



Research Summary 05

When does response end and recovery begin? Exploring preparation and planning to support communities' resilient recovery

The focus of this research project is to identify resilience practitioners' (RPs) and emergency responders' (ERs) influence on a community during a Natural Hazard Emergency (NHE), and how this affects a community's capacity to recover. This is important because a community's ability to effectively recover from impacts of an NHE have implications for that community's future resilience, and its ability to adapt to the effects of climate change.

The purpose of this research project is to aid ERs and RPs to identify appropriate approaches to incorporate into their NHE response planning and preparation that assist a community's process of recovery, and A) contribute to a community's future resilience and B) support the Scottish climate change adaptation program (SCCAP).

CONTEXT AND BACKGROUND

The Scottish Government defines Community Resilience as:

"Communities and individuals harnessing resources and expertise to help themselves prepare for, respond to, and recover from emergencies, in a way which complements the work of the emergency responders.¹"

To achieve this, the relationship between the three phases of community resilience (1:Preparation and planning, 2: Response, and 3: Recovery) needs to be better understood.

Therefore, if resilience planning is to explicitly include recovery the impact of the response, to an emergency and its relationship to the community's recovery, needs to be more thoroughly explored. This is important so that resilience practitioners and emergency responders can plan and prepare strategies, that support the recovery process, without compromising their primary objectives to, protect human life, property, and the environment.²

This research has examined RPs and ERs influence on a community's capacity to recover from NHEs in three ways, firstly by identifying the mechanisms (Table 1) through which ERs and RPs can affect a community during the response to an NHE. Secondly by analysing five successful strategies (Table 1), taken from academic literature, which have helped communities

Table 1: The dominant mechanisms required to develop resilience and summary of analysis of five successful strategies (Baxter 2020)

Strategy	Potential		Dominant Mechanism										
	Future Resilience	Adaptation to Climate Change	Efficacy	Engagement	Involvement	Competency	Altruism	Action	Observation	Knowledge	Information	Understanding	Experience
Green: indicates high potential to improve Yellow: indicate moderate potential to improve Blue: indicates mechanisms are engaged by each strategy													
Transition Phase	Green	Yellow	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue
Resilient Recovery Planning and Managed Participant for Community Resilience	Yellow	Green	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue
Machizukari "Creating Communities" Balancing Infrastructure Recovery With Local Sociality	Green	Yellow	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue
Well-Being and Mental-Health Interventions and Support to Enable Community Recovery	Green	Yellow	White	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue
Creating Space for Groups to Form in Response to Disasters (Building Psychosocial Capacity)	Green	Yellow	White	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue

to recover in the aftermath of an NHE which A) contribute to a community's future resilience to NHEs and B) support communities to adapt to climate change. Thirdly by analysing the characteristics of the mechanisms and successful strategies to identify those strategies with the potential to be incorporated into NHE response

preparation and planning by ERs and RPs. A decision support tree has been created which could be utilised strategically across sectors, and by individual ER and RP organisations to evaluate strategies' potential for incorporation into NHE response planning and preparation.

Twelve mechanisms have been identified as important drivers for the recovery process (Table 1) which are influenced during the response to an NHE by RPs and ERs. These mechanisms are all interconnected with one another and affect: 1) a community's external experience of the response to an NHE, 2) the community's capacity to cope with the NHE and 3) the internal reactions experienced by the community during the NHE. These are the three components of the capacity to cope feedback cycle, (shown in figure 1 and developed as part of this research project) which create the conditions in which the process of recovery begins.

The process of recovery involves mental and physical well-being as well as the ability to access physical assets and resources, expertise and skills, all of which underpins a community's capacity to cope. This means capacity to cope during an NHE, but also the capacity to cope with the process of recovery and the capacity to adapt to the impacts of climate change. Capacity to cope is the bedrock of resilience and the foundation of building future resilience and being able to adapt to climate change.

ERs and RPs have a positive effect on the communities they protect and mitigate the consequences of NHEs. By incorporating strategies which support and improve the effectiveness of the twelve mechanisms identified by this research project, during the response to an NHE, ERs and RPs can have a direct positive effect on communities' ability to recover, thus improving future resilience and potentially the willingness to engage with the Scottish Climate Change and Adaptation Program (SCCAP).

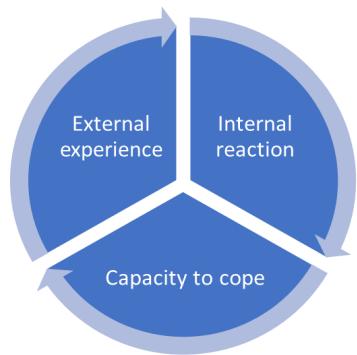


Figure 1 Capacity to cope feedback cycle, taken from Baxter (2020)³.

Three Key Points/Implications/Next Steps from Research

There should be a managed transition phase in between the immediate response to a natural hazard emergency and the recovery of a community. All ERs and RPs involved in the response to a NHE should prepare a withdrawal or handover plan in advance of a NHE as part of the transition to the recovery.

ERs and RPs should consider themselves part of what creates the conditions in which a community's recovery takes place both during A) the response to, and B) preparation and planning for a NHE.

ERs and RPs should consider strategies which actively promote a community's future resilience and the SCCAP (provided they do not compromise their core objectives).

1. Scottish Government, Ready Scotland, Resilience Division (2019) *Building Community Resilience: Scottish Guidance on Community Resilience*. Scottish Government, Ready Scotland.
2. Ready Scotland, Ready Scotland (2017) Responding to emergencies: Scottish guidance on responding to emergencies: Scottish Government.
3. Baxter (2020). When Does Response End and Recovery Begin? Exploring Preparation and Planning to Support Resilient Recovery. Report, National Centre for Resilience.

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You can find out more about the NCR on their website, <https://www.gla.ac.uk/research/az/ncr/>, or by following them on Twitter [@ResilienceScot](#)

If you would like to receive more information about the Centre and its activities, or if would like to get involved, please contact nationalcentreforresilience@glasgow.ac.uk