

CASE STUDY



PROJECT POTABLE WATER FOR BEACH RESORT

PRODUCT Sea Water Reverse Osmosis

INDUSTRY Tourism and Leisure

LOCATION South Coast, NSW

BACKGROUND

Remote beach properties are typically not connected to the potable water network and require local water treatment of highly saline water. When the new owners of a beach front luxury resort on the NSW South Coast took over the property, they inherited an old, inefficient and unreliable sea water desalination plant that was not capable of producing potable water to the standards of the Australian Drinking Water Guidelines (ADWG) and using large amounts of power.

To meet the expectations of their 120+ guests and NSW Health, resort management prioritised the urgent installation a new sea water desalination plant. The plant needed to produce potable water in accordance with ADWG for resort guests, with spare capacity to irrigate their grounds. The plant also needed to be more energy efficient to lower running costs.

SOLUTION

MAK Water supplied a custom skid mounted Sea Water Reverse Osmosis (SWRO) for the client.

DESIGN FEATURES

- Process guarantee to produce water to meet ADWG
- Custom skid to fit into their existing plant room
- Cost effective treatment tailored to the site requirements

DESIGN SPECIFICATIONS

- 35 kL/day of potable water
- Skid mounted to suit the existing plant room
- Utilise existing infrastructure to minimise project costs
- Fully automated system with minimal operator input

RESULTS AND BENEFITS

- **Compliance.** Guaranteed potable water to meet ADWG and NSW Health requirements for disinfection
- **Reliability and Efficiency.** Robust and automated plant for worry free operation with improved efficiency.
- **Flexible Payment Terms.** With cash flow limited due to COVID19, a 24-month lease to own agreement was negotiated allowing OPEX budget to be used
- **Service and Maintenance Agreement.** MAK Water provided 24/7 Technical Support and regular routine plant maintenance allowing owners to focus on the business



Custom Skid Mounted Sea Water Reverse Osmosis Plant - left view



Custom Skid Mounted Sea Water Reverse Osmosis Plant - right view