

Submission to Productivity Commission on Water Recovery

Overview

This submission is brief, long on assertion and short on evidence. This is not because the assertions are not defensible, but rather because of limited resources. I would be happy to enlarge verbally should the Commission be interested.

Assertions

1. The key characteristic of Australia's inland rivers (where most irrigation takes place), is massive *variability*. For example, the Darling River at Bourke has an annual *average* flow of approximately 2,500,000 megalitres. The spread around the average is zero (no flow whatever for 12 months) at the bottom end to a flow of 12,000,000 megalitres at the top end. Whilst this may be an extreme example, it is indicative of Australia's highly variable rainfall and run-off.

In such circumstances it is really nonsense to ask CSIRO to calculate "Sustainable Water Yield" which I take to mean the annual amount that can always be extracted. Likewise the setting of Sustainable Diversion Limits makes no sense unless these are set at zero. Such an approach appears to take no account of variability. A fixed extraction amount in a year of high flow could be miniscule in terms of its impact on the environment. The same amount in a low flow year would be excessive.

2. This variability is dealt with by the use of *allocations*. Water *licenses* give irrigators the right to extract water *when allocations are made* and this only happens when flows are sufficient to allow this.

Thus, the purchase of water licenses by the Government will do nothing to increase water supplies when river flows are low and when there are no (or very limited) allocations and will only restrict production when flows are significant.

Much is made of providing irrigators with greater certainty. However, the facts are that Australian irrigators, like graziers, know and accept the risks involved in farming in Australia's highly variable rainfall environment. The only achievable certainty would be a policy of zero extractions.

3.If Australia is to responsibly and environmentally sensitively maximise agricultural production, we need to take two key approaches. We need to *conserve* (read efficient storages) at time of high flows and build infrastructure that is *flexible*. These two key words (conservation and flexibility) need to drive our thinking. The flexibility needs to manifest itself mainly by allowing smaller flows to pass storages unimpeded.

An approach which uses fixed amounts, as with "Caps", "Sustainable Yields" and "Sustainable Diversion Limits" seems to reveal a fundamental misunderstanding of Australia's inherent rainfall and run-off variability.

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