

# STORAGE DAM

## EVAPORATION CONTROL

CRC Irrigation Futures, National Program for Sustainable Irrigation



## Monolayer Research

Chemical monolayer seen below spreading across the water can be used to slow down evaporation. The monolayer alters various properties of the water surface including wave or ripple action and reflectivity (albedo).



Further research is being undertaken through the CRC for Irrigation Futures to gain a better understanding of the action of chemical monolayers upon water surfaces, and therefore improve their performance in reducing evaporation.

More efficient ways of applying the monolayer to the water surface are being developed. Sensors for identifying monolayer on the water surface have been researched and a temperature based measuring system is being developed.

This monitoring system could be linked to a computerised network of applicators to optimise the delivery of the chemical accounting for wind direction and other environmental factors.



The impact of natural microlayers found on the water surface on the performance of monolayers is being researched and trials of the performance of different products have been completed.



The possibility of developing improved monolayer products is being investigated by the CRC for Polymers. Such products would have better attributes for reducing evaporation and would be more resistant to movement by wind and breakdown by bacterial activity.



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