

Senate Standing Committee on Rural and Regional Affairs and Transport

ANSWERS TO QUESTIONS ON NOTICE

Additional Estimates February 2009

Agriculture, Fisheries and Forestry

Question: LWA 01

Division/Agency: Land & Water Australia

Topic: Tropical Rivers and Coastal Knowledge (TRaCK) Research Reports

Hansard Page: 65 (23/02/2009)

Senator Ian Macdonald asked – I do not mean this in a nasty way, but what can we look at? What have you got to show for that so far? Are there reports?

Dr Robinson – Yes. The TRaCK program has released a number of reports. I could not name them off the top of my head, but they are available.

Senator Ian Macdonald – I think I have seen the earlier ones. I am just wondering if there have been any recent reports back to you, or from you back to the department

Dr Robinson – Certainly, we get our six monthly program reports, but I think you are referring to the technical or scientific reports. I would have to taken on notice the specific ones that have come in over the last six to 12 months.

Answer:

There are approximately twenty projects in the Tropical Rivers and Coastal Knowledge (TRaCK) program covering social, economic and environmental aspects of river management in northern Australia. Information demonstrating the progress of the program is produced in several forms.

Newsletter style summary brochures are produced for wider circulation; examples of these can be viewed on the TRaCK website at www.track.gov.au. Fact sheets on each project are available on the web site.

The amount of technical information starting to be generated from TRaCK is ramping up rapidly with more than 30 reports, journal articles and publications expected to be submitted for publication in the coming year. To date, however, only a small number of projects have been completed, with the majority still in a data gathering and analysis phase. Most projects will be producing both research project reports and technical papers for scientific, peer-reviewed, journals. Copies of technical papers to date are shown below:

- Four background reports on collaborative water planning, to improve community (including indigenous, industry and rural communities) participation in water planning and to develop tools for better community engagement:
 - i Mackenzie, J. (2008) Collaborative Water Planning: Retrospective Case Studies. Volume 4.1. Water planning in the Gulf of Carpentaria. Land & Water Australia.
 - ii Ayre, M. (2008) Collaborative Water Planning: Retrospective Case Studies. Volume 4.2. Water planning in the Ord River of Western Australia. Land & Water Australia.

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- iii Ling Tan, P., Jackson, S., Oliver, P., Mackenzie, J., Proctor, W., and Ayre, M. (2008) Collaborative Water Planning: Context and Practice Literature Review. Volume 1. Land & Water Australia.
- iv Elix, J. (2008) Collaborative Water Planning: Context and Practice Literature Review. Volume 2. Best practice strategies and techniques in the resolution of public disputes over natural resources. Land & Water Australia.
- A project report titled 'Ecohydrological regionalisation of Australia: a tool for management and science' that classifies northern Australian rivers on the basis of their flow regimes and ecology, so that rivers can be grouped based on similarities and differences, allowing research results to be applied from one area to another.
- A report that mapped and assessed the impact of *alluvial* gully erosion in four tropical savannah rivers of Western Cape York and the Gulf Country. Brookes, A., Knight, J. and Spencer, J. (2008) A remote sensing approach for mapping and classifying riparian gully erosion in Tropical Australia.
- A draft report to the Northern Territory NRM Board Government on a framework for monitoring water quality in the Daly River is out for public comment. Risby L., and Townsend S. (2009). Water Quality Monitoring Framework for the Katherine and Daly River Catchments (Draft). Report to the Tropical Rivers and Coastal Knowledge (TRaCK) program. Land & Water Australia, Canberra.
- A report on the social and cultural values and a stakeholder assessment of water use scenarios for the Howard River, NT. Woodward, E., Jackson, S., and Straton, A. (2008) Water resources of the Howard River region, Northern Territory: A report on the social and cultural values and a stakeholder assessment of water use scenarios. CSIRO Sustainable Ecosystems
- A report titled 'Additional work on Darwin Harbour to support the Water Quality Protection Plan for Darwin Harbour' on the results of field work examining water quality decline in the Buffalo Creek, Darwin Harbour.

Other articles:

Brooks, A.P., Shellberg, J.G., Knight, J., Spencer, J. (submitted) Alluvial gully erosion across the Mitchell fluvial megafan, Queensland Australia. *Earth Surface Processes and Landforms*.

Brooks, A. P., Spencer, J. Shellberg, J.G., Knight, J. & Lymburner, L. (in press) Using remote sensing to quantify sediment budget components in a large tropical river - Mitchell River, Gulf of Carpentaria *Sediment Dynamics in Changing Environments* (Proceedings of a symposium held in Christchurch, New Zealand, December 2008). *IAHS Publ.* 325.

Burford, M.A., Alongi, D.M., McKinnon, A.D., Trott, L.J. 2008. Primary production and nutrients in a tropical macrotidal estuary, Darwin Harbour, Australia. *Estuarine, Coastal and Shelf Science*, 79, 440-448.

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Kennard, M.J., Pusey, B.J., Olden, J.D., Mackay, S.J., Stein, J.L. & Marsh, N. (submitted). Ecohydrological classification of natural flow regimes to support environmental flow assessments: an Australian case study. *Freshwater Biology*.

Kennard, M.J., Pusey, B.J., Mackay, S.J., Olden, J.D. & Marsh, N. (submitted). Quantifying uncertainty in estimation of hydrologic metrics for ecohydrological studies. *River Research and Applications*.

Straton, A., Jackson, S., Marinoni, O., Proctor, W. and E. Woodward. Exploring and evaluating scenarios for a river catchment in northern Australia: the DMCE as a tool for water planning. Submitted to *Environment and Planning*