#### Senate Standing Committee on Economics

# ANSWERS TO QUESTIONS ON NOTICE

**Treasury Portfolio** 

Budget Estimates

1 June - 3 June 2010

**Question: BET 121** 

Topic: Murray-Darling Basin #2

Hansard Page: E89-90 (03/06/2010)

Senator XENOPHON asked:

**Senator XENOPHON**—In relation to your research report on market mechanisms for recovering water in the Murray-Darling Basin—which I, and I hope others, found very useful in terms of informing the policy debate—is it fair to say that the commission expressed quite serious concerns about the rigour of approval for irrigation infrastructure projects and that there is a real risk at the moment of inefficient and inequitable investment under the current framework in terms of the current processes in place? Is that stating fairly what the commission's concerns were?

**Mr Banks**—There were concerns as to the relative pay-off from that kind of spending relative to buybacks, for example. As with any infrastructure spending, having a good understanding of the costs and benefits is very important. That was a general observation that was made. I think the other one was that there was some information in that report about what the cost was of saving water through that route versus others. In general terms, that seemed—with some of the information available to us—a much more costly way of going about it.

**Senator XENOPHON**—I do not know whether you can answer this, but was the commission surprised at what appeared to be inefficiencies in the current infrastructure program and what is being proposed in terms of water infrastructure relative to, say, buybacks or other water efficiency measures?

**Dr Kirby**—I think there had been some data around for a while which suggested that infrastructure spending was a relatively expensive way of getting water compared with many other alternatives. So I think that information had been around for a while. There is quite a difference there.

**Senator XENOPHON**—Given the work the commission did on the Murray-Darling Basin and your March report, is there a concern that there could be stranded assets—and I think some water economists, such as Professor Mike Young, talk about having gold-plated assets in some areas—as a result of the relative inefficiencies of going down that path rather than, say, water buybacks?

**Mr Banks**—I guess that as a general proposition—my colleagues might want to comment more—you would be wanting to invest in those assets in a sustainable way, so you would be wanting to invest in areas that were likely to have the highest economic return, which means you need to be comparing an investment in one place with the potential investments in the others that might not otherwise have occurred. To follow your logic, if those investments were inappropriately directed then down

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the track you could find that they were stranded in the sense that the activity was not viable anyway.

Dr Kirby—We do not yet know what the new diversion limits will be.

# Senator XENOPHON—No.

**Dr Kirby**—So it is hard to judge which assets may be in danger of becoming stranded or not.

Mr Banks—Yes. Are you talking about existing assets or—

Senator XENOPHON—Also building new infrastructure, in terms of your concerns about appropriate use of taxpayers' funds with respect to new water efficiency projects. There is another issue which relates to this issue of infrastructure and the sustainable diversion limits. One of the concerns that have been expressed to me by my constituents in the Riverland of South Australia, which could also apply to other areas, is that they went through a process of installing underground pipes and a number of water efficiency measures over many years, largely self-financed-I think there were some government subsidies, but nowhere near the extent of government subsidies that are now being proposed in other parts of the basin—so their scope for water efficiency measures is much reduced because they have already put in the hard vards. My irrigator constituents tell me that following the 1967 drought they took various steps. If you are looking at sustainable diversion limits, isn't it reasonable in the context of the Productivity Commission's work on this-the Wentworth group, a very respected group, looked at 40 per cent across the board-to take into account whether any particular region has previously undertaken water efficiency measures in considering whether a sustainable diversion limit ought to be across the board? In fixing a sustainable diversion limit for a region, should you take into account whether the region is an earlier adopter, if you like, of water efficiency measures? Is that relevant, in your view as an economist, in any public policy framework? It is not a very elegant question; I am sorry.

**Dr Kirby**—It sounds as if the solution to the problem that you are posing would be extremely complex in a planning sense as well for decision makers, but your question does remind me—

**Senator XENOPHON**—Would it necessarily be, though? If you can work out how water-efficient a region is in terms of their being able to produce a tonne of oranges, wheat or irrigated crops so many per cent more efficiently than another region which has open-channel irrigation, do you take that into account?

**Dr Kirby**—It sounds to me as if it is getting to be a very complex, very detailed analysis for the public policy decision maker to undertake.

**Senator XENOPHON**—But complexity in itself should not be something we shy away from in trying to deal with a complex problem.

**Dr Kirby**—I hesitate to use the phrase 'central planning', but that is sort of the challenge that you are moving towards, it seems to me.

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**Mr Banks**—With these sorts of things, it is a bit hard. We were not directly involved in that report, and it is a thick report, but if you like, Senator, we could look at the report and draw from the report—

Senator XENOPHON—Perhaps on notice.

Mr Banks—Yes.

# Answer:

A Sustainable Diversion Limits (SDL) for any one region or catchment (defined to be an area covered by a water resource plan) will in effect be set after deciding what is needed for the environment within that region, and what is needed to contribute to downstream environmental requirements that could be met from multiple different catchments (e.g. for the lower lakes). In relation to how the MDBA will source this given amount of water, one approach might be to make across the board cuts. Another approach might be to make non-uniform cuts, taking into account socioeconomic factors.

The Commission did not specifically address this question in its recent report, but did make the following observations:

- SDLs should be formulated in a way that seeks to balance environmental, social and economic tradeoffs. This would mean that at the margin an additional unit of water would ideally give the same payoff to community wellbeing however it was used, and that costs and returns would be equated across regions. (Recommendation 6.1)
- There may be equity advantages in sourcing water needed for downstream sites on a pro rata basis across catchments, providing that SDLs are calculated in a dynamic sense to account for trade between catchments after the basin plan is introduced (p. 115). This trade would have the potential to undo the economic distortions that a pro rata allocation might create in the first place.

Two additional points can be made based on the Commission's analysis:

- Making allowance in the setting of SDLs to reflect the extent to which a region has already made such investments would need to recognise the status of the capital stock in all irrigation regions. This would require a large amount of information and analysis.
- Attempting to account for these influences in administratively apportioning cuts across regions might be futile where subsequent trade between regions is accommodated within the Basin Plan architecture. This trade would help ensure that the cuts to meet downstream environmental needs are allocated efficiently.