29/4/2003

The Secretary
Select Committee on the Recent Australian Bushfires
House of Representatives
Parliament House
Canberra ACT 2600

Dear Sir/Madam,

SUGGESTED METHODS OF BUSHFIRE HAZARD REDUCTION

The recent devastating bushfires and the ones which occurred last year have shown again, that periodically extreme weather conditions occur in Australia, when we are not able to prevent bushfires from burning completely out-off-control. The amount of damage these bushfires cause is immense. And even though our fire-fighters try very hard to mitigate the damage these bushfires cause, history shows that they have only been partially successful; mainly because they have been handicapped by inadequate bushfire hazard reduction measures undertaken beforehand. Therefore it can be reasoned, that if better bushfire hazard reduction methods are implemented, far less damage will result from these devastating bushfires. In the light of this, I suggest a few new bushfire hazard reduction measures which should be implemented, because they are likely to be highly effective in limiting the amount of damage and loss of life any one of these devastating bushfires can cause. And if these suggestions are adopted, many other benefits will also be reaped.

Bushfire Hazard Reduction by "Harvesting" Our Bush

History shows, that bushfires devour almost all of our bush periodically, where the periods range from a few years to several decades; and furthermore, that we were not able to prevent this from happening. We also know, that our bush renews itself over time. Therefore we can regard our bush as a renewable resource. When these devastating bushfires occur, incredibly large amounts of heat energy are released into the atmosphere, which we are not able to utilize for our benefit. Therefore we can also regard our bush as being a renewable source of heat energy; and we should aim to harness much of this energy for our benefit, instead of letting most of it be wasted periodically in bushfires. It is uneconomic and / or impracticable to harness all the energy obtainable from our bush by "harvesting" it, but I suggest that we "harvest" a good deal of our bush selectively for the purposes of producing heat energy for our use, and also to acquire many other benefits from it as well.

The benefits obtainable from such a policy would be great and many; for example:

* The most important benefit would be, that any one bushfire would devastate a much smaller area, than the recent large bushfires.

* History shows generally, that the larger the bushfire, the more people, domestic and farm animals are killed and injured, and the more wild-life is also killed and injured. Therefore, if any one bushfire is confined to a smaller area, less of these deaths and injuries will result.
* Although I am not able to estimate how much heat energy is released into the atmosphere during typical large bushfires, I suspect that the heat energy released during the recent Canberra area bushfire would have been enough to supply all the heat energy needs of all Australians for many years. Not only could this harnessed heat energy be used for our space heating needs, cooking needs, water heating needs, process industry needs, and other heating needs; it could also be used for very many other purposes, especially if it were to be used in mini power stations to generate electricity, which is fed into the grid. A disadvantage would be, that we would not be able to harness this heat energy near our big cities, because of smoke pollution; but this should generally not be an impediment is country areas.
* The "Greenhouse Gases" released into the atmosphere during such bushfires are also very large, but they are not "counted" against the country of origin. Therefore any "harvested" bush, if utilized as fuel for domestic and / or industrial purposes, cannot be "counted" with the "Greenhouse Gases" released by that country. Therefore, industry growth would not be constrained as much, as is presently being proposed due to the restrictions on "Greenhouse Gas Emissions".
* Any heat energy derived from "harvested" bush, would also decrease the amount of non-renewable fuels we would need to use. Therefore the "countable Greenhouse Gas Emissions" would be lower in Australia.
* Harvesting and utilizing our bush would also create employment in very many fields.

I propose that the "harvesting" of our bush be done in a sensible, logical and environmentally sustainable way; for example:

* "Harvest" our bush so as to create easements which carry very low fuel-loads; and do so, <u>that any one bushfire is constrained by low fuel-loads easements around it</u>. This would result in <u>any one bushfire destroying a much smaller area</u>.
* Keep relocating the low fuel-load easements periodically, so that the bush which carries the greatest fuel-loads is converted to low fuel-load easements.
* Thin-out some of our bush to lower the fuel-loads per unit area, and so decrease the intensity of bushfire fire-fronts.
* "Harvest" our bush carefully, so that wildlife relocates itself from the newly created low fuel-load easements. These low fuel-load easements would also provide temporary sanctuaries for wildlife during major bushfires - which at present usually destroy most wildlife in those areas. Furthermore, these low fuel-load easements would also provide better access for fire-fighting purposes and provide access for many beekeepers to aid the honey industry.
* The "harvesting" of our bush should not be done purely to harness the heat energy which is obtainable from it (say from fire-wood, wood-chips and briquettes), there are many other purposes for which our bush should also be "harvested"; such as:
  * Timber furniture
  * Timber for houses

* Paper pulp
* Various Oils
* Fences, fence posts, wooden stakes
* Mulching - with much of it turned back into the ground to improve soil fertility.

I have no doubts, that even the most "one-eyed" conservationists would agree with this suggestion, once they realized that more of our bush and wild life would be saved from periodic utter destruction due to these devastating bushfires, and that we would also consume less of our non-renewable heat energy resources.

Planting of Low Flamability Trees and Shrubs to Establish Permanent Low Fuel-load Easements

One of these devastating bushfires occurred in the Adelaide Hills during the early 1980's. Lives were lost and much property was destroyed in that devastating bushfire, but at least one home was saved by an apple orchard; even though it was in the path of a very fierce fire-front. The first three rows of apple trees were badly singed, but the fire-front could not pass through this apple orchard to get to the home.

Green apple trees are not the only trees which will not burn easily, there are many other varieties of trees and shrubs which will not burn easily. I suggest that **our Federal Government direct that investigations be carried out to determine which type of trees and shrubs are most suitable for the various areas, and that these be planted to establish also some permanent low fuel-load easements**.

Mandatory Bushfire-proof shelters

I suggest that **mandatory bushfire-proof shelters be built close to homes in bushfire-prone areas**. These bushfire-proof shelters should comply with designs made available by our Federal Government, and they should contain all the equipment specified by our Federal Government. Furthermore, our Federal Government should make interest free loans available to residents for this purpose; and (CFS ?) inspectors should ensure that all construction and upkeep of these bushfire-proof shelters complies with specifications.

If such bushfire-proof shelters were to exist, **less people would loose their lives trying to flee some of these devastating bushfires**. Furthermore, as soon as the main fire front passed, residents are likely to be able to leave their bushfire-proof shelters and save their homes from utter destruction.

I hope that you find these my suggestions useful.

Yours sincerely,

Raymond E. Zegebroks

(Raymond E. Zegebroks)

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