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[Mr. Tony Windsor MP, Chairman of the Regional Australia Committee Inquiry](#)

Cc The Secretariat

House of Representatives Standing Committee on Regional Australia - March 30<sup>th</sup> 2011

**Re: Inquiry into the Proposed Murray Darling Plan**

We submit this supplementary submission addressing an area of crucial importance which was inadvertently left out of our original submission for the Committees consideration.

The Murray Darling Association (MDA) has noted for some years significant 'holes' in the nation's meteorological and hydrological data base. This is of concern as the data base is being used in the development of Government Policy, identification of flood inundation areas and now in support of the inquiry into the Murray Darling Plan. In addition, this data forms the basis of major civil works that Councils undertake, such as water treatment plants, which often are 'over engineered' at inflated capital cost to allow for incomplete hydrological data.

Our Council members generally collect meteorological and hydrological data. An example among many, is the Toowoomba City Council which collects rainfall data around its reservoir and reservoir data which are provided to the Bureau of Meteorology (BoM). We believe that Council also has an additional network of rainfall measurement sites as well as an annual budget of \$180,000, excluding equipment, where the data is locally stored. This data is generally recorded in a format that is not readily accessible to neighbouring Councils, the MDA nor the Government.

*The main reason for this is, there is no consistent format by which data collated is actually able to be transferred to a central location where there is a repository that would enable better forecasting and eventually a means by which the data can be quickly interpreted into an information and warning system such as what has recently occurred downstream of the freakish events that even caused a severe loss of life in Queensland recently.*

In recognition of this eventuality, and knowing that such data collection is haphazard and not interconnected to the parties that would benefit from such a system, the MDA sought to rectify the situation and in September 2006 applied to the National Water Commission (NWC) in collaboration with Sentinel under the competitive NWC National Water Initiative Grants Program.

The objective of the funding application was to ensure that proven, common data management software, specifically designed for Meteorological, Hydrological and the spectrum of Environmental Sciences applications could be adopted by our membership. The intent was to secure the historic and current catchment data in a uniform format that would be accessible to all stakeholders including BoM. At the time the software, *DataSight* was in use in 8 countries, now 15 countries, whose users include one of our members. The NWC rejected the application stating that the data was not required by stakeholders, unfortunately a decision which subsequent events have proven to be wrong.

Subsequent to this and following the election of the Rudd Government the MDA, in February 2008, the MDA National Chairman and General Manager, met with Senator the Hon Penny Wong, the then Minister for Climate Change, Energy Efficiency and Water, to secure support to initiate the objectives outlined in the NSC application. Again we were advised that the data was not required or that the government had already commissioned the CSIRO and the BOM to carry out all the studies that were felt necessary for the development of a future plan under the guidance of the proposed Murray Darling Basin Authority.

*Another critical piece of information that we felt would assist in providing a better understanding of how the water resources of the Basin were being dissipated, was a means of knowing what volumes were being lost in evaporation, within the basin. A full survey of all water storage bodies, their various depths in the case of on-farm storage, their surface area relative to the depth and monthly evaporation recordings to ascertain just how much of stored runoff was being lost annually, would be substantial and could be dramatically reduced.*

This data, we felt would be critical in determining if there was to be any investment in on farm storage upgrades, what volumes of water would be saved by improving the efficiency of those storages as well as knowing how much is lost in all the public storages annually.

A relatively crude survey by the MDA had concluded that the losses were well in excess of 3,000 gigalitres per year and that through some investment in re-engineering of the all storages identified, public and private as worthy of change, would most likely save a third or approximately 1,000 gigalitres per annum that would either stay in the rivers, improve end of catchment flows or improve better on farm use.

The change in the climate cycle from extended drought to a wetter regime over the summer of 2010 - 2011 resulted in significant meteorological events. This highlighted the urgent need for the historic data being made available to all stakeholders, in particular the MDA members as the near catastrophic impact throughout the MDA's catchment area demonstrated. This has impacted on lives, property and agriculture pursuits and the national economy.

In talking to fellow witnesses to the Inquiry into the Proposed Murray Darling Plan and our members it was clear that the inability to access to historic meteorological, hydrological and flood records is a common issue. If it had been available to the Committee its work would have been simplified and the foundation of the final Report stronger. We strongly believe that this situation should be rectified as a matter of high priority.

We are also aware that Australia's Insurance industry is seeking the nations flood inundation data and maps from the Commonwealth on which to base future insurance coverage. It is understood that for regional Australia, the flood level mapping data often does not include the underlying historic records held by our Members. This data would become available to stakeholders during the implementation of our proposal.

We further recommend that the Committee advocate to the Government that the program as outlined in the NWC National Water Initiative be adopted as a matter of urgency.

The cost of implementing the MDA Sentinel proposal as outlined in the application to the NWC National Water Initiative program was \$3 million in 2006 covering all 120 Member Councils. An assessment of 20 Councils Members of the MDA confirmed that they held \$8 million in historic data, (*This excludes the costs of personnel and equipment.*) This provides a \$5 million return on investment exists over project cost in just 20 Councils which when extrapolated to the full 120 Councils membership is expected to increase the return on investment by \$8 million.

The program which includes software supply, training and retraining, technical support both 'help desk' and ongoing regional support, has been proven in use within our membership.

As a significant number of our members are not wealthy Councils, it is beyond their fiscal means to participate in the program without Government support. It was on this basis that the application to the NWC was prepared to ensure that all MDA Member Councils that reside adjacent to any of the mainstream rivers and tributaries are able to participate.

In summary we strongly urge the Committee to include in its Report Recommendations that the historic meteorological, hydrological and flood record data held by our membership be secured and made available in a format accessible to all stakeholders.

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