

Question on Notice

No. 693

Asked on 22 May 2007

DR FLEGG asked the Deputy Premier, Treasurer and Minister for Infrastructure (MS BLIGH) –

QUESTION:

With reference to the opening by Incitec of a temporary desalination plant at their Murrarie plant that will free up one megalitre of water every day, which is enough water to supply 7,000 people –

1. Will she provide a list of reports the department has commissioned on similar desalination plants that use brackish water from sources such as the Brisbane River?
2. Will she outline why brackish water treatment plants that require less energy than desalination have not been considered as an option to counter the South East Queensland water crisis?

ANSWER:

The Government has not commissioned any reports solely to deal with the use of brackish water desalination. Specific brackish water desalination has received limited attention to date because the expected volumes able to be supplied are small compared to the region's current and future requirements. Seawater desalination has significant benefits in terms of both supply volume and water quality consistency compared to brackish water supplies.

In terms of water quality, when compared to seawater brackish water is more susceptible to run off from urban areas, roads and fertilised agricultural lands. While energy savings are possible when desalination plants are fed with lower salinity water, these savings must be balanced against the need for additional pre-treatment requirements due to the increased presence of impurities as a result of this run off.

The other major limitation of specific brackish water desalination compared to seawater desalination is the acceptability of waste brine discharge into water bodies with limited dispersion characteristics. Given that brackish water zones are often small and subject to long periods of stagnation, brine returned to brackish water zones may be less easily dissipated than brine returned to the sea.

As part of its multi-faceted strategy to explore options for water supply, the Queensland Water Commission is exploring various water supply options including the use of brackish water desalination.