LANDSCAPE LOGIC
LINKING LAND AND WATER MANAGEMENT TO RESOURCE CONDITION TARGETS

CATCHMENT NUTRIENT AND SEDIMENT MANAGEMENT

PROJECT 5

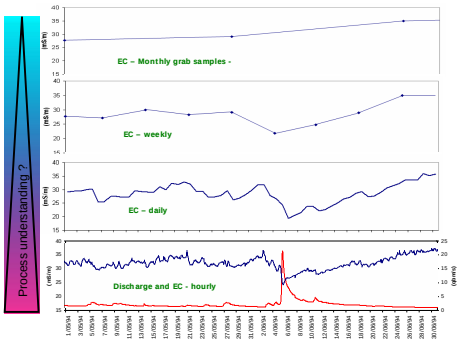
WHAT

This project will assist in prioritising investment to maintain or improve catchment, and subsequently estuarine, water quality. It will identify likely critical source areas for nutrients and sediments, and build conceptual 'models' of nutrient movement through the landscape and into receiving waters. Implicit is developing better understanding of sources, sinks and flow paths of nitrogen, phosphorous and sediment.

Source: DPIW

HOW

- High frequency water quality (including nitrate and ammonia) monitoring and complementary measurement to explain the links between land use management and aquatic ecosystem impacts.
- New methods for identifying functional hydrochemical response units (landscape units relating to dominant hydrological and chemical process dynamics) to advance prediction of catchment scale water, sediment and dissolved nutrient dynamics.
- Descriptions of how diffuse pollutants move through catchments – how solutes move from individual response units through to a catchment outlet.
- Identify critical source areas for nutrient pollution (i.e. 'hotspots' for NRM investment).



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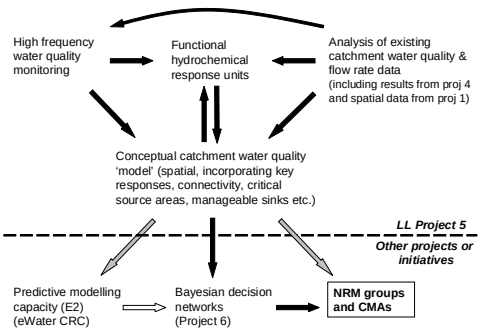

BRINGING IT ALL TOGETHER

- Improved understanding of flow paths, sources, and sinks relevant to the movement of nutrients through the stream network to end-of-catchment.
- Linking key measurements to actions on the land.
- Supporting improved prioritisation of investment for management of water quality.
- Helping parameterise Landscape Logic CERF Bayesian decision networks.

A partnership between North Central, North East & Goulburn Broken CMAs, NRM North, South & Cradle Coast, University of Tasmania, Australian National University, RMIT University, the Tasmanian Department of Primary Industries & Water, CSIRO, Forestry Tasmania and the Victorian Department of Sustainability & Environment.