

## MINISTER FOR THE ENVIRONMENT AND HERITAGE

Dear Minister

### **GNANGARA AND JANDAKOT MOUNDS**

As you are aware, the EPA has commenced a review of the existing environmental conditions applying to the water allocations on the Gngangara Mound and Jandakot Mounds under Section 46 of the *Environmental Protection Act 1986*. The EPA has agreed that this review should be staged over several years, recognising that there are some immediate issues that need to be considered as well as some further research to determine how better environmental criteria might be developed.

The Water and Rivers Commission (WRC) has prepared a report on the first stage of the Section 46. This report is focussed on an investigation into the critical areas of the Gngangara and Jandakot Mounds where environmental conditions have been and are predicted to continue to be breached this summer and next summer, and to outline a short-term management response to minimise the environmental impacts arising from those breaches for the period 2001-2003. This Stage 1 Section 46 report by the WRC does not include any proposals to change existing environmental conditions.

As an integral part of the Section 46 process, the WRC has established a peer review group to provide high level overview of the research and advice. In addition, the WRC continues to consult with stakeholders on the Gngangara and Jandakot Mounds. The Stage 1 report incorporates the comments from the Peer Review Group and stakeholders. The WRC is to be commended on this participative process.

One of the public water supply schemes on the Gngangara Mound is the Lexia Groundwater Scheme. The EPA give advice on the proposal by WRC to approve an allocation of 8 GL from this scheme for 2001/02 on 19 November 2001. A copy of this advice is attached. The comments provided by the EPA in that letter are relevant to much of the Gngangara Mound and, to a lesser extent, the Jandakot Mound.

There are several matters that are implicit in the proposed short-term management strategy outlined by the WRC in the Section 46 Report. The first is a total groundwater allocation from public water supply sources on the Gngangara and Jandakot Mounds of 158 GL for 2001/02. This is less than the amount requested by the Water Corporation but is 13 GL more than was allocated in 2000/01. The EPA accepts that there needs to be an appropriate provision of water to the public water supply, recognising that there is already in place residential water restrictions to reduce demand. Based on the advice of the WRC, the EPA agrees with the proposed allocation of 158GL for 2001/02.

The WRC reviews the specific allocations monthly, and modifies abstraction where necessary. This approach is supported, especially as the environmental consequences arising from climate variability, tree plantations and groundwater pumping are not uniform across the mounds.

Another aspect which is of concern to the EPA is the reliance on managing public water supply abstractions by the Corporation where private abstraction may be having an equal or more substantial influence on wetland or groundwater levels. While the EPA acknowledges that often there are commercial implications in relation to altering private abstraction, there remains issues of equity and the best means of protecting environmental values for the whole community. This is a significant challenge for the community. The WRC has advised that there are seven areas on the Gngangara and Jandakot Mounds where private abstraction primarily affects these environmental values and where environmental conditions are expected to be breached. The approach of the WRC in dealing with these areas is to obtain cooperation from landowners to voluntarily modify abstraction to minimise impacts. In the event that cooperative initiatives do not achieve required outcomes, the EPA encourages moves towards more structural initiatives to protect the environmental values.

The WRC predicts that environmental conditions applying to ten areas on the Gngangara and Jandakot Mounds will be breached. Eight of these are on the Gngangara Mound and two are on the Jandakot Mound. This is generally consistent with breaches in recent years. In the event that there is extreme dry and hot conditions over this summer period, there may be an additional 5 areas where environmental conditions may be breached, along with likely widespread areas of tree deaths.

The EPA believes that the WRC has prepared a short-term management strategy which endeavours to ensure that there is a management response to predicted breaches consistent with minimising the immediate threat to environmental values on the Gngangara and Jandakot Mounds. The EPA agrees with the proposed WRC management strategy, but recommends that it be reviewed by the WRC and with the participation of the EPA, prior to the 2002/03 summer to ensure that it remains appropriately focused and relevant.

Ongoing long-term drying conditions affecting wetlands and vegetation places further stress on environmental systems. While climatic variability is clearly a

major influence on these conditions, it does so over the top of affects resulting from groundwater abstraction for public and private purposes. The WRC Report outlines the nature of these impacts and expected changes. Should wetter conditions become more prevalent, the environment will take some time to re-establish some of the values that have been affected. These include terrestrial vegetation communities requiring wetter soil conditions and wetland vegetation.

In accordance with the environmental conditions on the Gnangara and Jandakot Mounds, the WRC has submitted its annual reports on the environmental management of groundwater abstraction on the Mounds. Once the delegation to the EPA Chairman has been gazetted, the EPA will provide advice on these report, which include matters of non-compliance with the environmental conditions.

The EPA was advised by the WRC that the Stage 1 Section 46 Report would be released to the public. This is encouraged by the EPA. There would be value in ensuring that this advice from the EPA was referred to in any media statement that may result from Government decisions about water allocations. Following the release of a Government media statement I would be available to provide to the media any clarification of the EPA's advice which might be required, and make available to the public this letter and also the previous letter in relation to the Lexia Groundwater Scheme.

The Stage 2 of this Section 46 will address many of the fundamental issues driving water supply and environmental values. The EPA considers that this next stage will be very important for refining measures for the protection of environmental values as well as providing more robust water supply solutions.

**Bernard Bowen**  
CHAIRMAN

7 December 2001