

INQUIRY INTO THE INCIDENCE AND SEVERITY OF BUSHFIRES ACROSS AUSTRALIA

I note John Brumby premier of Victoria indicated apart from the terrible loss of life, the recent Black Saturday bushfires could have cost the state One Billion Dollars. We have had fires like this before in Victoria and have had some in Kuringai national park area of Sydney and Canberra in recent years. Not a lot seems to have been learnt from them in terms of setting up fail safe systems to reduce their incidence or the devastating consequences they wreak.

The threat of Global warming to the Australian Community is already here, both in terms of regional higher temperatures, increased flooding and cyclonic activity which to the average bystander is hard to comprehend all at once. Of all the threats, bushfires is one of the hardest to cope with both from its rapidity of effect when out of control, and potential consequences for loss of life and property. While winter burning off of excess ground cover foliage is helpful in reducing loss in treed areas once a fire has reached a critical size it is virtually unstoppable when seasonal conditions of high heat and wind assist its growth & movement. The most important requirement is to stop fires before they reach this critical size.

NASA and the US forest services have developed a program of using UAV's or unmanned air vehicles to scan the land during periods of high fire danger. They do this by having small cameras located in the nose of UAV and beaming evidence back to base during periods of lightning or fire danger. It is possible for one operator to read data from 12 UAV's during 24 hr surveillance. We have already adapted a system to locate fires caused by lightning strikes using manned aircraft, the trouble is once the fire has been located we often do not have the facilities to put it out.

On the 25/05/09 I put forward a senate, a submission to the "Inquiry into Food Production in Australia" This submission titled Multi State Water Transfer Project, included a brief section (item 6) outlining how a series of strategically located water reservoirs could be located close to roads to hold a base of water that could be kept topped up during high fire danger periods. If it was possible through aerial surveillance to locate fires it may also be possible to quickly direct aerial water bombers to a reservoir to pick up water to put it out. An expensive solution, yes, but when you see the devastation wreaked by recent fires in Victoria as global warming heats up it may be a necessary expenditure. The trouble is when a state government suffers fire damage it doesn't seem that the extended real cost of that bush fire is made available to the public. eg - Few know that massive fires within inland forested areas have longer term effect on the water output from catchments located in the region, which in turn has costs on loss of industry or farm output.

There are many benefits of our Multi State Water Transfer Project but there is an extreme limit to the land coverage ample water from the north can do to provide back up for all needs. However if subsidiary canals are directed to regions where water can be picked up and flown from the canal direct to fire, or shipped by tanker during the winter to reservoirs, we have a trans continental way of using northern water to meet another critical community service "Fire Protection". There will be critics of using UAV's to source fire data. The loudest noise in USA comes from Airlines concerned at the possibility of small collisions endangering airliners. This is a matter of control as to height of UAV's during surveillance. Small craft can do a good job at spotting fires from 1000 feet altitude but they are blown about with convection currents from large fires. Large fires require higher altitude air vehicles fitted with cameras that will see through smoke to be effective. With the altitude they fly at, they are the craft whose flight path needs to be regulated in flight operation.

I can supply names of NASA and Forest Service people who have researched this subject. It is not an easy concept to deliver but one that must be looked at.

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