

## SUBMISSION TO INDEPENDANT INQUIRY INTO NSW FLOODS 2022

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Organisations dealing with management of Floods in NSW need urgent restructure

### 1. a. CAUSES and FREQUENCY OF FLOODS

The Northern Rivers of NSW (Tweed, Wilsons/Richmond and Clarence) are a very complex as well as compact collection of catchments that are often ALL impacted by the same rain event, be it a Tropical Cyclone or a slow moving East Coast Low pressure system.

The Feb 2022 event saw record levels of rain across these catchments fall slowly at first then in a few hours after midnight rainfall in intensity unheard of for more than a century created a flood event over 2 metres above the 1954/74 flood of record.

### b. PREPARATION and PLANNING

Normally it would be expected that Flood Warnings would have been issued for rural residents and urban areas downstream as part of the normal procedures, but it has been learned that several key Automatic river/rainfall gauges in the Wilsons River catchment were submerged and became inoperable. This meant that predictions for many thousands of Lismore residents were limited to almost hourly adjustment to the peak height as it overtopped the levees in Lismore CBD as well as South Lismore. Not to mention rural residents and farmers. Any competent Emergency Manager would realize from his risk assessment that there are a huge number of rural residents and farmers with thousands of head of cattle in dire need of EARLY WARNING of impending floods

### c. RESPONSES to FLOODS

This highlights the major shortfall in using technology (key gauges) ONLY, that can fail at the worst possible time creating the disastrous situation that occurred in Feb.22

BoM and NSWSES should have had a BACKUP system in case any loss of the gauge technology network occurred such as loss of power or what actually happened on this occasion or even in a smaller flood..

This amounts simply to Manual Gauge plates relatively nearby these KEY GAUGES , but close enough to be read by a suitably trained and trustworthy local resident, that can then report those readings to both the BoM and the LOCAL SES

This was the way that both these Organisations worked together for nearly FORTY YEARS. Local Residents reading gauges and commenting on the actual weather nearby at the time, also competent Engineers etc recruited as volunteers with detailed local knowledge, would contact the BoM by phone and discuss the readings and any key matters that were of concern. These discussions may have resulted in a finer tuning of the Forecasts and any warnings issued.

c.i. IMMEDIATE RESPONSE DURING OPERATIONS

Since 1990 NSWSES State Headquarters moved to Wollongong and commenced a centralist style of Operations Management, with all information having to pass up the line and any WARNINGS being issued by the hundreds of permanent staff located there

This in reality results in several hours time delay as the Local SES HQ are not permitted to issue a warning of their own.

Pre 1990 BoM issued the WEATHER FORECAST and SES in each Valley INTERPRETED how the forecast would impact on the communities and ISSUED their own Flood Warnings. This worked perfectly well for FORTY YEARS with very little loss of life and negligible property damage such as recently experienced. Flow times between catchment peaks and the peak in Lismore CBD have been calculated at approximately 8 to 10 HOURS and this WARNING TIME allows residents, farmers and business owners to prepare for the PREDICTED HEIGHTS, if this information is broadcast over the LOCAL RADIO on an hourly interval (24/7). Communities and Farmers have become accustomed to listening for regular flood warnings and advice and respond accordingly

c.ii Major floods affect whole valleys and the communities therein., therefore it is appropriate that Local Volunteers who are in a position to possess detailed local flood experience, are respected by their fellow residents and are capable of managing such flood events. In many smaller communities and villages residents are more than likely members of the local Bushfire Brigade and simply take that cap off and don the SES uniform. Selecting/recruiting capable motivated local residents to manage this Volunteer effort is not rocket science.

c.iii. Often the volunteers groups operate out of the same building in these smaller communities using the same if not similar communications equipment. A close liaison with the Telstra Technicians can often produce old but still effective phone systems that can enhance local communications. i.e. A single phone can become a series of several interconnected to take incoming calls

d.. TRANSITION FROM RESPONSE to RECOVERY

The transition between Response and Recovery is a fluid one, often resulting in organisations such as Red Cross, SDA, Salvos, Vinnies, and Docs slowly cutting down their RESPONSE involvement as the communities recover. Other community groups such as Helping Hands and “the Mud Army” have a role as well as others.

Local Govt Councils should play a major role in co-ordination flood Recovery

e. ADF assistance is a valuable and extremely capable resource that when requested by the State reports to either the SES (Lead Agency) or the LEOCON if the operation is moving into the Recovery phase

The Feb 2022 is an extremely unusual event with massive recovery That may take years to fully recover from. Issues like:-

Immediate accommodation for homeless families

Determining those in need of home relocation

Finding a suitable location for relocation

It may be possible to shift some homes to a nearby flood free Site. The issues are many and varied.

## 2. VOLUNTEER TRAINING

Lismore City SES had NINE smaller (12 to 14ft.) Flood boats which for unknown or ill-considered reasons were disposed of and replaced by two or three larger vessels totally unsuitable for pulling over partly submerged levee banks, or fitting in between flooded houses to effect rescue of trapped persons.

- a. SES Volunteers generally do a marvelous job for the community in storm damage, assistance to Police with searches etc, but because of the centralist management from Wollongong or more recently from Zone HQ in Newcastle, have lost most of the older volunteers that are not inclined to carry out the physical tasks like climbing on roofs etc.
- b. With my 33 years service in senior positions All in this area I enrolled as a SPONTANEOUS VOLUNTEER, but was never contacted by the local Region HQ or LHQ, until I arranged a meeting with a person allegedly in charge of the Richmond Valley and discussed with her my experiences in flood management from 1955 until I retired in 1995. I have not been contacted since. All operations seem to be run from remote INCIDENT HQs, so who needs local Volunteers?.
- c. BACK-UP FLOOD GAUGE READERS
- d. The "Belt and Braces" approach to management is tried and true, but seems lost on those who believe only in modern technology. Electronic Gauges are great while they work, but a Plan B is essential, together with LOCAL INPUT in PREDICTIONS
- e. LGAs to consider FLOOD RISKS  
Lismore, Coraki, Woodburn etc were established on the river many years ago so that coastal ships could service the developing communities. Lack of attention to the risk analysis has seen further development of industrial sub-divisions on the flood plain at Sth. Lismore ignoring the flood potential. LGAs need to undertake detailed RISK analyses particularly for major flood effects when considering future developments on the floodplain.
- f. FUTURE FLOOD RISKS & the COMMUNITY  
The communities have lost confidence in SES particularly since the management of Flood Operations has been done remotely. This lack of confidence needs to be re-built over time. Certain changes in management particularly to deal with this remote corner of the State, with its compact and complex mix of very high rainfall river systems, are URGENTLY NEEDED. The centralist system may well work for State wide Storms etc, but Floods have particular behavior

patterns peculiar to each River Valley. In this corner of NSW flooding can occur very quickly, which requires an immediate response with warnings to the community over the local radio. I strongly suggest that NSWSES consider establishing a FLOOD DIVISION, as part of their structure, in each river valley, made up of experienced Volunteers with detailed local knowledge. This team of Volunteers will have knowledge that will be helpful to the BoM, the INCIDENT Manager, the local Radio Stations and the Community in terms of timely warnings issued in order to minimize flood damage. We used Commercial Radio Stations to communicate with the Public and broadcast direct from the Region HQ. This enabled detailed reports to be broadcast into each Valley rather the "chatty" type of reports heard over the ABC in recent floods, particularly when done by a Staffer from Wollongong. I hope the above comments are useful and I would be happy to add further if required.

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