

*Shoalhaven
City Council*

Submission No.451



Environmental - Growth - Community

**Shoalhaven City Council
Submission to the
Select Committee on Recent
Australian Bushfires
2001/2002 Bushfires in NSW**

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Shoalhaven City Council sees that better management of incidents such as the bushfires of December 2001/January 2002 and November/December 2002 can be achieved. The recent incidents have identified various issues, including:

- Need for a more clearly defined regional focus, either as a whole or as functional working groups, for the Rural Fire Service in lieu of a corporate headquarters in Sydney.
- Opportunity for regional training for Rural Fire Service staff and volunteers to be delivered through regional "centres for excellence", particularly for incident management team members.
- A belief that the way of the future in bushfire management is better use of aerial intelligence. Within the Shoalhaven several private enterprises are well advanced in GPS/thermal imaging and air/ground data transfer. An opportunity exists to utilise the defence driven technology into the incident management area. Incident analysis and modelling for simulation training and predictive analysis can be developed in this area should the will be there.
- Need to seek integration with the Department of Defence for it to play a more significant role in bushfire management (and other incidents), particularly in the fields of logistic support, communications, intelligence and by the use of specialist conversion of military helicopters for water bombing, emergency retrieval and deployment of specialist groups.
- Need to bring fire mapping and modelling to a modern platform recognising that current GIS technology in Local Government through the larger Local Government Authorities has the capability to be enhanced to provide live data transfers on GPS fire plotting, infrared scanning etc.
- Need to recognise that an opportunity exists for private contractors operating in the civil air aerospace industry to partner the Rural Fire Service and other agencies (CSIRO, EMA) in developing technology, simulation and modelling of bushfire scenarios for training of Rural Fire Service staff and volunteers on fire planning, management and logistic support.
- Need to expand the horizons of Incident management training to incorporate the volunteer movement to capitalise on the "local" resource.



Planning strategies at Nowra Emergency Operations Centre during December 2001/January 2002 bushfires

Greater Regional Fire Service Presence in the Regions

Council believes that the present system whereby the Rural Fire Service presence is located at district level aligned with Local Government boundaries could be improved. Presently the district administration brigade structure is controlled through Regional Offices and then by a central RFS corporate headquarters in Sydney.

Council would propose that a system of regional teams be established located within the country areas based upon like geographical areas but also with a history of associated incidents (eg Shoalhaven combined with areas to the west not necessarily with Eurobodalla – a similar geography but not necessarily related in an incident).

Some of the RFS administrative staff could be located in a central regional centre, others deployed throughout that region or similar geographical regions through local district offices, and during emergency situations could then be pulled together into a regional incident team.

This regional model would then assemble, at a time of need, a team of incident managers who are not only familiar with emergency procedures, but also familiar with the local needs of that particular geographic area. By a system of mentoring with local knowledge, this resource can be rendered quite useful in a short period. Whilst expertise brought in from outside the region can assist in expanding the manpower resource, it is sometimes counterproductive by the fact that these personnel are unfamiliar with the local scenario, and may take a short period before they are up to speed with the current situation.

It is felt that at least six regional teams could be established throughout country NSW and this number would be tested in a major statewide incident. These teams could be located into areas of known high incident risk and that support facilities could then be equipped adequately with electronic support to be able to assist and manage incidents anywhere within the region from that control centre.

Expertise in GIS data and systems is quite advanced amongst several larger country councils. Building upon this expertise to provide regional networked hubs, would allow greater capability in the provision of mapping in real time, transfer of other data including infrared scanning and logistic/asset tracking and monitoring. Shoalhaven City Council is quite advanced in this area and came to the aid of the RFS and Dept of NP &W in recent events to provide solutions to software problems.

Council has thought about this problem quite extensively and worked with software system operators seeking a solution only to see these suggestions "borrowed" by the RFS for the development of their solution. During the Hylands emergency, these software enterprises offered volunteer assistance to further develop their model to assist the RFS in reporting the incident. The offer was not taken up as it was felt that their efforts in upgrading the

model/training package would most probably not be taken up by the RFS and the IP vulnerable and efforts wasteful. A most disappointing outcome after several years effort on the part of both Council and the company, especially with the level of resources being ploughed into "their" system by RFS.

Council is concerned at the level of overhead being established within the RFS. The proportion of these costs within the overall program budget is rising each year both at the state and regional levels. The New RFS HQ will be state of the art, but what cost will it pull from state funded operational budgets – thus deflecting more of the "operational" costs onto the Commonwealth under S44 emergencies.

Council also believes that even some of the corporate functions within the Rural Fire Service headquarters could be deployed to country NSW, leaving only a corporate secretariat in the metropolitan area, and even this could be located within a regional centre.

Rural Fire Service Staff Training

Based upon on the regional concept, Council feels that regional "*centres of excellence*" could be established to develop the skills for the volunteer incident management team members. Having this training expertise within the regions would allow greater access to more people allowing these skills to be transferred across a greater breadth of local administration and local brigades. Council acknowledges the RFS' stated objectives to have volunteers make up one third of incident management teams

The establishment of a common training system for all incident management teams would then allow this to be filtered down from the regional level through the district level, to brigade level, to allow the up-skilling of local personnel within the region. This would establish advanced management skills as part of the regional incident management team. Council also believes this is about local community leadership training and previously sought to apply for funding under the Commonwealth's Regional Solutions Program to improve and expand the model but without the RFS support it failed. Volunteers cannot afford either the time nor the money to attend training courses as currently offered.

This practice of developing staff and volunteers from within the region to assist with the incident management team is supported because of their knowledge and expertise in local conditions. When acquitted with advanced incident management training, they can be of superior benefit in a regional emergency rather than expertise brought in from outside the area.

The skills and procedure acquired through this regional training will be transferable from region to region upon standardisation of the advanced operational tools required for the modern emergency. The existing system is based upon one platform however the variability in geography/environment make operations quite different. The combination of both the training and

modern suite of tools is paramount. In a major emergency, as happened at the beginning of 2002, certain practical expertise from outside the region would be immediately transferable and useful to the local emergency if these modern and available tools were implemented.

From the practical experience of the recent incident it was evident that people were being moved through the Shoalhaven incident management centre for training purposes, and that their "value" to the emergency team was variable because of their lack of knowledge of local conditions and environment. This acquisition of knowledge about the local scenario did develop after a number of days in the team, however it seemed then that they moved on to somewhere else and another "trainee" was placed within the team.

The frustration was expressed by people with local expertise that these "visiting trainees" were of assistance but their value was limited.

Council believes that developing expertise from within the region for incident management teams can be achieved and developed by use of modern training techniques and operational regimes such as those used by the Department of Defence.

Utilisation of Defence Force

Council believes that a greater role may be available through the Australian Defence Force in the area of incident management, particularly in the fields of logistic support, communications, intelligence and specialist conversion of military helicopters for water bombing etc.

The recent incident highlighted the pros and cons of using particular aircraft, but it did realise that the aerial capacity in fighting fires was an effective management tool.

Council is concerned that major expense to Governments, through the hire and deployment of specialist apparatus from overseas, placed a major impost on resources. It is believed that the some capability was available in-country through the Department of Defence. It is understood by Council that the Department of Defence has a role primarily in the defence of the nation. Recent engagements have effectively been in a peace-keeping role of civil management and emergency incidents (Sydney-Hobart Yacht Race, East Timor, PNG tidal wave, as well as on the local scene - floods/bushfire incidents). Also the Department of Defence has been involved in major security/logistical exercises involving the Olympic Games and CHOGM and the functions of logistics and operational support are considered similar to civil emergency incident events.

Here at Nowra the Naval Air Station of the Royal Australian Navy was heavily involved in the bushfire incident both through its military helicopter operations and operational support through HMAS Albatross. (The base was directly under threat from the fires) Council believes that a greater use of the military

facilities, not only at Nowra but across the nation, could fulfil a need. Specially designed adapters etc could be made available for fitting to existing aircraft, with trained crew, for easy deployment to the incident scene.

In fact special mountings were already approved on the RAN Seakings to carry 6-8 tonnes of water – this facility was made known to RFS but only limited use was made of these aircraft.

This cooperation has a number of benefits in that it provides practical training for military personnel, it uses an in-country resource and develops expertise for future incidents. Economically, it keeps within country the vast amounts of money required to undertake an aerial operation within the incident management plan.



Aerial water bombing at Sussex Inlet

Council acknowledges however that none of the military aircraft equal the Skycrane.

Buffer Zones Around Urban Areas

Council has already commenced to review its policies regarding the reduction of combustible material and the use of buffer zones around urban zones and other physical assets. This management program does come at a cost and sacrifices in other areas of Council budget have had to be made. With most of Council's towns and villages adjacent to nature reserves or National Parks, there is quite a deal of community concern that within these areas a program of hazard reduction needs to be regularly undertaken, and that a graduated buffer zone be established adjacent to areas of built environment.

Council sought cooperation through the State Government for drafting amendments to existing legislation to ensure that the procedures of hazard reduction can be readily undertaken in and around communities. Council acknowledges the work done by the NSW Government in this regard.

In recent years the area under the control of the Department of National Parks and Wildlife has increased dramatically and Council is concerned that adequate resources have not been made available to that Department to manage the assets of the service in such a way as to protect the natural and built environment from wildfire events.

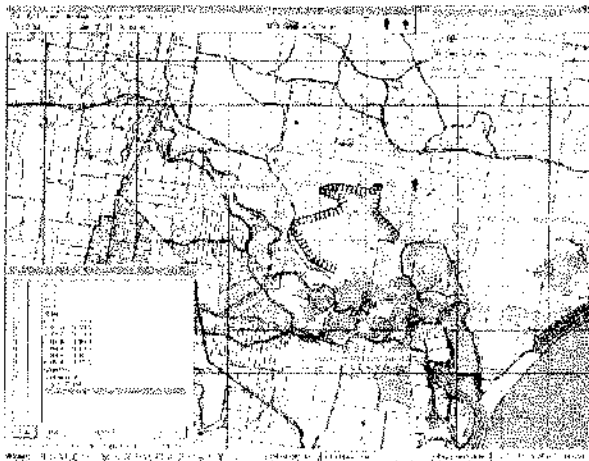
The development and maintenance of permanent fire breaks on both Council and NP&WS land for the protection of the built environment is essential.

The maintenance of these fire mitigation areas is a concern. The method of funding programmed maintenance should not just become a budget line item and consumed within operational budgets. The need to address the issue and prevent incidents is of paramount importance. The philosophy of using "insurance" or incident money to pay for neglected programmed items should be perceived as poor management.

Modern Management Techniques

Council has been working with the Defence corporate sector with regard to developing operational management systems to advance the capability of incident management in incidents such as that experienced in December 2001/January 2002.

Several Nowra-based contractors are working on similar GIS-type technology for the Department of Defence and have integrated these operational tools with computer simulated training packages. Overseas software is also available. Council believes that a similar opportunity exists within the area of incident management and strongly urges the Government to accelerate the process of establishing such a system. Within the Defence support industry sector, there are many capable industries, which would have expertise to adapt to create, develop and maintain such a system.



Computer simulated training package developed by a local Shoalhaven company

Council has worked with one such operator and presented this to the Rural Fire Service during 1999/2000/2001. The aim of this system was to have a platform which was usable both in the field and at the highest level of management and was based upon existing data and facilities available through either State Government or Local Council resources. The company in this instance was prepared to assist in the development of the package and in developing the training modules necessary. Council believed that the technology was such that it could be implemented across brigades and at higher levels, and therefore would generate knowledge both at the brigade

and upper management levels, allowing people to move through the different levels using the same system.

During the recent fire incidents, certain GIS electronic packages were utilised, however the recording of this data was being undertaken in a retrospective manner and the outputs were not readily understandable by those other than in the planning area. Some observations were:

- Scanned information was slow and late
- Helicopter plots were slow but accurate with user briefing

This meant that the electronic data had to be recast into the traditional forms of output to be understood at the operational level. What a time to find out that the advanced systems were not practical.

Council believes there is a better system and through its interaction with Defence contractors, has seen such models in operation. Projecting ahead and/or training from simulated scenarios are facets which need to be developed for operations and training.

The implementation of training and modern state of the art technology to manage such incidents is consistent with Council's other desire to have the Rural Fire Service geographically-oriented. The operation of a standardised system to embrace management, logistics, communications, operations etc is a thing, not of the past or the future - but of the "now".

The use of computer simulation for task training as well as strategic planning is a feature of Defence operations today. This same technology and expertise can be harnessed in the development of a better incident management system. Within the Shoalhaven area, Defence contractors exist who undertake the following tasks:

- Manage logistics for Defence operations
- Develop computer training packages for task and strategic projects
- Conduct and coordinate training for military personnel in strategic and operational procedures
- Fly and operate aircraft on behalf of the military
- Train crews in aircraft simulators and generate software scenarios for that training
- Integrate GIS and scenario training for aircraft and field simulated exercises
- Manage facilities in the local area for fire fighting training, water operations and emergency recovery of personnel, aircraft etc.
- Provide airborne thermal imaging services as well as analytical tools (these were used in the 1994 fires)

The opportunity for the private contractors operating in the civil aviation/aerospace/defence communications/logistics industries to partner the Rural Fire Service in developing technology, simulation and modelling of

bushfire scenario training of Rural Fire Service staff and volunteers has to be examined. The integration of Defence personnel with Government and volunteer fire fighters is essential in major incidents.

The breaking down of the training into modules deliverable anywhere (back of a warship patrolling the Persian Gulf) can be achieved. Having training at places and times suited to volunteers is essential. With over 1300 volunteers in the Shoalhaven (and >50,000 across NSW) this resource should be embraced. A new volunteer is out there with computer skills and other sophisticated and this resource needs to be tapped into. Keeping the higher order expertise wholly within the RFS is too narrow sighted.

Additionally, the development of training and management techniques for incident management is a saleable item on the international scene. The development of packages featuring these techniques could be sold not only interstate, but into South East Asia. Developing an expertise within Australia, and specifically NSW, that could be a significant export earner is a definite possibility. Additionally, the development of an industry to utilise the resources of the Defence contractors and build additional work to complement their variable Defence workload, is also seen as a benefit.

Other Issues

Volunteers are the backbone of an affordable incident workforce. Maintaining a volunteer "army" is essential and some recompense/support is paramount to having this workforce remain loyal.

A genuiness is needed in equipping volunteers to continue – adequate communications; assistance with purchases through some tax relief; direction of a fixed percentage of the fire levy to equipping brigades and so on.

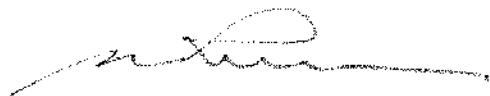
The role of employers is also important. During sustained emergencies, volunteering becomes a burden on business and employers. There is a need to soften the effect on the self-employed who give up their time to serve their community. Suggestions to overcome this challenge include:

- For approved volunteers undertaking emergency management work to receive \$x/day tax deduction entitlement;
- For those companies releasing volunteers from their workforce recognition of their "contribution" to the broader community needs to be forthcoming. Again an income tax incentive is suggested. The impact is even larger for self-employed volunteers where a day volunteered can be a day's loss of income and business opportunity.

Non-insured property owners should be set a LIMIT for any state compensation. Properties in high risk areas should pay a premium and part of this premium should be passed to a fire agency.

Contacts within Shoalhaven City Council

The City Services Manager, Mr Barry Russell, or Mr Greg Pullen, Council's Economic Development Manager will be available to work with the Select Committee in pursuing any of the issues as outlined in this submission.



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