

## COMMENTS ON CREATING AND MAINTAINING FIRE WISE VACANT ERVEN IN URBAN AND SUBURBAN AREAS OF THE OVERSTRAND MUNICIPALITY

Thank you for the opportunity to comment. By way of background, I am an applied ecologist, and I have conducted extensive research into the ecology and management of fires with a particular focus on fynbos ecosystems over the past 45 years. I have also gained considerable experience in the ecology and management of invasive alien plants. In these fields, I have published four scientific books, and over 170 articles in the peer-reviewed scientific literature both nationally and internationally. My work has always had a focus on the practical application of research findings to improve management. I have received several awards in recognition of this work, including the CSIR's Outstanding Achiever Award in 1997; the National Science and Technology Forum's annual award for an outstanding individual contribution to science over a lifetime in 2010; the South African National Parks annual award for corporate contributions to conservation by an individual in 2010; and the South African Academy of Science Gold Medal for excellence in the application of outstanding scientific thinking in the service of society in 2016.

I think this draft policy is a genuine attempt by the Overstrand Municipality to reduce the risks of fire damage. It is also encouraging to see a separate section (8.3) that applies specifically to biosphere reserves (I assume this applies to Rooi Els, Pringle Bay, Betty's Bay and Kleinmond within the Kogelberg Biosphere Reserve). However, there are several ways in which the policy can be strengthened to protect the biodiversity within the biosphere reserve, and there are also some ways in which the policy can be worded for clarity or proper alignment with existing environmental legislation. In the regard, I would be pleased if the points below could be considered.

1. The policy sets minimum standards for clearing vacant erven, but does not set minimum standards for retaining indigenous vegetation where possible and desirable. Under this policy, it would be legal to clear every scrap of vegetation from an erf, which is certainly not in keeping with the spirit of biosphere reserves. I propose that the policy should require the retention, where possible, of threatened and protected species, rare endemic species, ecologically important species, and red-listed species. This is more than just milkwoods. The policy calls for a reduction in density of at least 50%. It should also require the retention of a minimum cover of vegetation, e.g. clearing should not result in a reduction of more than 40% in the density of vegetation.
2. The policy allows for retention of some vegetation (e.g. 8.2.3 sets a maximum height of 500 mm for "grass and indigenous, ground-covering plant species"), and trees (e.g. 8.2.4 says trees should be "cleared of growth" to a minimum height of 1.5m). However, many of the characteristic, and ecologically important fynbos species in this area are neither ground-covering plants, or trees, but shrubs. For example, shrubs in the family Proteaceae (including Protea, Leucospermum, Leucadendron, Mimetes and Aulax) are typically about 2 m tall when mature, and they provide valuable resources for sunbirds and sugarbirds. The shrubs in this family should be exempt from the rules for height (applying either of 8.2.3 or 8.2.4 to them would simply kill them), provided of course that they should comply with the maximum (and my proposed minimum) density rules.
3. Vacant erven are not defined in this policy, but I assume that it applies to all erven that are not "developed", i.e. there is no building erected on them. Many residents own more than one erf, with a house on one and the adjacent erf used and managed as a garden. Can these "garden erven" (i.e. erven that are owned by the occupants of a house on an adjacent erf, and managed to the satisfaction of the Chief Fire Officer) not be exempt from this policy, and covered by the policy that applies to "developed" erven?

4. Points 8.2.7 and 8.3.7 state that “Erven that are located within 50m of thatched roof structures shall be cleared of vegetation to the minimum standard at all times, irrespective of vegetation species and location”. Thus a homeowner (erf owner) whose neighbour has a thatched roof will have to clear a considerable portion of their land, at their cost, to protect that neighbour who has, by choice, erected a building with a significantly higher risk of being damaged or destroyed in a wildfire. This does not seem fair. I would propose that, from now on, no buildings should be allowed to have a thatched roof, and that existing thatched roofs should be phased out over a reasonable time.
5. While it is encouraging to see that there is a distinction in this policy between erven inside and outside of biosphere reserves (sections 8.2 and 8.3), it is not exactly clear how they differ. One obvious difference is the omission of a clause on clearing alien vegetation that appears in 8.2 but not in 8.3. Why is this? Many other provisions are simply repeated. I would propose that, to be clear, section 8.3 should address only where the policy is different in biosphere reserves.
6. Regarding invasive vegetation, on page 4, “invasive alien vegetation” is defined as “vegetation declared invasive in terms of NEM:BA that landowners are legally required to remove from their property and which is deemed to be a verified fire hazard in terms of this policy”. This is not strictly correct, because NEM:BA lists certain species (not vegetation) as invasive, and these species have to be removed, not all alien vegetation. In addition, the NEM:BA regulations are nuanced. Some species (category 1) have to be controlled, while for others (categories 2 and 3) you have to apply for a permit to retain them (these include, for example, pine trees). You are allowed, under the NEM:BA regulations, to retain any alien species that are not listed. Perhaps you should be clear, in this policy, that no permits for the retention of listed pine tree species will be granted on any land with the exception of existing forestry plantations. Landowners will be required to clear all pines from their land as (1) they substantially increase the intensity of wildfires, making them more dangerous and difficult to control; and (2) they act as a seed source for invasions beyond the boundaries of the land parcel concerned. A focus on pines is particularly important because if they are not dealt with soon, the problem will rapidly grow to unmanageable proportions.
7. Regarding clearing methods, the policy defines methods that can be used (e.g. 3.4, 3.6). Could you please also specify what methods should NOT be used, i.e. machines that disturb the soil like bulldozers or scrapers. Sections 8.2.8. and 8.3.8 state that “The clearing of erven shall be done in a manner that does not contribute to soil erosion.” Replace “soil erosion” with “substantial disturbance to the soil”. An action may not lead to erosion, but it can lead to a lot of ecological harm.
8. In sections 4.4 to 4.9, it seems that landowners will be responsible for clearing their own land, but also that the municipality will appoint contractors. It is not clear whether a landowner is obliged to use the contractors, or at what stage contractors will become involved. Can this be clarified please?
9. Finally, section 4.3 states that “Compliance notices will be served on land owners by registered mail through the South African Post Office in terms of section 6(2) of the Community Fire Safety By-law”. I am not sure how practical this will be. The Post Office seems to be on the verge of collapse (for example, I have heard that the PO at Kleinmond has

closed permanently due to their inability to pay the rent). Another way should be found to deliver notices.

I will be happy to discuss any of the points above if clarity is needed.

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