

LOWER FITZROY RIVER INFRASTRUCTURE PROJECT DETAILED BUSINESS CASE 2017 SUMMARY OF COST BENEFIT ANALYSIS



The key conclusions to be drawn from the Lower Fitzroy River Infrastructure Project cost benefit analysis are as follows:

- Under the base demand scenario (i.e. 'best estimate' with a 1.5 per cent annual growth rate), the reference project has a negative net present value and a benefit cost ratio of 0.6 at a real discount rate of 7 per cent. The key benefit is the increased value of agricultural production (accounting for almost 50 per cent of quantified benefits), with the avoidance of Gladstone Area Water Board's augmentation costs under the base case the other key benefit.
- The results are highly sensitive to the benefits of increased agricultural production and hence the assumptions applied with respect to agricultural demand. The benefit cost ratio calculated for the reference project across several agricultural demand scenarios ranged from 0.3 to 1.6.
- In addition to the quantified benefits and costs, it is also important to consider those impacts that have not been quantified, either due to uncertainty or a lack of materiality. The most significant unquantified impact is the avoidance of the cost associated with the need to implement emergency supply measures in the event of a 'failed' wet season. Incorporating this benefit into the calculation of the results increases the BCR (under the central case demand scenarios) from 0.6 to 0.8).

Refer to the *Lower Fitzroy River Infrastructure Project Business Case*, Chapter 13—Economic analysis, on Building Queensland's website for further information: www.buildingqueensland.qld.gov.au