of the region's current daily water use.

This project will reduce the demand on Wivenhoe Dam water supplies and extend the long-term, water supply capacity of South East Queensland. It will provide purified recycled water to Swanbank and Tarong power stations, industry and agriculture, and Wivenhoe Dam to supplement the region's drinking water supplies.

Construction is expected to be completed in December 2008.

## Gold Coast Desalination Project

The South East Queensland (Gold Coast) Desalination Project is a \$1.2 billion initiative of the Queensland Government and Gold Coast City Council to construct the first large-scale water desalination plant on the eastern seaboard. Located at Tugun, the project will provide up to 125 megalitres per day of new, fresh drinking water to South East Queensland. Based on current, drought-restricted water use, the desalination plant could supply over one-fifth of South East Queensland's drinking water supply when complete.

The project includes the construction of a desalination plant, a 2.2 kilometre marine intake tunnel, a 2 kilometre outlet tunnel, and a 24.9 kilometre pipeline to connect the desalination plant to the South East Queensland Water Grid.

Construction is about 80 per cent complete and is on schedule to be finished in November 2008 and fully operational by January 2009. The project has an exemplary commitment to safety, having achieved 2.75 million man-hours without lost time for injuries.

# Connecting and diversifying our water supplies—the South East Queensland Water Grid (cont.)



## Southern Regional Water Pipeline

Construction is well underway on the Southern Regional Water Pipeline, which is a 100 kilometre two-way pipeline to move water between the Gold Coast, Logan, Ipswich and Brisbane.

The \$900 million pipeline will be able to move up to 130 megalitres per day, ensuring that water is distributed to the most drought-affected areas in the region.

New water sources, such as Wyaralong Dam and the Cedar Grove Weir will be incorporated into this network at the end of 2011. The Southern Regional Water Pipeline is expected to be fully operational by the end of November 2008.

## Northern Pipeline Interconnector

Stage 1 of the Northern Pipeline Interconnector is a 47 kilometre pipeline to transport water between the Sunshine Coast and Brisbane.

Construction of Stage 1 is underway. It will connect Lander's Shute Water Treatment Plant west of Caloundra to the Morayfield reservoirs, where it will link with the Caboolture and Brisbane water networks. This will enable up to 65 megalitres per day to be transported from Sunshine

Coast water supplies to the South East Queensland Water Grid by December 2008.

The planning and approval phase for Stage 2 of the pipeline is continuing. Approximately 50 kilometres of pipeline will extend north from Lander's Shute to access water from water treatment plants at Image Flat and Lake MacDonald, near Cooroy.

The new pipeline will have the capacity to move surplus water to meet the additional demand from growth areas, and allow for future, two-way flow capacity.

## Eastern Pipeline Interconnector

The Eastern Pipeline Interconnector comprises a new bulk water transfer pipeline and associated infrastructure with the capacity to transport up to 22 megalitres per day between Redland and Brisbane, connecting the Redland Shire to the water grid via Logan. The project involves the construction of a new reservoir, pipeline and pumping station.

Construction of the Eastern Pipeline Interconnector is progressing well and will meet the completion date of 31 December 2008.

## New and upgraded dams

Construction of the Hinze Dam upgrade began in January 2008. Scheduled for completion by the end of 2010, the upgrade will increase the full supply level of Hinze Dam by 12.3 metres. This upgrade will also provide flood mitigation benefits to the Gold Coast.

The South East Queensland Water Grid also includes two proposed dams currently in planning and environmental assessment stages—Traveston Crossing Dam Stage 1 and Wyaralong Dam.

The proposed Traveston Crossing Dam Stage 1 is located approximately 16 kilometres south of Gympie on the Mary River, and will deliver up to an additional 70 000 megalitres per year (192 megalitres per day).

The proposed Wyaralong Dam is located on Teviot Brook, approximately 14 kilometres north-west of Beaudesert in the Logan River catchment, and is expected to supply 21 000 megalitres a year (58 megalitres a day) when operated in conjunction with Cedar Grove Weir and the Bromelton Offstream Storage.

If approved, both dams are expected to be completed by the end of 2011.

The largest urban drought response in Australia is progressing on time and on budget, and these initiatives will secure water supplies for South East Queensland now and for the future.