

22 June 2007

*by e-mail to:*

[land.whitepaper@dse.vic.gov.au](mailto:land.whitepaper@dse.vic.gov.au)

Dear DSE

I am writing on behalf of two "Friends of" groups of which I am the contact person appointed by Bayside City Council:

- the Bayside Friends of Native Wildlife who study fauna in Bayside and along its coast, inform and educate others about it, and help with some habitat projects
- the Friends of the Bay Road Heathland who help the Council to care for a 2ha heathland remnant in Sandringham (Melway 77 11B). Most also work as volunteer guides to the Sanctuary in spring.

Due to shortage of time – I am also a local Councillor – I have not had time to check all the factual assertions and I have not been able to consult widely, but I believe the members of both groups would support what follows.

Yours sincerely,

Michael Norris

*for* the Bayside Friends of Native Wildlife  
*and* the Friends of the Bay Road Heathland Sanctuary

I will address your five questions in relation only to local land and biodiversity. This is not because we do not care passionately about the production and biodiversity values of land elsewhere – quite the opposite. It is because this approach shows how the issues of land and biodiversity in an urban context are similar to those elsewhere.

**It follows that urban biodiversity and land, as well as having intrinsic and amenity value, can be used to educate and involve metropolitan people about the larger – and crucial - issues for Victoria as a whole.**

And what does peak oil imply for all these issues ?

### **1. WHAT ARE THE ENVIRONMENTAL, SOCIAL AND ECONOMIC VALUES PROVIDED BY HEALTHY LAND AND BIODIVERSITY?**

***Our gardens*** contain considerable biological diversity (some of it exotic) and have environmental functions like raising amenity, reducing greenhouse gas and absorbing rain (to the benefit of ground water). They provide habitat for birds and other fauna (much not noticed - or appreciated in the case of insects).

***Our open spaces and streets*** provide similar functions but are often focused on amenity such as providing sports grounds (with little biodiversity) or views of trees. Some contain important remnants not safeguarded by specific designation. Research (for instance that for the Parks Victoria “Healthy Parks, Healthy People”) shows how valuable greenery is for human well-being.

***Our nominated bushland reserves etc.*** are of intrinsic (as well as amenity) value because they preserve genetic stock such as local indigenous vegetation, some of State significance with no similar remnants in the bioregion for over 100 kms , and provide habitat for a range of fauna which may not survive elsewhere in this area except golf courses, especially reptiles and insects. About 150 species of macro-fungi have been recorded. Caring for remnants is a healthy form of recreation.

***Our golf courses*** are a mixture between our open spaces and our bushlands, and contain some of the rarest local indigenous vegetation with some EVCs being extremely scarce in Victoria, and of course habitat with some bird species surviving there better than elsewhere. They also provide economic and social benefits!

***Our wetlands*** contain varying biodiversity according to the amount of pollution. They all help deal with litter etc. from human activities before it flows into the sea (Port Phillip Bay). A small amount of littoral vegetation has been demonstrated through WaterWatch to reduce nutrients along a creek, which also provides habitat for our scarcest native mammal, the Rakali *Hydromys chrysogaster*. During the current drought, they also provide non-potable water for other uses.

***Along our coast***, the vegetation helps at sea level to protect the land from erosion by the sea and, higher up, cliffs from erosion by water and human feet. It provides habitat for many creatures, including native bees that may not survive elsewhere.

***Our marine habitats*** are greatly valued, especially at the Ricketts Point Marine Sanctuary, and include seagrass beds, intertidal and subtidal rock formations that

harbour creatures not found further out to sea. Occasionally vulnerable and endangered birds use these areas.

*More generally the economic and social* benefits are hard to specify because there is little research. See below in relation to 'other threats'.

Council research shows a high regard for our garden city and open spaces but (from memory) the latter concern is not very specific. Quite a number of residents enjoy the natural heritage for its intrinsic value and will spend time preserving it. Others just like to know it is there. Many do not understand our unique Australian habitat and fauna and see only small aspects

Clearly in many settings, birds help to manage pests as when Pardalotes glean lerps from trees. Their functions in relation to other insects are largely hidden.

## **2. WHAT IMPACTS WILL CLIMATE CHANGE HAVE ON THESE VALUES?**

### **Global warming**

The variability of the Melbourne climate, including Southern Pacific Oscillations, means that it is difficult to detect climate change effects on biodiversity so far.

However the much greater incidence of 'dry country' birds is an indicator. Crested Pigeons were not recorded in Bayside until 1994 and are now commonplace.

Insect abundance has fallen considerably in the last couple of decades, meaning that fly screens are often not covered with creatures as they were in the past and 'insect plagues' are more rare. Again, it is difficult to know the reason for this.

Looking forward, from experience in Europe with its more stable climate, climate change will first affect soil and insects, and then other elements of the food web.

Gardens, wetlands and open space will be increasingly vulnerable to inundation and dry spells. Some plants/ecosystems will become endangered. Some frog species may not survive.

Some fauna may move in. Mosquitoes, moths, butterflies etc. with unknown effects.

Our coast will experience higher sea levels and more frequent storm surges allied to those on the record further south.

Due to increased evaporation, wetlands and groundwater may be depleted. From surveys in the 1930s there were plants associated with salinity in swampy areas about 5km from the coast. Salinity may therefore increase.

We have great problems due to environmental weeds. Climate change may affect a few but there is a danger of "sleeper weeds" (in gardens or Council spaces) that may become rampant as temperature rises.

## *Sea level rise*

This will affect both general levels and the scale of king tides.

Since the recent IPCC report there is evidence that non-linear effects of global warming may accelerate the increase in sea levels with one Council being advised to plan for a 30-60 cm rise by 2030. Engineers are famed for adopting conservative “add ons” to their calculations and this will result in serious cost-benefit debates about coastal protection.

Foredune and secondary dune formations (and the estuaries of our wetlands) are under threat with implications for storm water discharge, beach maintenance (for amenity and other purposes), and the prospects of survival of foredune communities includes rare Sedges and plants which support scarce bees etc.

Rakali breeding habitat, probably amongst human-made rock structures may disappear.

### **3. WHAT ARE THE OTHER THREATS AND OPPORTUNITIES?**

Here human activities and human appreciation are the main issues.

There are pressures to destroy biodiversity through large houses which reduce the land available for plants and creatures, to use it for sports (including ‘improving’ golf holes),

Some claim some coastal vegetation is economically disadvantageous because it obstructs views of the sea and shore, meaning that without it house and land values would be higher. It is highly questionable whether there is any real link between such increases in value from “amenity mining” and true economic growth in terms of productivity and welfare. And, of course, a view goes both ways, with better views from buildings often meaning worse views from the sea and foreshore.

And in principle indigenous vegetation is generally better at providing the benefits because it is part of ecosystems that include a range of types of plant and the animals which benefit from and sustain the plants. Many environmental weeds have directly negative effects, largely by suppressing the growth of bushes/trees and the ground layer.

Research by Deakin University which covers our area (no time to provide references – please ask) demonstrates that indigenous street vegetation implies a much greater diversity in terms of birds.

There are many opportunities to involve local people in all these matters (and climate change generally). Golf Australia (?) has guidelines for environmental issues on golf courses, birds in backyards and the Friends groups say what people can do to help...

***4. WHAT ARE THE ROLES AND RESPONSIBILITIES OF INDIVIDUALS, COMMUNITY AND GOVERNMENT AND HOW CAN WE MAXIMISE THE EFFECTIVENESS OF OUR JOINT EFFORT?***

Basically it is about generating a sense of what it means to be Victorian in an Australian context, and Australian in an evolving global context.

Biodiversity is being damaged by environmental weeds spreading to, or chucked in, sensitive vegetation. Possum-killers seem to get a higher profile than possum-savers.

Organisations including golf clubs are supported, generally regardless of their environmental impact and this should be stopped

The planning system has faint regard for biodiversity as a priority goal. The Native Vegetation Management System is just about offsets not real goals.

Above all else citizens need to know what they are doing whether it is planting environmental weeds, trampling rare habitat, sending weeds elsewhere, feeding less wanted birds....

Local government is so important in this.

***5. HOW WELL ARE THE CURRENT INSTITUTIONAL ARRANGEMENTS WORKING AND HOW COULD THEY BE IMPROVED TO DELIVER SUSTAINABLE LAND, WATER AND BIODIVERSITY OUTCOMES?***

In principle, the CMA is wonderful with its Regional Strategy as a vehicle for coordination and priorities. But the State strategy is seriously lacking in relation to the role of the Metropolis as where the votes are for real change to protect the sustainability on which we, and future generations, really depend.

I could go on about who decides what powers should be provided in relation to weeds, about priorities for coastal protection, about Planning Scheme and SEEP directions, about the Melbourne Water directions about spending on more/bigger drains vs. wetland enhancement....

But is does this all provide an opportunity to citizens to say "NO" to proposals?

Melbourne Water is proposing to spend millions in Beaumaris to enlarge stormwater drains when Bayside is trying to get most water retained. I suspect the money will be spent on drains.

Fundamentally, does the State government just want to provide continuing comfort to its citizens that all this is manageable. Or to tell them that business as usual will not work?

In haste and sorry to be so late, not to have had time to check this, and not to have included the more useful comments that others in Bayside might have made

