



Chief Executive Officer
City of Subiaco
PO Box 270
SUBIACO WA 6008

Our Ref A485476
Enquiries Matt Spence
Phone 6467 5536

Dear Sir/Madam

**NOTICE UNDER SECTION 39A(3)
*Environmental Protection Act 1986***

PROPOSAL: Management of water levels in Lake Jualbup
LOCATION: Subiaco
PROPONENT: City of Subiaco
DECISION: Not Assessed – Public Advice Given

The Environmental Protection Authority (EPA) understands that you wish to undertake the above proposal which has been referred to the Authority for consideration of its potential environmental impact.

This proposal raises a number of environmental issues. However, the EPA has decided not to subject this proposal to the environmental impact assessment process and the subsequent setting of formal conditions by the Minister for Environment under Part IV of the *Environmental Protection Act 1986* (EP Act). Nevertheless, the staff of the Office of the EPA has provided the attached advice to you as the proponent, and other relevant authorities on the environmental aspects of the proposal.

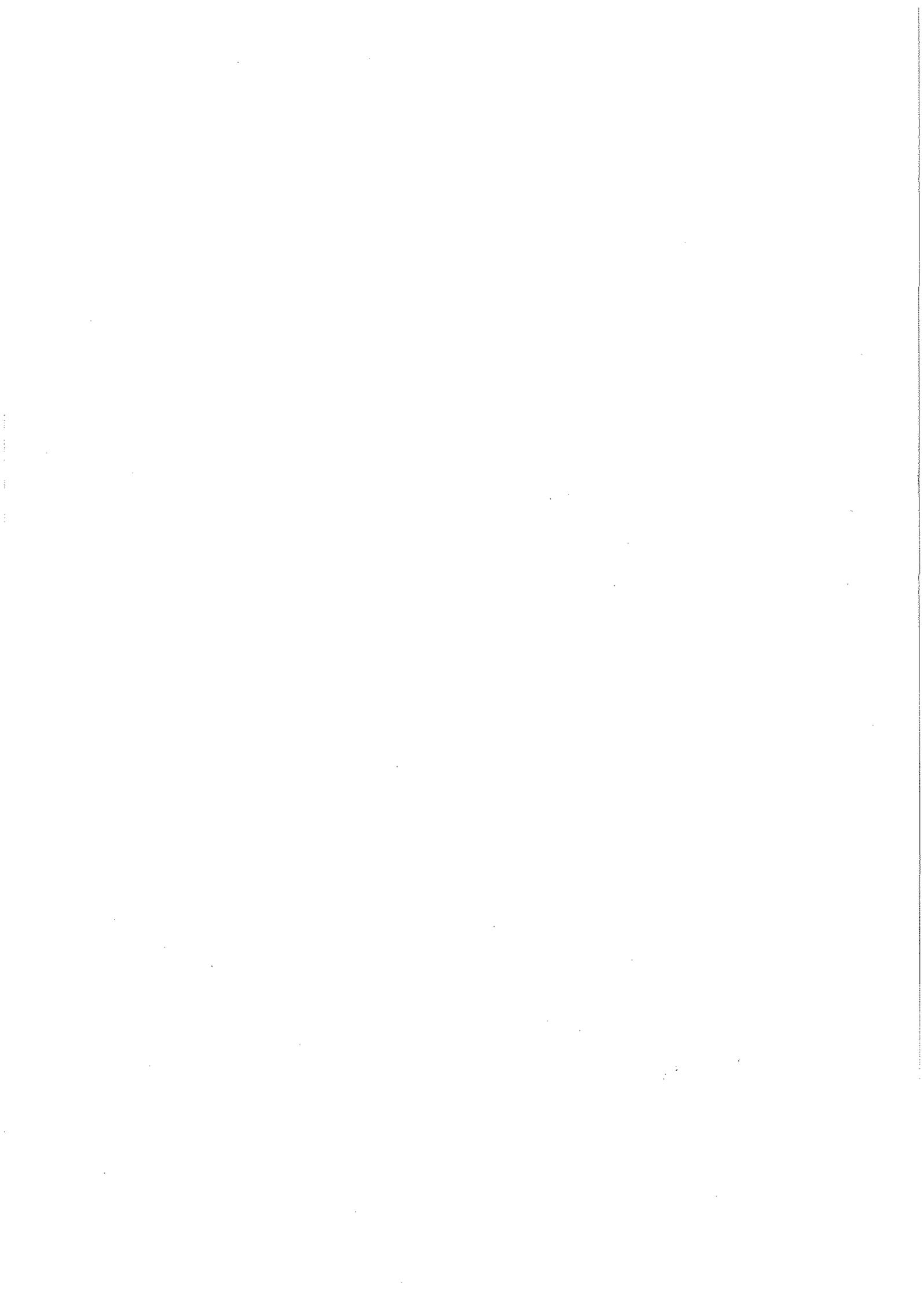
The EPA's decision to not assess the proposal is open to appeal. There is a 14-day period, closing 2 April 2013. Information on the appeals process is available through the Office of the Appeals Convenor's website, www.appealsconvenor.wa.gov.au, or by telephoning 6467 5190.

Yours faithfully

Anthony Sutton
Director
Assessment and Compliance Division

18 March 2013

Encl



**PUBLIC ADVICE UNDER SECTION 39A(7)
Environmental Protection Act 1986**

Summary

The Environmental Protection Authority (EPA) has received a referral on the proposal to maintain a permanent water body in Lake Jualbup. The proposal is to convert Lake Jualbup into a constructed lake by lining the lake bed with a polymer additive and constructing sloped banks and concrete walls to reduce water loss to the surrounding environment.

The EPA considers that the potential environmental issues associated with the proposal are:

- Water quality impacts on aquatic fauna,
- Impacts on the Oblong Turtle through binding the sediment; and
- Potential for Acid Sulphate Soils (ASS) exposure down gradient of the Lake.

Although the proposal raises environmental issues, the EPA considers that the proposal is not of a scale which is likely to have a significant impact on the environment and does not warrant formal assessment under the *Environmental Protection Act 1986*. The EPA considers that any potential environmental impacts of the proposal can be adequately addressed and managed through the implementation of an adequate revised Environmental Management Plan (EMP) for Lake Jualbup.

Inland Waters Environmental Quality

Creating a permanent water body in Lake Jualbup could potentially impact the water quality of the lake. Effectively Lake Jualbup will be converted into a closed system which will result in the concentration of contaminants and nutrients in the water body which could lead to eutrophication and odour related issues. This could have an impact on aquatic fauna, specifically the Oblong Turtle and waterbirds that inhabit the Lake.

The EPA recommends that the City of Subiaco develop and implement a revised EMP, in consultation with the Department of Environment and Conservation (DEC), which addresses the level of residual risk to aquatic fauna, and details appropriate measures to manage water quality of the Lake Jualbup to minimize potential impacts on aquatic fauna.

Terrestrial Fauna (Oblong Turtle)

Applying a polymer additive to bind the sediment of Lake Jualbup may limit the ability of the Oblong Turtle to burrow into the sediment. The EPA considers that the objective of the proposal should be to maintain a healthy population at the site. However, if this is not practicable then the City of Subiaco should consider relocating the population. The City should consult with the DEC to develop a revised EMP to manage the population of Oblong Turtles.

Landforms (Acid Sulphate Soils)

Lake Juabup is in an area classed as high to moderate risk of ASS and Potential ASS occurring at less than 3 metres (m) below the ground surface. The proposal may result in the lowering of the superficial aquifer water table by 0.4 m to 0.7 m immediately down gradient of Lake Juabup, potentially exposing ASS. The exposure of ASS could potentially impact the quality of any standing water and groundwater present in the vicinity.

The EPA recommends that the City undertake ASS site investigation studies at the Lake, consistent with DEC's Acid Sulphate Soils Guideline Series *Identification and Investigation of Acid Sulphate Soils and Acidic Landscapes*. If ASS is considered to be an issue at the site, the City should develop management approaches in consultation with DEC and the Department of Water.