

PROPOSED DEVELOPMENT ON HAWAAN FOREST ESTATE

COMMENT ON BUFFER ZONE AND OTHER ISSUES RAISED BY EKZNW

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1. The purpose of this report is to comment on a letter from Ezemvelo KZN Wildlife to Hawaan Investments (Pty) Ltd dated 29 July 2003. This report is concerned with (a) the so-called buffer zone between the proposed Hawaan Investments housing development and the Hawaan Forest, and (b) other conditions proposed to be imposed on Hawaan Investments.
2. EKZNW's proposed new delineation of the so-called buffer zone is arbitrary. Though EKZNW states '...the absolute minimum setback requirements and setback management that would allow persistence of the forest...' it is not explained in EKZNW's letter how this absolute minimum is determined. I cannot find reason why the line is not 1m, 10m or 100m this way or that. I cannot find compelling argument why EKZNW's proposed delineation is better than that proposed by the Developer.
3. EKZNW has admitted in its recent letter to the incompatibility of its previously proposed 200 m wide buffer zone.
4. Strictly, by EKZNW's new criterion ('...the absolute minimum setback requirements and setback management that would allow persistence of the forest...'), no buffer zone is necessary. As a vegetation scientist I am confident that the physiognomic vegetation class commonly understood as forest will persist at Hawaan with or without the buffer zone. Nevertheless, it has of course been the Developer's stance all along to provide for a buffer zone.
5. Despite having apparently discarded a spatially based approach (the admission that a 200 m wide zone is incompatible (Section 3 above)), EKZNW curiously persists with its spatially based approach. EKZNW wants 'sufficient area ... [for] natural ecosystem processes, particularly those influenced by fire' to occur. Among other criticisms, the use of fire under the circumstances is problematic (Section 9 below).

6. It is difficult to discern logic to EKZNW's statements on the buffer zone. EKZNW's delineation of the buffer is arbitrary (Section 2 above). There is mismatch of this with EKZNW's criterion (Section 4 above). EKZNW admits the incompatibility of its spatially based approach, yet persists with a spatially based argument (Section 5 above).
7. Hawaan Investments a long time ago identified the shortcomings of a spatially based approach. That is why the Developer commissioned Ben Breedlove. Mr Breedlove's Functionally Based Habitat Design (FBHD) is to intensify habitat provision by concentrating the interdependent biophysical functioning, as far as possible. No one is contending that this *functionally* based approach will substitute exactly for process that can no longer operate because of the circumstances. But FBHD is motivated as an improvement on the *status quo*, and as the best practicable option.
8. EKZNW's spatial – rather than functional – focus warrants further comment. It is a matter of economic reality that as land value rises so the intensity of land use must increase in order to meet the rent. If the rent is not met – if the land user is precluded from using the land to realize its value – then the land is liable to fall into disuse or misuse. The pure conservationists might say this is what they desire. They want the land value to fall, supposedly permitting a lower intensity and less expensive system of use and management. But this is perverse – it is liable to have exactly the opposite effects to those intended. The likely consequences are those described in my study of the alternatives for the Hawaan Forest Estate (Mentis MT 2003 Hawaan Investments EIA Special Study 1: Alternative Land-uses). The current or other alternative land uses do not earn, or risk not earning, the revenue required for land upkeep – to keep out the impacts and spillovers from neighbouring intensively used and valuable land (*viz* alien plant invasion, waste dumping, wild plant and animal exploitation, vagrants and squatting). Plainly, as the extent of the so-called buffer zone goes up, so the capacity of the Developer to fund habitat management goes down – the income is decreased and the expenditure increased. EKZNW does not have the knowledge to decide the relevant economic trade-off. This underpins EKZNW's arbitrary delineation that is no different from guesswork or wishful thinking. It may be noted that one of Ethekwini's specialist reviewers, Dr O'Connor, commented "Viability of the Hawaan Forest can only be ensured if there are sufficient financial and human resources for essential management actions."
9. EKZNW proposes the use of fire to manage the proposed buffer zone. However, use of fire under the circumstances is problematic. This is for several reasons.

- Fire is a tool for management on extensive and sparsely populated land. (I use ‘extensive’ in the sense of exploitation of naturally occurring resources, and in contrast to ‘intensive’ land where use of resources is intensified by cultivation, cropping, irrigation, fertilization, *etc.*)
- Fire is hazardous, and with grassy habitat established among the houses of the development, there is a risk to life and property.
- Because of the hazard, fire could be used only under low rate-of-spread conditions. The consequent incomplete combustion would exacerbate an atmospheric pollution hazard. Atmospheric pollution is a severe problem in the greater Ethekeeni area, and it is not implausible that controls in future will become stringent.
- The atmospheric pollution is partly because of the particulates. But there is also chemical pollution. Many woody plants manufacture secondary plant compounds to defend themselves against microbes and herbivores. Inhaling smoke, probably especially in the case of incomplete combustion, is equivalent to a low-dose sniff of burning tamboti (*Spirostachys africana*) or oleander.
- The fires, because they are ‘cool’, would not achieve part of their ‘purpose’ to set back succession to forest.
- Because the use of fire under the circumstances would not set back forest succession, it would be necessary to hand-manage plants and vegetation. Thus, under the circumstances, fire would not replace hand-management, and might even complicate it (*viz* threaten plants that are desired by FBHD).

Thus, while in the short-term FBHD might use fire to a limited degree, urban and peri-urban property management in the future might have to get along without resort to burning vegetation. One of Ethekeeni’s specialist reviewers, Dr Lawes, concurs “Using fires so close to a residential area is probably not desirable.”

8. EKZNW’s delineation and ‘...sufficient area ... for establishment of the important coastal grassland habitat...’ are not consistent with the reports of Ethekeeni’s specialist reviewers, Drs Lawes and O’Connor.
- Neither reviewer supports a zone between present forest edge and housing development as wide as 100 m or 200 m. Dr Lawes argues for a buffer zone, rather than an ecotone, to shield the forest from the development. Dr Lawes considers that the purpose of a buffer can be achieved with a narrow zone of 20 m width.
 - Both reviewers recommend a reduction in forest edge to area, and this by means of allowing forest regeneration to close up the ‘pinch’ in the forest block. The closing of the ‘pinch’ is also proposed by Dr Lawes on grounds of increasing persistence of forest species.

9. EKZNW, in its letter, states other conditions including a management plan, compliance with the Forest Act 84 of 1998, proclamation as a private nature reserve under provincial nature conservation law, and title deed endorsement of a conservation servitude. Comment is warranted.
- There are some things that are necessarily so. An environmental management plan for the Developer's project is liable to be a condition of an ROD. There is no problem with this. Existing laws, such as the Forest Act, are not excluded by an ROD. These laws always apply. There is no problem with this either. EKZNW's recommended conditions in these regards are redundant.
 - The other conditions, recommended by EKZNW to be imposed, are unwarranted, mistaken, even invalid.
 - By the rights of freedom of association and freedom of contract, no one person can force another into an association or into a contract. For example, Moreland and Hawaan Investments cannot be forced into an association or a contract.
 - It is not necessarily so that one forest should be with one management plan implemented by one entity. Such a viewpoint (Boon R 2003 Notes from a Hawaan Forest Estate (and surrounds) Ecological Issues Workshop) reflects the mindset of the central planners of the failed former USSR. There is no single best way of doing anything complicated. Even if there were a best way, how could we possibly recognize it as such? Quite as cogent, it is the comparison, and the competition, between alternative things/ideas/actions/methods that drive innovation and progress.
 - While EKZNW evidently thinks biodiversity is a good thing, it does not apply the same logic when it recommends a 1-plan 1-entity approach to management. Yet, in the same way that one species does not have all the answers to survival, so it is with one idea/paradigm/theory/plan/manager. As implied under the previous bullet: freedom to choose, the diversity so generated, and the selective retention that results, are as fundamental to socio-economic function as Darwinism is to biology.
 - Proclamation as a private nature reserve is voluntary. The landowner must apply for proclamation. I am not aware of any provision, in existing law or the new Protected Areas Bill, that makes it possible for government to require a landowner to proclaim his or her land a private nature reserve.

- Proclamation as a private nature reserve offers little benefit to the landowner. Proclamation actually constrains the landowner's freedom, for example to apply his or her own conservation measures in a timely manner. That is why so few private properties are proclaimed private nature reserves. Institutional memory is short, for these very facts were established when I worked for the Natal Parks Board in the 1970s. Landowners – upon consultation – usually declined proclamation as a private nature reserve because it hindered rather than helped their conservation effort.
- EKZMW gives no reason why it wants proclamation as a private nature reserve. The reader is left to assume the possibilities: centrally-planned conservation. In reality, EKZMW is not competent to run its own conservation (see Appendix 2 of Mentis MT 2003 Hawaan Investments EIA Specialist Study 1: Alternative Land-uses). If the quality of advice EKZMW offered was good it would not be necessary to shore-up with prescriptives.
- In terms of the new Protected Areas Bill, a proclaimed private nature reserve will require a management plan that will need to be audited. This adds nothing to the likely ROD requirement of an environmental management plan that will need to be audited. Yet again, there is redundancy in EKZMW's proposed conditions.
- EKZMW proposes that a conservation servitude be registered. Again, reasons are obscure. If the purpose is to protect parcels of land of biodiversity value, then which are these parcels? In terms of the Developer's plan, the whole property will be managed for biodiversity, with the sections complementing one another (*viz* forest, buffer, housing-unit gardens). Perhaps EKZMW thinks that preservation of pristine Nature is the highest form of conservation. Or maybe that where biodiversity is highest conservation is purest. In reality, conservation is the sustainable use of natural resources. There are thus many forms of conservation, any particular form shaping to its circumstances. Any debate about the superiority of one form of conservation above another can be judged only by its appropriateness to the circumstances. The Developer has devised a conservation scheme to generate the funds necessary to improve the biodiversity preservation of the land involved. No one else has come up with any plan that is remotely competitive. The reasonable person would have expected EKZMW to support the initiative, and empower it with know-how. Instead, the Developer is having senseless obstacles put in the project's path. At the very best, a conservation servitude is redundant because if the project is given environmental approval it is likely to be subject to an environmental management plan (EMP) that presumably will set out the parameters within which the development may proceed. While an EMP is a living document, and allows for change in keeping with knowledge-experience-circumstances, an endorsement on a title deed could freeze things in a world where change is the norm, and therefore become an obstacle to adapting future conservation management to keep abreast of changing conditions. The EMP is the tool for the job. If by a conservation servitude EKZMW wants to freeze things, then yet again there is inconsistency with conservation principles: in this case not foreclosing future options.

- A further objection to the proposed registration of a conservation servitude is that such measure might lessen the owner's rights and control over the land. The land might become more a commons and less a private property. While Garrett Hardin's *Tragedy of the Commons* is supposedly disproved periodically, the South African experience is that good conservation is practised by proud custodians of private land.
- 10.** In compiling this report I have had sight of the notes on the ecological issues workshop of 22 July 2003. The workshop was a central planning effort, and the results speak for themselves. The objectives of the workshop were to develop a 'blue sky' scenario for what is best for the catchment, and to establish ground rules to apply to development proposals. The workshop report contained no criteria for 'best'. There is no distinction in the workshop report between what might be the 'blue sky' and what might be ground rules. The workshop report contains sets of statements about various issues, apparently without consolidation, synthesis and prioritization. Other than providing broad parameters within which to plan and operate, I do not expect that a central planning exercise can prescribe details without repeating the errors of the former USSR diseconomy.
- 11.** The Developer's proposal, though bold, remains the most risk-averse and cautious plan on the table. Ethekewini's specialist reviewers find no significant fault with the proposed development, and support a narrow rather than broad buffer zone. The conditions that EKZNW wants imposed are arbitrary, inconsistent and contradictory. Without just cause, EKZNW seeks to wrest control from private landowners over the management of private property, and thereby stifle the creativity and innovation of the entrepreneur. The Ethekewini ecological issues workshop sought to define broad parameters and establish ground rules for development, but, on the basis of the record of the workshop, made no progress.