



Eyre Peninsula Desalination Project environmental modelling and assessments

We are taking an evidence-based, conservative approach to secure a climate-independent source of drinking water for the Eyre Peninsula.

This includes several detailed marine and technical studies, to ensure the proposed plant is constructed with minimal impact to the marine environment.

Site specific water quality testing

Weekly water samples are taken from several locations to understand the salinity and overall make-up and quality of the water. This includes testing for components routinely found in water next to ports and harbours including hydrocarbons, pathogens, metals, chemicals, and other organisms.

Vertical water profiling

Information on the vertical characteristics of the seawater has been collected around the Billy Lights Point area, as well as the wider Bays. This helps to guide the modelling and engineering design of the plant and whether we see different temperatures and salinity at different levels in the water column, such as the seabed or the surface. This can change across seasons, so changes are monitored throughout the year.

Site-specific benthic seabed habitat mapping

Videos of the seabed are used to map underwater habitats, including plants and animals. Videos have been collected at 2 kilometre intervals across Boston and Proper Bays, with videos now being collected focusing on the Billy Lights Point area.

Ecotoxicity review report

Ecotoxicity studies examine how the biological, chemical, and physical stressors from a desalination discharge might affect the marine biology, and uses laboratory testing to outline the dilution that should be achieved to protect the marine system. The predictions are made by trophic testing multiple relevant species.

Seagrass assessment

Seagrass mapping within the Bays has occurred through both hyperspectral mapping that uses light imagery to determine the density of material under the surface, and through video analysis, using benthic seabed video mapping.

Baited fish survey

We have looked at the fish species present around Billy Lights Point, and this work is supported by Flinders University's baited fish surveys undertaken every 2 seasons.

