

Recommendations

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- 1 That the review of the SWCM Act consider extending the frequency of the Catchment Audit to five years. Consideration should also be given as to the potential for rationalising catchment audit processes within the Catchment as natural resource management frameworks evolve.
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Minimising contamination of raw water supply

- 2 That SCA develops a catchment model for the purpose of estimating nutrient pollution loads (based on land use) for each sub-catchment.
 - 3 That SCA identifies the cause of exceedence of the Bulk Water Supply Agreement for pH and algae at Cascade and Greaves Creek water filtration plants.
 - 4 That SCA identifies the cause of the 'high' incidences and long duration of algal blooms in its storages.
 - 5 That SCA further investigates the reason for oocysts of *Cryptosporidium* detected at low-levels at the inlet to Prospect water filtration plant between October and December 2001.
 - 6 That SCA investigates the source of *Cryptosporidium* and *Giardia* oocysts and cysts measured at Gibbergunyah Creek.
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Managing water resources

- 7 That DIPNR expands research into the impact of different levels of extraction of water from rivers and the harvesting of water in farm dams on ecosystems and flow regimes within the Catchment in order to establish sustainable extraction levels and to guide resource allocation and management.
 - 8 That DIPNR develops and implements a monitoring plan and reporting requirements that provide reliable information on groundwater extraction within the Catchment.
 - 9 That DIPNR expands research to establish and refine estimates of sustainable yields from groundwater systems within the Catchment.
 - 10 That DIPNR and SCA expand research to better understand the interaction between surface and ground water systems within the Catchment.
 - 11 That DIPNR develops and implements appropriate mechanisms to enable the reliable reporting of environmental flows for relevant sub-catchments.
 - 12 That DIPNR initiates an investigation of the management of large flows during transfers under the SCA Water Management Licence to minimise impacts on the health of the ecosystem.
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Protecting and improving land condition

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| 13 | That SCA prepares a detailed land use map for program planning purposes. The resolution and categorisation used for this map should be sufficient for robust nutrient export and erosion modelling. |
| 14 | That relevant agencies commission the development of methods and tools to indicate the effectiveness of management practices applied to reduce water impacts from different land uses, for use in nutrient export and erosion modelling. |
| 15 | That SCA sets specific time frames for progressing and completing risk assessment and management processes for activities identified as 'sites of pollution and potential contamination'. |
| 16 | That programs addressing soil erosion in the Catchment demonstrably target areas with high estimated erosion rates. |
| 17 | That DIPNR in conjunction with SCA develops a land degradation map incorporating land use and land management for erosion risk management and future audit reporting. |
| 18 | That DIPNR and SCA investigate the development of a methodology to identify and report on areas of land affected by salinity. |
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Maintaining and enhancing ecosystem health

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| 19 | That SCA adopts 300 $\mu\text{S}/\text{cm}$ as a practical conductivity trigger value for compliance monitoring of lakes and reservoirs in its Water Quality Monitoring Program. |
| 20 | That SCA reviews its water quality monitoring program to ensure that appropriate ecosystem water quality monitoring is undertaken in areas of the Catchment identified by other indicators as subject to environmental stress. |
| 21 | That a monitoring and management strategy for fish stocks in the Catchment be developed. |
| 22 | That Riparian Management programs undertaken by government agencies in the Catchment be funded and integrated to achieve Catchment-wide mapping and aid in increasing the amount of riparian vegetation in a good or near intact condition. |
| 23 | That SCA creates an integrated database to allow monitoring and assessment of all works undertaken that affect the quality of riparian vegetation and streambank stability. |
| 24 | That SCA undertakes vegetation mapping in conjunction with DIPNR and the Department of Environment and Conservation (NSW) for the remaining areas of the Catchment with the priority being given to areas of native vegetation. This mapping should be consistent with the mapping undertaken of the Special Areas and include information on disturbance and condition. |
| 25 | That SCA ensures that mapping of riparian and native vegetation is appropriately integrated to ensure full compatibility of data. |
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