

## Gold Coast Desalination Alliance – Coastal Management and Approvals



### Client: John Holland Group

As part of the provision of ongoing environmental management during construction of the Gold Coast Desalination Plant, E3 Consult provided expertise in the management of high ecological value coastal areas.

Major issues requiring management included acid sulfate soils, groundwater and estuarine flora (mangroves and salt couch). E3 identified potential environmental issues and developed applications to government agencies for approvals regarding water quality objectives and water discharge, developed dewatering plans and conducted water quality monitoring of fresh and estuarine waters. E3 was also associated with the background monitoring for the marine waters linked to the intake and outlet shafts for the desalination plant tunnels.

*Application of  
marine and  
ecological  
protection  
measures to meet  
regulatory  
requirements*

Another major component of the marine works where E3 provided pivotal assistance was the development and implementation of the marine spoil management procedure. Due to the sensitivity of the marine environment and the potential pollution caused by the dredged material, this spoil could not be placed back on the seabed floor. Great care was taken to excavate and transport the material to land for treatment and final disposal in a controlled landfill.

The involvement of E3 staff in this project demonstrates our skills in the following areas:

- Experience in coastal management and infrastructure projects; and
- Development of innovative solutions and environmental practices to ensure compliance with regularly conditions.

PH15 – GCDA Coastal Management and Approvals