

Effectively involving an Australian rural community in a Risk Management Process: a 'community partnerships' approach

A behavioural study of an Australian rural community's adoption of a Public and Environmental Health Management Plan

The doyen of hazard research, Gilbert F White said in 1945 that there is a problem in adjusting human occupancy of the earth to the vicissitudes of an irregular, capricious and sometimes violent nature. In such circumstances decisions on land use can be improved by considering the fullest range of social characteristics and behavioural adjustments as well as possible engineering works. This paper is a report on a multi-faceted means to ensure successful creation and adoption by a rural community of a Public and Environmental Health Management Plan. Hence, this represents a behavioural study of an Australian Community. It offers lessons for Emergency Managers wishing to promote behavioural change and enhance emergency risk management processes.

Community involvement in the process of emergency risk management or the process of planning is more likely to engender ownership and influence behaviour.

This paper explores innovative ideas generated in the development of the Public and Environmental Health Management Plan (PEHMP) for Berri in South Australia, and provides some lessons for Australian Emergency planners in rural communities as identified in a recent project for EMA (Pisaniello and McKay, 2001). The lessons are structured around aspects of the Emergency Risk Management Process as endorsed by the States and Territories of Australia in the form of the *Emergency Risk Management Applications Guide*¹, see Figure 1.

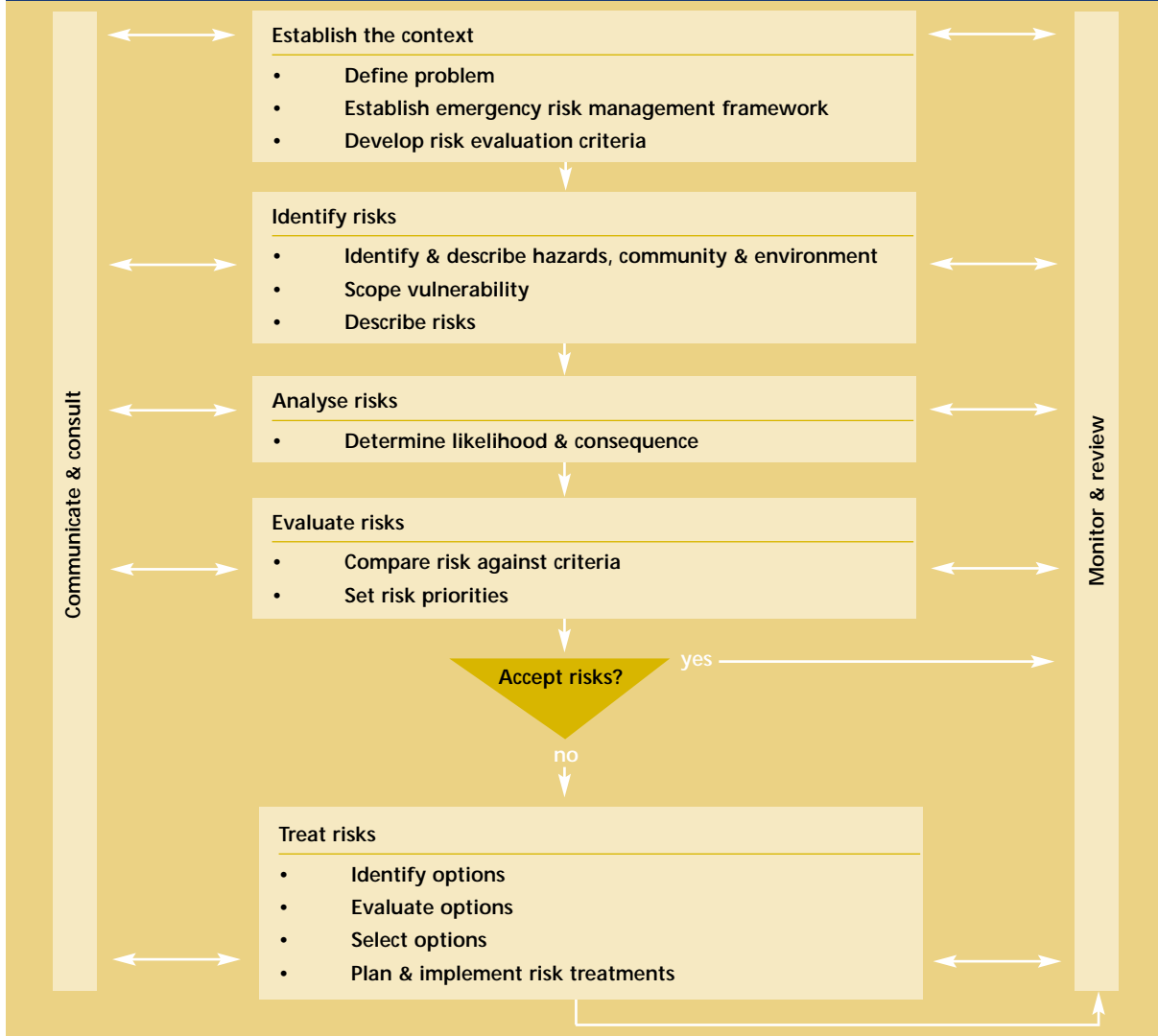
Emergency risk management is a systematic risk management process applied to communities in the context of emergencies. It produces a range of measures that contribute to the wellbeing of communities and the environment. The process includes: context definition; risk identification; risk analysis; risk evaluation; risk treatment; monitoring and reviewing; and

communicating and consulting. The process is illustrated in Figure 1. This paper will provide ideas on methods to involve the community in some of the key elements from Figure 1. These are presented in the form of 'lessons' for emergency managers. These lessons derive from 'stories' (also presented here) told by Greg Reedman (Executive Officer of the Riverland Health and Social Welfare Council 1992–1995) and Mike Stephenson (Environmental Health Officer of the District Council of Berri) who generated a successful 'risk management' plan for Berri in the field of Public and Environmental Health. This paper then relies on narrative research methodology (Clendinnen, 2000), ie. storytelling. This is a traditional means of exploring experience and has recently gained popularity as a professional development tool. Bringing about thoughtful change to practice is one trait of a reflective practitioner. Storytelling provides practitioners with opportunities to engage in reflective activities and is crucial for the development of new understanding and appreciation (McDrury and Alteria, 2000). Emergency managers are encouraged to describe their stories in relation to Emergency Risk Management and planning in order to explore, inform and advance practice (Fleming, 1996).

A key requirement for effective emergency risk management is for the local community to be aware of the risks, to be involved in the process, and ultimately to alter their behaviour (Scanlon, 1996). There have been many studies in the past demonstrating the failure of public information to alter behaviour (McKay, 1996). Community involvement in the process of emergency risk management or the process of planning is more likely to engender ownership and influence behaviour. The successful approach used to develop the Berri Public and Environmental Health Management Plan is outlined here to offer insights to emergency managers undertaking an emergency risk management process involving community consultation.

¹ Emergency Risk Management, Applications Guide, Australian Emergency Manuals Series, Part II, Volume 1, Emergency Management Australia, 2000.

Figure 1: The emergency risk management process (after EMA, 2000)



1. Influencing stakeholder involvement – part of establishing the context

Berri Council is one of seven district councils servicing the Riverland Region of South Australia. The region is generally flat to undulating, the major topographical feature being the Murray River Valley, which is up to 40m deep, and up to ten kilometres across. The river supports extensive irrigation areas, which produce citrus and other fruits, wine grapes and vegetables.

Berri is centrally located in the Region, and has therefore become the focus for industrial development and as an administrative centre for many of the government departments that service the Region. Berri's population comprises approximately 6,800 people living in 2300 households. While it has a much higher proportion of articulate, middle class people than the rest of the region, it also has a wide range of people from socio-economically disadvantaged groups. Details of some of the demographic and health information about Berri and its people are also provided in the Plan (District Council of Berri, 1994).

In Berri the impetus for the Public and Environmental Health Management Plan (PEHMP) was the need for the Council to be proactive rather than reactive (Reedman and Stevenson, pers comm, 2001). This aligns with the task of the Emergency Managers in undertaking emergency risk management.

The emergency risk management process requires broad community input and this requires exploration and definition of the communities at risk. In Berri the following statement and 'story' was provided by the authors of the report about the involvement of the towns people in decision making in the past, and the approach used to develop the PEHMP:

"The consultation and decision-making process in the past (in small rural communities) was based solely on input from groups and professionals and vocal minorities, thereby capturing only the persons with 'barrows to push' and the 'articulate middle class'. This represented a severe imbalance in the overall process as the views of the 'silent majority' went unaccounted." (Torquing, 1995)

'The Berri Approach'

"The Berri approach involved a multi faceted way of getting people interested in the ideas, and personal contacts by a well constructed letter and follow-ups. Particular managers were targeted, such as the managers of large local businesses, the Chief Executive Officer of the Hospital, the schools, the Manager of the Public Housing authority, and their networks were mobilised by getting the attention of the manager. Meetings were then called by personalised letter with adequate notice and the key managers participated and enjoyed working on issues with their workplace role firmly in mind. This got away from the usual scenario where a few vocal people hijack the agenda of a meeting and all interested parties, or indeed information on the issue may not be heard."

Story: Mike Stephenson and Greg Reedman

In order to get stakeholders on board, emergency managers may need to call on other expertise. Indeed, in this regard it is instructive to listen to Mike and Greg talk about their skills and how they evolved into a team.

The experience of the Council with previous planning projects, whether initiated by Council or from State departments or semi-government bodies, was that they have tended to be written in isolation, or with token consultation on the final product. Council was committed from the outset that this Plan be developed from the outside in, rather than Council staff writing a document and then seeking submissions and support from outside as an after-thought. (District Council of Berri 1994)

Mike Stephenson however realised that the existing public consultation process was ineffective as it contained excessive 'jargon' that is meaningless to people in 'hands on – get job done' positions. Consequently, Mike decided to develop a new process that would achieve his aims. However, Mike knew that he needed to consult in order to achieve this, which resulted in a partnership with Greg Reedman. Greg had the necessary expertise for the task, gained as a long serving senior officer of the Australian Bureau of Statistics in Canberra. Mike's initial vision was to commission Greg to perform the consultation employing the standard process. However, as a result of detailed discussions on 'what they wanted to achieve', the partnership of two highly motivated people formed, and along with it a change in methodology and approach in order to achieve the desired objectives.

Lesson: Highly motivated people will often find each other to work on an issue jointly. Effective partnerships that will assist the ERM objectives may be formed with someone from a different background and/or in a different organisation.

Mike and Greg worked to demystify the 'science' of consultation in order to get the community involved and promote ownership of the PEHM Plan at the local level. It was also recognised that in the future, funding assistance could be linked to plans such as these. To this end, every organisation or body that had any influence on health and services in Berri was invited to send a delegate to a preliminary meeting, and to participate on a Steering Committee. The response was excellent, and without really knowing what they were going to be involved in until the process was well underway. Enthusiastic support was found among people like:

- The Police Inspector;
- The Community Health Co-ordinator;
- Real estate people;
- Housing Trust officials;
- The Hotel Manager;
- Aged Care Professionals;
- 'Child Adolescent Family Health Service' representatives;
- Health Commission;
- Councillors;
- Council engineering and planning staff;
- Local Medicos;
- TAFE personnel;
- Education Department staff;
- Child Services staff; and
- The Tourist Office.

The invitation letter for involvement in Berri's PEH Plan Steering Committee was designed in line with the following key points:

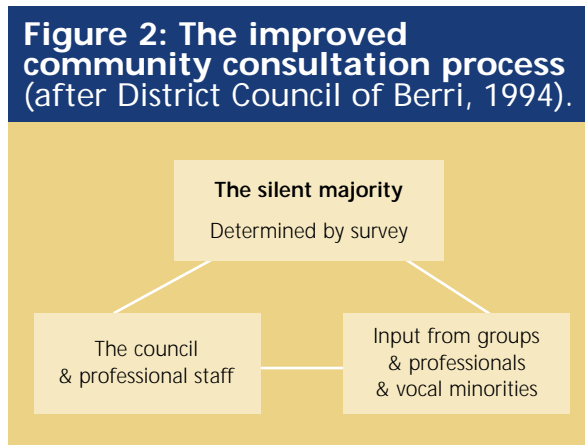
- Writing a personalised letter to each key person.
- Setting out the aims of the Plan from the Council's perspective, and letting them know that their input would be valued.
- Placing the Plan into the key person's context, and describing to them a hypothetical outcome to which they could relate.

With a letter written in this way, people made the effort to attend the first meeting to see 'what's in it for them'.

Lesson: Place the invitation to participate in terms of benefits to the participant.

The wide range of representation on the Steering Committee was essential in maintaining a balanced discussion of the survey results gathered from the community (described later). In the past Council decision-making had mostly been based on the view of the Council with the input of staff and the vocal minority (District Council of Berri, 1994). The process adopted for Berri, enhanced decision making by gathering the views of the silent majority, and combining these with the view

of the Council and as many professionals and groups of interested people as possible. This improved process is illustrated in Figure 2.



Lesson: Input and ownership by the community and key stakeholders are essential to effective community decision making in any policy area, such as Public and Environmental Health or emergency risk management.

With this Steering Committee in place the next steps in the consultation process for the development of the PEHMP evolved from the meetings and avoided the trap of the vocal minority hijacking the issues. The point of the first meeting was to ensure that each party knew the others, to find out about the provision of service or community support from each group and to outline the basis of the Plan to be developed for Berri.

At the first meeting, Greg spoke about the advantages of the use of a survey in this case and the arguments against the use of other methods in isolation. A note of caution: a fundamental mistake made in developing the Berri Plan was that the survey process did not get into full swing until the committee had begun to tire of the process. Starting the survey earlier would have kept the enthusiasm high, and the interest level 'bubbling'.

Lesson: The aim of the first committee meeting should be to achieve a consensus on the aims and the way forward.

2. Identifying risks

Looking at the demographic information about Berri and its people it quickly became apparent to Mike and Greg that traditional methods of public consultation, eg. public meetings, focus groups, 'phone ins'

discussions with key people, would be inadequate in identifying issues important to the bulk of the community. It was clear that some carefully designed and targeted techniques would be needed to consult with the full range of people in the community. Accordingly, it was decided to conduct a rigorous household interview survey, sampling from across the entire community.

The process used for identification of the community's public and environmental health issues (perceived risks) is a method transferable to an emergency risk management process. The townspeople's identification of perceived public and environmental health risks enabled prioritisation of the issues and the next step in the process.

A survey

Given that a zero budget line had been allocated for the project outside of personnel time and office back up, it was decided to make use of volunteers from the community to assist in this part of the consultation. This gave the community ownership of the process and the final product, and also had significant cost advantages.²

The benefits in conducting a statistically valid, properly designed survey of an area are huge. The greatest benefits are the intangibles:

- A feeling from the community that Council is interested in their opinion.
- Comments like "please come again, we didn't realise you were interested in us".
- Being able to implement a new policy, knowing that a definite and measurable percentage of people are behind you, and the vocal minority is just that ... a minority.
- Having a tool that will present valuable data to Council on just about any opinion expressed in the survey.

Lesson: Local government, indeed all government, should ensure that it takes into account the views of the majority. In our society the majority is often silent – one possible tool that could be used to gather community views is a survey conducted according to rigorous methodology.

Designing the survey

The key steps in designing the survey for Berri are discussed below. Torquing (1995) provides more detailed guidance on the survey process, including a checklist for designing a statistically valid survey.

² There are disadvantages and risks associated with the use of volunteers and, when used for financial reasons has shown to be negative: this should be weighed up against the benefits associated with involving the community.

Sampling was the first necessary step in designing the Berri survey, and this was undertaken as outlined in the Torquing (1995) package – which also includes comments on the need for sampling and the process of determining an adequate sample size.

To begin, Mike and Greg did not have a basis from which to sample. They needed to know how many households existed and their locations in order to draw a sample for use to produce estimates for various sub-regions. Therefore, a number of people went out and identified all the dwellings. The use of census data (ie. ABS Collection Districts) may be a more efficient source of information on your community for the purposes of gathering base data for survey sampling (Ferrier, 2000). The use of spatial data integrated with this information may also be of benefit when considering treatment options (McRae, 2001).

The existing public consultation process was ineffective as it contained excessive 'jargon' that is meaningless to people in 'hands on – get job done' positions.

Mike and Greg decided that the 'acceptable' error of the sample would be in accordance with ABS Standards or better. A random sample of 325 households spatially distributed throughout the council area was selected using standard blocking and selection processes (see Torquing, 1995). The sample size was chosen to give a standard error percentage of 5 per cent on major variables after taking account of likely non-response.

Lesson: In any statistically valid survey, the sample size should be chosen to give an 'ABS acceptable' standard error, but should also be 'achievable' with the available resources.

In the survey, three population groups were specifically examined. They were infants and children aged less than 13 years, adolescents and teenagers aged 13 to 17 years and adults aged 18 years and over. Issues associated with health promotion, education and disease control, the social environment, the built environment, the natural environment and environmental safety were investigated for the entire population.

There were difficulties with the community's understanding of the amorphous concept of Public and Environmental Health. The questionnaires were structured to be open ended and simple, and then focussed people's comments onto relevant issues with a series of diverse examples.

Publicity before conducting the survey

Before household interviews were conducted using the survey instrument, it was necessary to give credibility to the process and also to raise community awareness. This was achieved through a publicity campaign comprising two main aspects:

1. Media coverage – a media release.
2. A letter from the Mayor sent to every sample household chosen, advising that a person from the Council would be contacting them soon.

Lesson: Appropriate publicity and credibility needs to be established before wider community participation is sought.

Recruiting and Training Interviewers

All interviewers volunteered their time. They came from a wide range of backgrounds and organisations. eg. Lions, Apex, Community Health Service, District Councillors, council staff, Skillshare trainees, Health and Social Welfare Councillors and members.

The interview was a simple process where interviewers read the questions as written and merely recorded interviewees' responses as faithfully as possible.

The interviewers were essentially untrained. Their basic instruction consisted of simple map reading so that they could identify households to be interviewed, an overview of the aim of the survey and some simple instructions regarding interviewing techniques. They were encouraged to try to make the interview a structured chat with as many members of the household present as possible and to record interviewees' comments as faithfully as possible.

Given that the interviewers volunteered their time, it was essential to show appreciation and this was done publicly at a free BBQ fully catered by the Council. This was in addition to other benefits that came from involvement, eg. training for those who were unemployed.

Lesson: If volunteers are to be used, there should be good reason for this other than the cost-saving. They should also be shown some form of appreciation, to promote the goodwill between Council and volunteer.

Mike and Greg concluded that it was imperative that each member of the Steering Committee and each member of the Council conduct at least 10 interviews apiece. 'The best most valuable surveys will be those comprised of interviewers who are involved in day to day Council activities' (Torquing, 1995). By aiming to have every member of Council staff, from the CEO to

the receptionist, the garbage truck operator to librarian conduct at least 10 interviews each, some unforeseen but rewarding benefits emerged:

“The change in outlook that staff undergo when they have listened and written down the opinions of a normal household will amaze both them and you. The attitudinal change is rewarding on its own. After a process like this the receptionist doesn’t think of the next complaint as just another grizzling rate payer, and this reflects right through the organisation. Similarly from a Committee view point, the members take a renewed interest in the process, and the organisations they represent gain something too.” (Torquing, 1995)

‘Interviewers and the kitchen table’

“The range of interviewers we used was wide, with varied backgrounds – some were professionals in the health field, some just volunteers, some of our own staff and elected members – and the main point that came back from all of them was that they were impressed with the community’s comments and level of understanding of what they were discussing, and they had an almost attitudinal change to their community because as a front counter person or a garbage truck driver or a paediatrician or whatever they were, they only normally run into a certain type of person in a type of mood or a complaining person. They were actually able to sit down at kitchen tables with real people, normal people if you like, and write down their views as they were expressed to them and write down those people’s opinions, and come away with a renewed attitude to their community when they actually find out that 90 per cent of the people they talk to think that their council or their organisation is doing a good job. It impacts on their attitude and on their work from then on. That comment was reflected at a committee meeting later on that the real experience is not here at the committee table, it’s around the kitchen tables”. Story: Mike Stephenson

Lesson: The methods used to consult with the community can impact on things other than the primary objective of the consultation, ie. attitudinal change amongst both the community and Council workers.

Interviews

Each interview was planned to take about 30 minutes. In densely populated areas where walking from one to the next only takes minutes, a person allocated with 10 households to interview, could comfortably do so over three evenings, between 6.30 pm and 9.00 pm. These times were found to be suitable for finding

families at home and available to chat. Each interviewer was given a fixed length of time in which to complete their workloads, eg. 10 days. It was found that once engaged in conversation with a household, interviews could extend to up to 2.5 hours in length, a commitment not anticipated by interviewers.

Validating the data

Before the results of the survey could be processed, the survey data had to be validated. This was achieved by checking the coding of the questionnaires to see if each questionnaire was internally consistent (see Torquing, 1995). Next the questionnaire results were checked against ABS Population data.

Analysis of survey results

From the 325 households surveyed in Berri, there was a 90 per cent response rate, 10 per cent were either not home and repeated attempts failed to find them, or they declined to participate.

The survey results enabled determination of the major public and environmental health issues in the community. From this information a summary of the top ten community issues raised in the interview process was produced (Figure 3).

This was sent to all interview respondents and Committee members as feedback and also published in the local newsletter. The results raised considerable interest, as demonstrated in the following story:

‘The summary sheet sent to respondents and waste disposal story’

“When we released Berri’s top ten highlights we distributed this information to each of the people that had taken part in the survey and to the media. A number of issues came up which we were then able to highlight. One particularly important issue was ‘waste disposal’. At the time the Berri District Council had no rubbish collection at all outside the township. Throughout the survey we were able to demonstrate about 40 per cent of the population of Berri lived outside of the township. They had no rubbish picked up at all. Not surprisingly, this was an important issue to them. This happened to come at the time when the council was looking at re-development of its waste disposal approach and so they changed what they might have otherwise have done and replaced their existing system with a single person operator using a grab arm on the back of a truck and expanded that in order to redirect the resources to cover the entire district. The population at large thought this was wonderful, because the council was genuinely listening to them”. Story: Mike Stephenson

Figure 3: Survey Results: A Summary (after District Council of Berri, 1994)

Summary: SURVEY RESULTS

The top ten health and wellbeing issues to the people of Berri District Council area were;

| Issue | Percentage of households |
|---|--------------------------|
| 1. Recycling | 62.5% |
| 2. Ross River Virus | 48.8% |
| 3. Elders' Independence | 48.8% |
| 4. Bicycle paths | 44.1% |
| 5. Water Quality | 44.1% |
| 6. Domestic Pet Control | 42.3% |
| 7. Waste Disposal | 42.3% |
| 8. Employment for adolescents and teenagers | 42.7% |
| 9. Cultural and Social Facilities | 40.5% |
| 10. Public Toilets | 40.5% |

Recycling was particularly important for those households with children aged 13 years (73.7%) or young people aged 13–17 (69.2%)

Cultural and Social Facilities were seen to be important to a wide range of population, eg (47.4%) for households with young children, (38.5%) for those with adolescents and teenagers, (36.1%) for those with adults aged 18–64 years and (35.7%) for those households with a person aged over 64 years.

Water Quality was of concern to a wide range of population across all age groups and both within the townships and the districts (44.1% overall).

Differences between households in the townships and districts

Waste Disposal was important to (54.2%) of households in the Berri districts without weekly rubbish collection compared with (33.7%) for those households in the townships.

Sunburn of infants and children was important to 48.6% of households in the districts compared with 22.5% for the townships.

Footpaths were only of interest to 22.2% of households in the districts compared with 45.9% for the townships.

Bicycle paths were important to 41.7% of districts households compared with 45.9% of townships households.

Interests of different age groups

There were a number of differences between age groups.

Households with young children were particularly concerned with Bicycle Paths (47.4%).

Households with adolescents and teenagers were particularly interested in Open Spaces and Parks (57.7%).

Households without children expressed particular interest in Elders' Independence (52.6%).

Households with a person aged over 64 years were particularly interested in Footpaths (60.7%).

3. Focus Groups: using the identified risks to examine strategies for implementation

Development of the overall Plan for Berri involved the 3 'groups' in the process as illustrated in Figure 2; the household survey provided INPUT from the 'silent majority', next focus groups were used, providing opportunity for 'experts' and those surveyed to come together to discuss issues and gain agreement on the way forward, and following this, council was presented with the recommendations to endorse for action.

In establishing these Focus Groups, interviewees who were interested in focussing on particular topics were invited to attend Focus Group meetings with people with professional expertise in the area, with a view to (1) exchanging information and (2) formulating recommendations for council. Focus Group topics were determined by the Steering Committee who categorised each of the lists of issues into 4 groups. Invitations were then sent to people so that they could choose which group they wanted to be involved with. In this way the Focus Groups were selective, ie. designed to complement the random sample.

The composition of the focus groups enabled a breadth of opinion from a variety of sources. For instance, the Focus Group dealing with children, had welcome input not only from Committee members, but also from Friends of CAFHS (Child, Adolescent Family Health Service), from the Childrens Services Office, the Director of the Child Care Centre, the local dietician, Education Department officers and others.

Meetings of the Focus Groups were held at the offices of the Riverland Health & Social Welfare Council, and followed a similar format:

- an introduction to the planning process;
- a summary of the survey process;
- providing clear instructions to members on how to consider the survey results under each heading for the group's category;
- discussion as to which of the issues raised by the community should have priority over others;
- by consensus, five to seven topics were chosen in each working group for the development strategies and targets;

- those not chosen were noted for later discussion or follow up in the next plan;
- each issue was fully explored looking for possible improvements to servicing, or ways of implementing a service or facility where none existed; and
- sometimes an issue was beyond the resources or responsibility of the Council, and where this was acknowledged, some comment was generally made on how Council might influence the responsible people or authorities.

'The police chief's story from the focus groups'

"In the working on the impacts of health issues on elders through the discussion the police chief asked if there were any issues of neighbourhood safety. I undertook the interrogation of the database there on the spot and said 'it's only about 2.5 per cent of elderly people are showing any issues at all about safety'. He said: 'can you tell where they are?' We were able to do that. We discovered that they were clustered in about 5 or 6 houses in a particular part of Berri. It was a poor part of Berri and these elderly people were surrounded by people of difficult background. He said: 'That's where the problem is, we will send a patrol car around there on a regular basis'. That solved the problem. By taking on only quantitative information we would have missed out. We looked at both qualitative data from the whole survey and individual questionnaires to see what they had to say"

Story: Greg Reedman

4. Results: treatment

The final part of developing the Action Plan for Berri involved documenting the developed aims and strategies from the Focus Groups. This included the people/agencies who had been identified as being responsible for implementing the strategies and documentation of expected target dates for implementation of the strategies. Certain results were different to those expected as illustrated in the following stories.

'Yearly meetings'

"From the results where there evolved a 3 yearly process of consultation that was driven from this survey. During the Focus Group discussion stages, each of the people attending those meetings commented that they got a lot from the process and benefited from the interaction with all their colleagues and counterparts, or opponents, that they normally wouldn't see in their day-to-day activities. Many were keen to see that process carried on regularly. So one of the outcomes that we weren't expecting was that council would call a meeting on an annual basis, of a semi-formal nature, just for those service providers to get together, bounce their forward plans and outline their upcoming projects for the year in the four areas of Focus Groups that were worked on. We had an informal arrangement to

continue the Focus Groups outside of the framework of the plan we were developing. Several of those meetings were held up to about 1996 but then with amalgamation of adjoining councils and the movement that you usually have of health professionals within their field a lot of those people involved at that time have since moved on. Unfortunately, that outcome is not continuing".

Story: Greg Reedman

'Clout story – water quality'

"The survey resoundingly showed that the poor water quality was unacceptable to the community and an aim that came out of that was to place political pressure on appropriate people to develop improvements in water quality. Strategies were developed to (1) enlist the help of the Health Commission, the Minister of Health, through the local government association, and (2) make presentations on the health aspects of Water Quality to the Ministerial Committee, which was in session at the time, and delegations to the Minister of Infrastructure. All of this combined did have a result wherein that Ministerial Committee acknowledged the 'Berri a Wealth of Health' survey as having an impact on their decision to install filtered water plants through the region. Its influence was because it was a statistically correct survey that was feeding back figures from the ground or the community instead of another one of what could be said to be reports made by consultants who are being paid by the people. Because it was a ground-up survey that can be shown to be statistically correct, the people at a political level were able to put sufficient weight in it than to see it as noise making from an unhappy council".

Story: Mike Stephenson

Mike and Greg refined the aims and strategies obtained from the Focus Groups and also ensured that the aims and targets were 'achievable' (ie. not too ambitious). The Plan was kept as simple as possible in order to avoid having people 'slog through, getting a headache just translating the jargon back to everyday terminology' (Torquing, 1995). A first draft of the Plan was presented to the Steering Committee for comment, and then submitted to the Council for endorsement: this was achieved with no significant changes.

The final cut of the Plan was distributed to the Steering Committee, Government Departments linked with Environmental Health, libraries and Council, which enabled it to be integrated into the corporate planning of the Council.

5. Time

The Berri Plan took approximately 15 months to develop, from April 1993 to June 1994, in addition to 7 months preparatory work by Greg and Mike.

Plan Development

April 93 – Nov 93: A number of key activities took place during this period including:

- invitations sent out in order to establish the steering committee;
- planning the Steering Committee meetings by both Mike and Greg;
- publicity over several months including letters sent out to households;
- identification of dwellings;
- training the interviewees;
- questionnaire development; and
- pilot testing.

It should be noted that Greg piloted the questionnaire with members of his Council; around 40 people were used to perform the interviews, test the processes and modify the questionnaire.

Nov 93 – Jan 94: The interview process took place.

Nov 93 – May 94: Focus Groups were being established as the data was coming in, and meetings were being held, some in tandem with the interview process. It should be noted that Mike and Greg worked intensely during this period.

June 94: Analysis of the survey data and focus group outcomes were completed and the summary report was written and endorsed by Council. The aim was to execute the action plan in the new financial year.

It should be noted:

1. While Greg and Mike performed the intellectual work and most of the 'grunt' work, it was very important that they were supported by administration staff in order to undertake tasks such as typing and distributing letters, 'chasing up' attendees for meetings, etc.
2. Now that this process has been developed, other Councils that have since adopted this process in order to develop a Public and Environmental Health Management Plan have completed it in around 6 to 12 months, eg. Enfield Council in 6 months.

6. Challenges and obstacles

The main challenge associated with developing the Berri Plan was overcoming the preconceptions that people bring with them, particularly Council Reference groups in regard to consultation. Preconceptions that had to be overcome included:

- perceived difficulties with conducting surveys;
- perception of loss of control/power when genuine consultation takes place;

- creating a wish list and raising public expectations which can not be met; and
- community leaders believing they already know what people need.

7. Outcomes and benefits

The Berri Plan was developed in 1993 and included 120 strategies that were accepted and endorsed by the elected representatives of Council. The recommendations were actioned and progress was reported to Council on a monthly basis at elected members meetings.

At present, of the 120 strategies actioned in 1993, 84 have been either completed (ie. if they were 'one offs', they have been done) or implemented and are still in place (ie. if ongoing, they are still going), eg: banning of backyard burning, rubbish collection process, bushfire plan. Some of the other 36 strategies have either been varied, had their priorities changed, are no longer relevant, or are still aims for the future.

The most significant benefit of the process adopted for Berri was that it provided confidence that the plan represented and took into account the views of the public as a whole. As such, it provided Council with the necessary information and, hence, political strength to resist lobby groups (ie. vocal minorities) who wanted issues addressed that the rest of population (ie. silent majority) did not necessarily consider critical. This benefit is well illustrated by the first story presented in Section 5.6.

Other benefits to come out of the Berri process include the following:

- Provided for positive community building, ie:
 - Good will – people pleased that the Council was interested in their well being and listening to what they wanted. "Comments like – please come again, we didn't realise you were interested in us – are so rewarding" (Torquing, 1995).
 - Councillors and staff were generally surprised to find that people were quite happy with the process they were involved in: this changed the climate for people in Council. "The change in outlook that staff undergo when they have listened to and written down the opinions of a normal household will amaze both them and you. The attitudinal change is rewarding is rewarding on its own. After a process like this the receptionist doesn't think of the next complaint as just another grizzling rate payer, and this reflects right through the organisation" (Torquing, 1995).
- Council received much positive publicity and feedback as a result of the method and process used.

- Provided supportive evidence and a strong basis for requesting funds in a number of areas, for example:
 - \$58,000 funding to construct a bike track, which was a direct result of the recommendations in the Plan.
 - The figures from the survey were used to strongly influence the State Government on water quality, which has resulted in millions of dollars spent on the building of major filtration plants not only in Berri, but in all Riverland towns in SA.
- People of the region benefited because the decision makers were far better informed.
- Council was now able to take a significant leadership role in social issues (whereas previously it was unable to do this because it was only a small Council and therefore could not afford to employ social workers). For example, the poor self-esteem of youth was identified by the plan as requiring attention and, hence, Council demonstrated leadership by holding the “Berri’s Youth – Our Future” meeting.

8. The way forward

The emergency risk management process as outlined in Figure 1 features “Communication and Consultation” with the community at each stage of the process. Genuinely involving the community in the process may require a range of methods of consultation at different stages as illustrated in the development of the Berri PEHMP and other studies (Gregory, 2000). The benefits of involving the community in decision making (providing the results of the consultation actually influences the decisions to be made) can extend beyond good will, the community pleased that the Council/decision makers were listening to what they want, to attitudinal and behaviour change through raised awareness of individual and communal responsibilities. Although initially resource intensive, genuinely involving the community in the emergency risk management process may in fact reduce the communities vulnerability to emergencies.

Acknowledgements

First and foremost, the authors wish to acknowledge the key contributions made by both Greg Reedman (Regional Manager Riverland SASES) and Mike Stephenson (Environmental Health Officer of the District Council of Berri) who generated the successful plan for Berri and subsequently provided the valuable stories and insights for the Study reported here.

Much appreciation also to the Australian Emergency Management Institute for funding this Study and for their initiation and participation in the project through Louise Mitchell.

Thanks also to Ms Janet Matheson at the University of South Australia for her kind efforts and general assistance.

References

- Burton, I., Kates, R. & Rodman, S. 1969, *The Human Ecology of Coastal Flood Hazard in Megalopolis*, Dept of Geography, The University of Chicago, Research Paper No. 115, Library of Congress No. 68-57967.
- Clendinnen, I. 2000, *True Stories*, ABC Boyer Lectures, ABC books.
- District Council of Berri. 1994, *Berri – A Wealth of Health*, A Public and Environmental Health Plan 1994–98, developed in association with Riverland Health and Social Welfare Council.
- EMA. 2000, *Emergency Risk Management Applications Guide*, Australian Emergency Manuals Series, Commonwealth of Australia.
- Ferrier, N. 2000, Demographics and emergency management: knowing your stakeholders, *The Australian Journal of Emergency Management*, Vol 14. No 4, Summer 1999–2000, pp.2–4.
- Fleming, R. J. 1996, *Australian Emergency Management Institutes Educational Development: For Whom and for What?*, Proc: NDR Conference on Natural Disaster Reduction, 29 Sept – 2 Oct 1996, Gold Coast, Australia, pp.83–89.
- Gregory, R. 2000, Using Stakeholder Values to Make Smarter Environmental Decisions, *Environment*, June, pp.34–44.
- McDrury, J. & Alterio, M. 2000, Achieving Reflective Learning Using Storytelling Pathways, *Innovations in Education and Teaching International*, Vol 38, No 1, pp.63–73.
- McKay, J. M. 1996, Reflecting the hazard or restating old views; Newspapers and Bushfires in Australia, *International Journal of Mass Emergencies and Disasters*, Vol 14. No 3, pp.305–319.
- McRae, R. 2001, Community mapping – an aid to emergency management, *The Australian Journal of Emergency Management*, Vol 15. No 4, Summer 2000–2001, pp.22–27.
- Pisaniello, J. D. & McKay, J. 2001, *The Development of a Public and Environmental Health Management Plan for Berri SA and its application to the Emergency Risk Management Process: an effective approach*, Report to EMA, Uni of SA Project No. 2068163.1, May 2001.
- Scanlon, J. 1996, *Could the System be Upside Down?: Some Questions About the Current Approach to Emergency Planning*, Proc: NDR Conference on Natural Disaster Reduction, 29 Sept – 2 Oct 1996, Gold Coast, Australia, pp 93–98.
- Torquing, 1995, *Consult v1.x Product Manual*, Written by Greg Reedman and Mike Stephenson and Published by Torquing Software.
- White, G. F. 1945, *Human Adjustment to Floods: A Geographical Approach to the flood problem in the United States*, University of Chicago, Department of Geography, Research paper No 29.
- Wisner, B. 2001, Capitalism and the shifting spatial and social distribution of hazard and vulnerability, *Australian Journal of Emergency Management*, Vol 16. No 2, pp.44–52.

By Dr John D. Pisaniello, Research Fellow and Prof. Jennifer M. McKay, Business Law, University of South Australia, School of International Business, Water Policy and Law Group, Mr Greg Reedman, Regional Manager, South Australian State Emergency Service, Mr Mike Stephenson, Environmental Health Officer, Berri Barmera Council, and Ms Louise Mitchell, Education Officer, Emergency Management Australia Institute.