

PORTFOLIO COMMITTEE NO. 5 – INDUSTRY AND TRANSPORT INQUIRY INTO AUGMENTATION OF WATER SUPPLY IN RURAL AND REGIONAL NSW

Highlighted Questions: Mr Mark Taylor, Assistant Secretary, Commonwealth Environmental Water Office

Question 1

Mr JEREMY BUCKINGHAM: Was the effect of that pumping significant? Did it undermine the effect of the release and what the Commonwealth and the State were trying to do?

Mr TAYLOR: It did not totally stop the benefit. We still got a good flow coming through, but it certainly lessened the impact. We are looking to connect flows, so we want volume and connectivity and it just meant the longer the flow comes through the system the more it soaks out. It certainly had an impact.

Mr JEREMY BUCKINGHAM: But this was our water, was it not? This was the Commonwealth's water that was being released, and some may argue that the water was lost due to the pumping and was stolen. We have paid for that water and we release it at certain times to get an impact. We do not get that water back. That was a significant impact and there was a financial cost to the Commonwealth, was there not?

Mr TAYLOR: It is a complex issue. There was a cost, absolutely, because we paid for the delivery of the water as well as for the water itself.

Mr JEREMY BUCKINGHAM: How much?

Mr TAYLOR: I do not know exactly how much that particular cost is.

Mr JEREMY BUCKINGHAM: Could you take that on notice?

Mr TAYLOR: Yes, we will have a look at that.

Response:

On 28 March 2017, the remnants of severe tropical cyclone Debbie became a tropical low and drifted into the Border Rivers catchment. The heavy rainfall resulted in high river flows in the Border Rivers, which would soon flow into the Barwon River.

Following considerable consultation, it was decided to trial a connection flow between the Macquarie River and the Barwon River during the high flows, to benefit native fish. Such connection is unusual, as the Macquarie Marshes is usually a terminal wetland.

For this connectivity trial, the volume drawn from Commonwealth water accounts was 27.5 gigalitres (GL) in the Macquarie catchment. It was expected that much of this flow would be retained in the Macquarie Marshes, and prime the native vegetation for growth in the coming spring and summer. The Commonwealth Environmental Water Office (CEWO) commissioned additional flow and fish monitoring for this event: the results are expected in coming weeks. Additionally, NSW contacted landholders and requested that they do not pump during the event, despite them being entitled to under NSW regulations. They agreed voluntarily.

During the environmental watering action, on two occasions, irrigators pumped some of the water. NSW OEH called the landholders and requested that this diversion be stopped, and it was on each occasion. There was no breach in licence conditions, the landholders were entitled to pump. Initial estimates were that 3.2 GL flowed through to the Barwon River, and about 0.9 GL was pumped out by licence holders during the event. The pumped volume was approximately 3% of the total release of 27.5 GL with a market value of between \$100,000 and \$120,000. The associated delivery costs were approximately \$17,000.

While the objectives for the environmental watering event were largely met in this instance, NSW could consider developing a mechanism in water regulations or Water Resource Plans to exclude licence holders from pumping for the duration of a flow event that was created exclusively or mainly using environmental water. There is no third party impact on irrigators, as the flow event would not have existed had it not been for environmental water being released into the river.

Question 2

The Hon. MICK VEITCH: The good folk in Tumut say they feel that the upstream environment is being killed off for the downstream rivers. They say that they have issues with bank slumping because of high volumes of water being pushed down the Tumut River. How do we publicly account for the environmental outcomes you are trying to achieve with each of your environmental flows?

Mr TAYLOR: That is a good question. We do a lot of reporting at the moment, but I think we could be more effective at building a better understanding about the benefits of environmental water across the general community. That is clear and understood. I want to be frank about that. We are certainly getting outcomes. We report through the Parliament and through the Murray-Darling Basin Authority itself. You will see plenty of information on our websites about the monitoring we are doing. We have a serious investment in long-term monitoring. I suspect that they are not the sorts of things your community is thinking about. There is a lot of that information, and I can provide it to the Committee if it will be of any use.

The Hon. MICK VEITCH: Please take that on notice.

Mr TAYLOR: By all means. We can certainly provide that. I can talk a little more about the sorts of outcomes we get if that would be useful.

Response:

CEWO Monitoring and Evaluation:

The CEWO is investing over \$30 million as part of the Long Term Intervention Monitoring (LTIM) projects to monitor and evaluate long term environmental outcomes and support the adaptive management of Commonwealth water holdings. Consistent with our role under the Water Act 2007 and Basin Plan, longer term monitoring focuses on understanding the contribution of Commonwealth environmental water to the environmental objectives of the Basin Plan 2012 (Chapter 8, Environmental watering plan) and the intermediate targets towards achieving these objectives up to June 2019 (Schedule 7). The project is managed in partnership with over 30 research bodies including some of Australia's leading regional universities, scientific research institutions and state agencies to undertake monitoring and evaluation across seven river valleys within the Murray-Darling Basin.

Information on monitoring and evaluating Commonwealth environmental water is available at: <http://www.environment.gov.au/water/cewo/monitoring>

Design and logic Information as well as results from the CEWO LTIM projects is available at: <http://www.environment.gov.au/water/cewo/monitoring/ltim-project>

All monitoring results are published on the CEWO website including annual evaluation reports for the:

- [Junction of the Warrego and Darling rivers](#)
- [Gwydir river system](#)
- [Lower Lachlan river system](#)
- [Murrumbidgee river system \(including the Tumut River\)](#)
- [Edward-Wakool river system](#)
- [Goulburn River](#)
- [Lower Murray River.](#)

The CEWO also evaluates the contribution of Commonwealth environmental water at the whole of Basin scale, with first year 2014-15 evaluation reports available

here: <http://www.environment.gov.au/water/cewo/publications/2014-15-basin-scale-evaluation-cew-report-and-appendices>

Bank Erosion:

The CEWO, in partnership with the Goulburn-Broken Catchment Management Authority and the University of Melbourne, have recently investigated the impacts of environmental flows on rates of bank erosion in the Goulburn River. It was found that while rates of bank erosion and deposition are related to inundation duration, the effect of environmental flows on bank condition is very minor compared to changes that occur under the remainder of the regulated flow regime. In fact, it was found that managed recession of environmental flows events allows the formation of sediment drapes, providing favourable conditions for vegetation establishment which reduces bank erosion.