

# 10 Recommendations

## Management options

- The economic and social costs and benefits of the various management options need to be associated with their physical impacts on stream flow, salinity and salt-affected land.
- The long-term sustainability of commercial tree plantations needs to be determined. Issues to be addressed include the incentives for private owners to embark on a new rotation after harvesting, maintenance of soil fertility, and the possibility of salt accumulation in the root zone if trees are planted where deep groundwater is discharging.
- The practicality of groundwater pumping needs to be tested in field trials whose design is based on computer modelling. The design phase should include estimation of the reduction in salt-affected area to be expected as a result of pumping. The trial should provide information to estimate the effectiveness of groundwater pumping in reducing salt load discharged to rivers, and to estimate the costs of larger scale implementation.

## Monitoring and evaluation

- This report should be updated with more recent data at 5 year intervals until the achievement of the salinity target for inflows to Wellington Dam.
- Monitoring of stream flow and salinity should continue at mainstream gauging stations to test whether the peak salinities have passed and when future treatments have a discernible effect on salt loads and stream flow.
- A study should be undertaken to determine appropriate annual cycles of Leaf Area Index (LAI) for lucerne under practical grazing regimes and water availability, to better model the salinity benefits of using lucerne as a management option.

