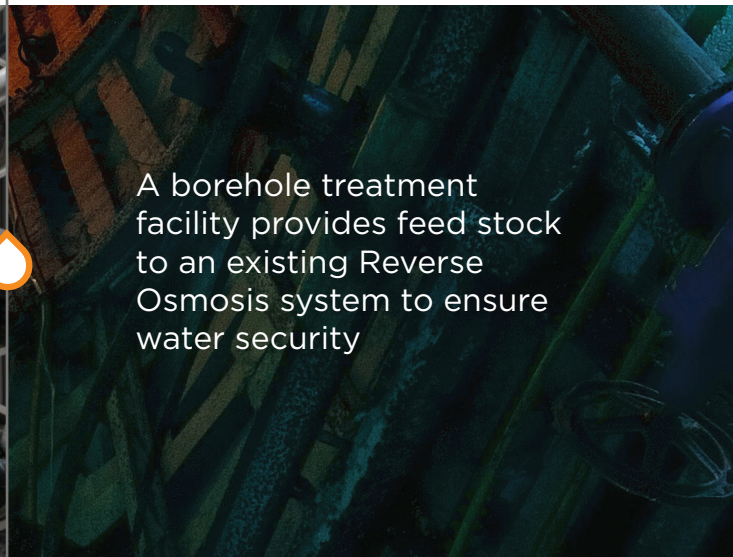


I&J FISHERIES, SOUTH AFRICA

GROUND WATER TREATMENT



A borehole treatment facility provides feed stock to an existing Reverse Osmosis system to ensure water security

THE CHALLENGE

I&J and PROXA worked together to develop an overall water strategy. I&J's goals were to become more resilient in terms of water security, operate independently of municipal water supply, ensure continued production and manage and control the cost of their water into the future.

OUR SOLUTION

PROXA conducted an initial techno-economic evaluation of three possible alternative water sources (effluent, ground water and sea water). The client selected the treatment of ground water to potable for the Woodstock site with a payback period of less than 24 months. The borehole treatment facility provides high quality water for the product make-up.

HOW PROXA ADDED VALUE

PROXA performed a life cycle cost analysis on a number of different water sources and technologies. This enabled the client to make an informed decision taking the facility's short- and long-term manufacturing needs into consideration. Given the urgency of water security at the time, packaged treatment plants were selected and constructed in parallel with borehole drilling to ensure rapid deployment.

FEED WATER

Ground water

PERFORMANCE TARGET

0.9 MLD per day potable water to SANS 241 specifications

PROCESS

- Ultra Filtration (UF)
- Reverse Osmosis (RO)

PROCESS INNOVATION

The plant is fully automated and allows remote operations from a centralised control room in the PROXA technical centre. Highly skilled members of staff man the control room and maintenance teams carry out weekly site visits. A support unit is also on call 24/7 in case of emergency.

PROCESS RELIABILITY

PROXA provides technical support, operation and maintenance to ensure continued water availability.

Client: I&J

