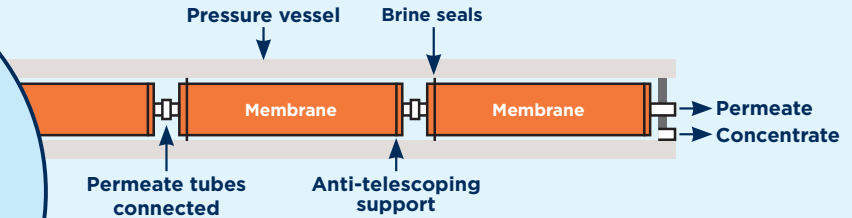
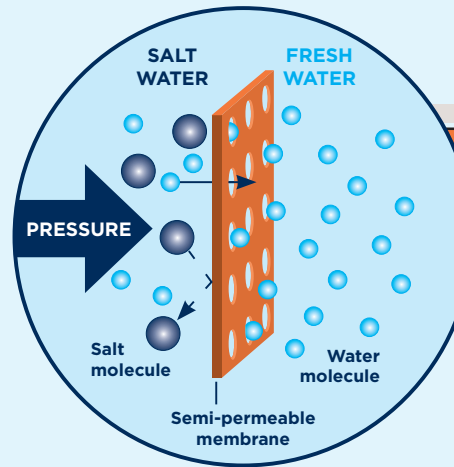
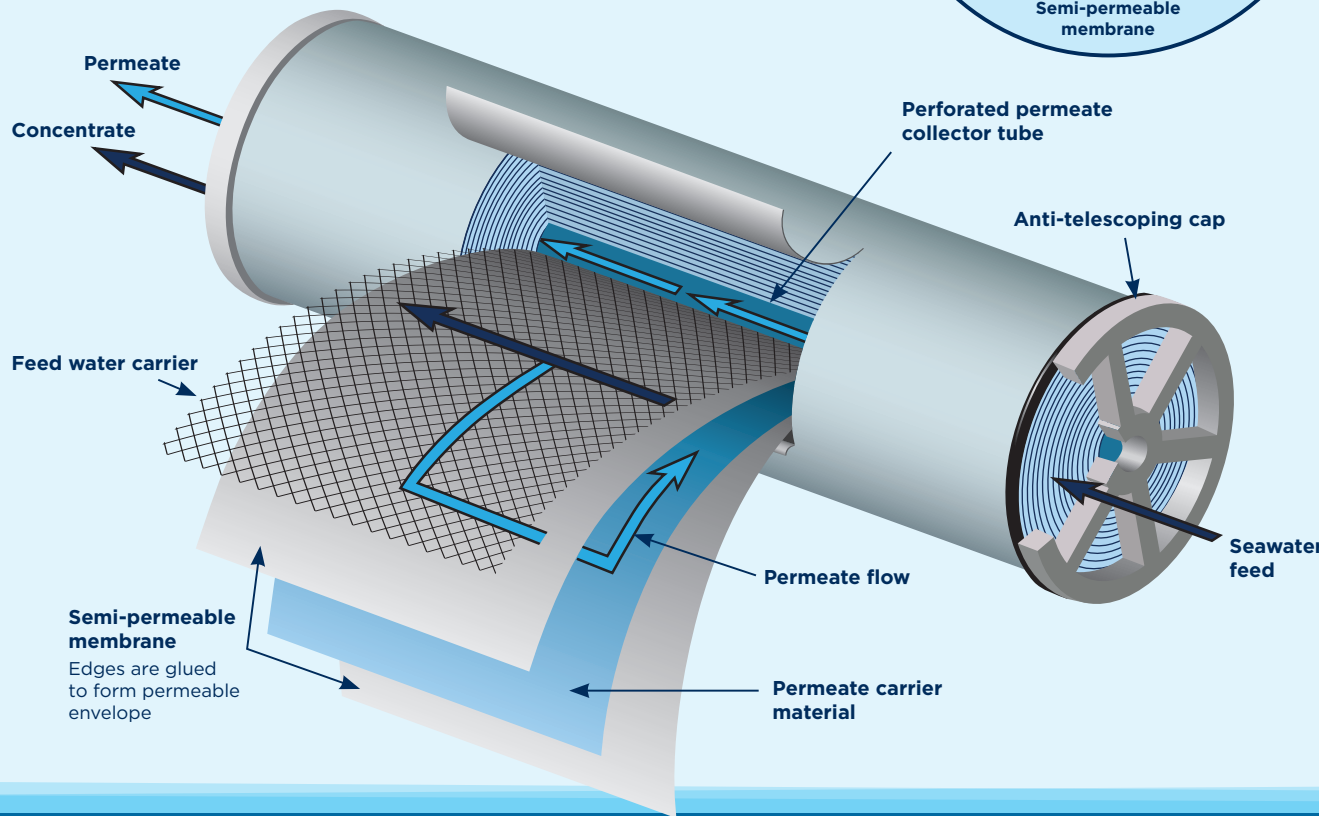


Reverse osmosis

Inside this massive warehouse is where the 'magic' happens.

Clean filtered seawater is pumped at very high pressure (60 bar) through our reverse osmosis membrane system, where dissolved salts and minerals are removed.

The pressure needed for this to happen is so intense that it would be enough to shoot water 600 metres into the air.



The water is driven through semi-permeable membranes housed inside pressure vessels. The membranes contain polymer sheets 'spirally' wound around a central collection tube. The membrane sheets act as a barrier, allowing fresh water to pass through and be collected while stopping any salt and minerals.

There are about 36,000 membranes, with 8 membranes inside each of our 4,500 pressure vessels.

Over 70 per cent of the water passes through a second set of membranes to ensure the overall quality standards are met.

The water that is rejected during the reverse osmosis process is effectively saltier seawater (or saline concentrate) which we carefully return to the ocean.

Did you know?

As the reverse osmosis process is energy intensive, we use energy recovery technology that reduces our energy use by about 50 per cent.