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To: The Secretary, Senate Standing Committee on Rural and Regional Affairs and Transport
Parliament House, Canberra ACT 2600

From: Joan Gibbs, Lecturer in Ecology, University of South Australia

Date: 11 September, 2008

Subject: Inquiry into water management in the Coorong and Lower Lakes

Dear Senate Committee,

My submission to the Committee will conclude with a request to convert currently unsustainable livelihoods in the catchment area into more sustainable natural systems by restoring native grasslands for smaller enterprises. We have some excellent examples of permaculture farms at Narrung that are not suffering from the water emergency, because they do not profit from longterm degrading practices.

Terms of Reference:

1. Water management in the Coorong and Lower Lakes
 - a. Volume of water to replenish CLL: 1000 GL is the minimum needed to have good benefits to the Coorong ecosystems (CSIRO); 4000 GL is the environment share for the MD Basin.
 - b. Options for sourcing and delivering this water
 - i. Voluntary contributions, once-off: voluntary means EVERYONE contributes equally by percentage (50%?), for no compensation (otherwise it is not voluntary)
 - ii. Acquisition of sufficient water: compulsory closing off the bigger users, like the Barmah-Milera Forest (150 GL)
 - iii. Transmission and delivery of water: small, temporary floods are needed at the precise time and at the precise depth to stimulate red gums to germinate and to allow Ruppia (fish food) to reproduce (CSIRO, CLLAMM group);
 - iv. Commonwealth powers and legislative barriers: find out from countries that were successful in delivering and regulating water, what things did not work and what things did work. Ramsar and EPBC act have been ineffective so far at protecting ecosystems from man-made drought. The dominance of economy over the environment should be reversed, as: "There is no sustainable economy without a healthy environment."
 - v. Convert irrigation infrastructure spending into payments for ecosystem services (PES – see Convention on Biodiversity 2008) to those who will change from wasteful irrigation into perennial plantations based on native plants, especially native grasses, which retain water and carbon in healthy soil.
 - c. Instead of water buybacks, please offer incentives to land managers who will provide ecosystem services by retaining stubble, changing from annual crops to perennial native grasses, reducing the size of the enterprise, erosion control and soil organic carbon retention and buildup. Buybacks of irrigation licences can only give a maximum of 200 GL, and this may not even reach the Coorong.
 - d. Please investigate and reward the farms that have lived sustainably at a lower income by not over-using the water resources.

Please tell us how you will monitor the effectiveness of the decision for achieving longer-term sustainability targets? The target is: economic accounting for the environmental share of water for the Coorong and Lower Lakes.

Thank you,