

Extending the CSIRO Murray-Darling Basin sustainable yields project beyond the Basin

The CSIRO is conducting three additional studies for Northern Australia, Tasmania and South West Western Australia.

For each of the three studies, the CSIRO is:

- Developing transparent, consistent and robust methodologies for determining the extent of available water resources in the catchments/aquifers of the study area
- Applying the above methodology to estimate water availability and demand in 2030 in the light of climate change and other risks, to provide:
 - Estimates of water resources on an individual catchments and aquifer basis using four different scenarios:
 - i historic climate and current development;
 - ii climate for the last 10 years and current development;
 - iii 2030 climate change and current development;
 - iv 2030 climate change and 2030 development of farm dams, plantations, groundwater systems and proposed irrigation development.
 - For each of the scenarios (i) to (iv) above, providing an assessment of the impact of current and future predicted water resource development on key environmental assets.

For Northern Australia

- Taking into account the unique seasonal characteristics of water availability and the interconnectivity of surface and groundwater systems in northern Australia and providing advice on how these impact on water management.
- Assessing water storage options in agreed catchments, including the storage of water in aquifers.
- The project is taking account of current water resource assessment projects and activities underway in northern Australia where applicable, in particular those associated with the TRACK program, the Indigenous water policy group within NAILSMA and any consultancy projects as identified by project contact group members.

For Tasmania

- As a minimum the project is incorporating all the catchments where significant irrigation already occurs and those areas proposed for irrigation development under the Tasmanian Government's Drought Proofing program. The project also complements current water resource assessment projects underway by the Tasmanian State Government where applicable;
- The study is providing output in a fashion suitable to inform the development of irrigation projects and water management planning for those catchments;
- The studies are addressing the impact of incremental change in catchment hydrology resulting from likely land use change and variations in interception rates over time

For the South West of Western Australia

- The study is addressing ground water resources and particularly aquifer interconnectivity.
- The study is addressing areas of significant direct groundwater or surface water irrigation activity (i.e. individual operators) as well as covering areas where significant irrigation already occurs.
- The study is providing output in a fashion suitable to inform the development and water management planning for those catchments.

The Northern Australia component of the project will be completed by end June 2009.
The Tasmanian and Western Australian components will be completed by end December 2009.