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Significantly less water by 2030, says Sustainable Yields Report

The CSIRO *South-West Western Australia Sustainable Yields Project*, undertaken in partnership with the WA Government, has projected a marked decrease in river flows and water yields in south-west WA by 2030 under the impacts of climate change and increasing demand.

Credit: Robert Garvey, CSIRO

The Minister for Climate Change, Energy Efficiency and Water, Senator Penny Wong, said, 'we know that the Perth region has already experienced a reduction in surface water runoff of around 50 per cent since the mid 1970s, a change that shows trends and patterns that are consistent with human-induced climate change.

'The report highlights the likelihood of a further reduction in Perth's water supplies by 2030, which is of considerable concern.'

The key findings from the study, which covers almost 40 000 square kilometres between Geraldton and Albany, found that:

1. south-west WA will face a one-quarter reduction in water availability by 2030, relative to the last 30 years;
2. under the best-case scenario, mean annual surface water yields will decrease by 4 per cent by 2030; and
3. under the worst-case scenario, that reduction will be 49 per cent by 2030.

The study also found that groundwater availability is projected to decline. Under an extreme dry future, water yields in

three important groundwater areas – including the Gnangara aquifer which supplies tap water to Perth – could decline by over one-third by 2030.

Groundwater-dependent ecosystems, such as wetlands and vegetation communities that depend on groundwater levels that are close to the soil surface are also expected to experience additional stress by 2030.

The study is one of three recently completed sustainable yields projects that build on the successful Murray-Darling Basin Sustainable Yields project.

The CSIRO *South-West Western Australia Sustainable Yields Project* reports can be found online at www.csiro.au/partnerships/SWSY.html.