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COMMUNITY RESILIENCE RESEARCH:

Final Report on Theoretical Research and Analysis of Case Studies









Final Report

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Collingwood Environmental Planning Limited with Kingston University

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Cover photographs:

- People in Peckham, South London place positive messages about love of their community onto a boarded up shop window following the disturbances, August 2011.
- Flooding during the tidal surge of November 2007 at South Quay, Great Yarmouth. © Great Yarmouth Borough Council.

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Executive Summary

Aims objectives and approach

The Community Resilience research project aimed at developing a better understanding of the role of community resilience in emergency response and recovery situations in order to inform Cabinet Office / Civil Contingencies Secretariat policy on community resilience and to inform the development of future work. There were two parts to the research:

- A desk based review of existing evidence on community resilience;
- An examination of the role of community resilience in the context of emergencies in four case studies. The case studies were:
 - o Two on flooding (Thirlby, Yorkshire; and Great Yarmouth, Norfolk)
 - Snow and ice (Forest of Dean)
 - o The Summer 2011 civil disorder (riot) (Peckham, London).

In addition to the Evidence Review and the Case Studies' research, a workshop was carried out on the 17th November bringing together interviewees, policy staff from CCS and DSTL, academics and national stakeholders in emergency planning to consider commonalities and discuss emerging findings.

Findings

The Evidence Review examined two key issues: The importance of community resilience to emergency response and The factors that promote or inhibit community resilience, including why some people choose to engage and others do not. The areas investigated were:

- 1. Understanding resilience in the context of emergencies
- 2. Understanding community
- 3. Understanding community in emergency response and how this influences activities
- 4. Characteristics of communities that influence community resilience in emergencies
- 5. Networks and social capital
- 6. Community structures, governance and their influence on community resilience
- 7. Characteristics of good practice engagement on the part of institutions responsible for emergencies and the extent to which these characteristics promote community resilience

A key finding was the need to understand the structures and processes that constitute "community" so that resilience to hazards is embedded within current networks and practices, drawing effectively on appropriate resource during emergencies. A definition of community resilience was developed for the project to express that emphasis: "Communities (social, spatial, cognitive) working with local resources (information, social capital, economic development, and community competence) alongside local expertise (e.g. local emergency planners, voluntary sector, local responders) to help

themselves and others to prepare and respond to, and to recover from emergencies, in ways that sustain an acceptable level of community functioning"

The four case studies were analysed individually and themes were drawn out from all four which were:

- 1. The role of networks social capital in action
- 2. Types of resilience
- 3. The role of leaders and influential individuals
- 4. Governance clash of cultures?
- 5. Perceptions of community and identity
- 6. Building community resilience to emergencies starting where people are
- 7. Perception of the hazard and its relation to community resilience.

Recommendations

The recommendations fall into two categories which are summarised below (full details on pp 41-43). Recommendations for further research are also made.

Support local people to engage with resilience

<u>Provide support to the process of community resilience planning</u> recognising that the process of developing a resilience plan can, in itself, foster a sense of community and build resilience.

Emphasise the importance of working with existing social networks for community resilience planning, e.g. informal networks between neighbours, neighbourhood watch, networks through schools (i.e. adult, e.g. clubs, PTA etc., as well as pupil networks).

<u>Be prepared for community resilience groups and plans to look different</u> in different areas and recognise that imposed solutions, plans or processes are less likely to be effective.

<u>Develop a simple community analysis process e.g.</u> flow diagram of key questions to be asked about communities, aimed at local authority emergency planning officers, community resilience group members and would sit alongside the Guiding Principles and could be used as part of a community impact assessment by emergency responders.

<u>Facilitate the "community" of community resilience champions</u> by enabling sharing of stories, coming together and for them to go out to other communities as "experts".

Improve communication between the Local Resilience Fora and local communities.

<u>Encourage appropriate community representation on the Local Resilience Forum (LRF)</u> so that links between people at a local level and the level of the resilience forum are developed. Whilst the Local Resilience Forum operates at the Police Area level, many hazards and risks threaten only very localised populations.

Support and look for opportunities for knowledge exchange between LRFs and local community resilience groups e.g. through workshops, dedicated sessions to community resilience.

Consider training and awareness raising to LRF members in the role of communities in emergencies. This would provide examples of how engagement with communities in emergencies is being carried out and the issues around it

Foster an attitude of openness and trust from emergency responders, external organisations in their dealings with people in local areas. Avoid excessive secrecy, respond promptly to questions, and communicate frequently through a variety of channels.

Be aware that building trust is a key principle in the development of effective governance and strong networks. This involves regular, personal contact between agents. Face-to-face contact appears to be a particularly effective, and possibly essential, way to build trust.

Ensure that the language that is used by emergency responders is appropriate and is sensitive to the nature of the communities that are being engaged with. Responders should be aware that they are sometimes not the best people to effectively contextualise the importance of contingency planning for people whose most pressing priorities, often justifiably, lie elsewhere.

Summary of recommendations for further research

How do emergency responders (e.g. police, fire, Environment Agency) engage with communities around resilience?

How and in what ways does community resilience develop over time and context?

How do different types of community interact with different types of hazard? What does community resilience look like in different emergencies?

How is community resilience understood by community members and emergency responders? How do those understandings impact on action during emergencies?

What is the role of small businesses in developing community resilience?

1. Introduction

The aim of the Community Resilience research project was to develop a better understanding of the role of community resilience in emergency response and recovery situations in order to inform Cabinet Office / Civil Contingencies Secretariat (CCS) policy on community resilience and to inform the development of future work.

There were two parts to the research. The first part of the project involved reviewing existing evidence on community resilience in order to explore:

- The importance of community resilience to emergency response
- The factors that promote or inhibit community resilience, including why some people choose to engage and others do not.

This is presented in a separate report "Community Resilience Research: Evidence Review".

The second part of the project consisted of four case studies to examine the role of community resilience in the context of emergencies:

- Two on flooding (Thirlby, Yorkshire; and Great Yarmouth, Norfolk)
- Snow and ice (Gloucestershire)
- The summer 2011 civil disorder (riots) in August (specifically, Peckham, London).

The case studies enabled a more detailed understanding of:

- How communities respond in the face of adverse events
- The factors that facilitate people working together in those situations
- The extent to which that community response was linked with and assisted the response by 'the authorities'/ emergency response organisations.

The full versions of the case studies are presented in a separate report "Community Resilience Research: Case Studies, Lessons and Recommendations".

In addition to the Evidence Review and the Case Studies' research, a workshop was carried out on the 17th November 2011 bringing together case study interviewees, policy staff from CCS and Defence Science and Technology Laboratory (DSTL), academics and national stakeholders in emergency planning. A record of the workshop was produced and forms an Appendix to this Final Report.

This report consists of the following:

- A summary of the review of the evidence around community resilience in relation to emergency response together with a discussion on community engagement in emergencies.
- A discussion and synthesis of the findings from the four case studies carried out as part of this research.
- General lessons from the case studies.
- Recommendations for practice, policy and further research.

2. Summary of Evidence Review: The Importance of Social/Community Resilience to Emergency Response

Social or community resilience has been gaining ground within government and disaster literature in the last decade, yet the focus has been on resilience with less emphasis on the nature of community. This is perhaps because definitions of resilience have focussed largely on the individual (psychological) or the system (socio-ecological). However, impacts from disasters (e.g. flooding) are clearly felt at the community level and there is research which discusses how communities respond after such events e.g. in terms of volunteers helping out (Watson et al, 2009) and community spaces being found for people to gather (Easthope, 2011). The nature of those responses varies and there is work to suggest that it varies according to the type of community (Coates, 2010), as well as with the type of event. Given this, in order to support communities to be more resilient in the face of emergencies having an understanding of how communities work is very relevant. Therefore, key aspect of this research is to integrate understandings of community into the concept of resilience. Therefore, we start with separate discussions of resilience and community ending with a brief review of "social/community resilience".

Understanding resilience in the context of emergencies

Defining resilience

"The capacity of an individual, community or system to adapt in order to sustain an acceptable level of function, structure, and identity" (Cabinet Office, 2011: p10)

And.....

Resilience can be observed as.....:

- Resistance "holding the line"
- Bounce-back "getting back to normal"
- Adaptation "adjusting to a new normal"
- Transformation "owning a need to change"

And.....

Resilience building is an ongoing dynamic process rather than a static outcome.

In this research we take as our basic definition the Cabinet Office definition in National Strategic Framework for Community Resilience, which in turn has come from Edwards (2010) through research by Demos:

"The capacity of an individual, community or system to adapt in order to sustain an acceptable level of function, structure, and identity". (Cabinet Office, 2011: p.10)

We would like to add to this definition and highlight that resilience can be understood from a variety of ecological, environmental and civil-protection-relevant perspectives (Adger, 2000; Coles & Buckle, 2004; Folke, 2006; Klein et al., 2003; Medd & Marvin, 2005; O'Brien & Read, 2005). Through interpretation, these multiple perspectives can be roughly translated as describing resilience in four principal types (Whittle et al., 2010) which are very useful to articulate these because they can be more or less helpful in building resilience. These are:

- Resilience as resistance "holding the line"
- Resilience as bounce-back "getting back to normal"
- Resilience as adaptation "adapting to a new normal"
- Resilience as transformation "owning a need to change".

In addition we would argue that resilience building is an ongoing process rather than a static outcome. Given the dynamic nature of both communities and the cycle of emergencies, it is more useful to discuss what processes and structures are in place to facilitate resilience than to ask if a community is resilient or not.

Understanding community

Community in this research is understood to be a combination of:

- Spatial
- Social and
- Cognitive elements.

The definition of community used in this research combines three elements of community:

- the spatial element;
- social relations and structures such as networks; and
- cognitive or psychological elements such as local or group identities and the creation of belonging/exclusion.

Research has shown that to fully understand communities, the ways in which they respond to emergencies, and how they may be changed by the experience, it is necessary to study the interrelationship of these three elements (Coates, 2011). Recent approaches to studying the impacts of disasters have recognised that these are essentially social events and determined by factors in people's everyday lives such as what groups they belong to, how they perceive risks, who they trust etc (Blaikie et al., 1994; Cannon, 2000; Enarson and Morrow, 1998; Fordham, 1998; Hewitt, 1997; Wisner et al., 2004). This approach has highlighted the need to understand the social processes of 'everyday life' rather than narrowly focussing on the crisis situation (Wisner et al., 2004). However to date, the focus of research has been on the experiences of individuals and households (Twigger-Ross, 2005; Walker et al., 2005; Walker and Burningham, 2011) and whilst existing research and anecdotal evidence suggest that emergencies do impact at the community

level, relatively little is known about the impacts on, and response of, social structures in the local area (Tapsell, Tunstall and Wilson, 2003). Understanding the processes operating to create and maintain communities is a key component in community resilience and the extensive community literature can play a large part in achieving this goal.

Recent work argues that a community can never be satisfactorily defined either by location or by its networks. It can mean different things to different individuals and groups and this will depend upon the context. Whilst this approach offers a number of benefits critics have argued that the focus on the cultural aspects of community has been at the expense of spatial, material and social aspects that are so crucial with regards to emergencies in geographic areas (Amit, 2002; Herzfeld, 2005; Neal and Walters, 2008). Given this as noted above we take the view that community is defined in spatial, social and psychological terms. Even a community which appears to have no physical location can be defined in relation to a physical location through its absence. Because the emergencies we are considering are geographical in nature if is vital to understand how the people located in that area relate to each other in order to see how resilience can be improved.

Understanding community resilience

Community Resilience is defined as:

"Communities (social, spatial, cognitive) working with local resources (information, social capital, economic development, and community competence) alongside local expertise (e.g. local emergency planners, voluntary sector, local responders) to help themselves and others to prepare and respond to, and to recover from emergencies, in ways that sustain an acceptable level of community functioning".

In terms of our working definition of community resilience, bearing in mind the previous discussion about resilience and community, we highlight here the key aspects that we want to focus on.

Firstly, community resilience is not something that just emerges, post-hoc, as a response to an emergency, but rather we would suggest it builds on pre-existing networks and capacities, which may have influenced its emergence (positively or negatively). Community response is built using pre-existing community capacities, which are expanded or extended in line with a – perhaps dramatically – identified need (Dynes, 2005). Norris et al (2008) describe community resilience as process linking a network of adaptive capacities. These capacities are:

- Economic Development: e.g. a community's resilience depends not only on the volume of economic resources available to it, but also on their diversity. The capacity to distribute post-disaster resources to those who most need them is also vital.
- Social Capital: e.g. social networks need structure, institutions of support provision, rootedness, a commitment to networks goals and grass-roots leadership. To this we would add that trust and reciprocity are also vital factors in the development of social capital and that these are developed with the benefit of actual, long-term (good or bad) experiences in people's lives or in their local environment (McCulloch, 2003).

• Information and Communication: e.g. the need for systems and infrastructure for information exchange and a shared meaning and purpose which means that communications will be understood in the intended context.

• Community Competence: e.g. a capacity for action and decision-making to be achieved collectively and for the proactive development of efficacy and empowerment.

This suggests that, if tapped effectively, the capacities needed to develop community resilience may be able to be developed at any stage of the integrated emergency management (IEM) cycle, i.e. not just during response, as is implied by the definition of Community Resilience that is offered in the National Framework on Community Resilience¹ and not predominantly during recovery, as suggested by Whittle et al. (2010). In effect, for many communities the capacities that facilitate resilience building are already there (or are not).

Not only, however, does Norris et al.'s framework identify the necessary resources and dynamic attributes, which will enable successful coping in an event. In discussing community resources it allows us to investigate the complexity of the community in terms of how those resources might be useful or not across the IEM cycle.

A further important aspect is drawn out by Norris's et al.'s approach and that is the understanding that to improve community resilience it will be important to improve the underlying social aspects that make people more vulnerable to negative impacts from hazards in particular and from life events in general, e.g. Low incomes, poor health, low educational attainment. In this way it is useful to draw in some of the work on urban regeneration where community resilience in the face of economic and social pressures is a key issue. Urban regeneration, neighbourhood renewal and economic development practitioners are generally focused, in the simplest terms, on how an area can build or capitalise on its economic and social strengths and how community cohesion and social capital can be enhanced to support the former. In particular, these approaches seek to tackle what are often ongoing problems of economic and social deprivation. Reference to community resilience has been made in this context: building more resilient communities to be able better respond to and overcome economic and social pressures. The role of community networks and community engagement are directly related to developing community cohesion and social capital which are related to community resilience.

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¹ The National Framework defines Community Resilience as "Communities and individuals harnessing local resources and expertise to help themselves in an emergency, in a way that complements the response of the emergency services." This definition fails to encompass resilience-building that occurs at any stage of the IEM cycle apart other than response.

Understanding "community" in emergency response and how this influences activities

Communities in the context of emergencies have been considered as:

- Self-evident and unproblematic
- Synonymous with "the public"

These understandings can lead to:

- waste of local knowledge and expertise,
- lack of trust in authorities,
- divisions in communities,

...all of which are likely to considerably reduce community resilience in an emergency.

Community has been a central theme in both this and the previous government's policy and this can be seen in emergency response as well as in many other policies. However, as discussed in the previous section community is very malleable concept and its ability to mean so many things helps to account for its appeal and its longevity (Day, 2006). Difficulties can arise where groups attempt to come together, with community as a central notion, but without necessarily sharing the same vision of community. Different conceptualisations will lead to different strategies and interventions. The problem and its solution will be framed in different ways. This can lead to misunderstanding, missed opportunities and even conflict and damage. Attempts at engagement can therefore show insufficient understanding of the complexity of community, leading to missed opportunities in supporting these community structures or worse, a disruption or dissipation of potential community resilience (Buckle, 1999, Amlôt and Page, 2008).

Examples where lack of consideration of community structures has caused problems

There are a number of examples where a lack of consideration of community structures in post emergency management has caused problems: mistrust, alienation of local people, divisions between members of communities, and highlights the need to understand community level social impacts. Poor communication through a lack of awareness of how local structures work can lead to mistrust (Coates, 2010). In the changing relationship between the expert and the public, trust has come to be seen as a key issue (Arnoldi, 2009; Beck, 1992; Drevensek, 2004; Dunn, 2008; Giddens, 1994a&b; Rayner, 1992; Renn, 2008). There is some evidence to suggest that there is a loss of faith in expertise and trust in experts is declining (Beck, 1992; Giddens, 1994a&b). The division of responsibilities between a number of organisations may also lead to mistrust as has been shown frequently in relation to flooding. Despite steps to improve coordination over recent years it continues to be an issue however, as highlighted by the Pitt Review (Pitt, 2008)

"Poorly-managed and implemented response and recovery operations, however well intended, can serve to increase feelings of isolation, loss, anger and distrust" (Amlôt and Page, 2008p 34). There is ample evidence from the flood literature of divisions caused or exacerbated by the handling of post-

flood resources (Fordham, 1998; Fordham and Ketteridge, 1995; Tapsell et al., 1999; Tapsell, 2000; Tapsell and Tunstall, 2001). The technological disaster literature also illustrates the dangers of dividing the community in this way (Freudenberg, 1997). For example, a study of the social and psychological impact of a chemical contamination incident of a Cheshire village in the UK found that the separation of the village into different compensation zones exacerbated divisions, and the community was effectively destroyed. The village social structure was damaged and "the people of the village went from living in a pleasant close-knit community, to living in a blighted, contaminated, divided community that was disintegrating on a daily basis" (Barnes et al., 2002 p 2238). The study highlighted how the community-level social impacts need to be taken into consideration when managing incidents and the dangers of ignoring this aspect.

If community resilience is to be improved or supported, it will be necessary for those involved to engage with communities as a complex social structure. Local communities may vary considerably and it is necessary to recognise this variation rather than expecting one solution to work in all cases. It is also important to engage with residents understandings of their community rather than imposing or assuming some readily available label. Community may have multiple meanings and it is therefore important for those working together to come to a shared understanding in order to communicate effectively.

Characteristics of communities that influence community resilience in emergencies

Research in this area is relatively limited as yet, and as both community and resilience are complex multi-faceted concepts it is a difficult task to know which characteristics of community will influence which aspects of resilience and under what conditions. However, research suggests a number of related community characteristics which play a role in resilience: networks: social capital; trust identity and previous experience. These are summarised in the table below followed by a detailed discussion of networks and social capital given its centrality to this research.

Table 1: Characteristics of communities which play a role in resilience

Characteristics		Key features	Potential influence on community resilience in emergencies
	Bonding capital	Close knit, family/friends support, could be insular	Likely to provide important "getting by" support in an emergency, but may not be linked to wider resources. If linked into authorities, organisations could provide very useful ways of communicating with local people in emergencies.
Networks	Bridging capital	Looser networks between people, communities of interest, e.g. work, protest	Can enable people to draw on a wider range of resources during an emergency. Bridged networks may appear after emergencies, galvanised around the emergency. If developed around a number of issues then it provides vital links between different types of people within an area.
	Linking capital	Hierarchical networks between local people and authorities	If developed they provide the vital relationships between organised emergency responders and local people in such a way that improves responses to emergencies and reduces negative impacts

Characteristics Key features		Potential influence on community resilience in emergencies		
Trust	Competence, Consistency, Empathy	Crucial to the development of social capital and in governance structures		
Identity	The values around which a community coalesces and expresses	Can be useful if the values link with those needed within emergencies e.g. altruism, support for neighbours, but care is needed that assumptions about how people with a shared group identity will work in an emergency.		
Previous experience	The experience a community has had of the event	The evidence suggests that previous hazard or emergency experience at both the individual and communal level plays a positive role in building resilience e.g. knowing what to expect, signing up for warnings etc. However, that experience can also 'imprison' communities in the belief that a low probability or 'worst case' event, of greater magnitude than any in memory, will never happen to them.		
Community Context Physical and social features of the community e.g. spaces for communal events, relative isolation and social structures e.g. parish councils		The interaction between the spatial and the social aspects of community can be important in resilience building e.g. if rest centres are outside a person's community they may not go to them in an emergency. Isolated areas may foster a greater sense of perceived resilience and therefore decline offers of help. Key social centres e.g. pubs can provide valuable focus in emergencies.		

Networks and social capital

Networks are an essential part of any community. These networks may take many forms at a whole variety of scales and may be mediated by technology as well as being face-to-face. There is ample evidence within the disaster literature of people helping one another during and following a crisis situation (Fernandez-Bilbao & Twigger-Ross, 2009; Pitt, 2008). There is also evidence that these networks may be created or reinforced through the experience of the emergency situation in a phenomenon known as the therapeutic community (Flint and Luloff, 2005; Fritz, 1961; Gurney, 1977; Tapsell et al., 1999). However, they may also be damaged and there may be division, in what has been termed the corrosive community (Erikson, 1994; Freudenberg, 1997). It is clear that networks will be called upon if there is to be some form of resilience. Correspondingly, disruptions to the existing support networks by floods or by the removal of people to temporary accommodation have been shown to reduce resilience (Buckle et al., 2000; Fordham, 1998). Recent research suggests that although help is often willingly given by local people, at least in the immediate crisis situation, this is dependent on the existing network structures. Help is more widespread, collective and organised where networks are dense and interlinked and there already exists a culture of working together (Coates, 2010). A key way in which networks have been conceptualized is through the concept of "social capital". Putnam (2000) has introduced the categories of bonding, bridging and linking social capital to explain different types of networks, , but as Deeming (2008) in his work in three coastal communities concludes "merely having social capital in a community does not mean that it is readily instantiated into any form of hazard resilience"p.295.

The following table differentiates and summarises these three network types^{2,} and how they are considered to affect community resilience.

Table 2: Categories of social capital and different types of networks

Type of social capital	Key characteristics	Good for/ Opportunities	Bad for/ Risks
Bonding: "super-glue"	Close knit, often based on familial or friendships ties	Support in emergencies within network, sticking together	Can be exclusive, may not be linked to wider resources that are needed to cope within an emergency
Bridging	Looser networks	Bringing people involved in different groups together providing access to wider resources	May not be able to respond quickly. May only offer very narrow types of resource based on the type of relationship (the interest). Unlikely to provide emotional support
Linking	Hierarchical networks between people in local areas and organisations with power and influence	Engendering collective action	Can become rule bound over formalised and potential for manipulation by those in power

Community structures, governance and their influence on community resilience

Governance is......the structures, actors and decision processes that are involved with public life Factors of governance that influence community resilience:

- *Diversity.....* of actors and structures in the governance structure: greater diversity likely to mean a wider range of resources to be drawn on in emergencies
- Autonomy.... of actors and structures: autonomous components likely to be more resilient
- Interdependence.... of actors and structures: ability of each actor/structures to support each other
- Adaptability...... of actors and structures to learn from experience: more adaptable actors and structures will increase resilience
- *Collaboration.....* between actors and institutions: partnership working between sectors brings in a wide array of resources to draw on.

When decisions are jointly taken between two or more individuals then this implies the existence of some kind of structure or institution. The concept of governance considers the institutions, bodies or organisations involved in decision-making processes to consist of more than just 'government'. It

² The discussion concentrates on the types of informal networks that involve physical interaction between members; therefore, it will not investigate what Putnam refers to as 'tertiary' associations. These are groups or organisations (e.g. Greenpeace) to which increasing numbers of people ostensibly belong but to which members contribute no active networking role other than to, for example, receive mailings that report the exploits of the group's activist clique.

may consist of a wider range of formal and informal bodies. The broader literature on governance, from the social sciences, recognises that initiative and decision making processes do not take place exclusively at the state level but within an increasingly pluralistic structure of agents at different spatial scales. According to the concept of governance, actors do not consist of exclusively government bodies but may include private sector business, community organisations, voluntary sector bodies and other NGOs, as well as influential individuals. The concept of multilevel governance suggests that governance takes place through processes and institutions operating at a variety of geographical scales including a range of actors with different levels of authority (Hooghe and Marks, 2003).

Pelling and Dill (2010) point to evidence from recent disasters to highlight the importance of political context. While the evidence they draw from comes largely from less developed contexts, the aspect of the political context is nevertheless pertinent to developed countries such as the UK and in particular in relation to the influence at different sub-national, national and international scales. Godschalk (2003) examines a range of different models of governance in order to evaluate the most effective forms for fostering community resilience. Recent government policy places emphasis on local and regional agents to mirror the more flexible and responsive forms of governance that characterise contemporary community relationships (Bennett et al, 2004; Fuller et al, 2002). Emphasis is given to local agents taking responsibility themselves for gathering the important information and signals, organizing responses, and developing new delivery frameworks. This requires highly responsive and flexible forms of governance rather than the top-down structures characteristic of previous policy (Bennett and Payne, 2000; Benneworth, 2001). It is argued that, rather than compete with or replace local networks and initiatives government policy is most effectively channelled through existing local community structures. Pelling and Dill (2010) suggest that the recent period of neoliberal policy is characterised by a shrinking state and a growth in nongovernmental actors.

There is a body of literature that questions that ability of governmental structures to plan ahead in order to effectively respond to disasters, emergencies and extreme events. Learning from previous disasters according to Pelling and Dill (2010) is problematic given the unique context of individual events. Furthermore, the task of constructing governance structures to support community resilience is problematic if events are uncertain and unpredictable, not just events associated with the natural environment but also modern crises related to technology, health hazards, or environmental catastrophes. The unpredictability of events makes advanced planning problematic. Duit and Gallaz (2008) examine the effectiveness of governance structures and community resilience in the context of complex adaptive systems (CAS). In the context of CAS unexpected or marginal events can produce political crisis as unexpected events produce shocks and multiple factors can cascade. However, they argue that different structures can produce different responses to crisis events, with differing levels of success and resilience. There are a number of different characteristics ascribed to governance structures in the literature but these may be summarised in terms as five key characteristics:

• *Diversity.....* of actors and structures in the governance structure: greater diversity likely to mean a wider range of resources to be drawn on in emergencies

• Autonomy.... of actors and structures : autonomous components likely to be more resilient

- Interdependence..... of actors and structures: ability of each actor/structures to support each other
- Adaptability...... of actors and structures to learn from experience: more adaptable actors and structures will increase resilience
- *Collaboration*..... between actors and institutions: partnership working between sectors brings in a wide array of resources to draw on.

What is clear from this discussion of governance structures is for community resilience to be improved there will need to be attention paid to the actors and institutions at different levels as without the connections with those with power and between those with different types of resource and power effective responses in emergencies are less likely to happen.

Characteristics of good practice engagement on the part of institutions responsible for emergencies and the extent to which these characteristics promote community resilience

Good Practice Community Engagement is the development of practices and actions that enable members of the community to influence the decisions and get involved in the actions that affect their lives (Involve, 2004, p.19)

Good practice engagement involves:

- Recognition of engagement principles
- Understanding the context in which engagement takes place
- Clarity of objectives
- Understanding the communities involved
- Appropriate methods of communication and engagement
- Evaluation and learning from practice

Civil contingency institutions do not seem to have focused on developing guidance or tools for addressing the specific challenges of engaging with communities in the context of emergencies. The Cabinet Office and the Voluntary Sector Civil Protection Forum have produced a Guidance Note on Voluntary Sector Engagement (Cabinet Office, undated) which recognises the important role that voluntary organisations can play in supporting responders in emergencies. However, the focus of this document is on the formal aspects of relations between responders and voluntary organisations (e.g. Service Level Agreements, Memorandums of Understanding and protocols). These are mainly relevant to relations with large national or regional organisations and not so much to engagement with communities or members of the community. Indeed, requiring community organisations to spend time on formal procedures of this kind takes them away from work on the ground and may even discourage action.

Communication is one aspect of engagement that has received greater attention from emergency responders. The Cabinet Office has guidance for emergency responders on communicating with the public (Cabinet Office, revised in February 2011). This focuses on three main types of communication: raising awareness of hazards, warning and keeping the public informed in the case of an emergency (including working with the media). These are all essentially one-way flows of communications, allowing for little feedback from members of the community or organisations and for no discussion about the messages and their implications. One-way communication tends to see the audience as passive receptors of information rather than as being actively engaged in response and recovery. This kind of communication can be disempowering if it makes individuals or local organisations dependent on a source of information external to the community. To be effective, risk communication needs to be conducted as a long-term commitment requiring repeated resource investment (Ronan & Johnston, 2005). From this work it is clear that the type of communication that will lead to longer term, trusted relationships which are vital to resilience building, is best defined as engagement, which is on a continuum from provision of information through to codelivery of actions but has at its heart a set of core principles and methods.

The following sections briefly examine the main elements of good practice engagement, based on literature on engagement. While this literature refers to a range of contexts (community development, regeneration, public health, environment, etc), the focus here is on how emergency responders' engagement with communities can foster resilience.

Recognition of engagement principles

There is an extensive literature on community engagement or public participation, based on evolving practice and increasing recognition of the need to involve people in decisions and actions that affect their lives (e.g. Wilcox, 1994; Warburton, 1998; Involve, 2005). Research and practice on public participation indicate that while it is possible to point to examples of 'good practice' within the engagement process, organisations and individuals who engage effectively build trust by being transparent and showing respect for all participants, are clear about the scope and purpose of the engagement and ensure that all interests are involved and their views taken into account. These core principles are set out in different ways in different contexts; one example is the nine principles set out by the Environment Agency in its approach to Working with Others (Environment Agency, 2006):

- Clear boundaries
- Providing information
- Showing respect
- Feeding back
- Taking action
- Learning
- Being independent
- Targeted approach

Focused on common results.

When large complex institutions like local authorities or the Environment Agency engage with communities, it is important that all members of staff, from senior management to staff working on the ground, understand and reflect these principles in all their activities; failure to do so can lead to a loss of trust and eventual disengagement by the community. Discussion and acceptance of good practice principles of engagement at the highest levels of an organisation is also an essential first step to ensuring that staff on the ground feel that they have 'permission' to spend time engaging with communities

Understanding the context for engagement

In order to be able to engage effectively with communities, emergency responders need to understand the context in which they are working. External organisations seeking to motivate or build on community participation need to be clear about what they can influence in order to focus their efforts effectively.

Understanding the incident management context

The Environment Agency has done considerable research on the impact of flooding on individuals and communities and on community participation in flood preparedness, response and recovery. A report commissioned following flooding in Yorkshire in 2000 (Wilkinson, 2005) suggested that the ability of the local authority and other key agencies to establish strong relationships with the community, "played a significant part in the physical, emotional and community recovery following the traumatic event" (p.5). The emergency planning team at Bradford Metropolitan District Council provided aftercare in the post-event period that not only facilitated the social and psychological recovery of those affected but also helped the community to develop ongoing relationships with other agencies including the Environment Agency. However, the study found a lack of 'bridging capital' between the community immediately affected by the flooding and its agencies, and other neighbouring communities. Without the involvement of these neighbouring communities, it proved difficult to find lasting solutions to the causes of the flooding. This reinforces the role of bridging social capital as discussed earlier.

Using data to understand context

Gathering and using data is a central part of planning for emergencies. Responders have developed sophisticated data systems to understand and monitor hazards and to anticipate and manage likely responses. However, there has been a tendency to concentrate on data about the risks and hazards, giving less consideration to the characteristics of the communities which could be affected by that potential hazard. The Institute for Community Cohesion (ICoCo) has developed a tool to help local authorities, the police service and other responders to understand and monitor tension and conflict (ICoCo, June 2010, p.46). This is a specimen table of indicators, sources and spatial units, which includes data that is publically available, covering:

- Social inclusion
- Segregation
- Equal opportunities

- Educational attainment
- Community safety
- Population dynamics
- Social networks
- Political participation
- Community engagement
- Identification with a locality.

Monitoring this kind of information could help to provide a good picture of local community issues and dynamics.

Clarity of objectives for engagement

Over the past two decades there has been a clear move to encourage greater public participation. Much of this effort has focused on getting the people who will be affected by plans and strategies to provide information to ensure that these are targeted effectively ('getting it right first time') and on increasing understanding of and support for them and for the actions based on them (Baker et al, 2006). More recently the idea of 'partnerships' where all those involved in an issue work together, has been given greater importance. However, for communities to be resilient, they will often need to strengthen their own capacities as the basis for linking up with emergency responders. This changes the objective of engagement, from bringing communities groups and members into a plan or programme already defined by the emergency responder(s), to one of providing support to help the community build capabilities on their own terms.

Research on environmental risks finds that the shifting of responsibility onto the public is problematic and that citizens are ambivalent about this new role in their relation to state (Blake, 1999; Bickerstaff, Simmons and Pidgeon, 2008; Bickerstaff and Walker, 2002). Climate change and radioactive waste management, for example, are seen as serious collective action problems, in relation to which it is the responsibility of the state to establish a strong legal framework or guide to personal choice (Bickerstaff, Simmons and Pidgeon, 2006).

Given the difficulties of engaging residents in flood mitigation activities (Harries, 2008) and resilience measures more widely (Meyer, 2006; Slovic et al, 2001) it is worth exploring the possibility of engaging communities in a broader range of activities than simply those related to disasters or emergencies. If a wide range of problems or issues are included, then a clearer benefit may be seen than if focusing on one type of event alone. Risk awareness and risk reduction programmes implemented by agencies which are not accurately targeted at local priorities are more likely to fail in their efforts to engage local people whose 'risk attention' is elsewhere: 'day-to-day life usually takes precedence over spectacular but infrequent events' (Buckle, Marsh and Smale, 2000). Research by Winkworth et al (2009) looking at communities following bushfires in Australia indicates that engaging with community in a broader sense than has been traditional is also beneficial for the relationship between government and community.

Understanding the communities involved - stakeholder analysis

As shown earlier, insufficient understanding of the complexity of community, can mean that opportunities for supporting community structures are missed or even that social capital is undermined with a loss of potential community resilience (Buckle, 1999; Amlôt and Page, 2008). An understanding of the types of social capital and the characteristics of governance structures can help emergency responders to assess where they can most effectively focus their efforts in terms of promoting or supporting resilience.

There are many tools for stakeholder or community analysis, from plotting organisations and groups on a simple matrix (European Communities, 2003; Colbourne, 2008) to more detailed analysis of community resources and relationships (e.g., Environment Agency, 2010). In applying these tools and approaches, it is important to work with local people rather than in isolation, to avoid imposing definitions or assessments from the 'outside'. The aim of the stakeholder analysis is to ensure that a systematic approach is taken to understanding where and who the communities are who need engaging with.

Appropriate methods of communication and engagement

Finding the appropriate methods for engagement has been found to be important for the success of the engagement, with the key factor being linking up the objectives with the methods used. It can be easy to launch into a method (e.g. sending out a leaflet without thinking through the objective of that approach).

A useful aid to considering the range of methods appropriate to different objectives is that developed by Wilcox (1994) and is presented in the table below.

Table 3: Determining appropriate methods of communication and engagement

LEVEL / STANCE	Information	Consultation	Deciding together	Acting together	Supporting
Typical process	Present and promote	Communicate and feedback	Consensus building	Partnership building	Community development
Typical methods	Leaflets Media Video	Surveys Meetings	Workshops Planning for Real Strategic Choice	Partnership bodies	Advice Support Funding
Initiator stance	'Here's what we are going to do'	'Here's our options - what do you think?'	'We want to develop options and decide actions together'	'We want to carry out joint decisions together'	'We can help you achieve what you want within these guidelines'
Initiator benefits	Apparently less effort	Improved chances of getting it right	New ideas and commitment from others	Brings in additional resources	Develops capacity in the community and may reduce call on services
Issues for initiator	Will people accept consultation?	Are the options realistic? Are there others?	Do we have similar ways of deciding? Do we know and trust each	Where will the balance of control lie? Can we work together?	Will our aims be met as well as those of other interests?

LEVEL / STANCE	Information	Consultation	Deciding together	Acting together	Supporting
			other?		
Needed to start	Clear vision Identified audience Common language	Realistic options Ability to deal with responses	Readiness to accept new ideas and follow them through	Willingness to learn new ways of working	Commitment to continue support

With respect to engaging with members of the public around community resilience all these methods will be important at different times and stages.

Evaluation and learning from practice

As the practice of stakeholder engagement develops, the emphasis has shifted away from methods for engagement towards the whole process of planning, engaging and evaluating. This has come with the realisation that it is crucial to understand the contexts in terms of people, events, organisations, and issues when planning any stakeholder engagement. Formal evaluations of engagement processes are on the increase, but it is by no means a given that they are carried out alongside every engagement process.

Evaluation is a process of review and analysis to assess the value (including benefits) and quality of a process according to an agreed framework. This framework should include:

- Analysis of activities and results against the objectives of the project, stated and/or implicit.
 It is important to include early on in the process questions about the framing of the objectives and the assumptions that lie behind those objectives.
- Analysis of the methods and processes used against agreed principles of good practice.

While evaluations have traditionally focused on assessing inputs (resources put in such as time, money, etc.), outputs (activities or deliverables, e.g. reports or meetings) and outcomes (results and impacts), it has become increasingly important to also assess the context within which the project takes place, and the process used.

Conclusion

The Evidence Review provided the framework through which the case studies were examined. Specifically, the concepts here of resilience, community, networks/social capital, governance, and engagement were examined in relation to the emergencies in the case studies. Our underlying questions were:

- To what extent does action in emergencies reflect, build upon and enhance existing community networks and relationships? and
- What factors are facilitators or barriers to improving community resilience?

3. Case Studies: Overview of Findings

Introduction and approach

Four case studies were chosen to examine the role of community resilience in the context of emergencies:

- Two on flooding (Thirlby, Yorkshire; and Great Yarmouth, Norfolk)
- Snow and ice (Gloucestershire)
- The summer 2011 civil disorder (riots) in August (specifically, Peckham, London).

The case studies allowed a more detailed understanding of:

- How communities respond in the face of adverse events
- The factors that facilitate people working together in those situations
- The extent to which that community response was linked with and assisted the response by 'the authorities'/ emergency response organisations.

Research Method

For each case study written material was analysed together with interviews/group discussions with key people identified through a snowball approach. An interview schedule was developed which focussed on the areas discussed in the evidence review.

In each of the areas the following people were interviewed.

Thirlby

Seven community members were interviewed all of whom had some role or had had a previous role within the village: chair to the Parish Meeting, chair of the social committee, previous Chair to the Parish Meeting, chair of the local history group, a trustee of the village hall, a long standing member of the village who has previously held a number of official roles in the village, who runs a small business in the village, and someone involved with the maintenance of the recreation field. In addition a member of the North Yorkshire Emergency Planning Unit, and the team Leader of Flood Warning Team, Environment Agency were interviewed. In total nine people were interviewed.

Great Yarmouth

In Great Yarmouth three community members who also had other roles: councillor, assistant principal of the local academy and local Homewatch co-ordinator were interviewed. Further a small group discussion was held with community member/councillor, community member, headmistress and community development worker. The local Emergency Planning Officer, Services Manager and Neighbourhood Management Worker (all working for the local authority) were also interviewed along with the Flood Incident Manager, Environment Agency, Anglian Region. In addition, two community resilience emergency planning groups were attended. In total, seven people were interviewed, a discussion group was held with a further four people and two meetings were attended.

Forest of Dean

In the Forest of Dean the Emergency Planning Officer, Forest of Dean District Council, Gloucestershire Highways member of staff Gloucestershire Country Council, a member of Gloucestershire Rural Community Council and the Mayor of Cinderford were interviewed. There were also two meetings which were noted: Gloucestershire Rural Community Council (GRCC) meeting. Attendees: Assistant Chief Executive, GRCC; Gloucestershire County Council Councillor and Lydney Town Councillor; Forest of Dean Rural Advisor, GRCC and Forest of Dean District Council meeting. Attendees: Forest of Dean District Council, Corporate Support and Emergency Planning Officer; District Councillor (Cabinet member for community) District Councillor; Team Leader Street Wardens; Community Engagement Officer and Older People's Lead at District Council; District Councillor, Welfare Officer for Lydney. In total five people were interviewed and two meetings were attended.

Peckham

In Peckham two community members were interviewed together with the Head of Community Engagement, Southwark Borough Council, CEO Safe'N'Sound, a Peckham Settlement member of staff and a Tenants and Residents Association member. This was complemented with attendance at post riot meetings: two Peckham Network (initially known as Post-Riot Network) meetings and a meeting of community organisations and residents with UK riots inquiry panel led by Darra Singh. In total six people were interviewed and three meetings were attended.

The interviews were guided by an interview schedule developed by the team and recorded if possible on a digital recorder and then they were transcribed in full. Where circumstances did not allow for recording, notes were taken.

Analysis

Each of the transcripts were read through by the person who carried out the interviews. Themes relating to each of the sections of the interview schedule were drawn and discussed at a project team analysis session. For each case study similarities and differences between the interviewees were attended to in order to ensure that participants' views were represented accurately.

Case study summaries: Thirlby, North Yorkshire

In June 2005 intense rainfall occurred in the south west part of the North York Moors, causing the flooding of 121 properties. Thirlby, a small village of approximately 120 people was under the area of most intense rainfall and flash flooding destroyed a bridge and washed away some of the roads. Access was very difficult during the flood, help didn't arrive immediately, and eventually a helicopter was used to check on the village. The flood waters subsided within hours and after that access was difficult but possible. Approximately 18 properties were directly affected, in one case flooding reached ceiling height and the owners had to escape through an upstairs window. Some of these affected were out of their properties for over a year. There was no history of flooding and no flood plans in place.

Residents of the village carried out most of the immediate clearing of trees and other debris. They helped one another to reach higher ground and to move cars. They also provided temporary

accommodation, washing, shopping, and meals. They also helped look for lost items and provided small repairs to properties where possible.

The authorities were involved with repairing the roads and bridges but there has been relatively little contact with residents and authorities with the exception of the Chair to the Parish meeting who provided the main link between the village and 'outsiders'.

Residents felt that they had coped well; they were able to clear up in the immediate aftermath and support one another physically and emotionally in the longer term. Whilst the extensive community events were initially reduced they returned to 'normal' and continue to thrive six years after the flood.

Contact with the authorities was limited and the relationships not always successful. The authorities and other organisations such as service providers (and little distinction is made between the two) were generally seen as slow and inefficient.

Great Yarmouth, Norfolk

This case study centres on the 8th/9th November 2007 tidal surge and consequent danger of widespread flooding of the Great Yarmouth area. The tidal surge of up to 3 m made its way down the North Sea and there was the possibility of it coinciding with peak high tides. There was a risk of flood defences being overtopped on the coast and the tidal rivers in Great Yarmouth as well as other areas in East Anglia. There were severe flood warnings issued by the Environment Agency at Great Yarmouth and on parts of the Rivers Bure, Yare, and Waveney all of which flow out to the sea at Great Yarmouth. Over 1000 people were evacuated to rest centres and approximately 40,000 sandbags were given out to local people. Fortunately the weather changed and the flooding did not happen, but the plans were activated. After the event there was a clean up of sandbags and of the rest centres that had been used.

Local people helped each other as they could in terms of supporting those who evacuated, getting sandbags and looking after people's possessions. There was a sense of the local people not feeling prepared and that the communication between them and the emergency services could have been improved. The emergency services worked together to carry out the evacuation and distributing sandbags including getting more sandbags from other authorities. Police came from other authorities to knock on doors and support the process. Rest centres were set up and rest centre managers were brought in from outside the area.

Since the "near miss" a number of developments have happened to support community resilience most notably the setting up of four community resilience groups around the four urban areas. The aim of these groups is to be the interface between the local people and the different groups (e.g. Homewatch, youth clubs, schools, tenants and resident associations). These groups are variously developing their community resilience plans with a focus on the development of communication trees that could be used in an emergency situation. In addition, in October 2011 one area had an "emergencies week" where they engaged with older people through stories of the 1953 flood and children from the local primary school raised awareness through a loud and noisy walk through the area, asking people if they were prepared and handing out leaflets. There were also events at the school to draw in parents.

In terms of the key things that worked well, people in the local area did help each other out drawing on existing bonded networks, the emergency services worked well together and the plans for evacuation were effective. Since 2007 the development of the Community Resilience groups and their progress in resilience planning is very promising together with the linking of the community development with community resilience and other networks. Finally, the "emergencies week" worked very well.

In terms of what did not work so well, although people acted they did not feel prepared and did not feel they knew what to do in the event. Communication between local people and the emergency services was not as effective as it could be. The use of outsiders did not help relationships of trust e.g. in door knocking and at rest centres, which in turn led to a less efficient response.

Forest of Dean, Gloucestershire

Along with many parts of the UK, the Forest of Dean in Gloucestershire experienced adverse or severe winter weather over the last three winters (2008-9, 2009-10 and 2010-11), following a series of generally milder winters. This case study focuses on how those living in the Forest of Dean, also known as the Forest, responded when affected by a number of occurrences of this weather. It therefore covers a large number of villages, hamlets and three towns in the Forest (Coleford, Cinderford and Lydney). These occurrences have sometimes seen tens of centimetres of snow, with adverse conditions sometimes extending for more than a week. Icy road conditions, ongoing low temperatures and the Forest topography are often more problematic than snowfall levels.

The last three winters created particularly difficult conditions in terms of access in and out of towns and villages or from the Forest to elsewhere. Whilst access on the main roads was maintained, access on other roads was typically challenging, sometimes treacherous and sometimes too dangerous for many vehicles. Some villages and hamlets in the Forest were only accessible using four wheel drive vehicles, sometimes for a period of several days and, in the case of some minor side roads, for more than a week.

For both authorities and the local population the severe winter weather constrains or curtails travel (and distribution) and both adjust to the challenges this creates. This case study focuses on the experiences of the last three winters but sometimes discusses these in general terms, given that this severe weather has become a more familiar occurrence.

Many towns and villages see heightened levels of neighbourliness: existing social networks, both formal and informal, are activated with volunteers assisting health and social services providers e.g. by attending to the needs of the more vulnerable in the area or through use of 4x4 so that these providers can still deliver their services.

The overall response by the authorities (those not involved in snow clearance) can be summarised as delivery of services as far as possible and in accordance with their business continuity plans, focusing on ensuring the needs of the most vulnerable are met.

In general, the response is characterised by a 'getting by' approach, with many people modifying their day to day lifestyles and reaching out to support others locally through acts of neighbourliness (e.g. snow clearance, co-ordinating shopping, distributing medication, offering lifts in 4x4s, checking

on or providing reassurance to more vulnerable people or those that are geographically isolated). However, there are exceptions with some individuals or households preferring isolation and having a tendency to 'hunker down' until the adverse weather eases.

Authorities and residents in the Forest are, in general, better able to respond to the severe weather given the experience of the last three winters which followed several years of relatively mild winters. Some towns have been acquiring grit and salt and circulating supplies amongst shop owners in town centres in advance of winter. There is better understanding within the Forest that clearing snow and ice from paths will not result in potential liabilities should accidents still occur on cleared paths. Coleford Town Council has secured hand salters to facilitate salt spreading on footpaths. Overall both the authorities and residents of the Forest are starting to be more prepared. The process of developing emergency response plans is facilitating parish level approaches and responses to adverse situations.

Peckham, South London

On Monday 8th August, following a weekend of disturbances in Tottenham, north London, there was an afternoon and evening of rioting across London. In Peckham, south east London, confrontations between young people and the police in the area around the bus station, rapidly escalated to running battles along Peckham High Street with missiles thrown and shop windows broken. The police were slow in sending reinforcements and were not able to control the disturbances which spread south up Rye Lane, the main shopping street. At this stage the rioting seems to have begun to give way to looting with other types of people, including older people, getting involved. As well as the attacks on well-known chains like Burger King and the targeting of shops like off-licences for looting, there was also random destruction and a small clothes shop on Rye Lane was set on fire. The disturbances continued until late into the night and got as far as East Dulwich.

During the riots, many local people took action to stop the damage from active intervention on the part of youth workers to encourage young people not to get involved, individual acts of heroism e.g. saving stock from a burning shop, defence of local estates by local people through to people who spent the evening locked in fear inside their homes.

In terms of what happened next, the following day Council workers were out very early clearing up the debris: by 10am all the broken glass had been removed and broken windows boarded up. However, at the same time, people were turning up with their brooms in response to a London-wide tweet (#postriot) but finding that everything had been done. There wasn't much that helpers could do because the shops and businesses were waiting for the police and forensic teams to come; after that most of the businesses wanted to clean up by themselves.

Peckham Shed, a local organisation that uses theatre to work with young people, felt so moved by what had happened that they took their own initiative by writing a simple message of "We love Peckham because...." on the boarded up Poundland shop on Rye Lane. They gave out coloured Postit notes and pens and invited people to offer messages of good will. The hundreds of messages quickly became an iconic image of the recovery from the riots and has been seen in newspapers and websites around the world.

Southwark Council called an emergency meeting 36 hours after the rioting which involved residents' leaders, community organizations and youth groups and gave people a chance to raise their issues.

In terms of what has happened since the event, the Council organised a number of other meetings with the community after this initial meeting. These were more formal events with a Q&A format and an emphasis on what would happen (e.g. emergency fund for businesses). One local voluntary organisation says that the meetings also provided an opportunity for people to get a sense of the work being done by other organisations – and that this was a surprise to many.

In this context a number of community organisations decided to hold a meeting which would be multi-faith, multi-sector and multi-interest. This was the starting point for an initiative to create a community network, which met three times between August and November.

In terms of what worked well, opportunities were created for people to express emotional responses to the emergency. This came out as 'rants' in two meetings organised by the Council in the days immediately after the riots and was reflected in the messages posted on the Peckham Peace Wall which became a channel for these strong emotions.

The relationship between official agents (the police and Southwark Council) was felt by the Council to have worked well, with effective communication and collaboration. Relationships and networks between the official structures and the local community have been nurtured and established over a long period of time. The community has demonstrated lots of examples of resilience, at the very minimum a determination to keep going but there are many examples that going beyond coping, that offer some very positive signs that people want to build a stronger community.

Since the disturbances the Borough Council has been actively engaging with residents through 'community conversations', street stalls and a questionnaire. The authority is keen to obtain the views of the community and find out what they think caused the civil disorder, what the impact is and what can be done to help people and businesses. This has provided a channel for people to be able to put forward their views, albeit in a formalised setting.

In terms of what went less well, the police response was felt by many local people not to have been effective in limiting the impact on local businesses and to reflect aggressive approaches to young people which have been the subject of concern in the past "Obviously there were tensions there and there were issues in terms of people's trust of the police etc which is one of the things that has been said to us since". (Southwark Council Community Engagement)

While the Council's idea of holding 'community conversations' was welcomed, there were a few concerns about the format and outcomes of these events. In particular, it was felt that the formal setting had excluded many of the people that the Council should have been talking to, like young people and people in more deprived neighbourhoods. Furthermore, it was not always clear what would come out of the meetings.

Lack of leadership and communications during the rioting and in the early stages of the response: youth workers couldn't communicate with the police, people wanted to volunteer but didn't know how, etc.

4. Themes Arising from the Case Studies

This aim of this section is to draw out the findings from the case studies and reflect on them in relation to the evidence presented in the review. The case studies have provided us with an opportunity to see how some of the key concepts and ideas work in practice as well as providing new insights.

Once the case studies had been analysed individually, the workshop and a project team meeting led to drawing out seven key themes from the data and then discussed in relation to the evidence. The six themes are presented in the box below:

Themes arising from the case studies

- 1. The role of networks social capital in action
- 2. Types of resilience
- 3. The role of leaders and influential individuals
- 4. Governance clash of cultures?
- 5. Perceptions of community and identity
- 6. Building community resilience to emergencies starting where people are
- 7. Perception of the hazard and its relation to community resilience.

The role of networks - social capital in action

The case studies provided a number of examples of how different types of network worked during the different events.

Bonding social capital

There was evidence of some bonded networks being drawn upon in different ways in all of the four case studies. People linked through communities of place and helped each other with many tasks from making cups of tea (GY), providing food (T); helping with shopping (FoD), through to bigger task such as defending local shops (P); clearing debris and trees (T); getting sand from beaches for sandbags (GY) and clearing snow (FoD). These bonded networks were based in communities of place from a street where neighbours knew each other (GY) to the village of Thirlby. In Peckham as well as drawing on communities of place, organisations and people working with young people in the area intervened to stop those that they knew from getting involved in violence, drawing on bonded capital developed through working with people in the local area.

In terms of the effectiveness of these bonded networks within the events, people in Thirlby felt they had coped very well and had little time for the emergency services, they had just got on with it and sorted things out themselves. This fitted with their community identity of being self-resilient. In

Great Yarmouth, whilst people did take action, which was vital, there was a sense of being unprepared and operating in a state of confusion or "a bit of a panic"³.

As well as the events revealing the existing bonded networks in the different case studies, it also highlighted where those bonds did not exist and this acted as a catalyst for action: residents in one street in Peckham invited their neighbours to meet at the local pub to get to know each other so that they would not feel the isolation they felt during the riots in the future. In Great Yarmouth there was a feeling that since the event

It could be said that bonded social capital definitely helped people manage in the events. However, these networks are partial, likely to cover only certain areas, for example, there were people in Peckham who were so frightened they stayed indoors and locked their doors, feeling more resilient alone than with others.

Bridging social capital

As discussed in the evidence review, the concept of the "therapeutic community" that often emerges around a disaster is an example of bridging social capital — people who previously did not know each other coming together united by the shared experience of the event. In terms of the case studies there was some evidence of this happening in Great Yarmouth: I think it became stronger, people were more aware, and I think people made friends through it..........Which is quite strange because people then got to know their neighbours and they're sort of more, I don't know they just seem more for each other and to look after each more now whereas before it was just hello (community member, Great Yarmouth).

Since the events, different mechanisms are bringing together people from different parts of the local area and developing bridging capital:

- Specific groups around community resilience planning: in Great Yarmouth the four community resilience groups that have been set up are bringing together a range of people connected with the local areas: e.g. councillors, neighbourhood watch, church members, resident and tenants associations, community development workers and schools to work on the community resilience process and plan. Similarly, the Gloucestershire Rural Community Council is bringing people together through community resilience planning.
- General networks to bring organisations together: the Peckham Network is being developed, which has come out of a recognition for the need for coordination and joint initiatives across the local area.
- Events around specific hazard: in Great Yarmouth there was an "emergencies week" organised through the local community resilience group supported by the emergency

³ When applied to disaster situations, the word 'panic' is generally understood to describe dysfunctional or hysterical

likely describing reasonable responses to frightening and confusing circumstances. This is not 'panic', because that would imply that these people were no longer capable of making rational decisions on available information, which is most unlikely to have been the case

escape-focused behaviour (Wachtendorf *et al.*, 2011). However, what many decades of research has shown is that examples of true 'panic' during disaster events are exceedingly rare (Clarke, 2002, Tierney et al., 2006, Quarantelli, 2008, Fischhoff, 2008). People's behaviour during emergencies and disasters is much more likely to exhibit helpfulness and consideration toward others (*Ibid.*; Solnit, 2009). In this context, therefore, the feelings of fear and confusion that interviewees in Great Yarmouth may in retrospect have described as their "bit of a panic", should be understood as more likely describing reasonable responses to frightening and confusing circumstances. This is not 'panic', because that would

planning manager and the community development team. They engaged with older people through stories of the 1953 flood, and then asked leaders of those groups to be part of the communications tree: "And what we did with the groups, so we went to St Mary's, St Luke's and Manor Close, older people's groups, what we've done there is the leaders of the group are now key contacts on the communication tree" (community development worker, Great Yarmouth). The children from the local primary school raised awareness through a loud and noisy walk through the area, asking people if they were prepared and handing out leaflets. There were also events at the school to draw in parents.

Bridging social capital is important because it brings in a wider range of resources that can be drawn upon during an emergency. The community resilience planning process provides a systematic approach to bringing different local actors together and articulating what resources are available to them e.g. first aiders, people who can provide accommodation etc. What seems to emerge from Great Yarmouth and Peckham is that there need to be proactive measures taken to facilitate bridging capital otherwise the pockets of bonded social capital will be left to fend for themselves and those who are not connected to anyone are likely to be negatively impacted.

Linking social capital

The presence and absence of linking social capital in the immediate response was expressed differently across the four case studies.

- Presence of linking social capital "stepped approach": In the Forest of Dean local activities by bonded networks were supported by more formal efforts by charities such as WRVS, Age Concern and the council social services who linked in with volunteer 4x4 owners to help with delivery of services, and these links were considered to be effective: We are quite lucky in the forest that a lot of the agencies like the voluntary sector, the private sector, the public... that everybody works together and they talk, and they know who everybody is and that works very well. (Forest of Dean District Council Employee). This can be thought of as a "stepped approach", that is, rather than an emergency responder working directly with local people, instead different groups/organisations provide steps or links between the larger groups and members of the public, with bonds of trust evident at each level.
- The role of "change agents": Within this "stepped approach" the case studies provide evidence of people within organisations who play a vital role in providing steps between members of the public and organisations involved in emergency response. These can be referred to as "change agents". Specifically, within Gloucestershire there is a network of "village agents" who are there to help the over 50s in particular to make contact with agencies who are able to provide the services which they may need. In terms of the snow and ice events in Gloucestershire they play a vital role with respect to locating vulnerable people: "Village Agents know the vulnerable people. If they were worried, they could raise alarm bells. Every parish I go to, they all know their Village Agent. And each [snow] warden knows their village agent and vice versa." (Forest of Dean District Council Employee).
- Absence of effective linking social capital: The absence of linking social capital was responded to different ways:

No linking social capital, but not regarded as a problem: In Thirlby, where people felt that their networks had worked well, they were somewhat disparaging about the emergency services. As one community member recalls, "I remember at the time of the flood that the lieutenant, whoever he is, and a chief constable and various people came round and it was like poison to people in Thirlby who were suffering from the flood, these people coming round to polish your forehead and tell you that it was going to be alright... Everybody said that if they'd got out of their car with a shovel it would have been a completely different thing". Whilst during the event the chair of the parish meeting acted as the link between the emergency services and authorities there was no linking capital. This is perhaps related to the feeling that they had all the resources they needed to cope within the local community.

- o *No linking social capital seen as a problem:* In Great Yarmouth linking capital was not in place as the local headmistress said "Because at that time there were no structures in place to deal with it, nothing at all." This was highlighted in the response to the use of police from outside Great Yarmouth to knock on doors to evacuate people, it was felt that there should be trusted faces door knocking and also people who knew where to go in the local area. This was seen as a problem in the event and was one thing that catalysed the developments around the community resilience planning process. In Peckham it was felt that some community leaders feel that they could have been more effective in stopping people from destroying their own neighbourhoods and the livelihood of local businesses if there had been better understanding with the police.
- Presence and absence of linking social capital: In Peckham the situation with respect to relations between the police and the local people was more complex. In general, the police operation aimed to clear everyone from the streets and there was no differentiation between people who were trying to help and those involved in the rioting. This meant that some youth workers and organizations felt disempowered because they had no way of communicating with the police. However, there was evidence of some linking social capital, between one organisation: Safe'N'Sound and the police. Safe'N'Sound was very active on the night of the rioting and was able to help direct cars and people away from the area and to avoid some of the actions of those involved in the rioting. The fact that organisation's CEO is a member of a police advisory group meant that she was in regular contact with the police and could show an identification when she was out on the streets.

The events have acted as catalysts for actions to improve linking capital in some cases. In Great Yarmouth, the neighbourhood management teams who work to develop the local community in the urban areas have acted as "change agents" along with the emergency planning manager to support the development of linking capital between local people and organisations dealing with emergencies. This has taken a stepped approach. One example is where local women have been empowered through the community development work to organise around youth issues and run a youth club which has developed links with the local school and over time has become a hub for the local area and runs classes and courses as needed (The Den, Life Changes). In turn the emergency planning manager working with the neighbourhood management team is facilitating a community

resilience group on which a representative from The Den, Life Changes sits alongside the headmistress of the school. This is a great example of how linking social capital can be developed.

Types of resilience

The case studies provide further evidence for how resilience is enacted within emergency events and what happened after those events in terms of what was considered necessary to develop resilience. What is interesting here is the interaction between the type of hazard: its nature (man-made, natural); speed of onset (rapid – ongoing) and previous experience of that hazard. These aspects emerge as impacting on the types of resilience exhibited at different times of the emergency cycle.

Resilience as resistance - holding the line

There are a number of examples of resistance within the case studies. In terms of the snow and ice in the Forest of Dean, this manifested itself as "carrying on regardless" to an extent, that at times might have been hazardous, for example people driving in treacherous conditions because of the need to be in work to get paid, almost ignoring the hazard.

In Peckham, resistance was manifest as defence and negotiation: people grouped together to defend local shops from rioters and those involved with young people tried to dissuade them from joining in the violence and to go home. Defence, of a different kind was manifest in Great Yarmouth with the rush for and distribution of sandbags. Both these were examples of direct intervention to prevent greater damage from the event.

Resilience as bounce-back

Again there was evidence of resilience as bounce-back, returning to normal as might be expected. In Forest of Dean emphasis was on clearing roads, and making sure services ran as normal. In Peckham some members of the community have returned to their everyday activities in the hopes that the rioting was a "one-off". In Thirlby, the overall approach to resilience was that of bounce-back, the community felt themselves to have been very resilient and that this helped them to 'bounce-back' to normal. Some felt that there had been a strengthening of the local bonds and sense of community but they did not want to express this as a change in the community.

In Great Yarmouth it would seem that people did manage, the resilience seemed mostly to be a muddling through at the level of local people, relying on existing networks for support and immediate help. In terms of the approach it might be characterised as "bounce back" – a desire to get back to normal as quickly as possible.

Resilience as adaptation

In Thirlby there has been a certain amount of reflection upon the event and consideration of lessons learnt by the Parish Meeting and the history group. These have considered emergencies generally, not just floods in particular. As the flood is considered by many to be a 'one off' there has been little engagement with flood issues. Also some of those flooded do not want to be reminded of the event. In terms of change, or adaptation little has been done in order to formalise plans. However, since the flood the Environment Agency has identified Thirlby as an area susceptible to 'extreme flash flooding'. The Environment Agency has approached Thirlby through a gathering of the Parish Meeting. There was some interest expressed in the idea of an emergency plan although concerns

were raised regarding the expected time and resource it would take. A plan has not yet been created and it appears unlikely this will happen for all the reasons considered in terms of the type of community Thirlby is. The Environment Agency intends to contact Thirlby in January 2012 so a more formal plan remains a possibility for the future.

In one area of Great Yarmouth, Cobholm it was felt that people were now better able to deal with similar situations, there was an expression of adaptation to the possibility of a future hazard. In terms of the emergency services it was more organised and co-ordinated partly with an emphasis on keeping things going as normal (e.g. ambulance service) but also clearly planning for the complete disruption of a flood by evacuating large numbers of people at risk, so in that sense adapting.

Resilience as transformation

In Peckham many local voluntary organisations, while the context of the riots created the possibility of transformative action, the constraints of their funding situations made it hard to do anything more than bounce back: "Everything quite quickly went back to business as usual. Especially for voluntary organisations that don't have any money and can't take on additional work. Funded community organisations have more resources to look at what more can be done." (Community organisation, Peckham)

In terms of resilience since the 2007 event, in one area: Southtown it was felt that there the event had had a positive effect on bringing people together which had continued so that it was considered that the community in Southtown was stronger, and that the event had had a transforming effect but that it was an continuous process to maintain awareness and engagement in flooding. For some in Cobholm, another part of Great Yarmouth, thought the effect of the near miss did transform their lives because they decided to leave. As one councillor/community member said "what I've found is a lot of people who have been here for some time have actually moved out, they've had enough.....That really was... being moved yeah, which was nice people but they've just had enough and they took to the hills of Gorleston".

The role of leaders and influential individuals

What is clear from the case studies is that there are both individuals and roles, and sometimes a combination of the two that can have a powerful influence on what actions take place in terms of community resilience. Often it is said that people have certain personalities that make them able to support, influence and lead groups and certainly some people find that type of work comes more naturally than for other, however, it is worth unpacking those characteristics and considering to what extent the nurturing of those characteristics among local people is part of community resilience. We recognise that much is written on leadership and we are not able to cover that in this document, rather we are pulling out some key issues from the case studies.

In three of the case studies there were key individuals identified:

- *Great Yarmouth*: Emergency Planning Manager, Neighbourhood Management worker, Community member/The Den, Life Changes worker
- Thirlby: Chair to the Parish Meeting, Community member from a long standing Thirlby family
- Peckham: CEO of Safe'N'Sound

The characteristics of these people include:

- Trust from local people, which is built up over time and circumstance:
 - From the way they have managed a formal role with local people e.g. Emergency Planning Manager and Neighbourhood Management worker in Great Yarmouth. Both these people have a strong belief in empowering local people to act and work with that ethos, recognising the importance of relationship building and network development.
 - From their informal interactions within their communities which have then developed into more formal roles: e.g. The Den, Life Changes worker and the CEO of Safe'N'Sound. Both these individuals were known and respected in their local communities. With respect to Great Yarmouth she was encouraged to develop the idea for the Den and its activities by the community development worker and over time she has become confident in a range of situations.
 - From their "place" in the community e.g. Community member from a long standing Thirlby family. The size and nature of Thirlby is such that influence comes with having lived there a long time, and this individual is part of a family that has been there for several generations. In addition, that "place" can be earnt through a willingness to participate and contribute to village life.
- Belief in change and vision of that change:
 - o In Great Yarmouth and Peckham it was clear that these key individuals saw the need for change in some way and worked with a vision of what that might look like. For example Peckham Safe'N'Sound was set up by a former gang member with the vision of supporting young people and looking holistically at the issues they face. Because of the links she had with local young people and the police, on the night of the riot she was able to help calm situations down and encourage young people not to get involved in violence. In Great Yarmouth, the worker at The Den, Life Changes felt there was nothing for young people to do and so was encouraged to start a youth club, she had a vision of helping young people to make positive life choices.
 - In terms of the Emergency Planning Manager in Great Yarmouth he sees a very clear role for local people within emergency planning and how that might be linked to community development, and this vision is largely shared with the neighbourhood management team.
- Good social skills the ability often to talk to people from a wide range of backgrounds and perspectives, from the chief of police to a local teenager.
- Supportive systems: for these individuals to be able to play the roles that they do and be
 influential they need to be situated in supportive systems, be those social or organisational.
 In Great Yarmouth, The Den, Life Changes worker has been encouraged to have confidence
 in her views and opinions and now is happy talking in meetings and putting her point across.
 For the chair of the Parish Meeting in Thirlby to be effective in the emergency it was

important to have the support from the informal networks of the village. Likewise, the CEO of Safe'N'Sound had an existing relationship with the police and so was allowed to help in managing the situation on the night of the riots, whereas other youth workers who were not known to the police were asked to leave the area.

As discussed, these influential individuals have certain characteristics, but what is interesting is the approach taken in Great Yarmouth – a sort of "grow your own" approach to leaders. Using their "engage-involve-empower" approach to community development people can be encouraged to take on leadership roles such as the Den, Life Changes worker, rather than presuming that they must be parachuted in from outside.

Governance

What is clear from the case studies is that the governance of the emergency management cycle is complex. It is a multi-actored and multi-layered system. Community resilience in the sense of local people taking a role within that system in order to help themselves and others is not straightforward. A number of issues are raised by the case studies around the interface between the "official" system of Category 1 and 2 responders, Gold, Silver and Bronze command and the "unofficial" system of neighbours helping each other, people unsure of what to do and community organisations helping out.

Certainly within the emergency situation itself the "official" system is a command and control approach, which is appropriate given the urgency of decisions and the potential for problems if actions are not taken quickly. For the Gold and Silver command the aim is to manage the situation effectively and quickly and in the case of Great Yarmouth that required help from outside the county in the form of police to help with door knocking and sandbags. In Peckham there was an emphasis on getting the streets cleared and people back into their homes. This formal structure met with the spontaneous actions of local people and in some cases the system was able to accommodate those local actions and in others it was not.

For example, in Peckham some community workers who were there to help encourage people off the street were told to go home because they were not recognised by the police – they did not fit into the system. However, those who were known to the police e.g. the CEO of Safe'N'Sound were able to contribute. The importance of having developed relationships before an emergency is highlighted by this example.

In Thirlby there was relatively little contact between the authorities and the community during the flood. By the time the authorities had access there was comparatively little to be done immediately, but it was agreed that local people still carrying out cleaning up work with heavy machinery would be paid for their time. There was no contact with the authorities prior to the flood as it had not been predicted. In this case the system was able to accommodate and support local community actions and recognise the work that the local community had carried out. This is an interesting example of local people working with the emergency responders.

In Great Yarmouth the community resilience plans being developed are carefully focussed on complementing the command and control system that operates in an emergency. This is through the development of a communications tree, where one person is contacted with information and

that cascades out to others, and information on vulnerable people, etc can also be sent "up the chain". This provision of information locally could avoid the problems faced by the Environment Agency in 2007 when their Floodline system on the website was overwhelmed, which though positive because it showed that the levels of awareness were very high, however: "We had something called Floodlinewhich was totally overwhelmed frankly. We just couldn't get the calls answered...... normally on our Environment Agency website we get a thousand hits in a day, normally in terms of flooding things, that might get up to 10-20,000. On the night before we had this flood 457,000 - that's the kind of magnitude of increase, we have now had to build up to deal with" (Environment Agency manager).

The interface between official responders and local communities is not straightforward, and indeed in Great Yarmouth people questioned whether the emergency services wanted them to be involved, whether they were geared up for working with local people and how they viewed local people. As one councillor in Great Yarmouth said: "Well let's say this, we went to a meeting at the fire station which is local to us. It's in my area, and because they'd had a change of quite a lot of different levels of personnel, nobody knew about us. And it seemed that they were having a project that was sort of semi-similar to what we were doing, but really didn't want to know about us because, who were we?.......And I think that you will get this in lots of organisation, 'who are you', dismiss it, you know. 'We're the big boys'". Understanding how local action is viewed by responders and how to engage with it effectively is a key part of community resilience.

Perceptions of community and identity

In terms of perceptions of community and identity three aspects were identified in the case studies that are worth reflecting on.

Firstly, it was clear that in Thirlby, being self-reliant and therefore not dependent on others is a key part of their identity as a community. People are proud of their self-reliance which is seen as a key factor in their resilience. This view that it was better to get on and do things yourself within the village was expressed as the opinion of both those born there and those who had moved in more recently. As one community member who has lived there nearly 30 years notes "I think part of what makes Thirlby work is that there is a strong feeling that you can get everything that you need in Thirlby and that when outside agencies come in, it's not a very satisfactory outcome usually. I think that sums it up". Similarly when asked whether it would be helpful to have local authority involvement in organising an emergency response, another community member replied, "Thirlby would say, when I say "Thirlby" that's the people born and bred here, who are the majority probably still, I'm sure they would say, "No, dammit, let's do it ourselves, it'll be more efficient". There is a feeling by many that self-reliance is more effective and so outside assistance is avoided. Selfreliance as part of identity was also in evidence in the Forest of Dean, people know each other and there is strong familiarity and identity associated with the area with some people in the Forest referring to themselves and other residents as 'Foresters' as this quote illustrates: I've lived here most of my life. I think it's a very old-fashioned type community. Everybody knows one another and you will look out for one another. (District Council employee).

Secondly, in Peckham expressions of community solidarity emerged after the riot, in a way disparate groups all expressed their pride in Peckham and were encouraged to do so through the peace wall

which was Peckham Shed, a local organisation that uses theatre to work with young people, felt so moved by what had happened that they took their own initiative. Southwark Council's website describes what happened: In the immediate aftermath of the riots a local theatre company wrote a simple message of "We love Peckham because...." on the boarded up Poundland shop on Rye Lane. They then began to hand out coloured Post-it notes and pens and invited people to offer messages of good will. The hundreds of messages quickly became an iconic image of the recovery from the riots and has been seen in newspapers and websites around the world.

Thirdly, the importance of working with perceived community boundaries was stressed both in Thirlby and Great Yarmouth. In Great Yarmouth it was in terms of spatial boundaries, with the Emergency Planning Manager giving a good example of how they had thought to include on area: Halfway House in with another area Gorleston and did suggest they meet together but Halfway House pulled out of it: "Although, and it is in Gorelston and so when we were looking at division of the community resilience plans, we actually suggested Halfway House should be part of Gorleston........Absolutely, we're Halfway House, and that was really strong, so we managed to suggest that we should have at Gorelston and actually be part of it but they came out of it in the end.....".

Finally, we encountered spatial, social and cognitive aspects of community. The spatial aspect was clear in Thirlby, Great Yarmouth and Forest of Dean where belonging to a specific location with specific boundaries was important, and as the Great Yarmouth example shows, if those boundaries are not respected then communities may feel less likely to engage with resilience building activities. In terms of social aspects of community, or perhaps more communities of interest, Peckham seems quite a good example where there are a number of different communities brought together in one location around specific issues or interests (faith, youth etc) but with little connection with other groups in that place. The Council organised a number of other meetings with the community after this initial meeting. These were more formal events with a Q&A format and an emphasis on what would happen (e.g. emergency fund for businesses). One local voluntary organisation said that the meetings also provided an opportunity for people to get a sense of the work being done by other organisations – and that this was a surprise to many: "Again there were a lot of people going, 'Wow! I didn't know that you existed!" (Community organisation 2).

Building community resilience - starting where people are

A clear theme emerged from the case studies around the organic, long term, ongoing nature of building community resilience which can be summarised as starting where people are because that is where the networks exist and can be developed into support during emergencies.

In Thirlby for example, the existing networks developed over time, place and relationship proved to be strong during the flash flood. Understanding that self-reliance is part of the community's identity yet the importance of being linked to the authorities in case of another flood means that a gradual approach to plan making needs to be taken, one which builds on the existing networks and leadership to ensure that they are supported as needed.

In Peckham what emerged was the fact that there are many groups within the area that are not linked together, together with a recognition of the value of building those links so that more

resources could be drawn on in an emergency. So building those community links is a priority before considering community resilience although it could be used as a focus. Similarly, it was revealed that in some areas people are isolated and do not know their neighbours so developing that bonding social capital is important work to be done.

In Great Yarmouth the approach to community development is enabling the work of community resilience by providing links to local networks and skills. Without the community development work people would not feel empowered to get involved in the community resilience work and those networks on which the community resilience relies would not be in place.

Perception of the hazard and its relation to community resilience

The case studies brought out the importance of the perception of the hazard and its relation to community resilience. Firstly, there are the cases where the hazard is clear and likely to happen again, e.g. Great Yarmouth. Here, grouping around community resilience with flooding often as a focus is regarded as sensible by local people given the probability of it happening again. The flood risk maps provide key information on the extent of the potential damage which can be helpful for planning responses.

In Thirlby, the situation has been less clear, and there was a sense that the flash flood was a one off, and it was felt that having a plan was not necessary. Since the flood in 2005 the Environment Agency has identified Thirlby as an area susceptible to 'extreme flash flooding'. 'Extreme flash flooding has been defined as where a river or stream reacts very rapidly to rainfall and generates large flood depths or velocities of water that pose an extreme threat to life'. The nature of flash flooding makes it very difficult to predict and provide warnings. The Environment Agency through their Rapid Response Catchment Project aim to ensure that all those living and working in catchments that have the potential to suffer from extreme flash flooding are made aware of the hazard and know what to do should they encounter flash flooding. The Environment Agency has approached Thirlby through a gathering of the Parish Meeting. There was some interest expressed in the idea of an emergency plan although concerns were raised regarding the expected time and resource it would take. A plan has not yet been created but the Environment Agency intends to contact Thirlby in January 2012 so a more formal plan remains a possibility for the future.

In Peckham, perhaps given the nature of the event i.e. one over which people have control, there has been a sense of wanting to ensure that whatever the causes of the civil disorder, there is a need for the community to build better links within its organisations and to provide support for disaffected young people.

Finally, in the Forest of Dean, given three winters with severe weather there is a recognition of this as becoming a "new normal", and structures and plans are developing accordingly.

5. Lessons from the Case Studies

This section provides the general lessons that have come from the case studies.

Thirlby

General lessons from this case study for improving community resilience

- Develop knowledge of the existing communities (of place, of interest). This required by external organisations and people in local areas. Ensure that communities that do exist are able to define their own boundaries. Allow time to research the community and its organisations. Talk with local people from a range of backgrounds. Ask local people about how they define their local community. Be prepared to work with differing viewpoints.
- Raise awareness of responders of the potential roles of more informal organisations and networks as well as the more formal structures such as the Parish. Investigate the informal structures present and think creatively how they might be involved. Consider whether there is the potential to create links between existing groups so that they can work together. Some examples of the types of groups that might be considered local history groups, play groups, school based groups, book clubs, Women's Institutes (WI), art/craft groups, exercise/sport groups, civic societies, Neighbourhood Watch, local environmental issues groups, groups based around a specific ethnic identity, religious groups.
- Ensure that there is an attitude of openness and trust from emergency responders, external organisations in their dealings with people in local areas. Avoid excessive secrecy, respond promptly to questions, and communicate frequently through a variety of channels.
- Understand that solutions are unlikely to be effective if they imposed on local areas, it is
 necessary to work with the community to find something acceptable. When approaching
 local people to engage in developing emergency plans stress that they will help create this
 and discuss a range of ideas for possible formats.

Great Yarmouth

General lessons from this case study for improving community resilience

- Work with existing social networks to develop the both the underlying resources and links
 and the structures to facilitate an effective response that complements the emergency
 services: two practical ways to do this,
 - a) EPM to work with local people to develop existing networks so they can be drawn upon in a systematic way during an emergency, e.g. in terms of locating vulnerable people, door knocking and providing local knowledge to outside organisations
 - b) Work with rest centre "owners" e.g. schools to ensure that whoever runs them is aware of local issues and clearly links with the relevant on site personnel. It may be that the rest centre owners wish to staff it themselves with volunteers and this should be complemented with training and support from the EPM.

• Be prepared for community resilience groups to look different in different areas: to be effective they will need time to develop and will reflect the local area so networks will not be uniform. This means that EPM's need to be able to ask the right questions to find out where the key networks are, rather than having a prescriptive list of which groups to go to.

- Recognise that the resources that are drawn upon to build community resilience are developed when there are no emergencies through empowering community members and then giving them tools to use in emergencies that link with the authorities and wider information sources and networks. This is a key lesson and indicates that links should be made across departments within local councils but also at the national level to develop an awareness and understanding that many other aspects of government work e.g. education, social services, work etc are crucial in developing resources that can be drawn upon during an emergency. However, those resources have to be systematically organised and linked into the Emergency Planning and Local Resilience system.
- <u>Use local knowledge to improve engagement with local people</u>: trusted faces are more likely to get messages acted upon and local people will know where those who are vulnerable live and what their needs might be. Developing a system e.g. communications tree that can be activated in an emergency but builds on existing networks.
- Develop two way communication with local people and emergency services. 'That's where
 for me the main linkage are the contact people on the ground through which we
 communicate. Through them we communicate and they communicate to us on their
 concerns and questions, and so on. It's as much establishing that communication to the
 people on the ground, the residents, as much as anything else. That's where it's part of the
 process.' (EPM)
- Understand that bridging and linking social capital are key to move people from a "getting by" type of resilience to a "bouncing forward" type of resilience. It is clear from this case study that having the links between different groups in the community (bridges) and between local people and service providers has enabled the development of the Community Resilience Plan and more importantly the communications tree and the awareness raising exercises of Emergencies Week.
- Understand that the process of planning is as, if not more, important than the plan itself (although it is still important to have one!). Getting community resilience groups going and motivated takes time, but through that process of inviting people, of discussion and debate relationships of trust are developed which can then be drawn upon during an emergency.
- Be aware that building trust is a key principle in the development of effective governance and strong networks. This involves regular, personal contact between agents. Face-to-face contact appears to be a particularly effective, and possibly essential, way to build trust.
- Know that individuals can make a big difference in terms of linking organizations together
 and building trust and these people can be "locally grown". An important characteristic of
 individuals is that they have strong communication skills and are able to empathize with
 people and communities. They need to take a very active role in promoting collaboration

and dissemination of information, and this is undertaken through regular personal, often face-to-face, contact with stakeholders to build trust and co-operation. Such individual must also be sensitive to each particular (local community) context and be aware of a community's needs, resources and abilities.

Forest of Dean

General lessons from this case study in terms of improving community resilience

- <u>Social networks, both formal and informal, are essential to ensuring resilience</u>. Trust and knowledge of individuals is key to maintaining and enhancing these networks. Understanding how to support and develop these networks needs to be part of emergency planning.
- Having proactive individuals, village agents, snow wardens and others including councillors
 who are connected with the authorities (linking social capital) is important for community
 resilience to be effective when emergency responders and other authorities are at work.
 Working to develop and support those key individuals needs to be a priority with emergency
 planners and responders.
- <u>Understand that the value of emergency response plans at Parish level</u> is very much around the process of the preparation of which allows residents to become engaged on how to respond effectively in adverse situations.
- Communication and a sense of neighbourliness in addition to practical actions (snow clearance, collecting food and medication) is a critically important component of community resilience, particularly for those that are isolated, either geographically or because of their vulnerability. Emergency planning and formal response to emergencies should consider how this can be facilitated.

Peckham

General lessons from this case study for improving community resilience

- <u>Develop better networks between community organisations and people in local areas</u> to enable people to act quickly together in emergency situations:
 - Linking up between organisations and community leaders, and between these organisations and the emergency responders.
- Look for ways to develop bonding capital at the neighbourhood level so that residents support each other rather than retreating in fear into their own homes.
- Support the development of bridging capital: there are organisations of people in different
 parts of the area (e.g. Tenants and Residents' Associations, organisations bringing together
 national groups, faith organisations, etc) but they did not link up quickly to take action to
 deal with the emergency. This bridging is beginning to happen, catalysed by the rioting, as
 often happens post-emergency, but could be supported through community development
 or community resilience planning.

• <u>Strengthen linking capital between community organisations and the emergency responders:</u> some community leaders feel that they could have been more effective in stopping people from destroying their own neighbourhoods and the livelihood of local businesses if there had been better understanding with the police.

- Recognise and support the role of local organisations in building bonding capital. While
 some areas have strong bonding capital, which is expressed in regular activities which bring
 members of the community together, like trips, celebrations, etc. Where this kind of
 bonding capital does not exist, efforts need to be made to find and develop it linking up at
 the neighbourhood level so that residents support each other rather than retreating in fear
 into their own homes.
- Create channels for people to express their emotions about the emergency. Although this can be uncomfortable, especially for the authorities, it is important to create opportunities and to support organisations or individuals in the area who create their own channels. It is important that these channels are open to all and that they are not seen as being managed or dominated by particular interests.

6. Recommendations

Support local people to engage with resilience

1. Provide support to the process of community resilience planning recognising that the process of plan development can, in itself, foster a sense of community and build resilience. Communicating with risk-exposed communities is an *expectation* of good practice for LRF members (Cabinet Office, 2009b). However, local authority staff interviewed for this project had a perception that their time spent on this activity was undervalued as a quantifiable good practice *indicator*. It would be helpful if within local authorities, endorsed by central government a method could be found through which teams or individual staff (e.g. emergency planning officers), who actively engage with at-risk communities in order to develop contingency arrangements and to build resilience, can be provided with time and resource to do this, and that it is recognised as part of their job descriptions.

- 2. <u>Emphasise the importance of working with existing social networks</u> for community resilience planning, e.g. informal networks between neighbours, neighbourhood watch, networks through schools (i.e. adult, e.g. clubs, PTA etc., as well as pupil networks). Some possible examples include:
 - Emergency planners to work with local people to develop existing networks so they can
 be drawn upon in a systematic way during an emergency, via a communication tree e.g.
 in terms of locating vulnerable people, door knocking and providing local knowledge to
 outside organisations
 - Work with rest centre "owners" e.g. schools to ensure that whoever runs them is aware
 of local issues and clearly links with the relevant on site personnel. It may be that the
 rest centre owners wish to staff it themselves with volunteers and this should be
 complemented with training and support from the emergency planning.
- 3. Be prepared for community resilience groups and plans to look different in different areas and recognise that the imposition of solutions, plans or processes is less likely to be effective. Time will be needed for networks to be understood and having the right questions to ask will be important. A "community analysis process" is suggested below.
- 4. <u>Develop a simple community analysis process</u> e.g. flow diagram of key questions to be asked about communities. This would be aimed at local authority emergency planning officers, community resilience group members and would sit alongside the Guiding Principles. The focus will be on the local community as this is the scale at which much emergency response must, at least initially, take place. However, it will also consider networks that extend beyond the local level and how these may also be used. Users could work their way through the guide, choosing from various alternative answers and in this way build a clear idea of the type of community that exists currently. This could be supported by existing guidance on how best to use existing networks as well as the types of support that are likely to be needed. This process could be used within a "community impact assessment" where

- emergency responders would consider the impacts of the emergency on different parts of communities and develop their response accordingly.
- 5. <u>Facilitate the "community" of community resilience champions</u> by enabling sharing of stories, coming together and for them to go out to other communities as "experts". For example it would be helpful if LRFs and local authorities:
 - a. Enable network development to take place through the simple provision of a venue for these activities. This could create opportunities for trust to be built between all stakeholders (i.e. LRF and community/ies).
 - b. Consider how their budgets could be sufficiently flexible so that the reasonable costs incurred by 'champions' travelling between specified communities for specific knowledge sharing activities could be covered.

Improve communication between the Local Resilience Fora and local communities

- 6. Encourage appropriate community representation on the Local Resilience Forum (LRF) so that links between people at a local level and the level of the resilience forum are developed. Whilst the Local Resilience Forum operates at the Police Area level, many hazards and risks threaten only very localised populations. Engaging Elected Members directly and at the appropriate scale, in the development of all plans for risks cited in the Community Risk Register (and not just planning for their "role" during the response and recovery phases: see HM Government, 2009: p.38, 108; Cabinet Office, 2009a), could allow LRFs to better characterise exposed populations into communities (e.g. geographical, interest: Cabinet Office, 2011) and to better identify and plan for the needs of vulnerable groups and individuals (Cabinet Office, 2008). In addition methods to ensure a good information flow should be sought. It would allow for the identification of individuals, social networks and communities who could provide important support for the LRF membership and useful information conduits (i.e. two-way) through which 'resilience' information could pass into and out of the wider population.
- 7. Support and look for opportunities for knowledge exchange between LRFs and local community resilience groups and community development workers e.g. through workshops, dedicated sessions to community resilience. Local Authorities have a duty to provide general advice on Business Continuity to businesses and the voluntary sector. If this duty could be considered positively, as a means through which to engage networked communities (e.g. local volunteer organisations and the people they engage with) with contingency thinking this may open up opportunities for innovative outreach (see Great Yarmouth case study). Such an approach also opens up the opportunities presented by engaging with groups interested in other resilience domains (e.g. Transition Towns, Community energy, youth support groups, etc.).
- 8. Consider training and awareness raising for LRF members on the role of communities in emergencies. This might be in the form of examples of how engagement with communities in emergencies is being carried out and the issues around it together with some introduction

to some of the key issues around community resilience (e.g. different types of social capital)., together with some case studies for illustration.

- 9. <u>Foster an attitude of openness and trust from emergency responders,</u> external organisations in their dealings with people in local areas. Avoid excessive secrecy, respond promptly to questions, and communicate frequently through a variety of channels.
- 10. Be aware that building trust is a key principle in the development of effective governance and strong networks. This involves regular, personal contact between agents. Face-to-face contact appears to be a particularly effective, and possibly essential, way to build trust.
- 11. Ensure that the language that is used by emergency responders is appropriate and is sensitive to the nature of the communities that are being engaged with. Responders should be aware that they are sometimes not the best people to effectively contextualise the importance of contingency planning for people whose most pressing priorities, often justifiably, lie elsewhere. In such cases the efforts of responder staff who develop links of trust to such communities through intermediaries need to be encouraged and recognised as good practice.

Recommendations for further research

- How are emergency responders (e.g. police, fire, Environment Agency) engaging with communities around resilience? What are their views of the role of communities in emergencies? How does that help/hinder the development of community resilience? This research would examine not only what types of engagement might be happening but also the institutional cultures and attitudes towards community engagement and community resilience.
- 2. Carry out an action research project examining how community resilience develops over time and context. Take a longer look at the case studies in this research to see how community resilience develops over a couple of years – what helps and what are the barriers? This could build specifically on both Great Yarmouth and Peckham as there are currently active efforts being made.
- 3. Collect more case studies of different types of community and different types of hazard. The research to date has only looked at a limited number of community and hazard types. Further research with additional community forms and hazard types would enable a better understanding of how these interact to shape community resilience.
- 4. Examine in more detail the varying ways in which community resilience is understood by both community members and emergency responders. How do varying definitions shape the actions undertaken? Does variation in definition lead to difficulties in different groups working together? Is there an ideal definition and can groups work together to create a shared understanding?
- 5. There has been some suggestion that small businesses may play a role in community resilience. A pilot project has started to examine this and shows that the wide variation in business types and community contexts means that this role can be very varied. This project

could be developed further to try and identify how small business might be successfully included in community resilience plans.

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Appendix 1: Workshop Record (17th November 2011)

SEE SEPARATE VOLUME