Question on Notice

No. 1383

Asked on Tuesday 6 October 2009

MR HORAN asked the Minister for Infrastructure and Planning (MR HINCHLIFFE)–

QUESTION:

With reference to the Gladstone Fitzroy Pipeline Project (which is costing $345m for 115kms of pipeline, three pump stations and a capacity of 30 gigalitres) and to the Toowoomba Water Pipeline (Wivenhoe to Cressbrook) (which is costing $187m for just 38kms of pipeline, one pump station and a capacity of only 14,200 megalitres)—
Why is the Toowoomba Water Pipeline Project so much more expensive by kilometre and for capacity?

ANSWER:

I thank the Honourable Member for Toowoomba South for his question.

As at the beginning of November 2009, the combined level of Toowoomba's three supply dams Lake Cressbrook, Lake Perseverance and Cooby Dam was sitting at 8.9 per cent. Stringent Level 5 water restrictions have been in place in Toowoomba and surrounding districts since 26 September 2006.

At the existing restriction level the total depletion of this water supply, in the absence of any further inflow, is expected to occur in the first half of 2010. To safeguard supply from total depletion, construction of the Toowoomba Pipeline, originally planned for completion by the end of 2011 is being run under an accelerated program.

Well over one third of the Toowoomba Pipeline alignment travels through the heavily vegetated Deongwar State Forest. This area forms part of the Great Dividing Range and at its highest point, water in the pipeline must be pumped against a vertical head of 265 metres on its way to reaching Lake Cressbrook. The pumping capacity required to shift water against such a significant vertical head over the relatively short distance of 38 kilometres has necessitated incorporating two pumps into the pump station arrangement - a duty pump and a stand-by pump – both of sufficient size to meet this challenge.

By comparison, the Gladstone Fitzroy Pipeline project traverses through undulating grazing and cropping pastures characterised by sparse vegetation and a flat landscape with only low level hills for the majority of its 115 kilometre length. The Toowoomba

Pipeline also crosses a total of 23 creek crossings as compared to 8 required within the scope of the Gladstone Fitzroy Pipeline project.

Heavily forested areas require a greater extent of vegetation clearing and trenching and laying pipe in mountainous terrain with so many creek crossings is physically more challenging, requiring more time-consuming and specialised construction methods to ensure integrity of the pipe as well as the adjacent aquatic environment.

The Toowoomba Pipeline system also incorporates a submersible low lift pump suspended from a 45 metre steel truss jetty structure to draw water from Lake Wivenhoe and a 1000 cubic metre break tank used to protect the line from surge pressures.

When finished, the Toowoomba Pipeline will have the immediate capacity to deliver a much needed 14,200 megalitres of water per annum into Lake Cressbrook, as well as the in-built capacity to supply 18,000 megalitres per annum to cater for expected population growth and increased demand across the region to 2042.

To be clear, the pipeline cost difference is related to the need for accelerated construction of the Toowoomba Pipeline to secure water for the drought emergency and the more challenging task and conditions associated with building this pipeline.