

## WITNESS STATEMENT

**Name:** Mr Tim Stubbs  
**Occupation:** Director, Wolfpeak, Principal Environmental Engineer  
**State:** NSW

---

### Background

1. I am making this statement to staff of the Murray-Darling Basin Royal Commission.
2. I am currently a Director and the Principal Environmental Engineer of WolfPeak. I, together with another business partner, established WolfPeak in 2011, a consultancy firm specialising in environmental and engineering services.
3. I attained a Bachelor of Engineering from University of Newcastle in 1996.
4. From November 2009 to July 2013, I was employed as an environmental engineer with the Wentworth Group of Concerned Scientists (**Wentworth Group**). My role was to undertake and lead Wentworth Group's research into water reform in the Murray-Darling Basin.
5. In particular, with strategic guidance and instruction from members of the Wentworth Group, I researched and analysed information and assisted with developing Wentworth Group's reports and submissions concerning the Murray-Darling Basin Authority's (**MDBA**) Guide to the Proposed Basin Plan (**the Guide**) published in October 2010, the proposed drafts of the Basin Plan released for public consultation in November 2011 and May 2012, and the final Basin Plan, which was passed in the Australian Parliament in November 2012.
6. While working for the Wentworth Group, I was required to regularly communicate with staff of the MDBA, seek information and clarifications from them. This communication was often informal in nature in the sense that they involved numerous telephone conversations or meetings with staff of the MDBA.

### Process to reach 2,750GL

7. The Guide released by the MDBA proposed a long-term average sustainable diversion limit (**SDL**) between 3,900GL and 6,900GL. These numbers correlated well with some rough preliminary research and analysis, undertaken before the release of the Guide, with Wentworth Group members, and others which showed that the likely volume required was around 4,000GL. This was reflective of most scientific views at the time.
8. In the subsequent draft Basin Plans released for consultation and the final Basin Plan, the proposed SDL reduced to 2,750GL. It was, and still is, unclear to me how the MDBA reached this reduced volume in circumstances where the Guide had proposed between 3,900GL and 6,900GL. I attach to my statement the following copies:

- 8.1. 'Plan will leave us high and dry, warns expert' published in The Advertiser on 27 September 2011;

Signature   
Date 23/10/18

Witness   
Date 23/10/18

- 8.2. 'Scientists want "manipulated" Basin plan scrapped' published in ABC News on 19 January 2012;
  - 8.3. 'Murray-Darling Basin Plan to push up River Murray salinity' published in The Advertiser on 20 February 2012; and
  - 8.4. 'Shifting the Watermarks' authored by me and published in Australasian Science in April 2012.
9. In my analysis and research relating to the Guide, I understood the MDBA to have adopted a modelling process based on a number of hydrologic indicator sites. When a volume of water was run through the model, the model would show whether each of those hydrologic indicator sites would likely receive the water it required. Therefore the model was able to show the likely environmental outcomes as a result of any particular proposed SDL. This modelling was based on best available science at the time.
  10. I understood the MDBA used the same modelling in order to determine the SDL of 2,750GL in the Basin Plan. As part of this process, I believe the MDBA modelled different scenarios at the following volumes: 2,400GL, 2,800GL, and 3,200GL. However, I could not understand how the MDBA ultimately determined 2,750GL as the SDL in the Basin Plan based on such modelling.
  11. Among other things, I did seek clarification from MDBA staff as to how the SDL of 2,750GL, including what the SDL would be without accounting for any social or economic outcomes. I never received any satisfactory or detailed response to my inquiries.
  12. I also did not understand why the MDBA, in using the hydrologic indicator sites modelling, did not identify in the Basin Plan the targets from which such modelling delivered an SDL of 2,750GL. I attach to my statement a copy of my evidence given to the Senate Rural and Regional Affairs Inquiry into the Basin Plan on 23 November 2012.
  13. From my experience with MDBA staff and work with the Wentworth Group, I do not believe the Basin Plan and in particular, the setting of the SDL, was based on the best available science at the time. In my opinion, the 2,750GL appears to reflect a policy decision.

**Ground water take**

14. In addition to the SDL for surface water, it was also concerning to me that the Basin Plan proposed an increased SDL in groundwater take. This was concerning because groundwater is important to the maintenance of a healthy river system, particularly at times when a river system is subject to significantly low periods of rainfall, such as a drought. In reality surface water and groundwater naturally interact and connect.
15. I recall raising concerns regarding the increased SDL in groundwater take with various staff of the MDBA. I did not receive any clear justification or explanation for it.

Signature .....  
Date 23/10/18 .....

Witness .....  
Date 23/10/18 .....