



8th September 2009

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Appeals Convenor
Office of the Minister for the Environment; Youth
13th Floor Allendale Square
77 St Georges Terrace
PERTH WA 6000
Attention Mandy Cross

Dear Mandy

APPEAL AGAINST THE DECISION OF THE EPA NOT TO ASSESS THE BURNING OF BALDIVIS SWAMP (WOODLEIGH GROVE ESTATE) CITY OF ROCKINGHAM
Release date 16th March, 2009.

The information below is in confirmation of my two conversations with you and is an expansion of the points made in our appeal concerning the EPA's decision not to assess the burning of Balddivis Swamp.

In summary we submit that prescribed burning is likely (with very high risk) to result in a significant and unacceptable environmental impact on this Bush Forever site and should therefore be formally assessed as PUEA; or alternatively the proposal should be rejected by the Minister. Alternative measures for reducing fire risk should be employed according to binding Ministerial conditions.

(Nos 4, 2) Under natural conditions the wetland ecosystem at Balddivis Swamp is a closed system which keeps it in a delicate balance. Soil organic matter has accumulated over hundreds if not thousands of years to form peat and this protects the soil and its microbia from seasonal fluctuations in water levels and acidification.

Fire in peat rich soils destroys the delicate balance of the soil-vegetation ecosystem as the accumulated organic matter is suddenly released from the system. Fire continues to burn underground and cannot be controlled. This indeed happened recently in a nearby wetland in the City of Rockingham and the fire burnt for weeks resulting in catastrophic removal of organic matter (David Moort City of Rockingham Senior Environment Officer pers. comm. August 2009), from which the wetland may acidify and not recover or take hundreds of years to recover to a different ecosystem.

Wetlands on the Swan Coastal Plain with acid sulphate soils are very vulnerable to catastrophic degradation after fire. Thus it is important for the health of Balddivis Swamp that the surface soil vegetation and organic matter is maintained and not burnt. Removal of the organic layer stored in leaf litter and vegetation will expose the soil to leaching of its buffering capacity comprising calcium and magnesium ions and ash will be washed through the soil profile (Steven Appleyard DEC pers. comm. August 2009). The result would be lowered pH and loss of soil biota. Biotic impacts start to occur when pH drops to 4.2 (Pierre Horwitz pers. comm.) and heavy metals, aluminium, iron are released and become toxic.

(Nos 5, 7) The UBC believes that there is no scientific basis for prescribed burning of vegetation and especially wetlands on the Swan Coastal Plain. The concept of reducing surface (fire) fuel loads to reduce risk of wildfire is based in work done in production forestry in forest ecosystems in south west forests. It is not based on the ecological health of ecosystems, and is certainly not based on the ecology of wetland ecosystems. It is not applicable to vegetation systems of the Swan Coastal Plain which are quite different landforms and vegetation systems.

Furthermore prescribed burning on the Coastal Plain does not necessarily reduce risk of hot summer fires. For example at Trigg dunes, areas subject to cool burn (about 10 years ago) were burnt again by arson the following summer exacerbating degradation. After a seminar reviewing proposals to prescribe burn, the land manager (City of Stirling) changed approach and focussed on control of grassy annual weeds (which are highly flammable in summer) and did not prescribe burn.

At Kings Park a no prescribed burning policy was implemented some years ago. Their research found that the incidence of wildfire in the Park was not related to prescribed burning. It was more important to control grassy weeds, ensure fast attack to suppress fire, and to control arson and educate the community about fire prevention.

As we have stated in our appeal, Bush Forever sites are to be managed for protection of their conservation values. Burning Baldivis Swamp would not protect the values but would indeed help to destroy them.

Measures to reduce risk of fire especially to the two houses on the north side of the Swamp will still be highly unlikely to prevent property damage and risk to human life in the event of a hot wildfire because there is only one entry road and the two houses are in a fire trap. These houses should never have been permitted in this location. As suggested by David Moort, the best course of action would be for the Government to recognise this planning error and acquire and remove these houses. We recommend that this approach be considered by the Minister.

Reduction of fire risk should include:

- education by the City of Rockingham of all residents in the estate in fire prevention and awareness;
- education by FESA and DEC (groundwater hydrology staff) of residents about the dangerous acidification process which occurs when peaty swamps are burnt
- education of residents by the City of Rockingham with assistance from DEC's Urban Nature branch, about the special conservation values of the Swamp and the surrounding Tuart trees;
- ensuring that all residents take precautions, eg have roof sprinklers with independent pumps in working order, regularly cleaned gutters, remove dry flammable vegetation around houses, have an evacuation plan, etc;
- control of grassy weeds in and adjacent to the Bush Forever site;
- relocation of kangaroos culled from other sites (eg Whiteman Park) be considered for reintroduction to the wetland to reduce vegetation growth
- maintenance of the existing green lawn buffer around the wetland;
- presence of a local fire suppression unit on site for fast response before FESA could attend
- a community fire watch process made familiar to all residents on the estate

The Urban Bushland Council trusts that the Minister will seriously consider these issues in her determination of the appeal and that Baldivis Swamp is never burnt.

Yours sincerely

C Mary Gray
President