

## Gold Coast Desalination Project Expansion Environmental Site Assessment, Gold Coast, QLD



### Client: Gold Coast Desalination Alliance

E3 Consult completed an environmental site investigation at the Gold Coast Desalination Plant to assess a future expansion area. The investigation area included a putrescible landfill, municipal wastewater plant, night soil disposal and associated settling ponds with a history of disturbance and waste disposal.

E3 completed a soil and groundwater sampling program through a combination of soil bores, landfill gas wells, test pits, sediment sampling, surface water sampling and groundwater monitoring wells. Sampling locations were chosen based on available historical information including aerial photographs. Appropriate laboratory suites included organic, inorganic, biological and micro biological analyses. The thickness and base elevation of the municipal landfill was also investigated using a 55T piling rig to assess the interface of the landfill and the investigation area.

The site data was used to develop suitable management, remediation and design strategies to manage the environmental risks during construction and operational phases of the proposed expansion plant. The involvement of E3 in this project demonstrates our key skills in:

- Holistic and comprehensive approach to field investigations;
- Ability to assess significant volumes of site and historical information;
- Expertise in evaluating environmental and human health risks; and
- Providing infrastructure projects with tools for forward planning decisions.

*E3 engaged a 55t drill rig to penetrate 28m landfill waste profile*

*Experience and holistic approach to complex contaminated site assessment and infrastructure development*