
# Feedback on Socio-economic Impacts of the proposed Management Actions in the Long Term Management Plan for the Coorong, Lower Lakes and Murray Mouth Region

7 August 2009

**Introduction**

Thank you for this opportunity to comment. LakesNeedWater.org has reviewed the Proposed Management Actions Table for the Coorong, Lower Lakes and Murray Mouth.

We applaud the stated goal, which is "to secure a future for the Coorong, Lower Lakes and Murray Mouth as a healthy, productive and resilient wetland system of international importance."

We also support the prudent decision not to take water recovery targets into account, for two reasons:

1. it is unclear exactly how much water will in fact be recovered, and
2. any recovered water should be prioritised for those parts of the Murray Darling Basin most in need of freshwater

However, the proposed management actions erroneously exclude or de-emphasise the use of seawater in the Lower Lakes as a viable, long-term management strategy.

It is unacceptable to LakesNeedWater.org supporters to have a 'no water' option. The socio-economic issues for having 'no water' are great. The risk involved in waiting for freshwater is too large due to the acid sulphate soil issues. We believe returning the lakes to their pre-barrage estuarine state which involves reconnecting the Lower Lakes to the Coorong, is the best environmentally sustainable option with the least amount of catastrophic risk. Our reasoning is below.

**Analysis**

**Use of seawater**

LakesNeedWater.org strongly supports the scientific view that the water problems of the Lower Lakes of the River Murray can, and should, be decoupled from those of the rest of the Murray-Darling Basin by virtue of the Lower Lakes' proximity to the sea. In contrast, all of the existing management actions are predicated on the simplistic assumption that Lower Lakes should be returned to a purely freshwater system. This is despite the fact that there is overwhelming scientific evidence supporting the intrusion of seawater in the Lower Lakes for thousands of years during times of low flows. Prior to the construction of the barrages, the Lower Lakes were estuarine in nature and not purely freshwater systems. Please refer to our

website http://www.lakesneedwater.org/case-for-seawater .

Specifically, only one management action, Action C10,

> *"Introduction of minimal amounts of seawater to avert acidification of Lake Alexandrina,"*

even considers the use of seawater and even then it is regarded as a last-resort option with seawater to be used only in minimal amounts. The rationale states that it "may avoid acidification (although could make it worse)" whereas in reality there is no scientific evidence to suggest that seawater would make the situation worse. In fact, inundation by seawater has been demonstrated to be a proven technique for managing acid sulphate soils elsewhere in the world.

**Climate scenarios**

By now it is also widely recognized that the "Wet" and "Median" climate scenarios offered by the CSIRO are optimistic scenarios, not probable scenarios. Accordingly, planning should focus on the "Dry" and "Extra Dry" scenarios, with realistic assumptions about future freshwater flows, not optimistic ones.

This view is also supported by DEH chief executive, Allan Holmes, who states:

*"Government strategies to manage the acidification problem have changed in recent months from assuming Murray flows would return to normal to* ***expecting little flow for the next five years in the river.*** *"* (http://www.abc.net.au/news/stories/2009/07/29/2639993.htm)

Further, the use of seawater should not just be limited to the "Extreme Dry" scenario, but is equally applicable to the highly probable "Dry" climate scenario.

**Barrages**

The management actions also gloss over the highly adverse environmental impacts of the barrages. Although the importance of fish passages is acknowledged, for example in Action A10,

> "Fish passages through to the Coorong at Goolwa,"

The management actions do not adequately address the deleterious effects of the barrages. The presence of the barrages, by causing an abrupt change in the water environment and reducing tidal range, has contributed to massive habitat degradation. Please refer to our website page http://www.lakesneedwater.org/barrages .

Also please refer to the report The River Murray Barrages Environmental Flows Report produced by the Murray-Darling Basin Commission in 2000.
http://www.mdbc.gov.au/__data/page/1482/full_barrages.pdf

**Ramsar**

The Ramsar listing is for a freshwater system that has been artificially sustained by the presence of the man-made barrages for 70 years, and by now it should be clear that the Murray-Darling Basin no longer supports the flows to artificially sustain this purely freshwater regime. Meeting the Ramsar obligations, would be much better served by an estuarine scenario than by that of the RLCAG 'no water' scenario, since a modified but healthy estuarine wetland would be created, rather than an acidified small pool of water, with vast, exposed dry lakebed exposed, exacerbating the future potential for increasing acidification. Please refer to our website page http://www.lakesneedwater.org/ramsar .

**Flow management**

LakesNeedWater.org believes it is feasible that barrages and channels could be modified to maximize tidal flows and minimize sand loading, thereby creating a healthy estuarine system. Other estuarine lakes, such as the Gippsland Lakes and Mandurah's Peel-Harvey estuary are healthy ecosystems. Please see our website page http://www.lakesneedwater.org/tidal-flows for a more detailed explanation.

**Lake Albert and Lake Alexandrina**

Lake Albert and Lake Alexandrina are being sacrificed under a freshwater only regime in both Dry and Extreme Dry scenarios. This is unacceptable and should be considered a complete failure of the freshwater only plan. From the Management Actions Table B3:

> *"Operating Lake Albert at varying levels under a Dry or Extreme Dry scenario is simply not possible."*

Please see our website for more information on what could be done for Lake Albert, http://www.lakesneedwater.org/lake-albert .

**No Plan for Catastrophic Failure**

The Management Action Table does not seem to factor in the risk of the situation where by the bio-remediation of Lake Alexandrina fails, there is no fresh water due to the continuing drought, and the acid sulphate soils in Lake Alexandrina have turned. Even seawater won't help at this late stage.

**Membership of Local Knowledge Reference Group**

LakesNeedWater.org believes that DEH's Local Knowledge Reference Group should be amended to include experts from the marine sciences and hydraulic engineering as the current membership lacks experts qualified to assess the use of seawater as a long-term management strategy. Further, the membership is strongly biased to members publicly espousing a freshwater-only solution and does not reflect the majority of Lower Lakes community opinion and recreational interests. LakesNeedWater.org is concerned that these deficiencies and biases have steered DEH away from considering the full range of management actions.

**Recommendations**

We recommend that the Long Term Management Plan for the Coorong, Lower Lakes and Murray Mouth Region be rewritten from the standpoint of using seawater as a viable, environmentally sustainable, and long term solution.

We recommend that the membership of the "Local Knowledge Group" be modified to include marine science and hydraulic engineering experts and have a more balanced representation of local community and recreational interests.