

GNANGARA PINE PLANTATION, HARVESTING

717. Hon. C.L. Edwardes to the Minister for the Environment and Heritage

I refer the Minister to the ongoing debate regarding Perth's groundwater supplies and ask -

- (a) is it correct that a mature pine tree, such as those in the Gnangara Pine Plantation, will use an average of 200 litres of water per day;
- (b) is it correct that there are in excess of 4 million pine trees in the Gnangara Pine Plantation;
- (c) what is the actual estimate of the number of pine trees in the Gnangara Pine Plantation;
- (d) what is the harvest dollar value of the Gnangara Pine Plantation;
- (e) what dollar value does each pine tree have;
- (f) what are the dollar costs of maintaining the Gnangara Pine Plantation;
- (g) do these costs include the cost of fire fighting, policing and clean-ups of dumped rubbish, household and industrial waste and car bodies;
- (h) what action is the Minister taking to accelerate the harvesting of pine trees in the Gnangara Pine Plantation and make more ground water available from the Gnangara Groundwater Mound; and
- (i) if the Minister is not accelerating the harvesting of these pine trees, why not?

Dr J.M. EDWARDS replied:

- (a) No. The maximum recorded water use by maritime pine (*Pinus pinaster*) in Western Australia is 5mm per day by 250 trees per hectare which converts to 200 litres per day used by 250 trees. This rate of water use occurs for a period of about two months in spring. Water use during considerable periods of summer and autumn is negligible.
- (b) Yes. It is likely that there are in excess of four million trees in the combined areas of Gnangara, Pinjar and Yanchep plantations. These include a range of sizes from small seedlings to large mature trees.
- (c) Only parts of the plantations have been recently enumerated and thus an estimate for the total plantation extent is not available. The number of trees in any area varies from as many as 1500 trees per hectare in juvenile stands to as few as 40 trees per hectare in some of the older stands. The bulk of the plantations would be in the range of 150-300 trees per hectare. For the purposes of water management on the mound a more relevant measure is 'basal area' rather than the number of trees per hectare (basal area is the sectional area at 1.3 metres high, on all trees per hectare).
- (d) At the current rates the predicted delivered costs of all the timber sourced from the Gnangara, Pinjar and Yanchep pine plantations over the next 25 years is approximately \$191 million.
- (e) The value of each tree varies widely depending on the age at harvest, tree diameter, length and straightness.
- (f) The approximate total annual maintenance cost is \$1.2 million. This includes over \$700,000 for fire protection works paid to the Department of Conservation and Land Management by the Forest Products Commission. Other costs include fire suppression, nature conservation, parks and visitor services and access management works.
- (g) Yes.
- (h) A range of actions will be undertaken to accelerate harvesting. These include negotiations with Wesbeam regarding start up date and potential for ramping up production in the early years of operations. Alternative sources of log supply are being investigated and various thinning and clearfelling schedules are being modelled to enable decisions to be taken that will optimise various land use outcomes.
- (i) Not applicable.