

# Cairns Water Security Strategy

## SUMMARY



Image credit:TTNQ

### Cairns Regional Council has been planning for the water needs of a growing population.

The Cairns Water Security Strategy (CWSS) was adopted by Cairns Regional Council in September 2015 as a way of planning for the future of our water supply to ensure that we have enough of this precious resource to sustain our community as it grows.

Cairns currently has two main sources of water supply: the release of water stored in Copperlode Falls Dam (Lake Morris) on Freshwater Creek and run-of-river extraction from the Behana Creek intake. There are also smaller rural intakes that service communities to the south of Cairns.

With our population projected to reach 265,000 people by 2050, the Strategy contains a range of actions to help us get ready. The following short-term actions are Council's current priorities.

#### Action 1: Water Demand

Demand Management Strategy to manage the water demand across the community and achieve overall water savings of at least 10% over a 10 year period.

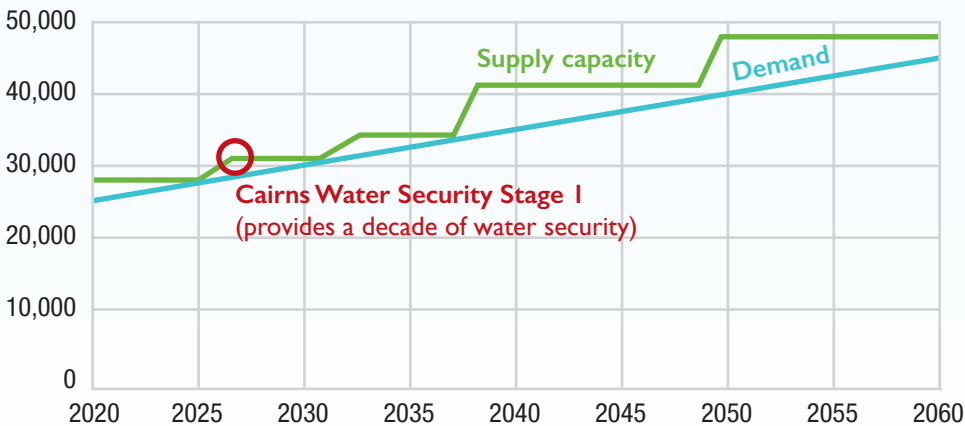
- How**
- Intelligent water networks
  - Water education programs
  - Water efficiency upgrades and retrofits.

#### Action 2: Water Supply

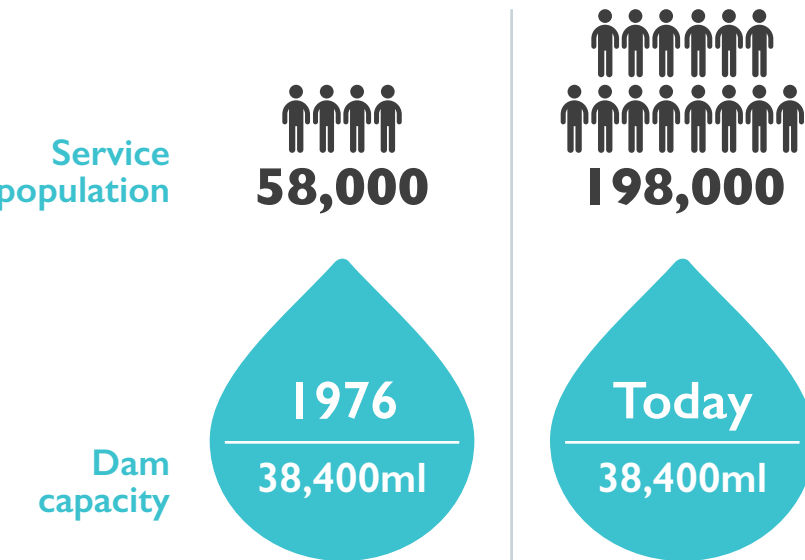
Cairns Water Security Stage I (CWSSI) – new water intake and treatment plant to deliver a new drinking water supply to the Cairns community.

- How:** CWSSI project
- A water intake at the Mulgrave River at Gordonvale
  - A Water Treatment Plant (WTP) and water reservoirs at north Gordonvale
  - Pipelines to take raw water from the water intake to the WTP and treated water to residents throughout the Cairns region
  - Associated works to improve the treatment of the existing Behana Creek water supply.

#### Augmented Supply Capacity vs Demand



Cairns' growing population has more than tripled since Copperlode Falls Dam was built in 1976

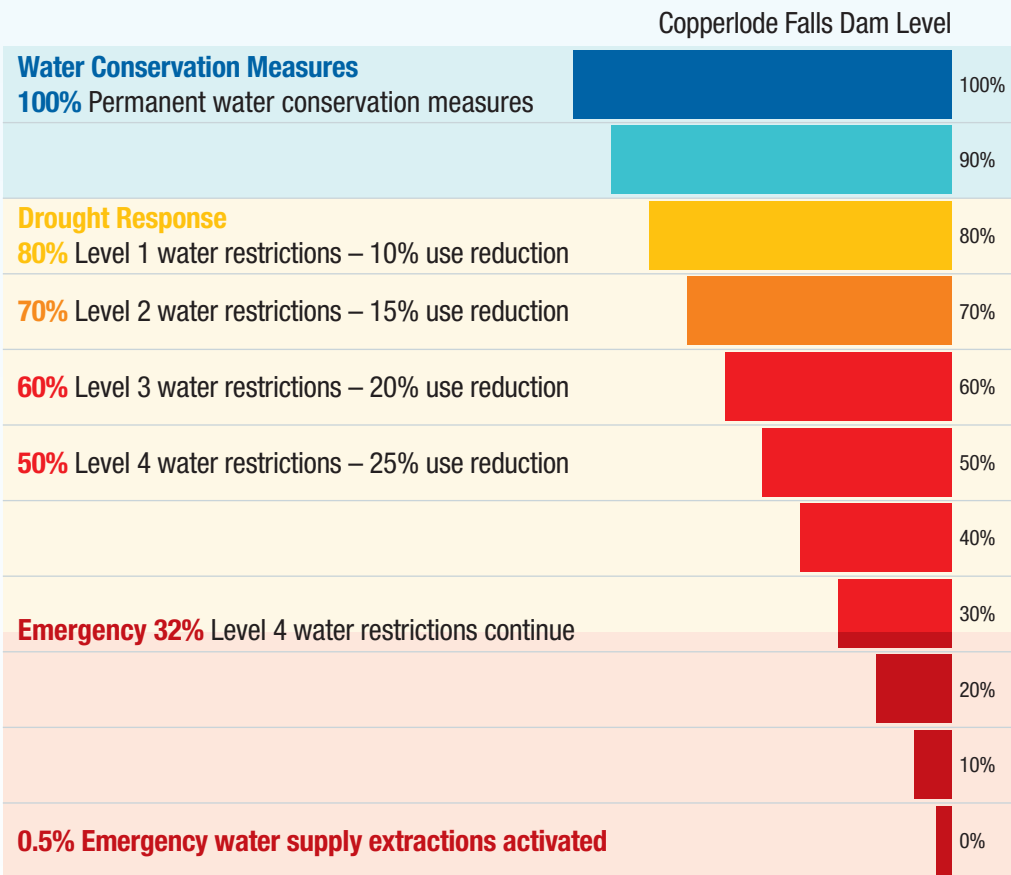


#### Action 3: Emergency Water Supply

A water supply solution in the highly unlikely situation of an extreme drought where Cairns' main sources of supply are depleted.

- How:** Drought Response Plan
- Emergency Water Supply Plan – we are preparing to implement the best water source option available in the event of an extreme drought
  - Temporary bore field extractions of groundwater from the Mulgrave River Aquifer activated only when Copperlode Falls Dam level reaches 0.5%.

#### Cairns Regional Council Drought Response Approach



We all have a role to play to ensure our precious water resource is available for everyone to use. Visit our website to find out how you can be smarter with your water.