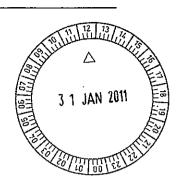




## Hon Bill Marmion MLA Minister for Environment; Water

Our Ref: 37-10559



Hon Brian Ellis MLC Chairman Standing Committee on Environment and Public Affairs Parliament House PERTH\_WA\_6000

Dear Chairman

STANDING COMMITTEE ON ENVIRONMENT AND PUBLIC AFFAIRS: PETITION NO 93 - PINJAR SOUTH - INCLUSION AS A PRIORITY AREA IN THE INDUSTRIAL LAND STRATEGY 2009

Thank you for your letter dated 29 November 2010 regarding the above matter.

As requested, I attach comments (Attachment 1) to the letter forwarded by the principal petitioner, Mrs Glynis Monks JP, dated 7 October 2010.

Yours sincerely

HON BILL MARMION MLA

Bill Main

MINISTER FOR ENVIRONMENT; WATER

27 JAN 2011

## COMMENTS ON PETITION

The Gnangara Mound is the primary low cost source of water for Perth. The cost of replacing the water drawn from the Gnangara Mound is estimated at over \$3 billion.

The Gnangara Mound is basically a 'mound' of sands where rainfall can infiltrate into the groundwater instead of flowing off as happens on clays. The mound of sands sits on top of thin bands of clays and shales which do not allow water to pass through them up or down. Under these bands, or confining layers, are more thick bands of sand, or aquifers, where more water is stored.

Once it infiltrates through the surface, the water can:

- slowly flow through the sands towards the ocean in the west, or into streams to the east, north and south;
- slowly infiltrate into even deeper aquifers through a few holes ('windows') in the confining layers; and
- be abstracted by bores to public water supply, horticulture or by garden bores.

The public water supply is partly used for drinking water. To protect groundwater drinking supplies, Underground Water Pollution Control Areas (UWPCAs) are established. The Department of Water (DoW) has guidelines for what land uses should be allowed in those areas to reduce the risk of pollution. Pollution would result in very high treatment costs for water, and potentially health risks.

The DoW categorises land overlying drinking water sources into three major categories. Priority 1 (P1) is the most stringent, recommending only very low contamination risk activities on overlying land. The P2 and P3 categories allow increasingly relaxed limitations on land use.

The area in question is currently a P1 area.

The Gnangara UWPCA P1 area was established over a large area north of Perth for public water supply. This area was defined to provide for the protection of both current and future public water supply needs.

The draft Gnangara Sustainability Strategy (GSS) has identified that with our current pattern of reducing rainfall, or even a slightly wetter scenario, the abstraction for public water supply should be reduced to an average of 110 GL/yr in the longer term, once the Southern Seawater Desalination Plant is commissioned. The abstraction from the Gnangara Mound has never been more than 175 Gl/yr.

The GSS recommended the areas identified in the petition undergo investigations to determine if a change to the P1 boundary, or a change from P1 to P3 could be accommodated in order to allow for potential changes in land uses.

The key reasons were:

- a critical demand for employment generating land uses in the northwest corridor of Perth (as advised by Western Australian Planning Commission);
- the low ecological value of this land relative to elsewhere on the Gnangara Mound (as advised by the Department of Environment and Conservation (DEC));



- the replacement of pine plantations with high value Banksia woodland over much of the nearby mound to establish higher ecological values in the area than currently exist;
- the capacity for the existing public water abstracted at this site could be taken from elsewhere on the Gnangara Mound given the reduced allocation limit (as advised by DoW);
- the westward flow of underground water meaning any potential pollution from land use changes will not end up in remaining bores to the east of this land (as advised by the DoW); and
- this area does not overlay a 'window' for recharge of the deeper aquifers under the mound.

The principal petitioner suggests that the draft GSS recommends allowing industrial development in a P1 area. This is not correct.

Firstly, the recommendation is only to prioritise investigations in this area to advise for, or against, a future decision making process. As identified in the draft strategy, these investigations are still pending including those identified by the petitioner. The GSS does not make any decisions itself.

Secondly, commercial or industrial land uses would not be supported within the P1 area as proposed by the principal petitioner. The above investigations would identify if a change in the P1 boundary is justified or a change from P1 to P3 (noting that P3 supports urban and industrial land uses). If so, the areas in question would no longer be subject to the P1 restrictions.

If these investigations proved the change was in the public interest and technically feasible, the existing bore could be decommissioned and a replacement bore developed elsewhere on the mound within the P1 boundary to maintain clean and safe drinking water for Perth.

As part of the above investigations and the decisions on final land use and development methods, potential acid sulphate soils would be taken into account. Any subsequent on ground works would then be carried out in line with an Acid Sulphate Soils management plan approved by the DEC. This is common practice across the Perth and Peel regions.

The principal petitioner has identified that consultation with Aboriginal people indicated a desire to see substantial landscapes put back to natural environment. The draft GSS recommends that 9000ha of land formerly covered in pine plantations are replanted with Banksia woodland to provide high value ecological linkages. Some of this planned area of high value rehabilitation is adjacent to the area in question.

In terms of consideration of Aboriginal heritage for the area in question, formal surveys and studies will be developed before any change in land use is considered as standard for this type of proposal.

The principal petitioner indicates there is sufficient industrial land within the City of Wanneroo for future requirements. Discussions with Department of Planning (DoP) and Land Corp have indicated that there is enough to meet immediate needs, however, mid to long term there is a critical shortage. Given the timelines for proper investigations and planning for the site, the draft GSS recommendations are timely. The DoP may comment on this further.

