Murray-Darling Basin Plan Submission 362

8<sup>th</sup> December, 2015

To the Parliament of Australia

Select Committee Inquiry into the Murray Darling Basin Plan

2015 - 2016

GPO Box 3001

**CANBERRA CITY ACT 2601** 

## **Lock Zero**

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# **Automation of Goolwa Barrage Gates**

#### 1. Lock Zero

Build Lock Zero below Tailem Bend this creates a new pool of 0.75 AHD between Lock Zero and D/S Lock 1 and protects Adelaide's water supplies and the Tailem Bend, Murray Bridge, Mannum and Swan Reach pumping stations. It will eliminate the damage the Lower Murray suffered during the drought of 2008/2009. The Lower Lakes pool can be lowered to 0.50 AHD (now 0.75 AHD) save 694GL.

#### 2. Region 5

This region should have the new Lock Zero and be divided into two sections :-

## 1. The Lower Murray River Region

Downstream from Lock 1 at Blanchetown to Upstream of Lock Zero below below Tailem Bend. This creates a new pool of 0.75 M AHD between Lock Zero and D/S Lock1 and protects Adelaide's water supplies and the Tailem Bend, Jervois, Murray Bridge, Mannum, and Swan Reach pumping stations. It will eliminate the damage the Lower River Murray suffered during the drought.

## 2. The Lower Lakes Region:-

Downstream from Lock Zero to the Upstream fo Goolwa Barrages.

The Lower Lakes pool can then be lowered to 0.50 M AHD (now 0.75 M AHD) save 694 GL.

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## 3. Re- Engineering the barrage gates

The Goolwa Barrage gates to be an automated system and with the proper management will be able to control the water levels of Lakes Alexandrina and Albert. The pool level could be increased to 0.75 M AHD, open the gates at low tide and flush the Goolwa channel out through the Mouth.

## 4. Drought Lake Level a minimum of 0.05 M AHD.

The Lower Lakes during dry periods when the levels reach 0.05 M AHD open the gates and allow the sea water in to prevent levels dropping further. Gates during those intermediate dry years then only allow enough fresh water to be used to prevent hyper-salinity not water level. i.e. operation changed from maintaining salinity below a set level. When there is plenty of water, levels could be maintained at present level 0.75 M AHD if required.

#### 5. Lake Albert

Lake Albert to become a transit lake by constructing a channel into the Coorong with auto gates or a CONNECTOR (refer Submissions 257 & 265to ) the Coorong.