

## **Innovation in Governance of Managed Aquifer Recharge**

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### **ABSTRACT**

Managed aquifer recharge governance with some exceptions is generally in need of a major overhaul in two areas; water quality protection and water allocation. This talk explores contradictions in health and environmental protection guidelines due to inadequate attention to the growing scientific understanding of MAR. These departures from a sound base have potential to make infeasible proposed operations that if risks were rigorously assessed would in other jurisdictions be declared safe and economically viable. The science and technology base necessary to support good guidelines, particularly in light of water reuse will be discussed. Secondly, water entitlements of water bankers and rights to transfer allocations warrant exploration due to their potential to induce private investment to secure water supplies and improve catchment water use efficiency. The difficult problems of over-allocated groundwater resources, where MAR can have beneficial effects (but sometimes claims are exaggerated) and allocation of aquifer recharge capacity among multiple water bankers, warrant further exploration. In each case positive examples or proposed constructs are put forward that if adopted may give greater certainty to obligations and entitlements concerning water quality and quantity for those managing aquifer recharge.