

Water

Development
Environment



PROJECT FOCUS

Laing O'Rourke for Adani:

Carmichael Railway Project water supply
and cost evaluation

Project brief:

Supply of water to the western alignment of the Carmichael Rail Project emerged as a critical factor in the costing and achievement of program for the project.

As such, a detailed analysis was required to evaluate potential sources of water and identify an optimum arrangement.

Psi Delta's role:

Determine location and flow of water required based on construction quantities

Evaluate practicability, cost and reliability of possible sources: rivers and creeks, overland flows, groundwater and pipelined water

Work with engineering consultants to prepare estimates of costing for supply infrastructure for preferred options

Perform a risk analysis and develop a risk mitigation strategy considering the certainty of individual supply sources and joint sources

Consult with landowners

Propose terms sheets for contracts to supply water

Our achievements:

Produced a detailed assessment of water sources to seven nodes along rail alignment.

Evaluated the joint and individual reliability of sources in meeting construction needs

Psi Delta completed:

Consultation and negotiation
Water sourcing and reliability assessment
Cost evaluation
Risk analysis

Our project collaborators:

Psi Delta consulted with people known from other projects that had detailed knowledge of the water systems in the region.