Our Water Supplies
The importance of the River Murray

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The Mt Lofty Ranges Catchment

60% of the water supply in average rainfall year
20% - 95% of water supply - depending on rainfall
The Water Supply Situation

- 120 GL/a from Mt lofty Ranges catchments
- 200 GL/a from River Murray
- 100 GL/a from seawater desalination plant (when completed)
- 40% wastewater recycled for non potable applications
- 20 GL/a storm water capture and reuse for non potable applications
- 135 GL/a current consumption (200 GL/a prior to the drought)
Some Facts

- Adelaide abstracts 80 Gl/a from the Murray in an average rainfall year
- Draw on the Murray is <1% of total diversions and <2% of average flow to SA. 70-80% of water used is for irrigation
- Equivalent to 7000 hectares of pasture irrigation
- 35% of MDBC abstractions are growing grass for stock grazing
- Minimum Entitlement Flow of 1850 GL/a was originally negotiated for SA.
  - Suspended under drought management arrangements
  - In SA, 600Gl allocated for irrigation, 150 Gl for urban uses, 800Gl evaporates in Lower Lakes
Some More Facts

• 80% of Irrigation in Australia is in Vic. and NSW and 93% of water is applied by flood irrigation “technology”
  • 4% sprinklers, 2% drippers, 1% microsprays.

• One wholesale irrigation company in Vic holds licenses for water almost 2x average flow of RM to SA

• Three irrigators in NSW and Vic lost 840Gl in 2001/02 in evaporation and seepage from 13000 km of open earthen channels, before it reached the growers. This is 150% of SA’s total irrigation use.
The MDBA Plan

- MDBA produced a Guide to the Plan in 2010 – rejected as a result of irrigation industry backlash.
- The Science was disputed but returning 4 000GL to the River only returns status to 1970.
- The legal basis of the new MDB Act was “clarified “ by Federal Minister (Burke) – led to resignation of Chair Mike Taylor and appointment of Craig Knowles. CEO Rob Freeman “resigned” in May 2011 and his replacement was announced the same day - the former Deputy Secretary of the Federal Dept. of Agriculture.
- The legal basis of the MDB Act was clarified by legal experts last year indicating that Taylor’s view was correct and that the basis for the current new direction is probably unconstitutional. This position has recently been confirmed by legal advice to the conservation movement. A similar position is held by the SA Government.
The MDBA Plan contd.

- The Draft Plan released in Dec 2011 suggests 2750 GL be returned to the River system, but suggested an increase of 2760 GL can be taken from various groundwater sources.

- Deadline for plan actions was moved out to 2019 and the diversion limits in the current plan were to be revised in 2015. “The rain now makes urgent action less critical”

- It assumed no risk to long term diversion limits from climate change

- It suggested that the higher environmental flows suggested by CSIRO, other Basin experts and the conservation movement could not be transported in the river system due to “system constraints” yet the flows at the time the Plan was released were nearly 50% higher than those constraints.
The MDBA Plan – contd.

- The 2010 Guide provides details of environmental requirements for 18 key environmental assets in the Basin - 3,860 – 6,980 GL to be recovered from existing uses.

- The 2011 Draft Plan provides selective and limited information on only 4 sites with no info on the other 14. The Draft Plan accepts the ecological science but ignores the modeling results that derived the above flow requirements.

- The 2750 GL includes existing water buy backs and efficiencies from infrastructure improvements of 1,282 GL. How much of that is actually water?
The MDBA Plan

- The SA Govt. made a large number of recommendations and observations early this year.

- The MDBA responded with an update recently which made few changes.

- No alteration to the proposed water recovery target for 2019.

- Has indicated that they will monitor the ground water diversions and if a problem arises action will be taken. MDBA has rejected the SA view that no additional ground water should be taken unless the evidence is provided to prove it is not connected to the surface water system.

- MDBA has removed the raw water quality targets for public water supplies.