



Coorong to determine the impact of water inflows from drains in the upper South East. The studies by the company have shown that parts of the Coorong are now saltier than the sea and the company's work is determining the impact of fresh water inflows from the Morrella Basin wetlands, which are being fed by drains in the area.

The impact of the drought and the federal government's National Water Initiative is placing even more attention on water projects and hence the need for water data is increasing.

In SA, the growth in mining is also likely to increase demand for WDS services. Before mines can be established, companies need information on the quality and quantity of nearby ground and surface waters.

Once the mining activity has started, environmental monitoring is required to ensure their activities do not impact on these water sources through run-off from tailings dams or waste heaps.

Information provided by Water Data Services will play a key role in the proposed development of a desalination plant at Port Bonython in the upper Spencer Gulf to supply fresh water to BHP Billiton's huge Olympic Dam expansion at Roxby Downs.

As part of the project, the company was called on to measure sea water quality over a 12-month period in the area of the proposed plant, to give a better understanding of the nearby marine environment.

The findings will be used to determine the impact of a desalination plant in the area and ultimately, whether or not the plant proceeds.

Hourly readings of water quality indicators – including turbidity, dissolved oxygen, pH levels, electrical conductivity, temperature and chlorophyll – needed to be collated, processed and made available via the internet.

The traditional way of approaching this would have been to place multiple sensors in the water, which would increase the complexity of recording, calibrating and servicing each sensor:

## “INFORMATION PROVIDED BY THE COMPANY WILL PLAY A KEY ROLE IN THE PROPOSED DEVELOPMENT OF A DESALINATION PLANT AT PORT BONYTHON”

Instead, Water Data Services became the first company in Australia to install and operate a water quality profiler, which was designed overseas for such jobs. The information is gathered automatically, along with additional data such as wind speed and direction and solar radiation levels, and automatically sent to the company through an off-site telemetry system for processing. The monitoring station is solar powered, with a battery back-up, and has a design life of more than two years.

One of the early surprises in the project was the strength of the current in the area, which had required special ballasting to secure the equipment.

Water Data Services designed a solution that was roughly a third of the cost of competitors, but which provided higher quality and more appropriate data. ◀

**Company name** | Water Data Services

**Date founded** | 1996

**Sector** | Hydrographic monitoring

**First located** | Edwardstown

**Now located** | Edwardstown

**Number employees** | 12

**Claim to fame** | Key role in determining impact of major water strategies being considered by governments and industry

**Company details** | Erudina Ave, Edwardstown, SA 5039

**Phone** | 08 8374 3522

**Website** | [www.waterdata.com.au](http://www.waterdata.com.au)