

# Community Mental Health Tool-kit Literature Review Project FINAL REPORT



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## Report Purpose

The purpose of this report is to examine the current research and ‘grey’ literature around mental health and wellbeing in rural and remote areas affected by natural disasters, with a particular focus on drought within Australia. This is to identify potential strategies, preventative measures and activities local communities can put in place to assist the local population to cope with the ongoing impact of drought and other significant events. This report will then guide local communities in the development of local ‘tool kits’ that are community driven and focused on local needs. The overall aim of the community mental health ‘tool kit’ project is to allow the local development of a mental health plan that ensures the delivery of services that are sustainable, efficient and appropriate to a specific community.

### Objectives:

- To identify the potential mental health outcomes of natural disasters and drought
- To examine evidence around mental health initiatives and strategies used in areas affected by natural disasters
- To identify areas of priority and consideration for the development of a community mental health ‘tool kit’
- To provide examples of activities, programs and community responses previously implemented by communities during periods of drought or after a natural disaster
- To provide examples of tools and models used in the assessment of a community’s wellbeing and resilience



## 1. Introduction

Australians are not unfamiliar with drought and natural disasters. With the world's highest climatic variability levels year to year, drought in Australia is a natural component of this variability that can, on occasion, last for many years (Love, 2005, as cited in Stone, 2014). The concept of drought considers a period of time with exceptionally low rainfall, exceptionally high temperatures, and low soil moisture for an extended duration to be considered insufficient for the population (CSIRO & Bureau of Meteorology, 2015). Many factors impact upon drought. The El-Niño Southern Oscillation; concentrations of greenhouse gases; stratospheric ozone; and the natural rotation of the sun have caused a natural warming effect as we move into the twenty-first century (CSIRO & Bureau of Meteorology 2015). Research has found throughout the past century that major droughts have been associated with land degradation within inland Australia (McKeon, Hall, Henry, Stone & Watson, 2004 as cited in CSIRO & Bureau of Meteorology, 2008). As temperatures are predicted to increase by up to 5°C by 2090, drought preparedness is of considerable priority for Australians (CSIRO & Bureau of Meteorology, 2015).

These extreme climatic patterns also increase the likelihood of other climate driven natural disasters such as flooding, cyclones and bushfires. In fact, it is estimated that there will be an increase in the frequency and severity of drought, an increase in the extreme fire weather days, and an increase in the frequency and intensity of daily rainfall which is linked to flooding (CISRO & Bureau of Meteorology, 2014). Natural disasters are estimated to cost governments around \$2.3 billion per year (Australian Business Roundtable for Disaster Resilience and Safer Communities, 2013). These climatic events not only impact on property and infrastructure but also come with a heavy toll to the health and wellbeing of Australians, particularly those living in rural and remote areas (Morrissey & Reser, 2007). Therefore it is important to gain a comprehensive understanding of the impact climatic events such as drought has on rural and remote communities before attempting to implement any planning.

## **2. Literature Review**

### **2.1 Preparedness, Prevention & Planning**

The locality and supply of services are major influential factors in rural and remote communities and their ability to prepare for drought. As drought is essentially unpredictable in terms of severity and duration, it has thus far been near impossible to arrange preventative actions. Drought itself has been excluded from being classified as a natural disaster due to the definition including the criteria such as rapid onset and difficult to foresee and effectively guard against (Council of Australian Governments, 2002). Drought has been referred to as a 'creeping natural disaster' due to its difficulty to be managed as there is no clear start, middle or end (International Centre of Excellence in Water Resources Management, 2012). Therefore previous research surrounding disaster preparedness is generally non-replicable in the area of drought. The longevity of drought ensures that natural disaster 'recovery' efforts are not applicable and even when the rain returns the effects of drought are still felt for some time afterwards.

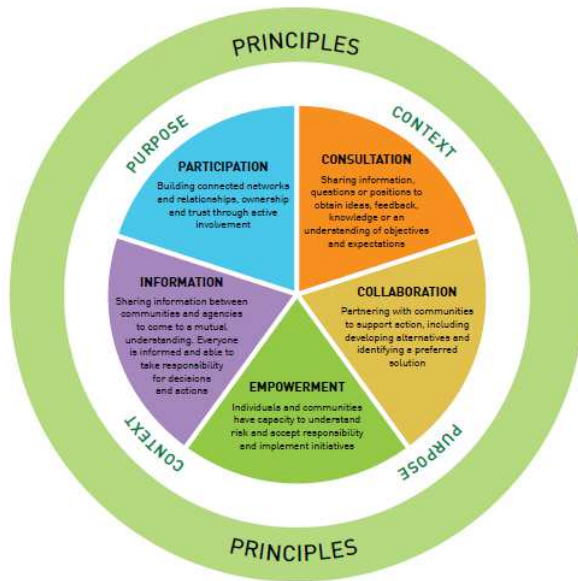
Preparedness is developed through education and the understanding of a hazardous situation. Whether a storm, flood, drought or cyclone, being aware of measures to prevent damage is important. One aspect of preparedness is to be notified or seek information regarding potential natural disasters from reputable sources. Case studies commonly found residents had a lack of awareness and information around preparing for natural disasters in a timely manner, even through known and trusted sources such as SES and ABC radio (Bird, Box, Okada, & Haynes, 2013). This highlights the need for adequate and timely information provision, prior to and during, any climatic event. Indeed, to be adaptable and develop resilience, individuals must be educated about, and aware of, the situation surrounding a possible natural disaster.

Other factors have also been found to influence preparedness. For example, the level of preparedness has been shown to be predicted by financial capacity, such as insurance cover and ability to meet the costs associated with a natural disaster (Boon, 2013). In terms of drought, the chronic ongoing effects must be pre-empted in an effort to prevent devastating loss. Research has shown that those with stronger financial capacity felt better prepared even with the slow onset of climatic events such as drought (Boon, 2013). The Drought Exceptional Circumstances Policy acknowledges that there are times rural communities need assistance, such as when the drought lasts more than 12 months or there has been at least three consecutive

failed seasons (Power, Laughlin & Clarke, 2000). Drought assistance is currently arranged once drought is declared, and the levels of assistance are based on income and asset assessment, although newer schemes including Interim Farm Household Allowance are available for daily living expenses without drought declaration (Department of Human Services 2015). Support may also include interest rate subsidy for businesses, and educational and health care cost support through the welfare system (Power, Laughlin & Clarke, 2000). Further research into the types of financial assistance and how they can greatly reduce the drought burden and associated lifestyle stress is needed.

An important component of any preparation or prevention for a climatic event should involve planning. There are a number of aspects to the planning process that should be considered. It is through the planning process that intent is communicated; roles and responsibilities are clarified; a shared language is developed; issues that may arise can be anticipated; and the recovery practices can be community focused (Emergency Management Australia, 2011). Community engagement is essential to effectively prepare and plan for a climatic event. For effective community engagement to occur there are a number of principles to consider. The engagement should aim to understand the community, its capacity, strengths and priorities. This can be achieved through respectful use of local knowledge and experience; tapping into existing networks; identifying and acknowledging community capability and sharing resources; appreciating the risks faced by communities; and assessing risk and levels of community awareness and preparedness (Emergency Management Australia, 2013). Another component is to recognise community complexity which may include ensuring differences and diversity are embraced and respected; using genuinely respectful and flexible approaches; identifying and addressing barriers to engagement; and recognising that communities evolve and change over time (Emergency Management Australia, 2013). Finally, it is important to partner with the community to support existing networks and resources. This can be achieved through building and maintaining partnerships; fostering relationships with community leaders; respecting community choices; building on existing social capital; and identifying and employing strategies that empower local action (Emergency Management Australia, 2013).

There is no one right way to approach community engagement although it should be guided by the principles defined previously. Approaches to community engagement can be situational or require a combination of multiple approaches to be effective as outlined in *Figure 1*.



**Figure 1.** Community Engagement Model for Emergency Management (Emergency Management Australia, 2013)

There are a number of activities that can be conducted that include community engagement and awareness as part of preparation for climatic events.

Examples of activities for preparedness include (Emergency Management Australia, 2011):

- Encouraging education campaigns and community conversations
- Determining community demographics and potential risk areas through the development of community profiles
- Developing local recovery committees to plan and collaborate with agencies
- Maintaining a website with relevant information, such as Lifeline and Cenrelink, so it is up to date and relevant when needed
- Updating and maintaining recovery plans
- Updating and maintaining contact lists
- Identifying and training volunteer workers
- Developing MOU's and contractual agreements for service provision

As previously mentioned, planning is an important factor in preparedness. Once community engagement has commenced, key stakeholders will be able to be identified. These key stakeholders may then be invited to form a committee to undertake not only the planning of preparedness activities but also recovery activities. It has been recommended that emergency



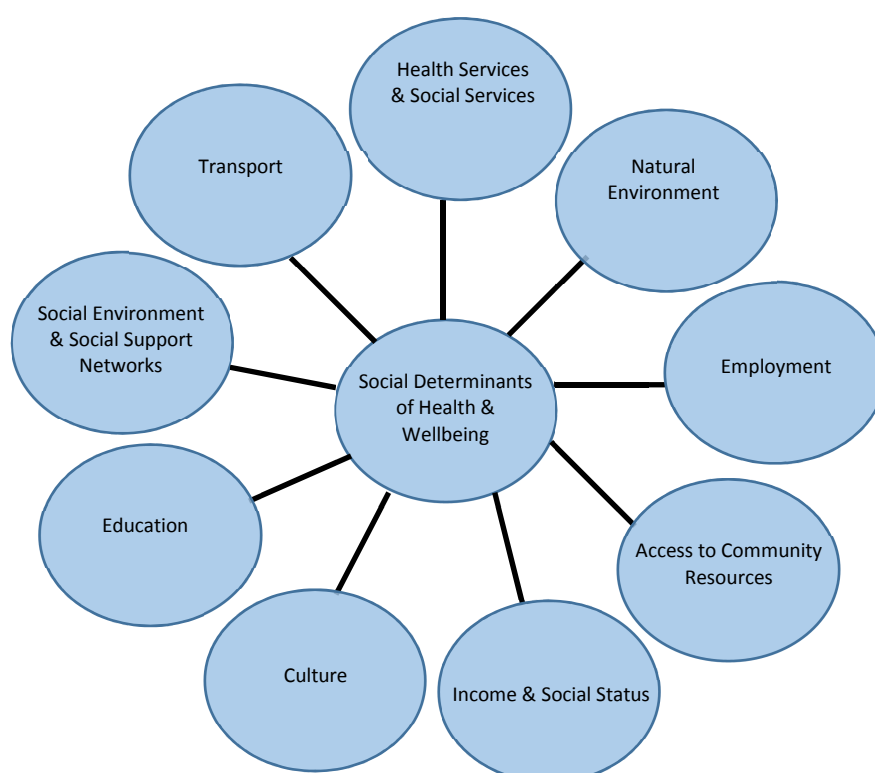
risk management committees should consist of individuals with expertise in emergency risk management, technical and/or scientific understanding, government, political, economic, regulatory, and community interest (Emergency Management Australia, 2001). As large committees can be less productive, and smaller communities having less access to individuals with expertise, it may be prudent to have committee members that ‘wear more than one hat’.

## 2.2 Recovery

Although there are no significant differences in the prevalence of mental health between major cities and those outside of metropolitan areas, there may be other factors that impact on accessing services in rural and remote areas for emotional wellbeing (Australian Bureau of Statistics, 2011). Factors that have been found to influence help seeking behaviour in a rural Australian population include: a reluctance to admit that distress was a mental health issue; the stigma of mental health; and the culture of rural communities, such as being self-reliant and mistrusting outsiders (Fuller, Edwards, Procter & Moss, 2000). Reduced access to services is also a major concern for these communities as the per-person supply of health practitioners decreases with remoteness (Australian Institute of Health and Welfare, 2008b). Indeed, research has indicated that the number of services available differed considerably between major cities and very remote areas, with 33 services per 1000 people in major cities, 22 services per 1000 people in remote areas, and only 5 services per 1000 people in very remote areas (Australian Bureau of Statistics, 2009). In addition, mental health services in rural and remote areas are often under-resourced (O’Kane & Tsey, 2004).

Natural disasters interventions focuses on staged recovery with short and long term efforts, whereas drought assistance requires a shift to not only supporting those while in drought, but also that when no longer in a state of drought, it necessitates refocussing to preparedness funding and community resilience building (National Farmers Federation, 2014). There is a large body of research supporting greater emphasis on long term efforts, particularly with funding required, and for this reason drought is separately funded via the Commonwealth and State governments jointly. However, drought assistance is short lived and the duration of drought effects can be long term. Drought can have a significant impact on debt levels for agricultural businesses which can then flow onto businesses serving the community (Swan Hill Rural City Council, n.d.). This can lead to the closure of local businesses and the loss of local employment opportunities. Loss of occupation is a significant risk factor for depression and those living rural are majorly affected by drought, often because their livelihood is their occupation and lifestyle (Tang, Liu, Liu, Xue, & Zhang, 2014). The loss of population as people move to regional centres for work and the loss of infrastructure, such as closure of businesses, can be accelerated in smaller communities (Power, Laughlin & Clarke, 2000).

There are a number of factors that are influenced by natural disasters and exceptional circumstances situations. It is these social impacts that essentially determine the health and wellbeing outcomes of a population (see *Figure 2*) due to their influence on people making positive or negative health decisions (Gannawarra Shire Council & Southern Mallee Primary Care, 2008). Access to health services generally increases during disaster recovery, so it is reasonable to expect similar usage in a population experiencing or recovering from exceptional circumstances situations such as drought (National Rural Health Alliance, 2004). It is therefore logical to see how social impacts such as loss of employment, isolation, loss of income from natural disasters and drought can impact on these determinants of health.



**Figure 2.** Social determinants of health (Gannawarra Shire Council & Southern Mallee Primary Care, 2008)

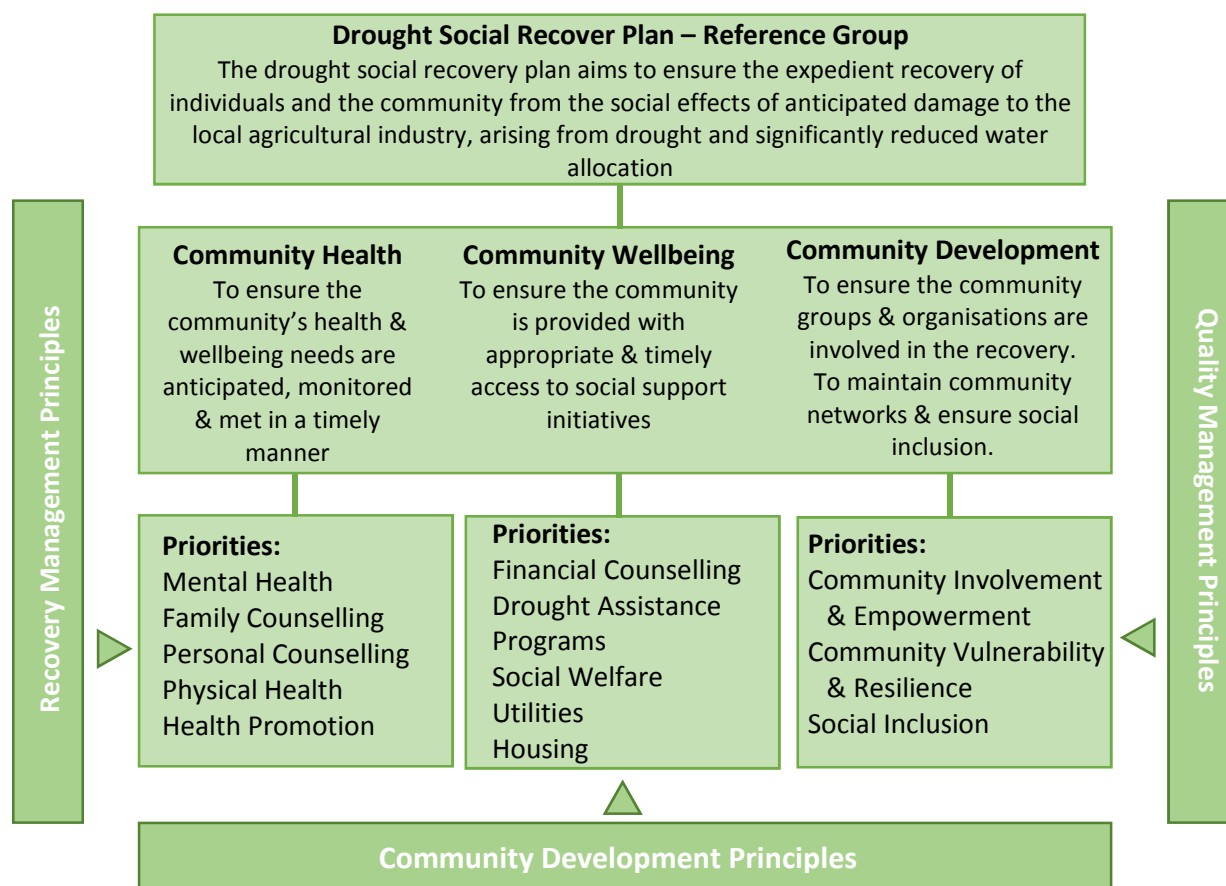
Natural disasters, and in particular drought, can lead to prolonged elevated levels of stress which is linked to increased risk for chronic health conditions, depression and suicide (Gannawarra Shire Council & Southern Mallee Primary Care, 2008). In fact, drought has been found to increase the risk of suicide in farmers and farm workers (Hanigan, Butler, Kobic & Hutchinson, 2012). This is a concern as rural communities already have a suicide rate that is more than twice that of metropolitan areas (National Rural Health Alliance, 2011).

Furthermore, research has suggested that when rainfall was 300 millimetres below the average rainfall there was an 8% rise in suicide rates (Nichols, Butler & Hanigan, 2006). Another issue is the increase in alcohol and drug use that has been observed to occur in the 'recovery' period of disaster or during drought, this in addition to a failure in seeking social support and increased stress levels can lead to poor mental health outcomes (Caruana, 2009).

It is common for people residing in rural and remote areas to have limited social interactions due to their physical isolation, but in times of increased stress it can lead to a greater risk of poorer mental wellbeing (Gannawarra Shire Council & Southern Mallee Primary Care, 2008). Social support and community networks are critically important in assisting individuals to cope with climatic events, however these often start to disintegrate at times of disaster and access to social support becomes harder (The Climate Institute, 2011). Mental health effects post natural disaster can be exacerbated by poor emotional and informative support, and low positive social interaction (Arosemena, Fox & Lichtveld, 2013).

Social support is not the only factor that can influence mental health outcomes during a climatic event. Some further barriers identified around mental health include lower incomes and significant distances to the health service, creating a financial and geographic barrier to help seeking (Tonna et al., 2009). Furthermore, cultural factors such as perceived shame or stigma associated with mental health, and social exclusion arising from lack of knowledge about mental health problems can further decrease emotional wellbeing and help-seeking behaviour (Judd et al., 2006). These attitudinal issues, along with the shortage of health practitioners can all reduce assistance sought when needed in rural areas (Tonna et al., 2009).

The model proposed in **Figure 3** highlights how, through the use of a recovery response committee, a social recovery plan can be developed so that it identifies the priorities needed to be addressed specifically for that community.



**Figure 3.** Drought Social Recovery Model (Department of Human Services, 2008)

Further goals and activities that can be included in the development of a recovery plan are outlined in **Table 1**.

**Table 1.** Planning Procedures for Recovery (Emergency Management Australia, 2003).

| <i>Goals</i>  | <i>Activities</i>  |
|---|--|
| <i>Produce an assessment of the community's needs, the capacity of the community to address those needs and additional support required</i> | <p>Collect information regarding the nature of the impact of the disaster on affected groups, their immediate and likely issues, to assist with planning the recovery process.</p> <p>Collect information regarding the nature of the impact of the disaster on community organisations to assist with planning the recovery process.</p> <p>Present a clear understanding of the current level of action, resources available, capacities within the community and current community development initiatives.</p> |

|   |   |
|---|---|
|   | Support and develop community proposals that address the longer-term recovery needs of the affected communities.  |
| <i>Ensure all stakeholders receive relevant, up to date and useful information which expands their knowledge and skills throughout the recovery process</i> | Develop and produce regular articles for community newsletters and information 'fact sheets; pertinent to individual and community needs.<br><br>Assist in the organisation, conduct and evaluation of meetings and forums in response to community information requests.   |
| <i>Coordinate and provide access to services for all affected residents in a fair and equitable manner</i>  | Link people to services including financial assistance through government grants, personal and practical assistance, counselling and outreach services for disaster affected communities and to people displaced from their community.  |
| <i>Identify the most vulnerable groups within the communities and address strategies to meet their needs</i>  | Activities focussed on children: <ul style="list-style-type: none"> <li>- Facilitate playgroups with workers experienced in trauma</li> <li>- Information for parents re. their children's needs after a disaster and recovery processes</li> <li>- School talks for parents</li> <li>- Activities after hours and through the day</li> <li>- School holiday activities</li> <li>- Support for parents to access practical assistance</li> </ul> Activities focusing on the elderly include: <ul style="list-style-type: none"> <li>- Practical support such as information, house cleaning, garden clean-up and rebuilding, support to get handymen</li> <li>- Access to talk</li> <li>- Access to all information available to other families</li> <li>- Case examples of accessing info</li> <li>- Involving other services</li> </ul> Activities focusing on public housing tenants include: <ul style="list-style-type: none"> <li>- Information about temporary tenancy issues</li> <li>- Planning to go back- what needs to be done</li> </ul> |
| <i>Celebrate success by recognising the achievements and acknowledging the efforts of groups and individuals</i>  | Assist community members to organise and hold social and celebration events in response to community requests that are inclusive of all   |

|  |  |
|--|--|
|  | <p>those affected.</p> <p>Encourage community participation in existing recovery events.</p> <p>Encourage local community members to become involved in leadership roles in local issues and activities.</p> <p>Facilitate the recognition and rewarding of all the activities that have assisted in the community's recovery process, e.g. volunteers.</p>  |
| <i>Gather data and learn lessons that can be used to make communities more resilient</i> | <p>Collect information regarding the nature of the impact of the disaster on affected groups, their immediate and likely issues, to finalise the development of the community development recovery process.</p> <p>Ensure within the rebuilding process that individuals and communities have the best knowledge on means of planning for protection against the occurrence of similar events in the future.</p> |

As previously mentioned, climatic events not only have social, health and emotional impacts but they also have an impact on the financial wellbeing of a community. The financial impacts of climatic events can affect public infrastructure, community facilities, and business enterprises, as well as residents and households (Emergency Management Australia, 2002). There are also indirect economic impacts such as a loss of trade to local businesses. In many cases of natural disaster the generosity of fellow Australians is felt with donations of goods and services to assist in times of need. However, research has indicated that donations of second hand items, for example, actually create an increased workload for authorities (Department of Families & Communities, 2011). It is therefore recommended that the donation of money is the most effective method of assistance as this allows for flexibility, choice, and promotes a self-directed recovery, as well as stimulating the local economy which can lead to a quicker recovery (Department of Families & Communities, 2011). The principles and strategies for economic recovery not only for drought but other climatic events are included in **Table 2**. A checklist for undertaking community recovery management and coordination is provided in **Appendix A** and examples of strategies and activities that have been included in recovery plans are provided in **Appendix B**.

**Table 2.** Principles and Strategies of Economic Recovery (Emergency Management Australia, 2002))

| Conceptual   | Management  | Service Delivery   |
|--|---|--|
| Resettle evacuees into the affected area as soon as possible   | Identify which segments of the business community which may be affected   | Ensure service delivery personnel have an awareness of the range of services available and appropriate referral processes  |
| Encourage emergency service agencies to implement procedures to support economic recovery (assistance to clean up etc.)  | Establish dialogue between business, industry and government representatives in the community   | Ensure service delivery personnel are aware of the local economic circumstances pre and post disaster  |
| Support and promote the economic viability of the affected community   | Establish a reference group which is representative of business, industry and employment groups   | Ensure service delivery personnel have good interpersonal skills and understanding of the local community  |
| Purchase replacement goods and services locally, via local businesses and tradespeople wherever practical  | Provide the business community with information about the recovery process and resources available through the reference group and other appropriate mechanisms | Provide financial assistance measures in a timely, fair, equitable and flexible manner   |
| Maintain the integrity of local agencies and their capability  | Ensure business community participation in the Community Recovery Committee   | Ensure financial support is needs based and timely   |
| Build on existing organisations and networks through activation of available systems within the community  | Conduct inter-agency briefings and feedback sessions on the effectiveness and progress of the economic recovery program   | Provide financial counselling and management services  |
| Encourage support of local trade and commerce  | Identify threats to business continuity for consideration in risk management processes  | Advocate with financial institutions on behalf of disaster- affected residents   |
| Encourage agencies to employ local residents and to purchase resources and services locally  | Develop risk management assessments aimed at minimising future damage   | Ensure services and/or information is coordinated and provided by a variety of means: <ul style="list-style-type: none"> <li>- One stop shops</li> <li>- Newsletters</li> <li>- Outreach</li> <li>- Internet</li> <li>- Telephone</li> </ul> |
| Provide government grants, appeal distribution and charitable payments as financial rather than material assistance in support of economic and local business recovery |   | Ensure availability and accessibility of economic recovery information and services  |
| Avoid duplication of services and identify gaps  |   |  |
| Maintain confidentiality and privacy principles  |   |  |



### 2.3 Resilience

To improve resilience within drought stricken communities, Norris, Stevens, Pfefferbaum, Wyche & Pfefferbaum (2008) identified that resilience can be increased through networked resources and proposed five implementation strategies to increase these resources. It was firstly identified that by attending to areas of social vulnerability, reducing risk and resource inequities in communities and developing economic resources, resilience will be enhanced. It was further identified that communities must be engaged in every aspect of the recovery process to promote social capital. Thirdly, dissemination and communication to facilitate quick mobilisation of emergency through the use of pre-existing organisational networks and relationships can enhance information provision and ongoing support services. From an evaluation of disaster response this was one aspect of particular criticism from community members who felt frustrated by the lack of communication and transparency (Onstad et al., 2012). Another strategy identified was that naturally occurring social supports following disasters should be promoted and protected by community members and professionals. Lastly, it was recognised that although it is important for communities to plan, any plan or community should be flexible in the face of unknowns (Norris et al., 2008).

As previously mentioned there has been an indication that more focus should be placed on communities building resilience to assist in buffering against natural disasters. Resilience can be defined as a trait that allows a person or community to move through a challenge, adapt to that challenge if necessary and then return to a relatively healthy state of being (Arbon, 2014). It has been proposed that building community resilience requires a number of factors. These factors include trust, social cohesion, supporting attitudes and values, leadership, a sense of community, good communication and information, collective efficacy, community involvement, resource dependency, social capital, existing norms and engagement with government (Emergency Management Australia, 2011). Communities that lead their recovery and support reestablishment as a community have a greater support network and can develop preparedness for drought to improve mental wellbeing in rural and remote locations (Emergency Management Australia, 2013).

Arbon (2014) developed a model based on current literature to identify the reoccurring concepts and themes that were found when examining community disaster resilience. This model identified the overlapping relationship of community connectedness, risk and

vulnerability, planning and procedures, and what resources are available. It was from this model that Arbon (2014) developed a tool to measure community disaster resilience (see **Appendix C**). A copy of the model is provided in **Figure 4**. Based on similar factors other researchers have developed measures of community connectedness and resilience (see **Appendix D & E**).



**Figure 4.** Community disaster resilience model (Arbon, 2014)

As previously discussed, assistance in drought and other natural disasters is required long term, ranging from months to years depending on the severity. As drought is a chronic ongoing event, support is required prior to drought declaration to enhance preparedness, and also long term to ensure community recovery. The limited period of around 12 months is the length of time many official recovery efforts run for, although recognition has increased that recovery can be a lengthy process for many groups, with some sectors of the community taking years to regain pre-impact productivity and improve economy (Handmer & Hillman, 2004). The length of drought and recovery can have a major impact on rural and remote communities as factors such as a lack of employment in small towns reduces the ability of the local population to rely on local supply (Power, Laughlin & Clarke, 2000). Another impact from the economic effects of climatic events is the reduction in labour support due for businesses due to many leaving the

community to find work. This may be one aspect of risk and vulnerability identified by a community and addressed through the encouragement of other industries such as tourism to build community resilience.

## 2.4 Response

Rural and remote Australia encompasses different lifestyle conditions in comparison to urbanised living. Factors such as social isolation, lesser access to services, independence, demography, and socioeconomic status are vast compared to those in urban localities (Williams et al., 2013). Poorer health outcomes are a major factor associated with rural and remote living, including higher rates of death, lower rates of General Practitioner visitation, and higher rates of hospital admission (Australian Institute of Health & Welfare, 2008a). These conditions are possibly due to higher rates of drinking alcohol and smoking in hazardous quantities, dangerous occupations including long-distance driving and driving at speed, and higher rates of accidents in locations with increased time to access emergency help (Phillips, 2009). Death from coronary heart disease, motor vehicle accidents, chronic obstructive pulmonary disease and accidental deaths are the major causes of death in rural areas (Australian Institute of Health & Welfare, 2008a).

Mental health wellness initiatives are required on a regular basis to focus on wellbeing and first aid in natural disasters. Psychological First Aid is recognised internationally as the best-practice method of assisting individuals in the immediate aftermath of a disaster (Australian Psychological Society, 2014). Psychological First Aid is an early psychosocial response characterised by a number of core actions as outlined in **Table 3**. The purpose of this technique has been described as aiming to stabilise a traumatised person by promoting a sense of safety, stability and physical and emotional comfort (Caruana, 2009). This provision of a safe and stable environment is necessary to reduce the likelihood of any mental illness arising from the difficulties of climatic events upon rural and remote communities (Caruana, 2009).

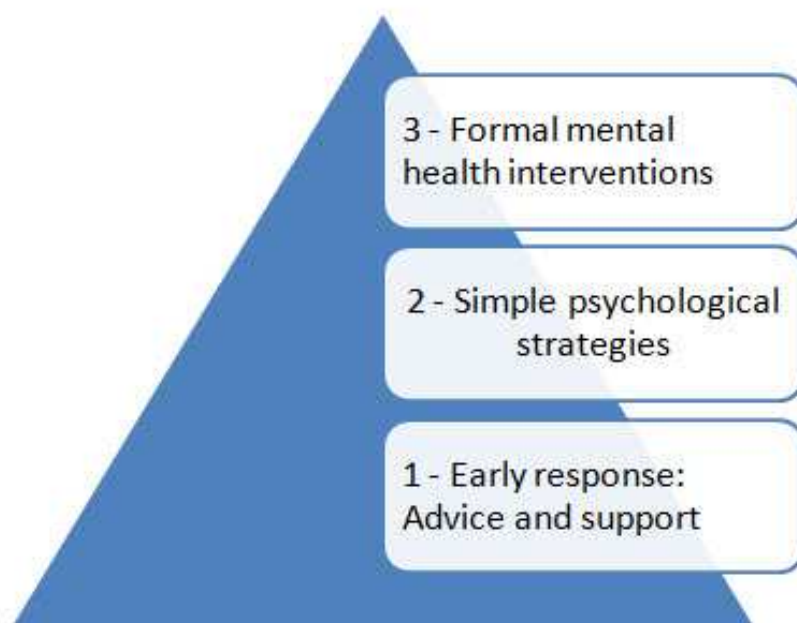
**Table 3.** Psychological First Aid core actions (Wooding & Raphael, 2012)

| Action  | Goal  |
|---|---|
| Contact and Engagement                            | To respond to contacts initiated by survivors, or to initiate contacts in a non-intrusive, compassionate, and helpful manner. |
| Safety and Comfort                                | To enhance immediate and ongoing safety, and provide physical and emotional comfort.  |
| Stabilisation (if needed)                         | To calm and orient emotionally overwhelmed or disoriented survivors   |
| Information gathering: current needs and concerns | To identify immediate needs and concerns, gather additional information, and tailor Psychological First Aid interventions     |
| Practical Assistance                              | To offer practical help to survivors in addressing  |

|                                     |   |
|-------------------------------------|---|
|                                     | immediate needs and concerns  |
| Connection with Social Supports     | To help establish brief or ongoing contacts with primary support persons and other sources of support, including family members, friends, and community helping resources |
| Information on coping               | To provide information about stress reactions and coping to reduce distress and promote adaptive functioning  |
| Linkage with collaborative services | To link survivors with available services needed at the time or in the future   |

Psychological first aid and other psychosocial care initiatives such as community or school based recovery programs are considered to be level 1 psychosocial care priorities, whereas level 2 would focus on brief skills based programs such as Skills for Psychological Recovery, and level 3 are specialised mental health treatments (Australian Psychological Society, 2014). This 3-tiered stepped care approach model (as shown in **Figure 5**) is an efficient and cost effective method of intervention after a natural disaster (Australian Psychological Society, 2014). However, its application to drought affected communities may be more limited but may inform communities on psychosocial care initiatives available to their community.

**Figure 5.** 3-tiered stepped care approach to psychosocial support model (Australian Psychological Society, 2014)



As previously mentioned, planning and community engagement opportunities encourages the community to feel empowered, enables social activity, builds on resilience and develops procedures that local communities are proud of and ensures the community integrity when struck by disaster. These activities are not only important in being prepared for a natural disaster but are vital in responding and recovering from the effects of a climatic event. Examples of community activities that not only work to build community connectedness, resilience, recovery and greater wellbeing but are also essential in recovery are provided in **Appendix B**.

## 2.5 Evaluation

To monitor the success of any intervention, plan or activity an evaluation must occur. It is therefore important to consider evaluation at the planning stage so that it is incorporated into any strategy or activity. Evaluation can be used in a number of different contexts such as monitoring performance, as a learning tool, for validation, or to obtain continued or new funding (Emergency Management Australia, 2003). There are a number of methods that can be utilised when conducting evaluations. These include both qualitative and quantitative methods, some examples are provided in **Table 4**. Some evaluation methods use both qualitative and quantitative methods such as the use of community score cards (Garbarino & Holland, 2009).

**Table 4.** Examples of evaluation methods

| Qualitative                              | Quantitative  |
|--|---|
| Feedback from events or community forums | Number of people that attended an event                               |
| Focus groups                             | Increase, or decrease, in numbers seeking help from service providers |
| Interviews                               | Surveys using Likert style scales                                     |
| Observations                             | Number of information packs distributed in the community              |

### 3. Conclusion

The effects of drought and other natural disasters whether chronic or short-lived causes disruption, devastation, stress and damage to both tangible and intangible aspects of life. Lives have been lost in both immediate and post traumatic events causing concern for the preparation of individuals in potential disaster zones, including chronic drought. Added stresses such as loss of income can be overwhelming, particularly for those in isolated rural areas unsure of where to seek assistance. To prevent such occurrences greater preparedness initiatives and community resilience building are the pivotal message from the literature.

Greater focus on reputable sources of information and preparedness responders are required, whether a natural disaster or drought, to encourage and communicate with communities at key timeframes (Emergency Management Australia, 2011). Targeting disaster preparedness from all aspects including economic, social, natural and built environments ensures greater outcomes for all. It has been suggested that a multi-faceted approach to mental health education and preparedness in drought affected communities should occur through enabling and engaging frontline agencies and services, and focusing on three key areas including: mental health first aid training; community forums; and development of resource booklets (Tonna et al., 2009). Community forums that involve key community members and experts in each appropriate field can highlight each component of wellbeing at a local level for communities to continue building resilience.

Developing community resilience in a recovery process is an intermediate state of being, and difficult to measure. Mitigating impacts of disaster is a key component of planning and preparedness, particularly for business and farming industries. There is not an end point post recovery, there should be a process of resilience that is a long-term commitment of sustainable behaviour change and enduring partnerships with government and non-government sectors as a community (Emergency Management Australia, 2011). Recovery planning is centred on empowering communities, developing and supporting leadership and advancing community-led strategies to encompass greater wellbeing as a whole.



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## APPENDIX A

Checklist for undertaking community recovery management/ coordination (Emergency Management Australia, 2011)

|  |   |
|--|---|
| <p><b>Keeping pace with the evolving situation</b></p>         | <ul style="list-style-type: none"> <li><input type="checkbox"/> Immediately establish liaison with incident controller and if possible locate a senior recovery officer in the emergency coordination centre</li> <li><input type="checkbox"/> Ensure initial and ongoing impact assessment data feed into recovery programs and processes</li> <li><input type="checkbox"/> Continuously review and analyse community needs for service provision planning</li> <li><input type="checkbox"/> Establish processes for information from all avenues (public meetings, call centre or recovery centre feedback, debriefings) to feed into the planning cycle</li> <li><input type="checkbox"/> Adapt community recovery plans in accordance with the evolving or changing community needs and priorities</li> </ul>   |
| <p><b>Engaging and empowering the affected communities</b></p> | <ul style="list-style-type: none"> <li><input type="checkbox"/> Ensure regular and ongoing engagement with affected persons</li> <li><input type="checkbox"/> Provide leadership, facilitation, support and empowerment</li> <li><input type="checkbox"/> Create opportunities for community leaders to evolve</li> <li><input type="checkbox"/> Create opportunities and support for affected persons and communities to lead and manage their own recovery</li> <li><input type="checkbox"/> Allow communities to self-identify</li> <li><input type="checkbox"/> Negotiate and agree on the prioritised tasks based on community needs and requirements, including short-term/ interim fixes.</li> <li><input type="checkbox"/> Build trust through respectful listening and understanding</li> <li><input type="checkbox"/> Establish active feedback processes and opportunities, including community recovery committee</li> <li><input type="checkbox"/> Maximise the availability of information to affected persons</li> </ul> |
| <p><b>Managing people</b></p>                                  | <ul style="list-style-type: none"> <li><input type="checkbox"/> Provide strong, clear and responsive leadership</li> <li><input type="checkbox"/> Ensure safe operating conditions for recovery personnel and community</li> <li><input type="checkbox"/> Ensure that workloads are sustainable by establishing management structures, delegating responsibilities and utilising 'spans of control'</li> <li><input type="checkbox"/> Ensure that recovery workers, managers and volunteers have defined work times and adequate rest breaks</li> <li><input type="checkbox"/> Ensure that briefings occur for all oncoming personnel</li> <li><input type="checkbox"/> Ensure that debriefs are conducted at the end of each</li> </ul>  |

|  |   |
|--|---|
|  | <p>shift to ensure capture of information as well as defusing personnel</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Provide opportunities for formal defusing and ongoing emotional and psychological support for recovery personnel</li> <li><input type="checkbox"/> Avoid convergence by providing clear information and direction as to how non-impacted persons might help</li> <li><input type="checkbox"/> Develop a strategy to manage politicians and VIP's</li> </ul>   |
| <b>Managing Resources</b>                      | <ul style="list-style-type: none"> <li><input type="checkbox"/> Ensure legislative, statutory and regulatory requirements are observed</li> <li><input type="checkbox"/> Identify resources and material requirements, including supply chains</li> <li><input type="checkbox"/> Avoid convergence by providing clear information and direction as to what and how voluntary resources might help</li> <li><input type="checkbox"/> Establish systems for recording offers of assistance (human resources and material)</li> <li><input type="checkbox"/> Identify staffing needs early and enable rapid recruitment</li> <li><input type="checkbox"/> Ensure that all staff have appropriate skills and qualifications and relevant authorisations</li> <li><input type="checkbox"/> Ensure that funding is provided immediately for essential services restoration</li> <li><input type="checkbox"/> Ensure that all expenditures are recorded</li> </ul>   |
| <b>Managing information and communications</b> | <ul style="list-style-type: none"> <li><input type="checkbox"/> Ensure that data collection and management systems are established as soon as possible and maintained</li> <li><input type="checkbox"/> Ensure that information is continually provided to: <ul style="list-style-type: none"> <li><input type="checkbox"/> Affected community members</li> <li><input type="checkbox"/> Recovery personnel</li> <li><input type="checkbox"/> Recovery management team</li> <li><input type="checkbox"/> Recovery management partners and stakeholders</li> <li><input type="checkbox"/> Organisational hierarchy</li> <li><input type="checkbox"/> Elected representatives</li> </ul> </li> <li><input type="checkbox"/> Form partnerships with media and use their resources to disseminate information</li> <li><input type="checkbox"/> Ensure that information: <ul style="list-style-type: none"> <li><input type="checkbox"/> Is relevant</li> <li><input type="checkbox"/> Timely</li> <li><input type="checkbox"/> Clear</li> <li><input type="checkbox"/> Best available</li> <li><input type="checkbox"/> Targeted</li> <li><input type="checkbox"/> Credible</li> <li><input type="checkbox"/> Consistent</li> <li><input type="checkbox"/> Coordinated</li> <li><input type="checkbox"/> Provided in multiple methods and media</li> <li><input type="checkbox"/> Provides opportunity for feedback</li> <li><input type="checkbox"/> Repeated as appropriate</li> </ul> </li> </ul> |

|   |  |
|---|--|
|   | <ul style="list-style-type: none"> <li><input type="checkbox"/> Create opportunities for two-way communication through:</li> <li><input type="checkbox"/> Meetings</li> <li><input type="checkbox"/> Workshops</li> <li><input type="checkbox"/> Surveys</li> <li><input type="checkbox"/> Telephone, email, web sites</li> </ul>  |
| <p><b>Ensuring coordination and integration</b></p> | <ul style="list-style-type: none"> <li><input type="checkbox"/> Provide coordination of activities and stakeholders to ensure that:</li> <li><input type="checkbox"/> Services and facilities are restored based on community needs and priority</li> <li><input type="checkbox"/> Resources are utilised efficiently</li> <li><input type="checkbox"/> Clear roles and responsibilities are established and adhered to</li> <li><input type="checkbox"/> Deficiencies and opportunities are identified quickly</li> <li><input type="checkbox"/> Establish a recovery management centre</li> <li><input type="checkbox"/> Establish and work with recovery committees to plan and develop longer-term strategic and sustainable recovery outcomes</li> <li><input type="checkbox"/> Consider establishing management groups for each of the four environments (social, built, economic, natural) as required, based on nature of event and impact assessments</li> <li><input type="checkbox"/> Ensure that all four environments are integrated and coordinated, acknowledging the interdependencies between them</li> </ul> |



## APPENDIX B

Examples of activities included in community recovery plans.

| Goal                                   | Activity   | References   |
|--|--|--|
| Maintain social links in the community | <p>Encourage social events that brings the community together with a focus on fun or learning outcomes and that is low or no cost</p> <p>Provide access to funding opportunities to community groups for activities and events that promote social connectedness</p> <p>Promote volunteer opportunities in the community</p> <p>Organise information meetings/BBQs and evaluate community response</p>   | <p>Gannawarra Shire Council &amp; Southern Mallee Primary Care, 2008</p> <p>Swan Hill Rural City Council, n.d.</p> <p>Emergency Management Australia, 2003</p> |
| Mental Health Awareness                | <p>Encourage community training such as Mental Health First Aid, SAFEtalk, particularly in those that are the first point of contact</p> <p>Encourage ASIST suicide intervention training for health professionals</p> <p>Develop/encourage programs such as the 'Good Sports Good Mental Health Program'</p>  | <p>Gannawarra Shire Council &amp; Southern Mallee Primary Care, 2008</p> <p>Swan Hill Rural City Council, n.d.</p>   |
| Health                                 | <p>Lobby for bulk billing in area</p> <p>Promote existing farm safety initiatives</p> <p>Ensure adequate specialist services are available to area for elevated levels of mental health issues</p> <p>Ensure timely access to counselling services</p> <p>Ensure staff that are providing drought support have ongoing support and professional development opportunities</p> <p>Monitor service use to identify any gaps in service provision</p> | <p>Gannawarra Shire Council &amp; Southern Mallee Primary Care, 2008</p>   |
| Social Inclusion                       | <p>Ensure cost of school or sporting excursions are accessible to all families</p>   | <p>Gannawarra Shire Council &amp; Southern Mallee Primary Care, 2008</p>   |

|                                       |   |  |
|---------------------------------------|---|--|
| Enhance communication                 | <p>Promote messages through existing communication channels and community newsletters</p> <p>Collate information regarding access services and present in an easily accessible manner eg fridge magnets, flyers</p> <p>Provide information packs with the key message of 'Look after your neighbour' and include information on health &amp; wellbeing</p> <p>Develop a Drought component on the Councils website to provide up to date information</p> <p>Hold regular community information sessions</p> <p>Publish good news stories and positive messages</p> | <p>Gannawarra Shire Council &amp; Southern Mallee Primary Care, 2008</p> <p>Swan Hill Rural City Council, n.d.</p> <p>Emergency Management Australia, 2003</p> |
| Future wellbeing                      | <p>Facilitate opportunities to support healthy lifestyles</p> <p>Facilitate the 'roll out' of programs such as Sustainable Farm Families</p> <p>Assist organisations in grant writing to ensure sustainability of effective wellbeing programs</p> <p>Explore future directions and needs for the agricultural sector</p>   | <p>Gannawarra Shire Council &amp; Southern Mallee Primary Care, 2008</p> <p>Swan Hill Rural City Council, n.d.</p>   |
| Family relationships                  | <p>Support additional programs to meet the needs of families during school holiday periods</p> <p>Develop low or no cost family holidays for local families such as through church groups, CWA or exchanges with another family</p> <p>Encourage use of NGO family support workers to assist families</p>   | <p>Gannawarra Shire Council &amp; Southern Mallee Primary Care, 2008</p>   |
| Drought Assistance & Emergency relief | <p>Create an environment where people feel comfortable to seek help</p> <p>Introduce a 'Farm Gate Model' where a council member &amp; health professional</p>   | <p>Gannawarra Shire Council &amp; Southern Mallee Primary Care, 2008</p> <p>Swan Hill Rural City Council,</p>  |

|   |   |  |
|---|---|--|
|   | <p>make cold call visits to property's</p> <p>Liaise with charitable organisations to ensure accessibility and distribution of emergency relief is meeting the needs of the community</p>   | n.d.   |
| Employment                              | Provide low cost opportunities for qualifications such as hospitality, aged care, business with recognition of prior learning   | Gannawarra Shire Council & Southern Mallee Primary Care, 2008  |
| Enhance opportunities locally for youth | <p>Development of a youth council to engage youth in community affairs</p> <p>Support youth to plan and run events and activities</p> <p>Ensure youth have opportunities to engage in meaningful employment or training</p>   | <p>Gannawarra Shire Council &amp; Southern Mallee Primary Care, 2008</p> <p>Swan Hill Rural City Council, n.d.</p>   |
| Business Support                        | Implement local campaigns / programs that encourage local purchases   | Gannawarra Shire Council & Southern Mallee Primary Care, 2008  |
| Education                               | <p>Lobby for subsidies or scholarships for students impacted by drought to take up tertiary places</p> <p>Encourage / support schools to implement programs in schools such as friends, Kidsmatter</p> <p>Extend or introduce school breakfast programs</p>                                 | <p>Gannawarra Shire Council &amp; Southern Mallee Primary Care, 2008</p> <p>Swan Hill Rural City Council, n.d.</p> <p>Emergency Management Australia, 2003</p> |
| Build resilience                        | <p>Develop/support sporting programs and fun physical activities such as swimming</p> <p>Develop/support gender specific programs such as "Men's Shed"</p>  | <p>Gannawarra Shire Council &amp; Southern Mallee Primary Care, 2008</p> <p>Swan Hill Rural City Council, n.d.</p>   |
| Planning & Coordination                 | <p>Ensure there is a coordinated approach through a drought coordinator</p> <p>Develop a committee of community representatives (Drought Advisory Group) to ensure effective information flow and planning of activities and resource use</p> <p>Develop a calendar of community events</p> | <p>Gannawarra Shire Council &amp; Southern Mallee Primary Care, 2008</p> <p>Swan Hill Rural City Council, n.d.</p>   |

## APPENDIX C

Scorecard – Community Disaster Resilience Measure (Arbon, 2014).

1. What proportion of your population is engaged with organisations (e.g. clubs, service groups, sports teams, churches, and library)?
2. Do members of the community have access to a range of communication systems that allow information to flow in an emergency?
3. What is the level of communication between local governing body and population?
4. What is the relationship of your community with the larger region?
5. What is the degree of connectedness across community groups? ( e.g. ethnicities/ sub-cultures/ age groups/ new residents not in your community during the last disaster)
6. What are the known risks of all identified hazards in your community?
7. What are the trends in relative size of the permanent resident population and the daily population?
8. What is the rate of the resident population change in the last five years?
9. What proportion of the population has the capacity to independently move to safety? (e.g. non-institutionalised, mobile with own vehicle, adult)
10. What proportion of the resident population prefers communication in a language other than English?
11. Has the transient population (e.g. tourists, transient workers) been included in planning for response and recovery?
12. What is the risk that your community could be isolated during an emergency event?
13. To what extent and levels are households within the community engaged in planning for disaster response and recovery?
14. Are there planned activities to reach the entire community about all-hazards resilience?
15. Does the community actually meet requirements for disaster readiness?
16. Do post-disaster event assessments change expectations or plans?
17. How comprehensive is the local infrastructure emergency protection plan? (e.g. water supply, sewerage, power system)
18. What proportion of population with skills useful in emergency response/ recovery (e.g. first aid, safe food handling) can be mobilised if needed?
19. To what extent are all educational institutions (public/ private schools, all levels including early child care) engaged in emergency preparedness education?
20. How are available medical and public health services included in emergency planning?
21. Are readily accessible locations available as evacuation or recovery centres (e.g. school halls, community or shopping centres, post office) and included in resilience strategy?
22. What is the level of food/ water/ fuel readily availability in the community?

Note: This questionnaire and other ‘tools’ are available from [www.torrensresilience.org](http://www.torrensresilience.org)

## APPENDIX D

| <b>The Community Connections Survey (The Benevolent Society, 2012)</b> |  |  |
|--|--|--|
| <b>Outcome Question</b> (source reference)                             |  | <b>Response options</b>  |
| <b>BONDING</b>   |  |  |
| Trust  | I trust my family to act in my best interests. <sup>5</sup><br>I trust my friends to act in my best interests. <sup>5</sup>  | Strongly disagree<br>Disagree<br>Neither agree nor disagree<br>Agree<br>Strongly agree   |
| Support  | How often can you get help when you need it from – Family? <sup>4</sup><br>How often can you get help when you need it from – Friends? <sup>4</sup>  | None of the time<br>A little of the time<br>Some of the time<br>Most of the time<br>All of the time  |
| Satisfaction with contact  | How satisfied are you with the level of contact you have with - Your children?<br>How satisfied are you with the level of contact you have with - Your parents?<br>How satisfied are you with the level of contact you have with - Your siblings?<br>How satisfied are you with the level of contact you have with - Your other family members?<br>How satisfied are you with the level of contact you have with - Your friends? | Very dissatisfied<br>Dissatisfied<br>Neither satisfied nor dissatisfied<br>Satisfied<br>Very satisfied<br>Not applicable   |
| Network size   | How many family members do you feel close to and can confide in? <sup>1</sup><br>How many friends can you confide in? <sup>1</sup>   | None, no family members I can confide in<br>1-2 family members<br>3-4 family members<br>5 or more family members<br>None, no friends I can confide in<br>1-2 friends<br>3-4 friends<br>5 or more friends |
| <b>BRIDGING</b>  |  |  |
| Trust  | I trust my neighbours to act in my best interests. <sup>5</sup><br>Generally speaking, most people in my local area can be trusted. <sup>5</sup>   | Strongly disagree<br>Disagree<br>Neither agree nor disagree<br>Agree<br>Strongly agree   |
| Support  | How often can you get help when you need it from – Neighbours? <sup>4</sup>  | None of the time<br>A little of the time<br>Some of the time<br>Most of the time<br>All of the time  |
| Satisfaction with contact  | How satisfied are you with the level of contact you have with - Your neighbours?   | Very dissatisfied<br>Dissatisfied<br>Neither satisfied nor dissatisfied  |

|                           |   |  |
|---------------------------|---|--|
|                           |   | Satisfied<br>Very satisfied<br>Not applicable  |
| Network size              | How many people in your local area do you know and could exchange small favours with?   | None<br>1-5<br>6-10<br>11-15<br>16-20<br>21 or more  |
| Network diversity         | In your free time, do you socialise with people of a different culture or ethnicity to you?<br>In your free time, do you socialise with people of a different age to you?<br>In your free time, do you socialise with people of a different level of education to you?  | No, none of the time<br>A little of the time<br>Some of the time<br>Most of the time<br>All of the time  |
| <b>LINKING</b>            |   |  |
| Trust                     | I have confidence in the police in my local area. <sup>1</sup><br>I have confidence in the local or city council in my local area.  | Strongly disagree<br>Disagree<br>Neither agree nor disagree<br>Agree<br>Strongly agree   |
| Community participation   | Approximately how many community or action groups are you a member of? <sup>4</sup><br>Approximately how many decision-making boards or committees are you a member of? <sup>4</sup><br><br>How much of the time do you help out as a volunteer for a group in your local area?<br><br>To what extent do you feel you are able to have a say within your local area on issues that are important to you? <sup>4</sup> | Number of groups<br><br>Number of boards or committees<br><br>None of the time<br>A little of the time<br>Some of the time<br>Most of the time<br>All of the time<br><br>No, not at all<br>Just a little<br>A fair amount<br>A lot   |
| Barriers to participation | What is the main reason you are not more actively involved in community groups in your local area in the last 12 months? <sup>1</sup>   | No time, due to work<br>Commitments<br>No time, due to family commitments<br>No time, due to childcare<br>No time, due to being a carer for another family member who is ill, has a disability or elderly<br>No time, I already volunteer all my spare time<br>Not interested<br>Not convenient<br>Language difficulties or barriers |

|                              |  |  |
|------------------------------|--|--|
|                              |  | Health reasons<br>Financial reasons<br>No groups in local area<br>Other ( <i>please specify</i> )                    |
| <b>COMMUNITY PERCEPTIONS</b> |  |  |
| Community cohesion           | <p>I feel like I belong to this local area. 7</p> <p>Living in this local area gives me a sense of community. 7</p> <p>Overall, I am very attracted to living in this local area. 7</p> <p>The friendships and associations I have with other people in my local area mean a lot to me. 7</p> <p>I like to think of myself as similar to the people who live in this local area. 7</p> <p>I would be willing to work together with others to improve my local area. 7</p> <p>I plan to remain a resident of this local area for a number of years. 7</p>   | <p>Strongly disagree</p> <p>Disagree</p> <p>Neither agree nor disagree</p> <p>Agree</p> <p>Strongly agree</p>        |
| Safety                       | <p><i>How safe or unsafe do you feel in the following situations:</i></p> <p>When at home by yourself during the day? 1</p> <p>When at home by yourself after dark? 1</p> <p>When walking alone in your local area after dark? 1</p>   | <p>Very unsafe</p> <p>Unsafe</p> <p>Neither safe nor unsafe</p> <p>Safe</p> <p>Very safe</p> <p>Not applicable</p>   |
| <b>LOCAL ISSUES</b>          |  |  |
| Attitudes                    | <p><i>Thinking about your own local area, how strongly do you agree or disagree with the following statements.</i></p> <p>It has good facilities and services like shops, childcare, schools, libraries, health services, transport etc. 4</p> <p>There is easy access to recreational and leisure facilities. 4</p> <p>There is a wide range of community and support groups. 4</p> <p>It's an active community, people do things and get involved in local issues and activities. 4</p> <p>There are opportunities to volunteer in local groups. 4</p> <p>Being a pleasant environment – nice streets, well planned, open spaces. 4</p> <p>It is a problem-free place to move around (for example there are adequate footpaths, seating, lighting, fencing).</p> | <p>Strongly disagree</p> <p>Disagree</p> <p>Neither agree nor disagree</p> <p>Agree</p> <p>Strongly agree</p>        |
| Problems                     | <p><i>The next series of questions are about crime and safety in your local area. Thinking about the last 12 months, how much of the time do you consider any of the following to be a problem in your local area?</i></p> <p>Noisy driving 1</p> <p>Dangerous driving 1</p> <p>People being insulted, pestered, or intimidated in the street 1</p>  | <p>Not at all</p> <p>A little of the time</p> <p>Some of the time</p> <p>Most of the time</p> <p>All of the time</p> |

|  |   |  |
|--|---|--|
|  | People being harassed or treated unfairly because of their racial, ethnic or cultural background<br>Public drunkenness <sup>1</sup><br>Rowdy behaviour <sup>1</sup><br>Offensive language or behaviour <sup>1</sup><br>People hanging around in groups <sup>1</sup><br>Noisy neighbours <sup>1</sup><br>People using or dealing drugs <sup>1</sup><br>Graffiti <sup>1</sup><br>Intentional damage to property other than graffiti <sup>1</sup><br>Property crimes (e.g. burglary, theft, destruction of property)<br>Violent crimes (e.g. mugging, assault, rape, manslaughter, murder)<br>Or any other problems ( <i>please specify</i> ) <sup>1</sup> |  |
| <b>NB - Local area</b> was defined as 'within about a 15-20 minute walk or a 5-10 minute drive from your home'   |   |  |
| Selected questions from the Survey were based on items from the following sources:<br>1. General Social Survey, 2006 & draft of 2010 items: Australian Bureau of Statistics (2006). <i>General Social Survey: User Guide, Australia</i> , cat. no. 4159.0.55.002, ABS: Canberra.<br>2. Census, 2006: Australian Bureau of Statistics (2006 reissue). <i>Census Dictionary, Australia</i> , cat. no. 2901.0, ABS: Canberra.<br>3. Household Expenditure Survey and Survey of Income and Housing 2003-04: Australian Bureau of Statistics (2006). <i>Household Expenditure Survey and Survey of Income and Housing: User Guide, Australia</i> , cat. no. 6503.0, ABS: Canberra.<br>4. Indicators of Community Strength: Pope, J. & Zhang, W. (2010). <i>Indicators of community strength at the local government area level in Victoria 2008</i> . Melbourne: Department of Planning and Community Development.<br>5. Families, social capital and citizenship survey: Stone, W. & Hughes, J. (2009). <i>Families, Social Capital and Citizenship Survey, 2001</i> . Canberra: Australian Social Science Data Archive, The Australian National University.<br>6. Australian Unity Wellbeing Index, Survey 18: Cummins, R. (2007). <i>Australian Unity Wellbeing Index Survey 18, Report 18.0, October 2007</i> . Geelong: Deakin University.<br>7. Neighborhood Cohesion Instrument: Buckner, J. (1988). The development of an instrument to measure neighborhood cohesion. <i>American Journal of Community Psychology</i> , 16, 771–791<br>8. Poverty and Exclusion in Modern Australia questionnaire: Saunders, P. (2010). <i>Social disadvantage &amp; economic recession ARC-Linkage project</i> (unpublished document), Social Policy Research Centre (UNSW) & The Benevolent Society. |   |  |

## Contact

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Any researcher who intends to use some or all questions from the *Community Connections Survey* in

other studies should inform The Benevolent Society advising which items are to be used and providing some general information on the sample to be surveyed. We will then advise whether the

items are copyrighted or have been developed for other studies, and provide you with the appropriate

acknowledgement text, or direct you to the copyright owner.

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## APPENDIX E

| <b>Conjoint Community Resiliency Assessment Measure (CCRAM) (Cohen, Leykin, Lahad, Goldberg &amp; Aharonson-Daniel, 2013)</b> |   |  |                     |
|---|---|--|---------------------|
| <b>Number</b>   | <b>Question</b>   | <b>Scale</b>   | <b>Factor</b>       |
| 1   | The municipal authority (regional council) of my town functions well  | 5 point Likert scale<br>1-Disagree - 5-Very Strongly Agree | Leadership          |
| 2   | There is mutual assistance and concern for others in my town  |  | Collective efficacy |
| 3   | My town is organized for emergency situations   |  | Preparedness        |
| 4   | I am proud to tell others where I live  |  | Place attachment    |
| 5   | The relations between the various groups in my town are good  |  | Social trust        |
| 6   | I have faith in the decision makers in the municipal authority (regional council)   |  | Leadership          |
| 7   | I can depend on people in my town to come to my assistance in a crisis  |  | Collective efficacy |
| 8   | The residents of my town are acquainted with their role is in an emergency situation  |  | Preparedness        |
| 9   | I feel a sense of belonging to my town  |  | Place attachment    |
| 10  | There is trust among the residents of my town   |  | Social trust        |
| 11  | In my town, appropriate attention is given to the needs of children   |  | Leadership          |
| 12  | There are people in my town who can assist in coping with an emergency  |  | Collective efficacy |
| 13  | In my town, there are sufficient public protection facilities (such as shelters)  |  | Preparedness        |
| 14  | I remain in this town for ideological reasons   |  | Place attachment    |
| 15  | I have faith in the ability of the elected/nominated head of my town to lead the transit from routine to emergency management of the town |  | Leadership          |
| 16  | I believe in the ability of my community to overcome an emergency situation   |  | Collective efficacy |
| 17  | My family and I are acquainted with the emergency system of my town (to be activated in times of emergency)                               |  | Preparedness        |
| 18  | I would be sorry to leave the town where I live   |  | Place attachment    |
| 19  | The municipal authority (regional council) provides its services in fairness  |  | Leadership          |
| 20  | The residents of my town are greatly involved in what is happening in the community   |  | Collective efficacy |
| 21  | The residents of my town will continue to receive municipal services during an emergency situation  |  | Leadership          |

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