

“Building national resilience, building global resilience”

A report addressing the question “how can planners best contribute to urban or regional recovery (after, for example, a natural disaster)?”

**Core concepts that embrace planners’ best contribution to urban and regional natural disaster recovery.**

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A handwritten signature in blue ink that reads "S. Baird".

Following the series of earthquakes that have been occurring in Canterbury since September 2010, including the tragic loss of life and destruction that occurred on February 22 2011, urban and regional recovery from natural disaster is very topical in New Zealand. Accordingly, addressing how planners can best contribute to urban or regional recovery efforts is an exciting and interesting prospect. It is noted that this is a broad topic and that the scope of this report is appropriately limited.

Some may say it is easy to sit outside a recovery effort and discuss what the role of planners should be; moreover such discussion may be interpreted as criticism of the recovery effort. To the contrary, this report seeks to highlight the most successful elements of the planners' role in recovery from examples in Japan, Sri Lanka and New Zealand. Moreover, it is hoped that writing this report from the perspective of an emerging planner who is yet to be involved in disaster recovery will provide some objective insight.

This report considers the role planners play through the development and implementation of planning documents and policy in the management of natural resources and communities' social, economic and built environments. It is widely understood that natural disasters can result in complete or partial destruction of an area or areas in addition to the disruption of civic functioning. Consequently, it is understood that natural disaster recovery necessitates all components of the planning spectrum.

This writer believes that planners' greatest contribution to natural disaster recovery can result in advances towards sustainable development outcomes and more resilient communities. This contribution can be summarised by the following three concepts: 'preparedness and adaptability', 'comprehension and research', and 'inclusion and partnership'. Each of these ideas must be combined with 'action' to result in the best input from planners into disaster recovery. The balance of this report seeks to explain these concepts (as illustrated in figure 1 below) and how they have emerged from a consideration of the response to the Canterbury Earthquakes and other disasters within the Commonwealth. The drafting of this report has involved the consideration of planning documents, media commentary and academic literature.

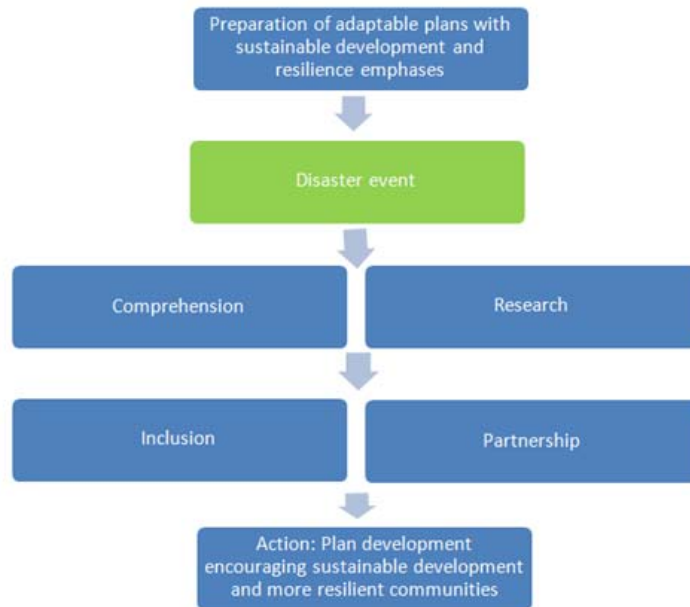


Figure 1: An illustration of the core concepts that summarise the planners' best contribution to recovery.

### *Preparedness and Adaptability*

Recovery planning has been described as beginning when the disaster response transitions from one of saving lives to one of restoring livelihoods (UNDP BCRP/RDPU: ND). However, recovery planning is also grounded in the planning that has, or has not, been undertaken prior to the disaster event.

Preparedness and adaptability influences the ability of planners to take action efficiently and effectively post-disaster. Arguably, the more rigorous the planning process that an area has been subject to prior to a natural disaster event, the more likely the area is to have some resilience to that event. Hazard identification and associated mitigation planning can minimise the effects from natural events. Preparation may involve having adaptable recovery plans in place. Brewster (2005: 10) noted that "the notion of *rapid action planning* would have the dual characteristics of a pre-disaster range of anticipated scenarios, based on a visioning type participatory framework; and a systematic approach to post-disaster recovery planning". Olshansky et al (2005) also discuss the value of having recovery plans in place ahead of time.

In New Zealand, hazards are commonly identified in plans and rules are established to restrict activities in certain places. However this is not definitive; it is noted that pre-earthquake Canterbury planning documents had not identified areas prone to earthquake effects. A primary difficulty in managing activities based on identified hazards is deciding the extent to which an activity should be restricted. For instance, it must be decided to what extent hazards with a low likelihood but great impact are recognised and likewise hazards with a great likelihood but small impact. The Canterbury Regional Council is adopting a

prepared approach to earthquakes and is re-writing policy, this includes the identification of areas susceptible to liquefaction and lateral spreading (Gorman, 2011).

Disaster preparation occurs in a variety of ways. For example, in Japan inscribed monuments are located in some places alongside the coast identifying where building should and should not occur. These monuments were laid by previous generations who had experienced tsunami (Nakaseko et. al., 2008). Perhaps the effects of the 2011 tsunami would have been less tragic had this information had been more closely followed.

Johnson (2011) noted that following a disaster there is a need to plan and act simultaneously. This is dissimilar to usual planning techniques; from experience, the development of planning documents is typically a time-consuming and complex process. Having pre-prepared and adaptable plans in place is likely to streamline and speed-up recovery.

Adaptability in relation to the tension between private and public development may also be necessary. This may be the sense that developments proposed prior to a disaster event may be more or less appropriate following the event. The consenting and applicant planners need to be mindful of this and may need to adapt their approach accordingly.

#### *Comprehension and Research*

Planners need to develop a thorough understanding of the situation that has evolved and what is required to move forward in a planning sense. This requires that planners research recovery alternatives; looking for examples and experiences elsewhere to learn from and also at what people/agencies/organisations on the ground may be able to participate in the planning process. This must be followed by the development and implementation of plans.

Following a natural disaster, there are a number of immediate responses that are required such as health and safety and clean up. This writer argues that generally this work is beyond the role of planners and during this time planners should begin developing an understanding of the events, and exploring the short and long term impacts that are likely to result on community functioning, the physical infrastructure and the natural environment. It is important that planners establish a process and are prepared to include the community in planning processes as soon as the community is ready to participate.

Both qualitative and quantitative research is necessary; environmental impact assessments must be undertaken and hazard profiles developed and these must be built into any planning (UNDP Sri Lanka, ND). Where the situation on the ground is fluctuating, there will need to be repeated data collection (UNDP Sri Lanka, ND).

The Canterbury case-study exemplifies the use of international experiences. Following the February 2011 earthquake, a group of Councillors from Canterbury spent time in San Francisco to learn how San Francisco recovered from the 1989 earthquake. Another group

of Canterbury Councillors spent time in Melbourne and also Marysville, Australia (a town which was devastated in the 2009 bush fires) (Sachdeva, 2011).

The 2004 Indian Ocean tsunami disaster resulted in a tremendous amount of death and destruction in many places including Sri Lanka. In terms of a planning recovery response this required a significant amount of financial resources, speed and efficiency (UNDP Sri Lanka, ND). In Sri Lanka, the first few months were spent establishing the details for many projects. Following this planners were able to be more reflective about the process and what needed to occur. The United Nations Development Programme (UNDP) has said that gender, human rights, environmental protection and conflict sensitivity are belittled in such disaster recovery efforts. To reduce this issue, planners should be conversant with the management of cross-cutting issues, as detailed by the UNDP (UNDP Sri Lanka, ND).

It is vital to avoid ill-justified snap-decisions; planning undertaken in the after-math of a disaster is likely to have a long term impact, and it is worth getting it 'right'. The comprehension and research concept recognises the need to pause and re-examine the situation. This is illustrated by a Japanese experience; two weeks after the January 1995 earthquake a two month moratorium was imposed on new construction, in March a decision was issued on districts in which restoration would be promoted and then detailed planning was undertaken with stakeholders within the affected districts before the plans were finalised (Johnson, 2011).

Developing a thorough comprehension is a complex task; however this is vital as planners will often be faced with conflicting information. Disasters also provide the opportunity for implementing sustainable development principles (UNDP BCRP/RDPU: ND). The UNDP noted that "it needs to be recognized that disasters do not only have a negative impact, but can also open up space for dialogue and create opportunities" (UNDP Sri Lanka, ND: 2). Research and comprehension is necessary for planners to make the most of this opportunity.

### *Inclusion and Partnership*

Planning is but one of a multitude of roles involved in disaster recovery. To be successful, planners must work alongside other formal and informal members of the recovery team including the local community, other experts and politicians. Planners must then act: consultation and participation processes must result in an outcome, namely that plans and policies must be developed.

Recovery planning can require the rapid rehabilitation of key infrastructure (UNDP BCRP/RDPU: ND). Providing for this may involve minimising some 'red tape'; planners' role is to enable existing planning frameworks to adapt to the current situation. Other than in such a scenario, rushed decisions should be avoided and the affected community should be involved.

Planners must not concede to pressure for fast track planning. Early stages of recovery planning should focus on identifying options and creating a community vision (Johnson, 2011). There is much literature on participatory planning and it is beyond the scope of this report to detail how participatory planning should be undertaken. It is however noted that participation is valuable and necessary and that it differs for each disaster event (Olshansky et. al, 2005).

Planning is not limited to the ideas of planners working for the local council or government. Pre-disaster planning should have established some sort of working relationship with existing community groups, and these relationships should be utilised in the recovery planning process. There is also scope for consultant planners' expertise to be utilised.

Post-earthquake recovery in Canterbury (including planning) is managed by the Government's Canterbury Earthquake Recovery Authority. Christchurch City Council has been given responsibility for the development of the Central Business District Plan and will also be responsible for the development of a number of suburban centre programmes. Thus far the Council led planning process has involved a number of stakeholders, and has encouraged input through a number of forums including a "Share an Idea expo", a "48 Hour Design Challenge", [www.shareanidea.org.nz](http://www.shareanidea.org.nz) and a number of community meetings (Douglas, 2011; Sachdeva, 2011; Williams et. al., 2011).

As discussed by Johnson (2011) plans play a number of important roles. Plans can generate public discussion and additional information; justify, obtain and apply funds, instigate decision making and action, and help improve the city's image and restore economic activity. Research and comprehension should assist in overcoming some of the complexities in plan development as the post-disaster environment may be somewhat different to the pre-disaster environment. It will be necessary to engage others; for instance to project populations, establish geological conditions and estimate economic performance; in order to create plans and policies that will be effective over time.

### *Conclusion*

It can be argued that disaster recovery planning seeks to create an urban area or region that is more resilient than the one that existed prior to the natural disaster (Brewster, 2005). This report emphasises key skills planners possess and highlights one way these skills can be utilised to ensure planners contribute best to the recovery process. Overall, planners have a key role to play in the recovery from natural disasters and while this role will vary depending on the nature and magnitude of the disaster, key skills can be adapted to ensure the most successful planning outcome is realised for the affected community. It has been argued that by being prepared and adaptable, undertaking research and comprehending the situation, and following an inclusive partnership approach, disaster recovery planners actions can contribute towards sustainable development and the creation of more resilient communities.

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