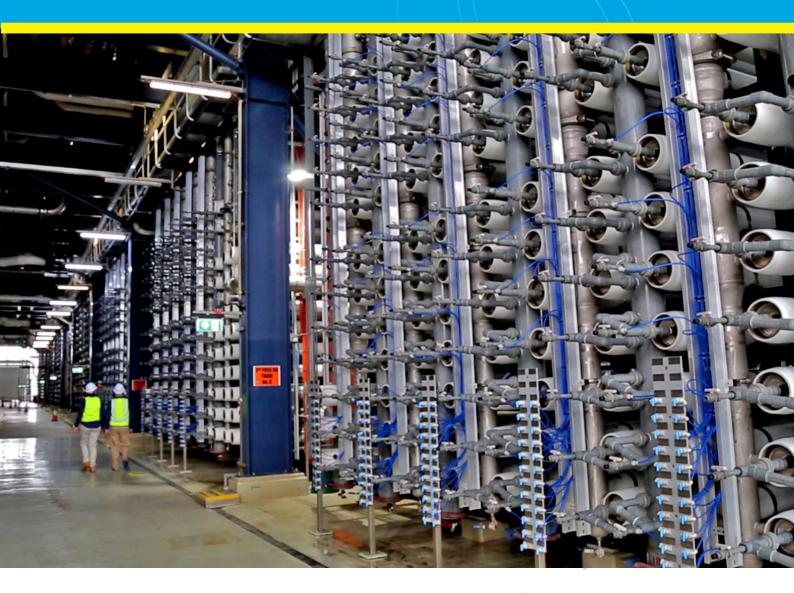
# PLANNING YOUR WATER FUTURE





# WATER FOR A GROWING GOLD COAST

## We're planning for your water future. Because we can't always count on the rain.

The plan might look different depending on where you live in South East Queensland.

We might have differences but we are one region, and Seqwater is planning for a reliable and sustainable water supply for all South East Queenslanders.



# **GOLD COAST WATER**

Gold Coast water is sourced primarily from Hinze and Little Nerang dams which is treated at the Molendinar and Mudgeeraba water treatment plants.

Combined, these two dams make up approximately 14% of the total volume available in our drinking water dams.

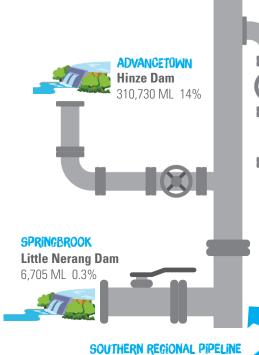
Some parts of the Gold Coast can also be supplied with water from Somerset and Wivenhoe dams via the Mt Crosby Water Treatment Plants and the Southern Regional Pipeline - part of the SEQ Water Grid.

The Gold Coast is fortunate to have access to a climate resilient source of water – the Gold Coast Desalination Plant.

Based on population growth and demand, the plant use will only increase over time.

The desalination plant would also be increased to 100% production capacity in a drought situation, when South East Queensland's key drinking water dams reach a combined capacity of 60%.

Upgrading the Gold Coast Desalination Plant so it can produce an additional 45 megalitres of water a day and upgrading the Molendinar water treatment plant so it could treat more water were identified in our Water Security Program (version 2) as potential new supply options for the future.



We use the Southern Regional Pipeline to transport water from the Gold Coast north to Brisbane when needed, and from Brisbane to the Gold Coast most of the time.

## NEW CANUNGRA PLANT

In January 2019, we opened a new water treatment plant at Canungra.

The new plant was built on the same site as the previous plant, and produces 1.5 million litres of treated drinking water each day - four times the capacity of the old plant.

Canungra's population expected to more than triple to 3000 people over the next 20 years.



TUGUN

Brisbane.

**Gold Coast Desalination Plant** 

Turns seawater into drinking

water and thanks to the SEO

Water Grid, can be transported to the Gold Coast, Logan and

The Canungra Water Treatment Plant is a stand-alone water supply system providing water to the township of Canungra and Maurita Crescent.





BY 2028, THE POPULATION OF SOUTH EAST QUEENSLAND IS PREDICTED TO GROW BY MORE THAN 750, 000 PEOPLE.

AVERAGE DAILY RESIDENTIAL WATER USE IN GOLD COAST IS 200L PER PERSON.\*

\*average daily residential use between 10 March 2017 and 9 March 2018

# WATER IN THE FUTURE





### OUR PLAN

The Water Security Program is Seqwater's plan to provide South East Queensland with drinking water over the next 30 years. This includes planning for extreme weather — both flood and drought.



## POPULATION AND WATER USAGE IS GROWING

Currently South East Queensland uses around 300,000 million litres a year. By 2046, with our increasing population, the forecast medium demand is around 525,000 million litres a year. With all SEQ Water Grid assets available and operating (including the Western Corridor Recycled Water Scheme), our region's bulk water system can supply about 440,000 million litres a year.



## NEW WATER SOURCES NEEDED

The Sunshine Coast will be the first location to need a new water source, in around 20 years' time. This could be earlier if there is a sharp rise in consumption or a severe drought. It is likely new water sources will be needed in other regions beyond 2040. No single option, such as a new dam or desalination plant, on their own, is likely to meet the region's needs. We will need a combination of options. In the future we will need to make trade-offs to make the right choices for South East Queensland.

# MYTHBUSTERS: GOLD COAST DESALINATION PLANT

## MYTH: THE PLANT IS A WHITE ELEPHANT, IT'S RUSTING AND NOT BEING USED

**FACT:** The plant produces water three times a fortnight, which is distributed to the Gold Coast's drinking water supply. We call this 'hot standby mode'.

The hot standby mode keeps the plant in a state of readiness, so the plant can reach full production capacity within 72 hours.

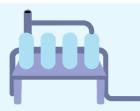
Desalinated water supplemented drinking water supplies in the final years of the Millennium drought in 2009 and 2010, during the 2011 and 2013 floods and following heavy rainfall produced by ex-TC Debbie in 2017.

The plant supplied water to areas of the Gold Coast during the Mudgeeraba Water Treatment Plant upgrade in 2015 and further work in 2017; and when Molendinar Water Treatment Plant underwent maintenence in 2016.

In 2018, the plant helped supply drinking water to Brisbane and Ipswich while the Mount Crosby water treatment plants were upgraded.

Based on population growth and demand, the desalination plant will be required to supplement peak demand on the Gold Coast in the future.

## MYTH: DESALINATION HARMS SEA LIFE AND THE ENVIRONMENT



**FACT:** Underwater footage shows that small plants and organisms are thriving on and around the underwater infrastructure.

The sea water intake provides a habitat for a diverse variety of marine organisms, effectively creating an artificial reef.

The sea water not converted into drinking water (called brine) is returned to the ocean through an underground pipe. A 200 metre long diffuser system releases the water in an area about the size of eight football fields.

Real-time monitoring of the quality of the brine discharged back into the ocean includes measurement of pH, chlorine, dissolved oxygen, temperature, turbidity and salinity.

A long-term independent marine monitoring program, designed in conjunction with the State Government and independent marine experts, is in place.

It shows that the plant is operating in compliance with licence conditions which have been developed to prevent environmental impacts.

# PLANNING YOUR WATER FUTURE



# WATER WISE TIPS

Water is a precious resource and South East Queenslanders are encouraged to be water efficient all the time.

### Water outside before 10am and after 4pm

If you water in the heat of the day, you can lose up to 50% of the water to evaporation.

### **Check for leaks**

You can lose thousands of litres of water a day without even knowing it due to underground leaks. Use your water meter to check for leaks at home and in your irrigation system.

### Use a good mulch

A good mulch will help your plants retain water through the scorching summer days and reduce weeds that compete for water.

### Use your pool cover

Pool covers reduce evaporation by about 90%.

#### Check how much water you use

Do you really know how much water you use? Use a water audit tool to calculate what appliances are your water guzzlers, where you're using a lot of water and opportunities to make savings. There is one on the Seqwater website **seqwater.com.au** 

### Turn off the tap

Half filling the sink instead of leaving the tap running to wash fruit and vegetables, turning off the tap when brushing your teeth and taking shorter showers are all simple ways you can save water inside your home.

# **DROUGHT RESPONSE PLAN**

We have introduced a drought readiness phase to better prepare the region for the prospect of drought. Drought response actions are linked to the combined volumes of our region's water storages.





Drought readiness messaging will start when storage levels reach 70%. Voluntary water conservation will commence at 60%, as will full production at the desalination plant. We'll also re-start our recycled water treatment plants. Mandatory water restrictions will commence at 50%.



# FOR MORE INFORMATION

More information is available at our Realities of Rain hub at https://yourseqwater.com.au/realities-of-rain

You can also subscribe to our email newsletter to stay up to date with news and events.

### **Contact us**

Email: communications@seqwater.com.au Phone: 1800 771 497