CASE STUDY

PROJECT	**POTABLE WATER PLANT UPGRADE**
PRODUCT	Ultrafiltration
INDUSTRY	Tourism and leisure
LOCATION	NSW

mak water
water | wastewater | sewage

BACKGROUND

A resort reached out to MAK Water as their potable water treatment plant that was not meeting the throughput required to meet the demands of peak season during school holidays. The system had originally been designed to produce 200m^3/day but had struggled to produce these volumes.

MAK Water reviewed the existing design and found that the system had not been designed to handle the variability of the river water that feeds the plant. MAK Water ran a computer simulation based on feed water analyses and subsequently engineered a solution that would meet the peak demands when the feed water quality was at its worst.

SOLUTION

The existing system was stripped back to the control panel and instrumentation. An additional 33% of membrane capacity was added to the system as well as larger chemical dosing pumps and blower for air scouring the media filters.

The existing water treatment plant layout made maintenance very difficult so some of the equipment inside the container was moved to outside to create a space that was safer to work in for operators and maintenance staff.

Before upgrade. Container was over crowded and hard to work in.

After upgrade and rrelocating tanks outside.

RESULTS AND BENEFITS

- **Demand satisfied.** Up to 220,000L of potable water a day. No more trucking in water during peak times.
- **Safety.** Log reduction of bateria via Ultrafiltration
- **Savings.** 25% of the cost of replacing the water treatment plant
- **Minimised waste.** By reusing equipment