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Submission to the Standing Committee on Regional Australia:

Inquiry into the Impact of the Murray Darling Basin Plan in Regional Australia

Parliament House Canberra ACT 2600

I am writing re the *Guide to the proposed Basin Plan* recently released by the Murray-Darling Basin Authority.

As a former Director, Coorong Lower Lakes and Murray Mouth Projects in South Australia, my concern is that the issue of *salt export* is not prominent in that document.

There are references to the salt issue e.g. on page 113 of the Overview, and again on page 118, where there is a reference to the **two million tonnes of salt** that the Murray transports in an average year. However these references are not translated into the real impact of the salt issue on South Australia.

In the last five or six years (until the recent flows returned), the amount of flow down the Murray has been insufficient to eject the salt carried by the River out through the Murray Mouth - the **only** point where it leaves the Murray-Darling Basin. That meant that the Basin's salt ended up in Lake Alexandrina and Lake Albert for those years - the reason that the salinity levels in these lakes rose so sharply and rendered them useless for drinking water for humans, farm animals and vineyards.

To put it another way, South Australia was the salt dumping ground for the entire Basin for those five or six years. Given that around 90% of that salt load comes from the upstream states - Victoria and New South Wales in particular - South Australia carried the salt load for the upstream states for that period.

The Basin Plan is essentially a once-in-a-century chance to set the operating policies for the River. We need to take account of the likely future variability of rainfall and likelihood of lower flows from here onwards, and construct a set of arrangements which will provide as much certainty as practical to the future users of water from the Basin.

If the Basin Plan does not deliver sufficient flows each year to flush salt from the Basin through the Murray Mouth, then South Australia - and the Lower Lakes in particular - will increasingly become a semi-permanent dumping ground for the Basin's salt.

Equally, if the Plan cannot deliver the required water to flush the salt - a natural artifact of the Basin - then it is hard to describe the Plan as addressing sustainability for the Basin. **Sustainability should be** 

for all of the States not just the upstream ones. South Australia has done the heavy lifting as far as salt in the last five or six years. The new Plan should ensure that it does not have to do it in an ongoing way.

My understanding is that a figure of between an additional 3000 and 4000 gigalitres per annum of water is required to flush the salt out through the Murray Mouth in an average year. Coincidentally, a figure of this order will also have broader environmental benefits for the River and its environs.

It is tempting to suggest that this additional water should not be provided to South Australia and that we should simply open the barrages and let the sea enter Lakes Alexandrina and Albert on an ongoing basis. However, both of these lakes are very shallow (two to four metres for the most part) and are subject to net evaporation losses of about one metre per annum! Should the barrages be opened and flows down the Murray be insufficient, the Lower Lakes would, within two to three years, become hypersaline lakes incapable of supporting either a healthy marine ecosystem or a freshwater ecosystem. They would be the dead lakes of Australia.

To summarise, it's not South Australia's salt - it's the whole Basin's salt; there needs to be a whole-of-Basin response in terms of adequate water to flush out the salt each year.

Yours sincerely

Peter Croft