

YARRAGADEE AQUIFER, EXTRACTION RATE

1058. Hon Jim Scott to the Minister for Local Government and Regional Development representing the Minister for the Environment

In relation to the study the Water and Rivers Commission and Water Corporation were commissioned to carry out on the increased extraction from the Yarragadee Aquifer -

- (1) Does the scenario modelling include rainfall variations?
- (2) If yes, what rainfall variations have been modelled?
- (3) Does the scenario modelling include proposed mining operations over the aquifer?
- (4) If yes, which ones?
- (5) Do the assessment of proposed mining operations include -
  - (a) mine extraction rates from the Yarragadee aquifer; and
  - (b) potential contamination of the aquifer from the proposed mines?
- (6) Does the scenario modelling include impacts on nearby wetlands?
- (7) If yes, which ones?

Hon TOM STEPHENS replied:

The minister has provided the following response:

- (1) Yes. The modelling does include rainfall variations. The variations have been determined in consultation with CSIRO.
- (2) The downscaled modelling is predicting the following conditions in the Blackwood Ground Water Area for the period between 2035 and 2064.

A possible further reduction in average rainfall of up to 5 per cent. Combined with the current reduction, this suggests that annual rainfall by the middle of this century will be about 10 to 15 per cent less than in the middle of the last century.

A 'time shift' in the rainy season, with drier starts to the winter, but with wetter late winter/early spring rains (in August-September).

Predicted climate changes will help to assess climate change impacts on ground water. Results from the ground water flow model will help decide how best to manage the ground water sources in the South West.
- (3) No. The scenario modelling does, however, anticipate regional development needs in a more generic sense, based on the estimates determined in the Economics Study report for the project.
- (4) Answered by (3).
- (5)
  - (a) Yes. In any planning and environmental assessment of proposed mining operations, the estimated draw of water required for mining operations is declared, regardless of which aquifer the draw is to be made from.
  - (b) The Department of Environmental Protection (DEP) and Water and Rivers Commission (WRC) assess mining activities for potential risks. Activities are regulated and monitored where appropriate. If the South West Yarragadee becomes a public water supply source, a water source protection plan will be developed. This plan will address water quality protection and landuse activities including mining.
- (6) Yes.
- (7) Lake Jasper, the Blackwood, Donnelly and Scott Rivers, as well as the wetlands throughout the Scott Coastal Plain, the wetlands on the Blackwood Plateau and all wetlands in the Bunbury Capel region.