### Senate Standing Committee on Economics

# ANSWERS TO QUESTIONS ON NOTICE

**Treasury Portfolio** 

**Budget Estimates** 

1 June - 3 June 2010

**Question: BET 282** 

Topic:Basin water reform

Hansard Page: Written

### Senator Eggleston asked:

- a) I just want to turn now the study you recently released on buybacks in the Murray-Darling Basin. I am particularly interested in the comments in the report about balancing the economic, social and environmental concerns. How can we assess how we trade-off issues among these concerns?
- b) How would we go about estimating what the value of environmental flows from an economy-wide perspective in terms of balancing the value of environmental water against other uses of that water? What are the different techniques available to do this?
- c) Can you expand on what other ways the Government buy water rather than purchasing permanent entitlements?
- d) The report made the comment that there appears to have been insufficient forethought given to the design, scale and implementation of these initiatives. What do we need to do differently to get water reform right then?

### Answer:

- a) The first step is to adopt a framework that allows economic, environmental and social costs and benefits to be accounted for, with an overarching objective of maximising benefits for the Australian community. Next, information that can be used to estimate the net benefits of various environmental watering options needs to be obtained. The types of information required includes (but is not limited to): scientific information on the likely environmental outcomes of each option; the value of irrigation water in productive use; and information on how the community values different environmental and social outcomes. Some of this information may be relatively easy to obtain and some, such as environmental valuations, is very difficult (see below). In practice this means that considerable judgement is required.
- b) Part of the value of environmental flows can relate to downstream water quality. This type of value can be estimated using data on how agricultural production responds to changes in water quality and/or data on how expenditure on remediating water quality (eg salt interception works) varies with water quality. Other types of values include recreational and existence values. These values are generally much harder to estimate, but techniques are available including revealed preference methods (eg the travel cost method) and stated preference studies (eg choice modelling surveys). These methods have limitations. While any estimates should not be interpreted as definitive, they can help to inform judgements as to which option is likely to have the greatest net benefits.

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- c) The other water products discussed in the report include seasonal allocations, leases on entitlements and option contracts.
- d) Australia has made considerable progress on water reform, much of which was undertaken as part of National Competition Policy, and in recent years under the banner of the National Water Initiative. The comments in the Commission's report highlight the need for:
  - clear objectives
  - sound cost-benefit analysis of government policy interventions and infrastructure spending
  - balancing environmental, social and economic trade-offs.