The Sydney Desalination Plant makes clean, fresh drinking water from seawater.

Using reverse osmosis membrane technology, water from the plant is monitored and treated throughout the entire process to meet Australian Water Guidelines - which makes it among the best in the world.



Seawater intake and outfall

Millions of litres of seawater are drawn in each day via four intake pipes and a 2.5km tunnel with around 60 per cent of the water returned to the ocean.



Pre-treatment filtration

Seawater is filtered and thoroughly cleaned in our pre-treatment filtration facility.



Booster pumps and cartridge filters

Filtered water is boosted up to 10 bar - the first step in increasing the water pressure for the desalination process.



Reverse osmosis

Filtered water is boosted up to 60 bar - removing all dissolved salts and minerals.



Post treatment

Minerals are added to stabilise the water, ensuring it meets Australian Drinking Water standards.



Treated water & transfer to Sydney Water

Water is stored in a 40 million litre tank, awaiting delivery to Sydney Water's drinking supply network.



Wastewater management

Wastewater is held in tanks, to be passed through a centrifuge. The remaining residues are disposed of responsibly.



Expansion

The Sydney Desalination Plant was originally constructed with expansion in mind.



Environment

Built with a focus on the environment, one-third of our site is a dedicated conservation zone.