

02 Ross Morton.txt

Invitation for submissions to water use and management inquiry

From: Ross Morton

Sent: Thursday, 28 June 2007 12:52 PM

To: Committees

Subject: Fw: Invitation for submissions to water use and management inquiry

Attachments: Water in Australia.rtf; fire and Water.rtf

the Secretary

Standing Committee on Planning and Environment

, ACT Legislative Assembly

28 June 07

Dear Dr. Jaireth

Please find attached two papers I wrote in 2003 around the subject of fire abatement and water. both involve designing for sustainable water storage, and the second one: "Water in Australia" surveys a range of water conservation measures - some of which the committee may find relevant to Canberra's situation.

I am a private citizen, but also am - for what it is worth - secretary to both Wyuna community and to PWDACT (People with Disabilities). The views expressed below and in the papers are my own.

I wrote the papers in 2003; the first - "Fire and Water" - very shortly after Canberra's Firestorm had ravaged this city and come within a hundred metres of our house. It was revised a month or so ago, in the light of further research into fire retardant vegetation. At first it was sent to Mr. Wood, a minister in the Stanhope government who had something to do with planning, and also to the Fire Recovery Taskforce. Mr. Wood replied, questioning the fire retardant properties of Acacia delbata. So in my later version I qualified its use in a fire retardant band, specifying juvenile delbata - as it becomes flammable with brittleness and age. I also added other refinements from research.

The reason I included "Fire and Water" is that water is used as part of the fire retardant zone designs an integrated element. In brief, a series of dams or ponds are excavated. The spoil is heaped strategically about the dam, and on this spoil is planted the fire retardant vegetation. behind, or uphill - from the dam complex can be built a series of fire proof structures - like stone walls or cement barriers. The entire structure functions to create a fire shadow behind it. If the fire shadow contains Canberra suburbs, and lies between built-up areas and the direction of likely fire attack (such as between West Canberra and the Murrumbidgee), I would submit the structure would serve a double purpose: 1) to protect the built environment from fire attack, and 2) to create a secondary water storage, which could at least be used for gardens, parks, and industrial purposes. Water recycled from domestic effluent, and - possible - from sewage - could be used to supply the dams or ponds. A further development could contemplate the growing of edible aquacultures - and wetlands etc. - along permacultural lines - further away from human habitation.

I am aware that Toowoomba rejected the notion of recycling sewage. this was, in my opinion, a great pity, as purifying and filtering technology been developed to such a refinement that the filtrate was more pure than usual tap water. However, to overcome any residual subjective squeamishness I would advocate the restricting of such filtrates to industrial or horticultural use - essentially parks, gardens and arboretums.

In the latter connection, namely arboretums, I was apprehensive to hear that Wollami Pine was contemplated for arboretum replanting in the Canberra Fire Reconstruction project. No pine - however steeped in heritage value - should be grown in a fire sector. The resin is highly flammable.

I hope you get my drift: I am in favour of recycling, of water conservation, of a permanent design for water and for fire protection in an integrated fashion. I also would like to advocate the following measures:

02 Ross Morton.txt

- . generous rebates for domestic water tanks especially for pensioners (preferably free for these). Modern sophisticated tank designs include tanks built into inter-house fences - which again would serve for fire resistance as well;
- . education/information brochures on domestic conservation measures: mulching, drought resistant plants for gardens, domestic fire retardant zones (ref. "Fire and Water"),-minimizing toilets and other domestic appliances (like washing machines) etc..;
- . graduated water restrictions, concomitant with conservation education, but followed by more compulsory and permanent restrictions if climatic trends indicate this to be necessary.

Yours sincerely

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especailly