



**CUMBRIA
RESILIENCE**



Cumbria Resilience

A review of recovery processes following *Storm Desmond's*
impacts on Cumbria (5th/6th Dec 2015)

(Time window: 5th December 2015 – October 17th, 2017)

Final Report

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HD Research
Lane Head Cottage
Bentham
N. Yorkshire
LA2 7DL
T: #44 (0)15242-62785
E: hugh.deeming@gmail.com
W: www.hdresearch.uk

Cumbria County Council
Cumbria House
117 Botchergate
Carlisle
CA1 1RD

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Prepared by:

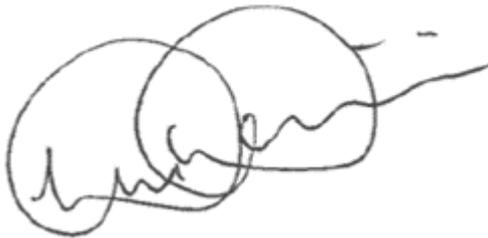


*Hugh Deeming BSc., PhD.
Principal Consultant, HD Research*

Carolyn Otley MA., PhD.

Third Sector Network Coordinator, Cumbria CVS

Approved by:



Dominic M. Donnini

*Executive Director of Economy and Infrastructure,
Cumbria County Council*

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Purpose

This report represents the final output from Cumbria LRF's Storm Desmond recovery 'lessons learned' 24 months following the storm's initial impact.

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1. Executive Summary

1. During the first week of December 2015, Cumbria was subjected to its third extreme flood event in a decade. Despite this recent experience, the impact of Storm Desmond on the county was unparalleled in many respects: i.e. in terms of record rainfall and river flows, the number of properties flooded and flood affected and also in terms of the pressure that dealing with those impacts placed on all organisations with a role in response and recovery. In effect, Cumbria, its institutions and its communities were faced with recovering from a disaster.
2. Given the scale of the event, the Cumbria Local Resilience Forum partners activated a coordinated response effort on Saturday 5th December that drew resources from across the country. This acute phase response has already been subjected to a review process, which generated 82 recommendations.
3. Even as people were still being rescued from their homes, Cumbria's resilience partners began planning for the recovery challenge; this is a clear illustration of good practice. Partnership groups to support recovery were established within the first few days.
4. Once the response phase had been concluded, formal responsibility for the coordination of recovery activities across the four affected districts transitioned to the Strategic Recovery Coordination Group (SRCG) chaired by Cumbria County Council. This transition occurred on Thursday 10th December.
5. The SRCG and its sub-groups then acted as a central hub to oversee recovery activities, securing additional capabilities and capacities where necessary and always endeavouring to meet the group's principal objective:

“Working with local communities to restore Cumbria to normality”

6. The nine SRCG sub-groups each focused on the coordination of a set of clearly defined, but also inevitably cross-cutting, work streams: Financial & Legal; Infrastructure; Business & Economy; Health & Welfare; Schools & Learning; Environment; Housing; Communities, and; Communications.
7. This review focused on investigating the activities of the SRCG and its sub-groups for a period of more a year and a half following the storm. This long timeline allowed for a greater understanding to be developed of both the initial efforts to restore and reconstruct following such a major event (e.g. bridge repairs) and the longer-term persistent challenges that have affected Cumbria's impacted communities (e.g. householders' negotiations with insurers and builders).
8. What the review found was that all stakeholders in the recovery process appear to have tried to act as efficiently and effectively as they could in order to enable communities' recovery.
9. Despite this, bureaucracy at local and national levels did act to hinder some recovery activity. This included difficulties with the interpretation of grant scheme rules, and difference in their application between the four affected districts of Cumbria. On occasion this generated a reputation risk to local authorities and other agencies.
10. A key theme within the 58 recommendations (Appx 1) made in this report is, therefore, that all organisations should collaborate to develop a unified approach to recovery management, which will standardise the processes and assist in ensuring that all those affected receive support

fairly¹. This includes ensuring that key personnel are trained and prepared for recovery roles (at all levels, from communities to SRCG chair) and ensuring recovery coordination is trained for and exercised as part of the county's emergency preparedness programme.

11. Given the population's apparently strong culturally rooted resilience and strength in the face of adversity, such approaches can only be regarded as critical if any future facilitation of recovery in the county is to be perceived as equitable between Districts.
12. In addition to challenges, the review also identified many examples of notable practice² across all levels of coordination. These included the provision by government of a block grant for infrastructure repair. This allowed the Infrastructure sub-group to implement a massive repair programme more efficiently than would ever have been possible if projects had been funded on a case-by-case basis.
13. Staying with infrastructure, Cumbria County Council's use of trusted contractors and innovative technologies also hastened major projects, such as the reopening the A591 at Thirlmere ahead of schedule.
14. Pride should also be taken by communities that pulled together in concerted efforts to assist neighbours, by providing critically important social spaces and 'single points of contact' where people could meet to find support (e.g. The **Encouragement** Cabin in Sandylands, Christchurch in Cockermouth).
15. The length of the review process has also meant that insights into the long-term effectiveness of recovery schemes could also be identified. These included the observations made in relation to the delivery of Property Level Resilience (PLR) grants. Being a relatively new concept, the PLR grant process faced many challenges. These included the perceived need within the authorities for the scheme to be rolled out quickly, to fit a political (and local authority capacity) agenda, which was perceived as too fast for recovering households. This haste appears to have fed further challenges, with PLR installation being carried out by contractors with varied levels of expertise.
16. Undoubtedly, there has been incidence of good practice, with some companies being seen to go out of their way to ensure households are protected to expected standards. However, some uncertainty remains over whether many installations will perform in a future event.
17. A recommendation that is clearly supported by the Cumbrian experience, therefore, is that there remains an urgent need for a level of nationally-defined standards within the somewhat nascent PLR delivery chain, which include standards for independent surveys and quality control. Without such standardisation there is a real risk that the visible evidence of the considerable investment already made by government in PLR (i.e. any completed installations which do not protect to expected standards) may, in the worst case, discredit the important potential of property level protection as a publicly acceptable and accepted adaptive risk-reduction measure.
18. Another issue whose visibility increased over time is the impact of being flooded on mental health. Some of this is due to fear of future flooding, but the psychological and emotional pressures caused by having to endure the long-term negotiations and disruptions that have

¹ These standardised processes should maintain accord with government sustainability and socio-economic equity aims, not just focus on delivering assistance equally (i.e. where everyone receives the same).

² The term 'notable practice' is used here to mirror the phrase already adopted by JESIP within the emergency services' Joint Organisational Learning (JOL) workstream, where it is used to denote examples of formally-assessed good practice.

become a feature of the recovery process also contribute. Whilst these are potentially “normal reactions for people dealing with abnormal circumstances” (Whittle et al., 2010), a number of recommendations have been made regarding the importance of ensuring appropriate support is signposted and available over the long-term.

19. In review it should be clearly acknowledged that the recovery from Storm Desmond has been achieved effectively, given the genuine challenges of scale and capacity. In all, however, 58 recommendations have been made, which span the breadth of activities overseen by the SRCG structures (see: Table 1). If integrated effectively, both into the county’s business-as-usual processes and into wider resilience building processes across the country, those coordinating future recovery operations will undoubtedly benefit.

2. Introduction

“In many disasters, events that seem larger than life are dealt with and managed, mostly, if not always most visibly, by the actions of ordinary people, extending their knowledge, skills, and resources to address small elements of the big, perhaps catastrophic, problem. In some cases, these are people charged with official responsibilities, who go beyond what they had expected they would ever need to do. Others are people who never considered themselves disaster responders and yet, step up to the plate.”

American Dunkirk – The Waterborne Evacuation of Manhattan on 9/11 (Kendra and Wachtendorf, 2017: p.4)

“Team Cumbria got on with it, didn't waste energy moaning”

Recovery Workshop participant

20. During the first week of December 2015, Cumbria was subjected to its third extreme flood event in ten years. The impact of Storm Desmond on the county's communities and infrastructure was, in many ways, unparalleled.
21. The acute phase response to Storm Desmond was carried out through an integrated multi-agency approach. This acute response has already been reviewed in order to identify both good practice and learning opportunities (Deeming, 2016a).
22. Structures to support the recovery of the many individuals, households and communities affected were established early, in parallel to the acute phase operations that aimed to protect life and property. The formal handover from the acute phase (chaired by Cumbria Police) to recovery (chaired by Cumbria County Council) took place on Thursday 10th December.
23. Recovery has now been ongoing for 24 months and, as a complex, long-term, process involving many organisations, it is not as straightforward to review as the highly dynamic acute-phase operations. However, knowing that it was important for the county to understand where its recovery operations had been successful and where they could be improved, in late 2016 Cumbria County Council commissioned a review of all the recovery activity overseen by the county's Strategic Recovery Coordination Group and its nine sub-groups. This report constitutes the final output of this review process.
24. Unlike many other recovery reviews that have been completed within the first few months of an incident, the near two-year window on activities analysed to prepare this report has provided real opportunities to understand the resilience that underpins the recovery of communities and systems recovery from this event. However, it also reveals the sometimes systemic (e.g. austerity-based) barriers that have acted to slow other aspects of recovery. Using this rich data stream, this report attempts to encompass learning from a range of experiences. Accordingly, the report should be understood as building recommendations that reflect and integrate multiple perspectives; from formal agencies and authorities, the third and business sectors and from communities and affected individuals. In addition, the recovery review has identified a number of issues that primarily relate to the acute phase response, but were not picked up in that debrief report. These are included in this recovery report where it is considered they are significant issues that should not be lost.
25. The report commences with an introduction to the review's process and aims. This is followed by a section that describes the context of the storm and its impacts. The next section then

provides an introduction to the concept of Integrated Emergency Management (IEM) and to the place of recovery within that framework.

26. Following this contextualisation, the main report will then introduce the concept of the Strategic Recovery Coordination Group (SRCG), and discuss its role and that of its nine sub-groups in facilitating recovery. Throughout the report, recommendations will be made to relevant bodies wherever evidence suggests that improvements in recovery practice and/or coordination could be achieved.

2.1 Recovery review: Aims:

27. This recovery review had 3 principal aims:
 - To assess the effectiveness of Cumbria's recovery structures following Storm Desmond, from both organisational and community perspectives
 - To identify good practice and where lessons need to be learned
 - To develop recommendations to improve Cumbria's future recovery processes, capabilities and emergency planning arrangements
28. This project has focused on examining the role of the SRCG, its sub-groups and the wider community in *supporting recovery*. It has not investigated, in detail, the parallel flood risk management and flood resilience work that has been carried out by the Environment Agency and other Risk Management Authorities (RMA), by the *Cumbria Floods Partnership* initiative, the Cumbria Strategic Flood Partnership³, or by Cumbria County Council in its role as Lead Local Flood Authority (LLFA) (e.g. Section 19 reporting)⁴.

2.2 Recovery review: timeline and data collection

2.2.1 Review timeline

29. Recovery starts as soon as a hazard passes. Accordingly, recovery for the residents of Flimby and Maryport, who experienced severe flooding on the night of 3rd December 2015, had already started before Storm Desmond even arrived over the rest of the county on Saturday 5th December.
30. Recovery is also a long-term process. As this report is being drafted 22 months on, there are still people out of their homes as a result of delays and complications with their recovery. It is, however, important to apply parameters to the investigation, in order that notable practice and lessons to be learned can be understood against a defined timeline.
31. Debrief investigations rarely commit beyond a year after an event. However, recovery from such an extreme event takes a long time, and one year would have been too short a period of time to consider the effectiveness of recovery, as many activities were still ongoing at this stage.

³ There is some independent discussion of the CFP process from Jan 2016 – Dec 2016 in a separate EU-funded report: <https://drive.google.com/file/d/0BySVyEajWokmWm9PVGdkdWFmOGs/view?usp=sharing>

⁴ i.e. Section 19 of the Flood and Water Management Act (2010) describes the Lead Local Flood Authority's duty to investigate flood events:

32. Accordingly, the timeline for this work was notionally set as an 18-month period from **Thurs 3rd Dec 2015 to Weds 1st June 2017**.
33. However, for some recovery challenges (e.g. drying and restoring some buildings; mitigating the mental-health effects of flooding and flood risk), even a year and a half can still be regarded as little more than an incubation period (Tapsell and Tunstall, 2008). Accordingly, this review has maintained a monitoring role until October 2017 in order to identify any additional observations and/or recommendations that continued to emerge.

2.2.2 Data collection

34. In order to develop a high-level understanding of the recovery process and its challenges and successes, a series of interviews and focus groups were conducted with key members of the Strategic Recovery Coordination Group (SRCG) and its sub-group members. In December 2016 an initial analysis of these data was used to develop an interim recovery debrief report (Deeming, 2016b).
35. During 2017, further interviews and meetings were conducted with a wider constituency of participants in the recovery process, including community members and members of some participating third sector organisations.
36. On Thursday 27th April, a major *Storm Desmond Recovery Debrief* workshop was held at Rheged (Appx 2). During this event, over 100 delegates (around half from communities and third sector organisations) participated in a range of plenary and table-based data collection activities (Appx 3). All these data were subsequently analysed by the project team and the themes and findings synthesized directly into this debrief report.
37. In addition to the collection of interview data, Carolyn Otley's⁵ continued engagement on the SRCG Community sub-group and other task groups within the recovery effort has enabled some the challenges that underpin several of the findings in this report to be better contextualised.

3. Context of storm impacts

3.1 History of flooding in Cumbria

38. As England's most mountainous county, Cumbria has a long history of flooding, with recorded events dating back hundreds of years (Whyte, 2009, Environment Agency, 2006). Looking back only a decade, the floods of 2005 and 2009 had represented some of the most extreme wide-area floods experienced in the county since at least 1968, and possibly since 1822 (CFLAG, 2016, Environment Agency, 2006). In 2009, the rainfall at Seathwaite, near Keswick registered as the most intense 24hr rainfall event (316 mm) in the UK on record (Eden and Burt, 2010). Sadly, this record was only set to last until Storm Desmond struck the county on 5th December 2015 (Marsh et al., 2016), when 341 mm of rain fell within 24 hours at Honister Pass.

3.2 Timeline and scale of Winter storm impacts

39. Looking at a shorter timescale, it can also be seen that the conditions prior to the arrival of Storm Desmond's record rainfall had preconditioned the county to serious flooding. Between 12th November and 29th November 2015 the UK had been subjected to a string of storms (Abigail, Barney and Clodagh) (Marsh et al., 2016).

⁵ See Appendix 6 for team biographies

40. Storm Abigail triggered a multi-agency response in Cumbria – including military assistance – because forecasts had suggested it would cause significant flooding. Whilst this flooding failed to materialize, the rainfall Abigail and the following storms dropped on the county served to completely saturate the catchments. It also raised the level of Thirlmere to the point where there was little remaining freeboard to prevent overflows resulting from any additional precipitation.
41. Serious flooding commenced on the night of 3rd December when Flimby and Maryport were subjected to intense surface water inundation, and over 150 homes were flooded. A senior Fire Officer in attendance, who had experience of both the 2005 and 2009 floods, believed this was the most dangerous flooding he had ever seen.
42. Storm Desmond itself hit Cumbria on Saturday 5th December, resulting in flooding to properties across the County - from Workington (in the West) to Brough (in the East), and from Longtown (in the North) down to the Furness Peninsula (in the South). (Figure: 1)



Figure 1: Location and numbers of affected properties across Cumbria Environment Agency ©Crown Copyright

43. The flooding experienced as a result of Storm Desmond was spread over a number of days; towns such as Kendal, Keswick and Appleby flooded around Saturday lunchtime, whilst

communities further downstream flooded later that day. Carlisle’s flood defences were not overtopped until Sunday, although the likelihood of Carlisle flooding had been known and planned for by the authorities for many hours.

44. After Storm Desmond had passed, additional storms throughout December continued to present significant risks. Cumbria’s authorities reactivated the Strategic Coordinating Group in parallel to the recovery coordination to plan the response for further flooding on a number of occasions, and this inevitably led to a slowing of recovery work as the same organisations and individuals were involved in both structures: this overlapping of SCG and SRCG operations had never been previously done in the County. Unfortunately, a small number of communities, including Glenridding, Appleby and Shap, did experience repeated flooding.



Figure 2: The cycle of repeated flood response activations undertaken by Cumbria's strategic partnership throughout November and December 2015

3.3 An “unprecedented” storm: effects, impacts and consequences

45. Storm Desmond has been described by many as “unprecedented”. This description has caused some frustration within affected communities, as it is clear from the history above that severe flooding is not new to many people and communities in Cumbria, who have experienced repeated flooding of their homes and businesses. Some of the worst affected homes have flooded 4 times in 10 years. There was, at times, a feeling within communities that the term “unprecedented” was being used as an excuse for both the perceived “failure” of flood defences and for the apparently slow pace of recovery work.
46. However, the overall scale of flooding caused by Storm Desmond was significantly greater than either the 2005 or 2009 floods, being spread over four of Cumbria’s six districts. This factor combined with its flooding of more than twice as many properties than the previous storms,

illustrate that the event can realistically be seen to meet the United Nations definition of a disaster⁶.

47. This meant that the recovery challenges facing Cumbria were indeed unprecedented; Storm Desmond flooded over 5,500 homes and 1,000 businesses, damaged or destroyed 792 bridges and nearly 400 km of major road, and affected public sector buildings including Carlisle's Civic Centre and 44 schools.

“Previous events were much smaller scale and easier to target resources. 2015 split our resources and transport infrastructure problems meant we just couldn't get to places.”

South Lakes Housing Assn.

48. There were many other significant impacts, including one tragic death that occurred as a direct result of the flooding.
49. This overall scale was not always immediately clear to communities, who were understandably focused on the damage they could see in their local area, with many people only appreciating the full extent of the damage in other communities a number of months later.
50. Whilst it is important to understand the huge scale of the storm's physical impacts, it is equally important to understand the massive and wide-ranging consequences for the individuals, communities and organisations affected.
51. Families saw their homes and possessions destroyed, and were faced with a long recovery journey – often living away from home (or upstairs in their flooded home) for many months, negotiating with a complex mix of utilities companies, insurance companies, loss adjustors, builders and grant schemes. At the same time, they were attempting to hold down jobs, get children to school and continue their other caring responsibilities. Farmers were cut off from their land and stock, and businesses were affected by both the direct costs of flooding and a reduction in footfall. Recovery was a stressful experience for almost everyone affected by the flooding, but the impacts were often worse for those who were already more vulnerable due to age, health conditions or disabilities, caring responsibilities, low income and/or inadequate insurance. These challenges, the fear of future flooding, and their effects on mental wellbeing, are discussed in more detail in later sections

3.4 Understanding recovery, relative to other work streams

52. The combination of the unprecedented scale of the storms' impacts and the repeated need, for the authorities to recommit to preparedness and response activities (rather than focus purely on the desperately needed recovery work) throughout December, demonstrates an important point.
53. Neither response nor recovery are 'Business as usual' activities for Cumbria's public sector; they have to take place in addition to the normal work of organisations. A relatively small number of people, across all the authorities, agencies and partners have been faced, effectively since

⁶ “A disaster is defined by the United Nations as: *“a serious disruption of the functioning of a community or a society at any scale due to hazardous events interacting with conditions of exposure, vulnerability and capacity, leading to one or more of the following: human, material, economic and environmental losses and impacts.*

The effect of the disaster can be immediate and localized, but is often widespread and could last for a long period of time. The effect may test or exceed the capacity of a community or society to cope using its own resources, and therefore may require assistance from external sources, which could include neighbouring jurisdictions, or those at the national or international levels.”

<https://www.unisdr.org/we/inform/terminology>

Storm Abigail on 12th Nov 2015, by the need to simultaneously balance, resource and deliver four distinct, but intrinsically linked work streams for the population of Cumbria: Business-as-usual; Planning for the future; Emergency response; and Recovery from any emergencies (Figure 3). How this complex partnership has managed to achieve this challenge will be discussed in the following sections.

54. These conflicting demands were not restricted to the agencies and organisations coordinating response and recovery; communities and individuals at risk of flooding faced similar challenges. Repeated flood warnings caused significant stress even when no further flooding occurred, but the distress was even greater when homes and businesses suffered repeated flooding, and clean up and recovery needed to start again from scratch.

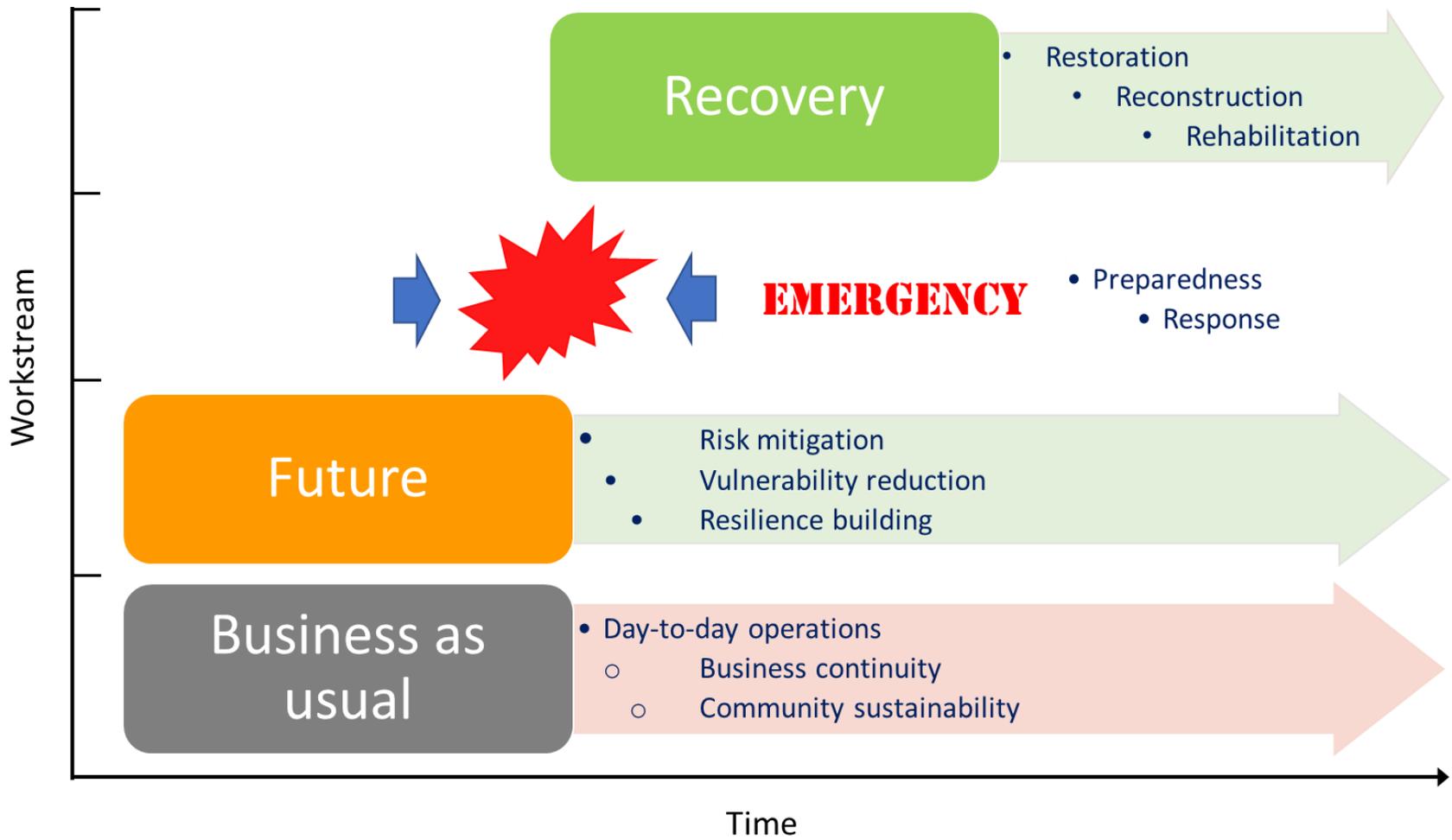


Figure 3: Illustration of four key work streams on-going and needing attention at any one time in a hazard-exposed county

4. How the formal response to, and recovery from, Storm Desmond has been coordinated in Cumbria

4.1 Cumbria Resilience: The Local Resilience Forum

55. Contingency planning for emergencies in Cumbria is carried out by a multi-agency partnership called the Local Resilience Forum (LRF): this forum is referred to in the county as *Cumbria Resilience*. The LRF-based approach is built on the concept of delivering multi-agency Integrated Emergency Management (IEM)⁷, through collaboration, communication and coordination between all the agencies and organisations that have been designated as Category 1 and Category 2 responders⁸ under the Civil Contingencies Act 2004 (CCA). In addition to these core statutory LRF members, Cumbria Resilience includes and links to a wider range of partners, including community, volunteer-led organisations such as Cumbria's mountain rescue teams, Churches Together and Rotary.
56. Prior to Storm Desmond, the Cumbria Resilience partnership had been active in meeting their statutory duties in relation to contingency planning. In relation to flood planning, specifically, Cumbria Local Resilience Forum had developed a detailed Multi Agency Flood Plan, as well as ensuring its partners had their own contingencies in place. The county had also developed recovery plans. All these plans together provided a framework for the response to the storm and its aftermath.

Integrated Emergency Management (IEM): the initial acute/response phase

57. Acute phase preparedness and response during major emergencies is conducted through a structured coordination framework (Figure 4).
58. Figure 4 illustrates how responsibility for delivering IEM operates through a tiered approach involving strategic, tactical and operational levels (JESIP, 2013, 2016), with a multi-agency coordination group at each of the 3 levels. These coordination groups are most often chaired by a Police Officer, but IEM operations in a multi-agency setting should not be thought of as a 'command and control' framework. All agencies retain 'command' of their own resources during emergencies (e.g. Fire Officers can always give orders to Fire Fighters using their Gold, Silver and Bronze hierarchy). When operating in the IEM *multi-agency* structure, the Chair does not command the group (e.g. Tactical), but provides a central point of leadership for the collaboratively coordinated decision making and response processes.
59. Emergency response in the UK is also determined using the concept of *subsidiarity*, meaning decisions should be taken locally where possible. However, large scale emergencies often require wider coordination to ensure limited resources are allocated to the areas of greatest need. (Cabinet Office, 2013a).
60. Storm Desmond rapidly escalated into a major emergency of national significance; in addition to the flooding already described in Cumbria, areas of Lancashire, Northumbria and southern Scotland were also affected. Therefore, figure 4 also illustrates the national strategic level,

⁷ The six phases of IEM: Anticipation, Assessment, Prevention, Preparation, Response, Recovery Management

⁸ Cat 1 Responders are the main organisations involved in most emergencies at a local level (e.g. emergency services - Police, Fire & Rescue etc. - along with health sector and local authority partners). Cat 2 responders are those organisations involved in some emergencies (e.g. utilities and transport companies) (HM Government, 2012: p.7). In Cumbria both the County and District councils are Cat 1 responders.

which came into operation with the activation by government of the Cabinet Office Briefing Room (COBR) committee and Lead Government Departments (e.g. Defra for flood response).

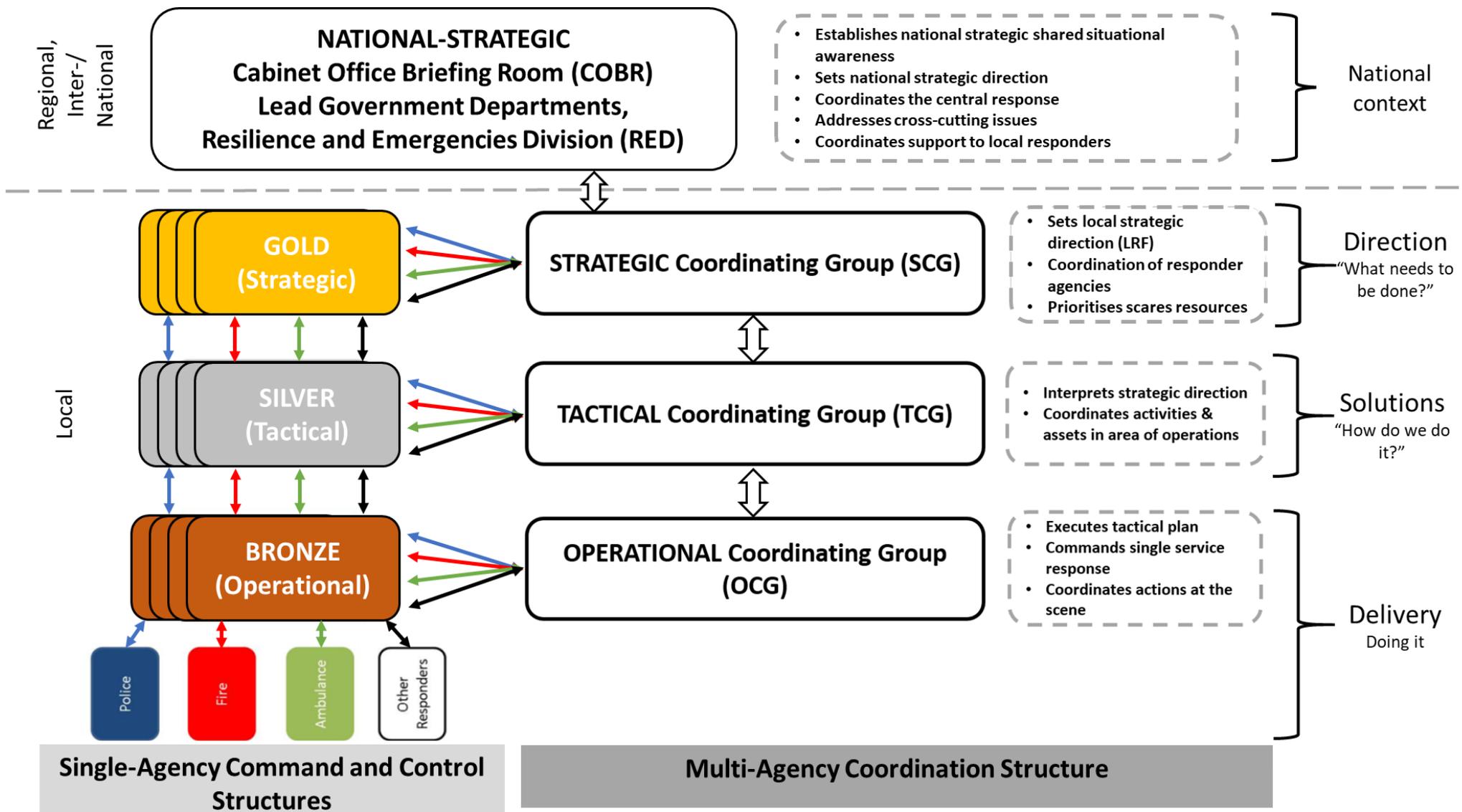


Figure 4: The principal tiers of Integrated Emergency Management (IEM) during major emergencies (adapted from: JESIP, 2013)

61. Beneath the national tier, at a county scale, the strategic, tactical and operational components of IEM can be thought of in terms of baking a cake:
- At *Strategic* level: a recipe is agreed (i.e. the direction is set)
 - At *Tactical* level: the ingredients and utensils are gathered (i.e. solutions are devised)
 - At *Operational* level: the cake is made (i.e. solutions are delivered)
62. Box 1 illustrates how this stepped process operated in relation to one specific aspect of the Storm Desmond response.

Box 1: ‘Isolated communities’ as a simplified illustration of integrated emergency management (IEM)

During the height of the Storm Desmond response on 5th December, news started to reach the **Strategic Coordinating Group (SCG)** that communities along the shores of Ullswater were being cut off and isolated from support due to rising lake levels, landslides and road-surface damage. Accordingly, it was important to formulate and activate a plan to reduce risks for these communities.

After deliberating this information, the SCG agreed and communicated a strategic *direction* that “*There will be no isolated communities*”.

Taking this direction from the SCG, the **Tactical Coordinating Group (TCG)** then interpreted what it meant, in terms of what preventing the isolation of all at-risk communities in the county would need, in terms of *solutions* (e.g. what assets and activities would be required).

Communicating and developing a plan with the **Operational Coordinating Group (OCG)**, who had deployed personnel to Ullswater, the TCG started to direct water rescue and other resources to the area. These included out-of-county water rescue teams and military vehicles with wading capability. The employment of these assets had been negotiated by the SCG and authorised by other LRFs, and in the case of the military assets, by **COBR** itself.

Over the following hours, with everything in place, the integrated response was *delivered* effectively and ensured that the Glenridding, Patterdale and other communities were safely reconnected to support lines, which included the delivery of food and water and the restoration of utilities.

63. The response to Storm Desmond required the mobilisation of a huge medley of specialist assets and personnel. It is, undoubtedly, testament to the professionalism of these personnel and to the sensible, pragmatic and altruistic reactions of individuals and communities throughout the county that only one life was lost directly to the storm’s effects.
64. Despite this success, the Cumbria Local Resilience Forum (CLRF) took the need to learn lessons from the way the response had been coordinated very seriously. Accordingly, in early 2016 a debrief report was commissioned, to investigate all aspects of multi-agency working that had been undertaken during preparation and response to the storm. This review was completed in July 2016 (Deeming, 2016a) and made a total of 82 recommendations for improving multi-agency working. All these recommendations were accepted by CLRF and work is on-going across a variety of programmes to meet them.

4.2 Recovery: doctrine and structures

4.2.1 The Recovery Advisory Group (RAG)

65. Cumbria Local Resilience Forum's considerable experience with emergencies, and the associated knowledge gained in the importance of supporting recovery efforts from the earliest opportunity, meant that recovery structures were activated alongside the SCG at an early stage. The Recovery Advisory Group (RAG) first met on Sunday 6 December, and sub-groups were quickly established. This was an important action that aligned clearly with the National Recovery Guidance (NRG) (HM Government, 2013b), which Cumbria Local Resilience Forum had been instrumental in developing following the partnership's experiences during 2005 and 2009.
66. The importance of having recovery structures in place at an early stage is illustrated in the fact that even as Storm Desmond arrived over the county, the Flimby and Maryport areas were already commencing their recovery from the significant flooding they had experienced on 3rd December. Likewise, the complexity of the response/recovery conjunction was further exhibited throughout the week, from 3rd to 10th December, as different locations experienced storm effects, responded and then started to recover on different timescales. Unfortunately, locations such as Glenridding were forced to experience this cycle several times, as one flood followed another in rapid succession through December.
67. The fact that some senior managers were needing to deliberate both SCG and RAG strategies simultaneously would have undoubtedly added to accumulated role pressure. However, it must also be remembered that many responders in offices and at the operational frontline, were also wrestling with this response/recovery conjunction in equal fashion. Consider here, for example, the staff at Carlisle City Council who worked with Mountain Rescue volunteers in order to retrieve benefits details from the flooded Civic Centre. Without this action, hundreds of people would have gone without vital benefits payments that week.

4.2.2 Transition

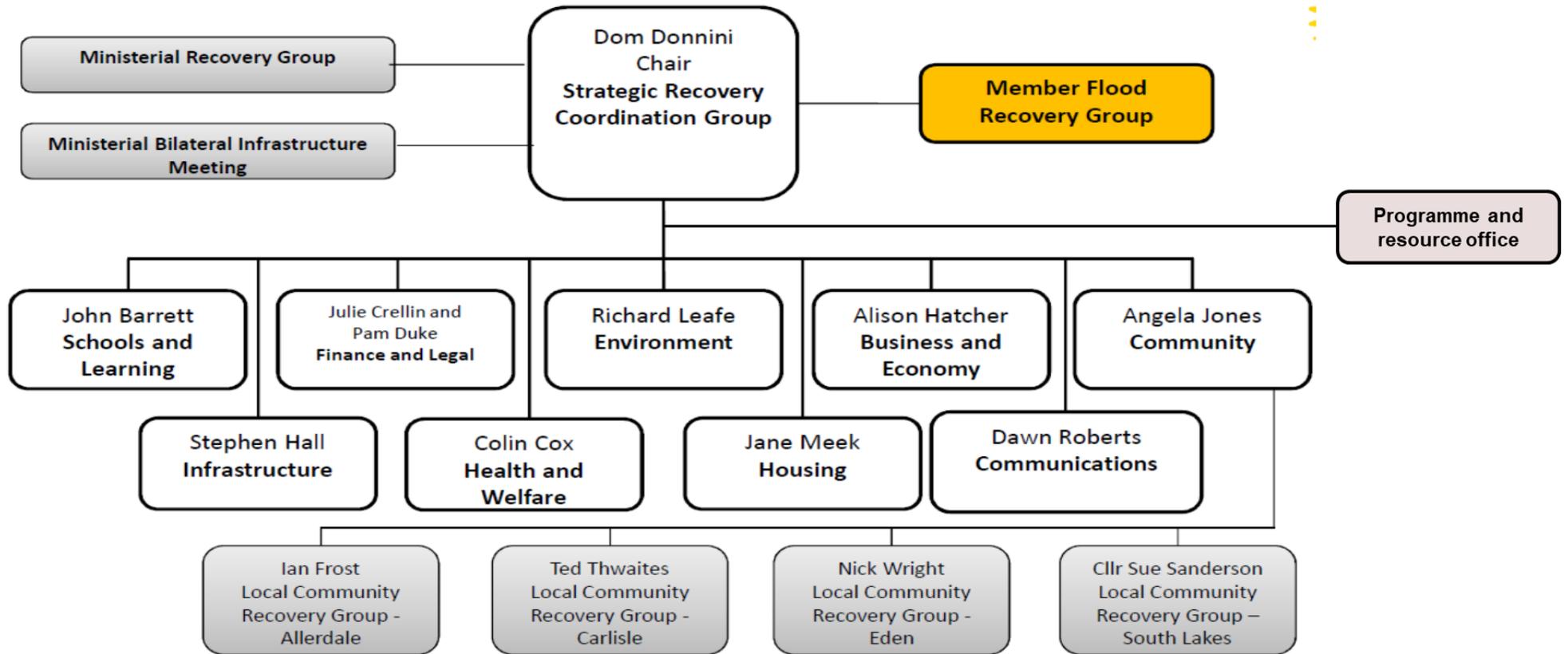
68. As the need for response activities diminishes, the SCG will decide a point at which their control and coordination function should be handed over to the appropriate local authority partner to take on the recovery coordination role. This partner, who is already chairing the RAG, will then become responsible for chairing and facilitating the gamut of recovery activities, as the RAG converts into the Strategic Recovery Coordinating Group (SRCG). Given Storm Desmond had affected many areas of Cumbria, the chairing role was taken on by Cumbria County Council (rather than one of Cumbria's 6 district councils) as they were best placed to oversee the complicated and long-term recovery activities.
69. Due to uncertainties in relation to how weather effects were playing out through the week following the storm, the respective SCG and RAG chairs do seem to have experienced some difficulty in deciding exactly when the formal transition from acute response to recovery should be made. This being largely due to the reality of the situation wherein there was no sense through this period of the stepping down of pressure on responders. However, following discussions with COBR, the SCG finally stood down and handed over to the SRCG at 17:00hrs on Thursday 10th December 2015.

4.3 The Strategic Recovery Coordination Group (SRCG): Structure

70. Once transition had occurred, the SRCG took over all recovery coordination activities as outlined in the county's General Emergency Recovery Plan (Cumbria Resilience, 2012). However, just as the SCG had national strategic support from COBR, so too, the scale of the recovery challenge necessitated that the SRCG was itself supported by a national strategic body; the Ministerial Recovery Group (MRG).

71. Figure 5 illustrates the structure of Cumbria's Recovery Structures following Storm Desmond—the SRCG and its sub-groups.
72. The recovery structures have similarities to the strategic, tactical and operational levels of the response phase SCG, but the local authority leadership of the SRCG is even less focussed on 'commanding' than is the police leadership of the SCG. Much of Cumbria County Council's role in chairing the SRCG was to support the delivery of solutions developed locally, by statutory partners, voluntary organisations and communities themselves. The recovery structures provided a mechanism to coordinate this activity, identify and fill gaps, provide information and resources, and to escalate concerns that could not be resolved at a local level.

Figure 5: The Cumbria Local Resilience Forum Strategic Recovery Coordination Group: Structure



5. Impact assessment

73. One of the earliest recovery tasks was to develop a clear awareness of the nature and scale of the storm's impact, by conducting a substantive impact assessment.
74. This impact assessment was carried out through the coordination of a range of approaches and assets, including desktop analysis, military support, and door-knocking by large numbers of staff and volunteers.
75. The image that rapidly developed was one of significant and widespread damage and destruction. Whilst the use of emotive adjective "unprecedented" drew some criticism when it was used to describe the record rainfall that had triggered the flooding, it is perhaps justified in this context. The overall impacts of Storm Desmond on the county's communities and infrastructure were indeed "unprecedented" compared to any other locally-recorded recorded disaster.
76. The impact assessment was collated by Cumbria Intelligence Observatory, as part of the Programme and Resource Office supporting the SRCG (Cumbria County Council, 2016). This impact assessment was refined and updated throughout the recovery process, as, for example, additional flooded properties were identified through the grant application process, and the nationally accepted definition of a "flooded property" became clearer. Some of the key impacts of impact assessment are outlined below to give an indication of the recovery challenges facing the SRCG, its subgroups and Cumbria's communities.
 - 5,319 homes (eventually rising to 5,525) and 1,029 businesses flooded, with many more "flooded affected" (for example, suffering disruption due to road and bridge closures).
 - Around 600 farms suffered loss of stock, flooded land or other damage.
 - 2 major bridges (Pooley Bridge and Staveley) destroyed and three major roads closed due to significant damage (the A591 at Dunmail Raise, the A592 along Ullswater, and the A686 at Langwathby), with a total of 792 bridges and over 350km road damaged (and 107 road closures).
 - The main West Coast Rail line was closed for two weeks due to damage between Oxenholme and Penrith (with a further closure following Storm Frank due to damage north of Carlisle)
 - 44 schools were affected by the floods, with 4 closed for significant periods; 17 nurseries and 6 childminders were also affected.
 - A further 44 public sector buildings were flooded, including Carlisle City Council's Civic Centre, libraries, care homes, and Police stations. The premises of a number of local charities, sports clubs and community groups were also affected.
 - Public spaces (such as Fitz Park in Keswick and Memorial Gardens in Cockermouth) and large areas of privately owned land were covered in gravel or other flood debris.
77. There was a huge range of consequences from this physical damage, with many affecting different people in different ways, some of which are summarised below:
 - Individuals were faced with cleaning their homes, and negotiating with a complex range of organisations including utility companies, local authorities, insurance

companies, loss adjustors and builders. Local authorities needed to find ways to rapidly and safely collect and dispose of the large quantities of waste generated as homes and business were cleared.

- A significant proportion of households were uninsured (there estimated to be over 2,300 homes – or over 40% - lacking building structure insurance, with others lacking contents insurance), often because they had flooded previously and could not obtain insurance. Many of those with insurance had huge excesses on their policies for flood claims (up to £10,000 in some cases). Both situations meant households themselves faced huge repair bills, and often had no alternative but to live in their flooded home for all or most of the time that it was being repaired; these homes were almost inevitably damp to some extent, leading to health problems in some cases.
- Businesses suffered damage and loss of stock from direct flooding, but also faced staffing challenges, and a reduction in trade. Many businesses, particularly those dependent on tourism, were keen to promote the message that “Cumbria is open for business”, although communities did not always feel this message was appropriate so early in recovery.
- Children and young people faced disruption to their education from school closures and relocations, and Cumbria County Council needed to make significant changes to school transport arrangements to accommodate road/bridge closures and pupils living in temporary accommodation.
- Road and bridge closures, sometimes coupled with living in temporary accommodation in a different community, meant many people faced longer journeys to work, school, shops and social activities. This led to both increased travel costs, and isolation from their normal social networks and community support.

78. The scale and widespread nature of the damage caused by Storm Desmond meant that there were few people in Cumbria completely unaffected by the flooding, particularly in the districts of Allerdale, Carlisle, Eden and South Lakeland. Almost everyone had friends or relatives whose home or business had flooded. But in addition, many people were affected by multiple consequences:

- they were having to find time to deal with insurance companies and builders whilst facing much longer journeys to work, shops and schools;
- they faced the costs of repairing their uninsured home but had lost their job when their employer’s premises flooded
- they were living in temporary accommodation at a distance from work and childcare, but had no transport as their car had flooded
- both their home and business had flooded, or
- they were working additional hours to support flood recovery whilst also dealing with the aftermath of their own home flooding.

79. It is hard to fully articulate the extreme pressures faced by so many people in a written report.

80. Without doubt, the realisation of the scale of these impacts led to a widespread appreciation across organisations, staff, volunteers and communities of the need to limit the potential human consequences of the event as effectively as possible.

6. A review of recovery processes following Storm Desmond's impacts on Cumbria

81. Having set the scene in relation to Storm Desmond's effects and impacts, and having outlined the need for potentially serious consequences of these disruptions for the affected communities to be minimised, the following sections of the report will review how the county's recovery was facilitated by the Strategic Recovery Coordination Group (SRCG).
82. Initially, the activities of the SRCG itself will be explained. This will be followed by a closer examination of the work of the SRCG's nine sub-groups. The narrative will be themed around the key areas of work undertaken by the groups where notable practice and/or lessons to be learned were identified. Broader activity, and community views, related to the work of the sub-group will also be included in each of these sections.
83. Each section will begin with a box containing the respective group's agreed terms of reference, as they were defined in Cumbria County Council's Recovery Strategy Document (2015).

7. The Strategic Recovery Coordination Group (SRCG): Role

Strategic Recovery Coordination Group (SRCG)

Aim:

“Working with local communities to restore Cumbria to normality”.

Objectives:

- Working across multiple agencies to ensure:
 - Local communities are engaged, consulted and supported at all stages of the recovery process.
 - The safety and welfare of all persons engaged in the delivery of the recovery programme.
 - All infrastructure, assets and highways are repaired or enhanced.
 - The provision of education and learning is maintained.
 - Business and economic recovery, confidence and support.
 - The health, wellbeing and housing needs of communities are met.
 - Community needs are matched to offers of support.
 - Financial management arrangements are in place with recovery efforts complying with legal requirements.
 - An effective communications strategy is in place.
 - Appropriate governance and resources are in place to deliver the recovery programme.
 - Effective liaison with elected members and central government departments.
 - An impact assessment is conducted.
 - An evaluation of the Cumbria recovery programme is completed.

85. As mentioned above, the importance of setting up the Recovery Advisory Group (RAG) in parallel to the Strategic Coordinating Group (SCG) during the acute phase was widely regarded as a clear example of good practice. This allowed the rapid ‘bringing to speed’ of a diverse recovery-focussed partnership (beyond the predominantly emergency-focussed responder

agencies), which was needed to provide a crucial early hub for the coordination and prioritisation of recovery activity.

86. The recovery structures benefitted from existing personal and organisational relationships. Many of the individuals and organisations involved were already familiar with working together, and knew each other's capabilities and capacities (Box 2), although this was not always the case. In addition, many of those involved had in depth knowledge of Cumbria and links to the communities affected: the areas flooded, the community leaders, the local organisations and the history of local flooding. This made it possible to establish the priorities for recovery support relatively quickly in the face of massive disruption.

Box 2: Definitions according to UK Emergency Responder Interoperability Lexicon (Cabinet Office, 2013b)

Capability: the equipment, systems and/or skills, which demonstrate an ability to respond to and recover from a challenge (e.g. a diver team trained to carry out bridge-inspection is regarded as a capability)

Capacity: the limits of specific capabilities (e.g. three diver teams represent a higher capacity to carry out bridge-inspections than a single team)

87. Whilst the make-up of the SRCG proved itself effective over time, within the SRCG and across the sub-groups, there was a perception that more preparation and training would have helped key members to understand their roles and responsibilities, prior to them being "thrown" into a major live recovery operation. This is especially relevant in respect to staff in non-responder organisations who were well suited to the task (e.g. Lake District National Park Authority), but who were unfamiliar with the SRCG's role within the Integrated Emergency Management (IEM) approach. Unfamiliarity with the recovery process and role of the SRCG and sub-groups is also reported to have led to some seemingly appropriate group members and potential chairs being reticent to take up the invitation.
88. Despite this issue, the inclusivity of the groups' membership undoubtedly increased the effectiveness with which they were able to support community recovery.

Recommendation 1: Cumbria Local Resilience Forum should identify a broad spectrum of suitably qualified, experienced and empowered persons who could be approached to undertake future leadership roles within Strategic and other Recovery Coordination Groups, engage their interest and provide them with familiarisation and on-going training for that task.

7.1 SRCG coordination with Ministerial Recovery Group (MRG)

89. The scale of the emergency meant that there was significant Ministerial interest in identifying ways in which the Government could assist Cumbria to respond to and recover from the event. During the acute response to flooding, this support was offered at the most senior level by the Cabinet Office Briefing Room (COBR) and through the Lead Government Department (LGD) for flooding: Defra (Defra, 2008, Defra, 2014). Once the response phase was over, however,

responsibility for overall government support to the SRCG passed to the Ministerial Recovery Group (MRG) and the Ministry of Housing, Communities and Local Government (MHCLG)⁹.

90. The MRG is a relatively new institution, which at the time of Storm Desmond had only been activated on three previous occasions (twice for UK flooding and once for the terrorist attack in Sousse, Tunisia). In fact, the MRG is such a new concept that it still does not feature in either the HM Government Concept of Operations (Cabinet Office, 2013a), or other national guidance on emergency response and recovery (HM Government, 2013a). However, LGD status passing from Defra to MHCLG for recovery was already a recognised transition (Cabinet Office, 2011).
91. The experience of working alongside the Ministerial Recovery Group (MRG) highlighted the potential tensions of this new relationship. It was challenging for Ministers in London to obtain the information needed for them to understand the local situation, and so identify the national support and guidance that would be useful, without adding to the pressure on the SRCG and other local recovery structures by frequent requests for detailed data.
92. For example, whilst the intention was good, it was not felt appropriate for the London-based MRG to be suggesting how Cumbria County Council should be operating one-way routes around damaged bridges; such contingencies were felt to always be better understood and developed by the local responders and communities.
93. Such concerns are consistent with national guidance, which states that the principle of subsidiarity should underpin a UK approach to response and recovery ...

“...that is founded on a bottom-up approach in which operations are managed and decisions are made at the lowest appropriate level. [...] The role of central government, devolved administrations and the regional tier is to support and supplement the efforts of local responders through the provision of resources and co-ordination. The central and regional tiers will only become involved in emergency response and recovery efforts where it is necessary or helpful to do so.” (HM Government, 2013a: p.16)
94. However, national-strategic coordination is still essential in order to ensure that there are no significant, unnecessary or unfair gaps in knowledge or support provided across counties and regions affected.
95. Early recovery is inevitably an extremely busy period, and the volume of work involved escalates dramatically as the scale of the incident increases; whilst there will be local knowledge of the recovery challenges, and in many cases also local activity to address these, it can take time for this information to be collated at SRCG level. It is therefore essential for MRG to find a balance between “continual requests” for specific data and allowing the SRCG to develop a strategic overview of recovery needs. Some MRG data requests were perceived as placing unnecessary additional pressure on SRCG, by diverting SRCG capacity from local strategic priorities during a particularly demanding period.
96. Another challenge that became apparent in the relationship between the MRG and SRCG was differing democratic accountabilities. The local authority officers chairing the SRCG and many of its sub-groups are accountable to their locally elected members, whilst staff from government agencies (such as the Environment Agency) are accountable to national government (and are required to comply with ministerial requests). There was initially some

⁹ The government contribution to recovery was focussed through the lead government department for recovery, the Department for Communities and Local Government (DCLG). To ensure the contemporary relevance of its content, however, this final report uses the name of the department following its reorganisation in January 2018 throughout: the Ministry for Housing, Communities and Local Government (MHCLG)

confusion around this relationship. Ministers were understandably more used to working with government agency staff and it was felt, therefore, that they were tending to attempt to direct the work of local authorities in a similar manner.

97. Taking the principle of subsidiarity at face value it could be argued that no problems arise from this situation, because the MRG role is only to “support and supplement” the SRCG and not to coordinate the actual response. However, without clear national guidance on the role of the MRG and how its relationships with local authority-led SRCGs should be understood, this issue continues to present potential challenges.

Recommendation 2: The Cabinet Office and Local Government Association (LGA) should ensure that the definitive role of the Ministerial Recovery Group (MRG) and its relationship and procedures for working with Local Authority chaired Strategic Recovery Coordination Groups (SRCG) is written into national guidance and HM Government Concept of Operations (ConOps) at the earliest opportunity.

98. Nevertheless, the MRG played an invaluable role in supporting Cumbria’s recovery. This dilemma between the MRG’s vital role and its tendency to appear too demanding was clearly expressed by an SRCG sub-group chair:

“[The MRG] is needed. There does need to be a sounding board in Westminster in the Government’s controlling mind that knows it has confidence in the local arrangements and it’s having the right conversations about how it can support them. So, some of the critical actions that were taken this time around, particularly bringing the Highways Agency into the A591 recovery and immediate sums of money into the farm recovery thing and into the homeowner situation and combining the money with the Community Foundation and into some of the early infrastructure stuff was really, really, important and we need that relationship. So, don’t just go back and tell them that ‘they’d like you to just get on with it’, [we] don’t. [We] need to have appropriate oversight.”

Interviewee

99. One option for reducing the amount of work needed to develop and maintain shared situational awareness between the SRCG and the MRG was the suggestion - mooted in many interviews and during the workshop – that the MRG should, in its entirety, take an early opportunity to visit the affected area. Such a visit would allow ministers to obtain critical updates on the situation and contingencies in place, but would also to allow them to appreciate, firsthand, the specific challenges (e.g. geography, topography, access) being placed on organisations.
100. Another option, related more specifically to the MRG’s need to understand the impacts on infrastructure, would be to develop options through which images and video could be streamed to the MRG to illustrate specific challenges (e.g. streaming footage recorded along potential diversion routes, which would clearly show bottlenecks and challenges in a way that a line on a map never could: e.g. see Plate 3, p.50).

Recommendation 3: The Cabinet Office should consider contingencies to allow the Ministerial Recovery Group to visit the affected area during the early stages of recovery, in order that its members rapidly gain a greater situational awareness.

7.2 The MRG’s approach to data

101. A fundamental challenge in the early days of recovery was the need for all stakeholders to understand the impacts of the event. Here the MRG was perceived, by the SRCG and all its sub-groups, to have been too “data hungry”. This was compounded by an apparent expectation that factors such as the number of properties flooded, or bridges damaged, or businesses affected would be straightforward to accurately and rapidly quantify. There was a perception that MRG preferred impossibly *precise* figures (i.e. no uncertainty in the numbers) to *accurate* figures (i.e. numbers that might change as knowledge of the flooding became more detailed).
102. However, given the sheer scale of the event across the county, such quantification was inherently difficult. In fact, the methods to count the affected households, assets and other variables matured iteratively over time.
103. In order to rapidly establish an accurate estimate of the number of flooded households, the Environment Agency led a computer-based analysis of flooding reports, and cross-tabulated this against properties known to be situated on the floodplain – a method that provided a relatively robust figure. However, over time, community by community enquiries by the military, and then house to house enquiries and investigations by district councils and others, progressively produced higher resolution data and refined the total “Households flooded” figure. For example, some homes within an extensively flooded area had escaped flooding due to being on slightly higher ground or having flood barriers installed, whilst other homes outside of obviously flooded areas were not immediately identified. The variation between these figures¹⁰, which was derived purely from the different methodologies adopted, underlines the challenges of producing completely accurate figures early in the recovery process, and to the dangers of regarding precision as a requirement for funding and other support. What this also illustrates is the need for an inherently slower ‘battle rhythm’ during recovery than is required during the intensity of the, life-saving focussed, response period.
104. From this perspective, it could certainly be argued that Cumbria County Council’s approach, of acknowledging the uncertainties in different methods and utilising them as guides, was the most pragmatic in the circumstances (Cumbria County Council, 2016). Notwithstanding that flooded properties continued to be reported for several months – and the general perception that a true number will never be agreed – what using such a range of figures allowed for was an important degree of flexibility in developing the ‘Cumbria Ask’ (see section 8.1) at the earliest opportunity.

¹⁰

Estimates of properties flooded using two datasets (Cumbria County Council, 2016: p.7)				
Source:	District data extracted from MHCLG Portal		Environment Agency	
	Households Flooded	Businesses Flooded	Residential properties flooded	Business properties flooded
Cumbria:	5,319	1,029	6,568	897

105. This pragmatic and open approach allowed a stronger working relationship to develop with the MRG over time, as ministers' levels of trust in the capability of the SRCG to coordinate recovery inputs and outcomes developed.
106. This does not mean that on-going work to develop a 'Flooded Properties App' on the Resilience Direct¹¹ system, or the development of a standardised Flooded Properties form by Cumbria LRF is unnecessary: better data will always improve the delivery of effective contingencies. It simply highlights the fact that data will unlikely ever be perfect in the immediate aftermath of high-impact emergencies and, therefore pragmatic contingencies, supported by best efforts, will always be necessary in conducting needs assessments for affected populations.

7.3 SRCG coordination with Military Aid to the Civil Authority (MACA)

107. Such trust was also enhanced by the way in which the SRCG worked during the recovery period with the capacities and capabilities provided as military aid by 42 Brigade.
108. The military had been heavily involved with the initial response (see acute phase debrief), but also provided capacity and capability to the recovery effort, until their formal withdrawal on 21st December. This support was known as "Operation Shaku".
109. Support included work to record affected communities (on the 'OP. SHAKU District Tracker' spreadsheet), debris clearance from roads and property clearance for affected households. Military staff also carried out preliminary (red-amber-green (RAG) coded) inspections of bridges and Army Engineer divers carried out a number of bridge foundation inspections, as river flow conditions allowed.
110. This military support added significant capacity to Cumbria's recovery effort during its busiest period, and so the success of this MACA engagement should be understood to emphasise the importance of the Ministry of Defence's more "forward-learning" approach to aiding civil authorities, which it has adopted since 2014 (Cabinet Office, 2014).
111. It should also be noted, however, that the Military contingent never lost sight of the fact that their role throughout the incident was one of supporting the SRCG and not leading it. It is also important to note a comment that a senior military officer made in relation to his respect for the SRCG and Cumbria County Council specifically:

"I cannot think of an occasion when Cumbria County Council could not have done these tasks themselves. There was nothing they didn't understand"

Senior Military interviewee

"It has been a privilege working with you and your team over the past 10 days. Your organisation is agile and highly effective at dealing with crises of this magnitude – you put the Army's contribution to shame!"

Senior Military Officer's correspondence to Cumbria County Council

112. These observations are particularly interesting in relation to comments, made at the Recovery Workshop and elsewhere, that demonstrated conflicting perceptions about the use of Military assets during recovery operations. From a public perspective, there appeared to be a perception that things could have been achieved more effectively with greater military deployment. However, from an SRCG perspective, comments were made that reflected a

¹¹ <https://www.ordnancesurvey.co.uk/blog/2017/02/report-flooded-property-app-emergency-responders/>

considerable degree of confidence, in respect to the possibility of assessing whether internal capabilities could be improved to a point where the Military need not be relied upon at all¹².

113. From a civil protection perspective, the latter comments hint strongly at a blossoming realisation about the importance of contingency planning and resilience building across the county's organisations and networks. Similarly, any associated reduction in reliance on MACA assets to 'come to the rescue' would also be encouraged by the Ministry of Defence, given the considerable competing priorities our forces face¹³.

7.4 SRCG collaboration with Ministers and MPs

114. In addition to the collaboration with the MRG, which covered all flooded areas of the UK, Cumbria's SRCG members and key elected members also liaised directly with Rory Stewart OBE MP, the designated Flood Envoy for Cumbria, in "Bilateral Meetings". As MP for Penrith and the Border, and Floods Minister, Rory was familiar with the local context, and accordingly, could mediate between the county, the Ministerial Recovery Group (MRG) and the government departments, in order to advocate directly for the provision of appropriate resources.
115. Sue Hayman, MP for Workington, was appointed as Shadow Floods Minister during recovery, and used this role to engage the insurance industry in negotiations in direct response to Cumbrian businesses' concerns that Small and Medium-sized Enterprises (SME) were not included in the industry's FloodRe™ flood insurance scheme (see section 8.7.1). This lobbying contributed to commercial flood insurance scheme being launched by the British Insurance Brokers Association (BIBA, 2016).
116. Sue was also vociferous in ensuring the Government settled Allerdale Borough Council's Bellwin scheme restitution (i.e. Allerdale Borough Council's claim to government for its emergency response costs: Figure 6)

¹² Rather candidly, several interviewees admitted that they had kept military personnel away from certain tasks, because of their [to paraphrase] "greater confidence in local-authority working procedures" (e.g. relating to staff safety)

¹³ NB. MOD guidance on MACA requests is very clear that "Military resources cannot be guaranteed to be available on demand". The fact that the UK Stand-by Battalion in December 2015 was 42 BDE., which is situated in the north west, undoubtedly contributed to the relative ease and speed with which it was able to respond. This need not have been the case if the stand-by battalion had been located further away.



Figure 6: Facebook post by Sue Hayman MP referring to payment of Allerdale Borough Council's Bellwin Scheme claim

7.5 Cumbria County Council Member Infrastructure Group

117. Due to the scale of damage to the County Council's own infrastructure (roads, bridges, schools, corporate buildings, etc.), a cross-party members' group was set up to support infrastructure recovery. Comprising the leaders of the three political groups (under the chair of the Leader of the Council) and the portfolio holder, and working with key senior officers, this group sat in parallel to the SRCG and Infrastructure sub-group.
118. It was essential that critical infrastructure was rapidly repaired, and to achieve this at speed, Cumbria County Council members delegated extraordinary powers to their Chief Executive. The cross-party members' infrastructure group provided oversight of this process. This enabled senior officers to be confident that they had members' support for their decisions, and allowed infrastructure recovery projects to progress quickly.
119. In describing the experience of operating under the oversight of this cross-party group, a senior officer commented:

"It's a lesson I'd really want to pass on to others as a positive."

Recommendation 4: The Ministry of Housing, Communities and Local Government (MHCLG) and Local Government Association (LGA) should discuss with Cumbria's Councils, how lessons from the creation of cross-party groups of Elected Members to work alongside Strategic Recovery Coordination Groups (SRCG) may be integrated into guidance to improve future recovery processes

7.6 The wider role of Elected Members

Cumbria has multiple tiers of local government, with a County Council and six District Councils. Many, but not all, of Cumbria's communities also have a Parish or Town Council.

Each of these councils is governed by Elected Members (councillors), who are elected to serve a geographical area, and are so linked directly into the communities they serve. With the support of council officers at County and District levels, these councillors form the core of representative democracy in the county.

During the response to and recovery from Storm Desmond, councillors from all tiers worked to support their community. During response this involved acting as focal points within their communities: both assisting the emergency services to identify vulnerable constituents and providing information for constituents about the response arrangements that were being put in place. Some councillors described frustration in being unable to contact the emergency services' Gold/strategic coordination group. However, given the scale of both the incident and the structure and complexity of the response operation, this communication difficulty was unsurprising. Additionally, it validated Local Government Association (LGA) guidance, which suggests that during the response period councillors should regard their responsibilities as local, rather than strategic, with a focus on (e.g.):

“...being [in their community] to identify the needs of individuals and the wider community and feeding them into to the appropriate part of response organisation via officers representing the council” (LGA, 2017: p.20)¹⁴

Without doubt members engaged at a local level, with many working directly alongside the council officers and assisting the Bronze/operational cells in their areas, as well as directly supporting members of their community “on the ground”.

As the recovery commenced, councillors found themselves drawn into four primary supporting roles:

- 1) Acting as a voice for as representatives their communities. This occurred at a number of levels, with councillors engaging on the national stage, by travelling to the Houses of Parliament to advocate for additional funding for Cumbria, as well more locally (e.g.) by directly supporting and facilitating local communities' own recovery initiatives.
- 2) Acting as a representative of their communities, which is the core role of councillors. From this perspective councillors were keen to express that they did not feel it was their role “to smooth issues over”, but rather it was their role to ensure any “*cracks in the recovery effort were exposed*” and that solutions were developed wherever possible. This role was described as often challenging, as it required councillors to act as brokers between their communities and authorities. This meant communicating in a way that balanced the communities' need for rapid recovery against the fact that the magnitude of the challenge faced by the authorities inevitably resulted in many recovery operations (e.g. bridge repair) being prioritised.
- 3) Acting as advisors to their communities through a networking role and facilitated by their connectedness with recovery structures. This included performing tasks such as: assisting with paperwork; signposting constituents to services; matching needs to resources (e.g. by

¹⁴ LGA (2017). *A councillor's guide to civil emergencies*. London, Local Government Association.

connecting householders with appropriate charities) and; providing physical and emotional support.

- 4) Providing community leadership, through the chairing and/or engagement with the local recovery groups and the Member Infrastructure Group (see section 7.5).

These four principal roles clearly align with those identified in Local Government Association guidance¹⁴. However, councillors also praised the training they had received under *The 21st Century Councillor* training programme¹⁵, which had prepared them to operate through processes of facilitation and brokering, rather than by taking on responsibility for all the work in the communities themselves. They suggested this allowed them to support individuals and groups very effectively and provided real community benefits by empowering these communities to become their own advocates. However, regardless of the success of this sharing of responsibility councillors were unanimous in describing the scale and challenge of the task they have been involved in and the fact that they are very conscious that they will be monitoring on-going issues and supporting constituents through their Storm Desmond recovery for months and, potentially for some, years to come.

¹⁵ Mangan, C., et al. (2016). *The 21st Century Councillor* (ESRC project report). Birmingham, UK, University of Birmingham, Public Service Academy.

8. SRCG Sub-Group Activity: December 2015 – mid-2017

120. The next section explores the roles and activities undertaken by the nine SRCG sub-groups between December 2015 and mid-2017.
121. It should be noted, that whilst all groups had their principal work streams, many of those work streams involved considerable collaboration across groups to bring outcomes to fruition.
122. This interconnectedness is illustrated in Table 1.

	Finance & Legal	Infrastructure	Business & Economy	Health & Welfare	Schools & Learning	Environment	Housing	Community Recovery	Communications
Funding, Financial Support & 'Ask of Government'	●	X	X	X	X	X	X	X	X
Utilities	X	●			X		X	X	X
Bridges	X	●	X	X	X	X		X	X
Structures, Geo Tech, Lighting, Signs & Furniture	X	●				X		X	X
Drainage & Culverts	X	●				X	X	X	X
Transport & Public Access	X	●	X	X	X			X	X
Property	X	●			X	X	X	X	X
Business Advice, Grants & Economic Support	X		●	X		X		X	X
Economic Infrastructure	X	X	●					X	X
Health & Welfare	X		X	●		X	X	X	X
Adult Services	X	X		●			X	X	X
Schools, Learning & Children's Services	X	X		X	●		X	X	X
Waste	X		X			●	X	X	X
Historic & Natural Environment	X	X	X			●		X	X
Animal Welfare	X		X			●		X	X
Public Rights of Way (PROW)	X	X	X			●		X	X
Housing	X			X		X	●	X	X
Community Recovery	X	X	X	X	X	X	X	●	X
Communications & Campaigns	X	X	X	X	X	X	X	X	●

Key:

- Lead Sub Group
- X Sub Group Interface Required

Table 1: Interfaces and key dependencies – to deliver the strategic and tactical objectives managed through the SRCG.

8.1 SRCG: Finance & Legal Sub Group:

Purpose

- To assess the financial and legal implications for the affected area and provide advice to the SRCG.

Role

- To explore different streams for financial aid
- To monitor all recovery work expenditure and report to SRCG
- To consider any litigation, criminal, or public enquiry issues.

“Support given to individuals across the piste was unprecedented and we’re unlikely to see same level of support again”

Recovery workshop delegate

“We were and still are very grateful for the [CCF grant] money. It helped us buy emergency goods that we needed and also day to day food/clothes as we didn’t know where our next meal was coming from and had no savings to fall back on.”

CCF Grant Recipient¹⁶

123. Even as the storm was passing, it was clear that the financial resources available within the county would likely be insufficient to achieve effective recovery at anything like the speed required. The storm effects had not just been “unprecedented” from a rainfall perspective and in terms of the wide-area impacts they had wrought; they had also been unprecedented in terms of the pressures that the process of recovery from those impacts would place on the public sector, which would have to oversee, coordinate and facilitate that recovery. Accordingly, it was vital that this message was projected to government by the SRCG.
124. Therefore, as the locally shared understanding of these impacts was developed by the SRCG it was then clearly communicated to first COBR and then, following transition to recovery, to the MRG and other Ministers and MPs via meetings, the Commonly Recognised Information Picture (CRIP) updates and later through the MHCLG ‘Flooded Properties’ Portal. As a result, this message was heard clearly by Ministers and MPs and promises of significant financial aid were rapidly made.
125. As such offers obviously consisted of public money they would undoubtedly, and quite correctly, involve associated requirements for audit in due course. Therefore, as part of the overall SRCG structure a Finance and Legal sub-group was convened immediately following the

¹⁶ Comments from “CCF grant recipients” come from the independent evaluation of the CCF Cumbria Flood Recovery Fund, and link: <https://www.cumbriafoundation.org/2017/12/04/making-difference-cumbria-flood-recovery-fund-2015/>

event to coordinate financial and legal activities across partners including the district councils, County Council, Police, Health and the Lake District National Park.

126. Principal in the success of the county's grant draw was Cumbria County Council's development of the "*Cumbria Ask*" – Cumbria's combined request for national government funding to support recovery, based on a spreadsheet that acted as a central record of all departments' and organisations' cost assessments. The spreadsheet was updated as the impacts and costs became clearer, allowing an iterative, transparent and evidence-supported process to develop. This also gave all involved stakeholders the opportunity to ensure that all costs were being developed realistically and without double-counting or omission of key variables. As a result of this unified approach to cost assessment, the MRG was able to trust the figures that were generated. This in turn gave government the confidence to offer large grants quickly.
127. The Cumbria Ask was clearly successful, enabling the Government to substantively assist in funding recovery, by providing Cumbria with grants totaling approximately £164.5m, including the £117.7m Infrastructure Grant.

Recommendation 5: Cumbria County Council and the Ministry of Housing, Communities and Local Government (MHCLG) should develop guidance for Local Resilience Forums outlining methods for the creation of centralised "*Cumbria Ask*" style cost assessments.

8.1.1 Grants available

128. Before discussing the issues that arose in relation to the management of grant schemes in detail, Table 2 outlines the various schemes that were made available to those affected. This table is split between monies distributed in support of government schemes and, separately, donations (and government match funding), which were managed by Cumbria Community Foundation (CCF) (see Section 8.8).

8.1.2 Block grants and the avoidance of opportunity costs

129. As well as reducing the time needed to develop infrastructure repair projects compared to a case-by-case approach (see section 8.2.1), the provision of almost £120 million of government grants to fund this programme meant that the County did not suffer unnecessary impacts on its 'business as usual' capital investment programme. Delays in planned capital works were incurred but in balance, this allowed for more effective planning for delivery of flood recovery schemes that integrated with planned maintenance activities. The County Council did make available £2.57m of its own capital resources immediately to support the flood recovery programme.
130. Fortunately, due to the relationships developed with government and the clarity of the scale of the issues being faced, early recognition of the funding that could be required and the provision of significant value grants early on in the discussions supported the ability for the Council to continue with its existing capital programme activities.

Recommendation 6: The Government should consider bulk grants as the favoured mechanism through which to support local authorities facing extensive repair activities.

Table 2: Principal recovery grant-scheme funds available for Cumbria

Government Grant		Amount distributed: as at 21/06/2017
Government Emergency Assistance (Bellwin Scheme)		£2,185,838
Infrastructure Grant		£117,700,000
Survey Work – Revenue Grant		£2,000,000
Strategic Business Grants		£7,000,000
Business Flood Recovery Grant scheme (FRG) (£2,500 per affected business)		£4,948,000
Council Tax relief		Allerdale DC: £758,599 Carlisle CC: £2,154,538 Eden DC: £264,389 South Lakeland DC: £1,181,971
Community Grant (£500 per affected household)		£2,335,800
Business Rate Relief		£3,023,273
Property Level Resilience (PLR) Grant (max. £5,000 per property)		£8,788,498 (June 2017)
Charity Donation match-funding to CCF (see below)		£4,700,000
Farming Recovery Grant (up to £20k per farm)		£5,043,720 (Est: 21/04/2017)
European Funding – Rights of Way		£3,000,000 (to LDNPA) £500,000 (to County Council)
Cumbria Community Foundation (CCF) Grants		Amount collected
Total fund accumulated: including £4.7m Government match funding		£10,293,821.86
Hardship Grants	Phase 1: (December 2015): Respond to immediate need and high volume of applications (1,180 received in first three weeks); grant awards £500-£1,000; vulnerable groups prioritised; quick turnaround. Phase 2: (February 2016): Recovery – supporting people to return home (uninsured recovery costs, loss of income); grant awards up to £6,000; priority given to uninsured and vulnerable groups.	
Resistance & Resilience Top-Up Grants	Up to £2,000 per household to top-up Government Property Level Resilience (PLR) scheme	
Community Grants	Phase 1: Strategic grant awards to organisations supporting recovery, including: British Red Cross, Citizens Advice, Age UK, Churches Together and community flood recovery centres. Recovery costs funded retrospectively. Phase 2: (January 2016): Recovery – repair of community facilities. Phase 3: (May 2016): Resilience and community rebuilding projects, including: community resilience schemes, community emergency planning groups and emotional wellbeing.	

8.1.3 Developing grant schemes

131. Due to the skills embedded in the Finance and Legal sub-group, grant schemes were developed quickly and effectively once the provision of grant funding had been agreed in principle. However, the delay in government departments providing clear guidance on eligibility led to unfortunate consequences. Primary within the confusion was the issue of whether “flood-affected” or “flooded” properties would be eligible for grants.
132. There is a critical difference between these two descriptors. Flooded properties are obviously those where water will have crossed a threshold, although even in this sense ‘threshold’ is debateable (e.g. is a property flooded if water enters an attached garage, but not the residential space?). However, to be ‘flood-affected’ can be considered much more subjectively. Is, for example, a rural property flood affected if its structure is not affected by water ingress, but its residents are isolated due to the severing of road access?
133. Initial promises for funding support for “flood-affected” were made by key figures in government at an early stage. This included the offer of a small business grant, which the Business and Economy sub-group developed and invited applications to the scheme. It was only after the grant had been publicised that the eligibility criteria were changed, by government, to include only “flooded” businesses. As the grant had already been offered, it was decided by the Council that it was too late to change the application rules due to the negative publicity this would cause and the fact that government had agreed the schemes prior to them being released. As a result of the potential impact on public confidence that this apparently simple change in criteria would have had, following negotiation, government agreed to provide an additional £400k of grant funding to support the original ‘flood-affected’ definition in respect of the Business Rate and Council Tax scheme and provided £2.378m in respect of the Business Support scheme.
134. Another issue in relation to the designation of flooded/flood-affected, related to the provision of the ‘Community Grant’, i.e. the £500 payment to every flooded household. Acting on the provisional postcode information provided by the Environment Agency, and an instruction from government to “get these payments out as quickly as possible” and before Christmas (Interviewee), finance officers developed this grant scheme and rolled it out. The roll out was regarded as a success, with the vast majority of properties within the Post Codes that had been flooded receiving a £500 rebate to their account via a reversed direct debit for Council Tax payments. 60% was paid out before the end of December 2015 and 52% before Christmas Eve.
135. Unfortunately, the speed with which this scheme was implemented meant that the actual number of flooded properties had not yet been accurately verified (i.e. the early calculation of flooded properties relied on desk-based approaches, which had not yet been confirmed by more labour-intensive doorstep methods). In South Lakeland, this led to a situation where a small number of residents who were awarded the grant, but who did not consider their properties had been flooded, returned the money. This should clearly be regarded as an example of an altruistic, honest and considered response by responsible householders. However, the story was picked up by the media in South Lakeland and unfortunately, ended up being displayed in a negative light (Gosden, 2016), which suggested South Lakeland District Council (SLDC) had been in error to act as it did, when in fact it was only responding to the information and instructions provided by government and its agencies.
136. Ultimately, confusions such as these and that of the redefinition of “flooded” from “flood-affected” may well have contributed to undermining the perceived efficiency of the grant roll outs and introduced *reputational risk* to stretched district councils, who were unfairly portrayed in public as apparently making early unforced errors.

137. The administration of grants by district councils prior to the development of government-validated eligibility conditions, whilst also under government direction that it should be done “as quickly as possible”, also created *financial risk* for the local authorities. These risks resulted directly from promises made to the communities by their local authorities who trusted that instructions from government would not change.
138. The fact remains, however, that in relation to the PLR grant specifically, different district councils have applied slightly different criteria and/or application-checking procedures from each other, regardless that a procedure had been developed by the Finance and Legal sub-group. From the review’s perspective, this appears to have resulted in something of a ‘postcode lottery’ in terms of people’s differing experiences of the application process.
139. Given that Cumbria prides itself on its strong cultural identity, it seems odd that those affected by Storm Desmond appear to have had potentially quite different experiences in their dealings with recovery bureaucracy. Accordingly, and even if only from a fairness perspective, as flooding is likely to remain a high risk for Cumbrian communities in the future, a recommendation appears appropriate to confirm *and implement* clear universal protocols for the administration of household and business-level grants across the county.

Recommendation 7: The Ministry of Housing, Communities and Local Government (MHCLG) (as Lead Government Department for recovery) should work with the Local Government Authority and councils in developing universal protocols for all recovery-related grant schemes it will fund. Protocols should be particularly precise in defining eligibility criteria, where the schemes’ target claimants are individual households and/or businesses.

Recommendation 8: Government should decide which recovery grant schemes will be funded into the future and create single points of contact for Local Resilience Forums to contact in relation to each grant’s administration.

8.1.4 Local Authority capacity in grant administration

140. The administration of a complex range of grants by local authority staff required considerable effort in addition to these personnel also needing to maintain a ‘business as usual’ administrative role. Where resources allowed, staff were seconded to recovery roles, whilst colleagues carried out day to day work. However, with no extra money available to build such capacity to focus staff solely on recovery issues, the administration of recovery work inevitably took different forms. In addition, many of the staff had been directly affected by the flooding and were managing those disruptions to their lives as well as their extra workloads.
141. Accordingly, one repeatedly recorded observation during this review has been the perception across finance departments of the need for government to allow either top-slicing of recovery grant funds, or the provision of additional discrete administration costs, in addition to grant funding. Either would enable local authorities to more effectively and fairly support and deliver the bureaucratic claims process, whilst they also provided continuity of service against all other statutory commitments.

Recommendation 9: Government should reconsider its current practice of refusing to provide additional funds in grant packages for administration purposes. The provision of such funds would genuinely assist local authorities, as it would reduce the considerable pressures placed on their capacity to maintain business continuity, whilst enabling them to more effectively support complex, vulnerable communities.

8.1.5 MHCLG capacity to assist Local Authorities

142. It was gratifying to hear that the assistance offered to the Finance and Legal sub-group by MHCLG was regarded as excellent, with the efforts of the small team assigned to help local authorities develop and deliver grant schemes being roundly praised. Again, however, the issue of resourcing proved a challenge. For, whereas, whilst it was the lack of funding for administration costs that undoubtedly impacted local authority performance, it was the significant staff 'churn' at MHCLG which reduced the effectiveness of collaboration.
143. This churn made it particularly hard to develop and maintain a coherent shared situational awareness, between authorities and MHCLG. This inevitably reduced the clear shared understanding of what had been done and what needed to be done in relation to the development and delivery of quite challenging grant processes. It also introduced frustrations as the decision makers on the queries were not in attendance at the meetings and the same issues had to be explained multiple times to different MHCLG reps.

Recommendation 10: The Ministry of Housing, Communities and Local Government (MHCLG) should ensure continuity in its delivery of administrative assistance to emergency-affected authorities. One aspect of this is to retain subject matter experts in place for the duration of grant schemes, or to improve handover procedures between staff.

8.1.6 Bellwin scheme

144. The Bellwin scheme "*provides emergency financial assistance to local authorities in England. Such assistance is usually provided in response to an emergency caused by the weather, but relief may also be available in other circumstances*" (Sandford, 2015). The scheme is designed "to recompense authorities for the costs of emergency measures undertaken to safeguard life or property, or to prevent further suffering and inconvenience locally, during exceptional circumstances." Accordingly, costs accrued during long term recovery are not covered by Bellwin. However, having access to compensation for response costs does reduce the pressure on other budgets.
145. Following Storm Desmond, the Bellwin guidance was not immediately available, because MHCLG were reviewing the guidance and a considerable delay accrued before it became available. Hence initial estimates of what costs could be recovered from Bellwin could not be confirmed by MHCLG officials.
146. The affected local authorities all submitted Bellwin applications, which is unsurprising given the scale of the impacts. However, due to resilience measures and financial contingencies put in place since 2009 and aided by the fact that it has a more specific remit than the local authorities, Cumbria Constabulary did not need to submit a claim. Regardless of the distinctions between Police and other authorities, such an outcome clearly indicates notable practice on the part of the Constabulary.

147. The perceptions of Bellwin's overall usefulness, however, were generally poor, given the nature of the events the county had faced. Bellwin is designed to compensate for response costs from single emergencies where a threshold of impact is crossed or where multiple incidents cross the threshold. For Cumbria, the localised impacts of Storm Abigail in November did not cross the Bellwin threshold and hence were not reported. Accordingly, when Storm Desmond struck, the county was not able to retrospectively include the costs incurred in respect of Storm Abigail and had to recover those costs from its own reserves. Following Storm Desmond, this arbitrary activation rule was exposed as slightly ridiculous, given that the Abigail response had been mirrored, even if to a lesser extent, yet only the December costs had met the scheme criteria.
148. It has been suggested, therefore, that in light of recent experience of impacts from series of hazards rather than single hazard occurrences (e.g. winter 2013/14 and 2015/16 storms), Bellwin rules should be revisited in order to ascertain whether it would be more practical to adjust the scheme criteria in order that it could:
- be open for retrospective claims if hazard series occur in a way that accumulates response costs disproportionately within the same local authority area, or
 - be notionally activated concurrently with the initiation of any Strategic Coordination Group (SCG).
149. Such contingencies would provide flexibility, in that they (1) would allow retrospective funding of lesser costs from an initial activation if they subsequently accumulated into much larger costs if a series of compounding events transpired and (2) would provide SCGs with an additional degree of confidence that any actions taken to deploy potentially costly interventions at an early stage of a developing incident would likely be compensable at a later date [obviously following due scrutiny of the legitimacy of those decisions].
150. A second issue with Bellwin was that its response focus meant that no account could be made in the authorities' claims of the considerable waste management commitments which the councils amassed during the storm clean-up (see section 8.6.2). This issue was also raised by several local authorities during the Cabinet Office winter storm debrief workshop in September 2016. There, it was suggested that Bellwin should be extended in order to encompass compensation arrangements for predictable recovery costs (such as waste clearance and landfill tax) rather than purely response costs. The Government view is that as the landfill tax is paid to government this would just be recycling of funding, but for local authorities the amounts are significant and are experienced as legitimate emergency-related costs.

Recommendation 11: The Government should review Bellwin Scheme rules in view of being more flexible and open to compensating for the impacts of any emergency sufficient in scale to demand the activation of a Strategic Cell and/or to retrospectively compensate hazard losses from the trigger event of what subsequently becomes a series of emergencies.

Recommendation 12: The Government should review Bellwin Scheme rules in view of including arrangements to compensate for the remediation of longer-term primary and secondary costs of hazards and emergencies (e.g. longer-term clean-up, landfill tax).

8.1.7 Managing grants fairly and coherently across a county with a two-tier authority

151. Whilst it was deemed important for grants to be managed at the local level by district councils, concerns were raised that the resulting claims process (or rather processes), meant that different claims procedures applied to different people, simply as a result of the postcode of

their home or business. This was despite the fact that from early on it was an agreed principle within the Housing sub-group that all schemes rolled out by the district councils affected would be applied consistently.

152. This phenomenon was particularly evident in the administration of the Property Level Resilience (PLR) grant. With different districts applying slightly different claims checking and validation criteria to applications for this grant (e.g. grant application forms all varied slightly). These differences tended, however, to be in the practical application of the agreed overall scheme rather than changing the scheme itself. As one interviewee suggested: *“In a two-tier area it is sometimes difficult to ensure that Districts don’t interpret application of schemes differently”*.
153. An added complexity was introduced in that the Housing sub-group accepted responsibility for the practical delivery of the PLR scheme, whilst the Finance and Legal sub-group maintained ownership of the overall grant principles. This division of labour caused some confusion early on and it was realised that clarity of ownership of delivery of the grants by the various sub-groups was an important consideration in the management of the overall delivery.
154. An obvious solution to reduce any apparent or perceived unfairness in grant awards would be to apply the single validated and district councils’ agreed protocol through a centrally administered team, rather than through the currently slightly varied district council centred systems.
155. It will be important, however, to build such an administrative system on plausible assumptions in relation to the resources that will be available to deliver it (e.g. dependent on whether additional funding for grant administration costs will be likely). Accordingly, it is important for MHCLG (as Lead Government Department for Recovery) to be involved in ensuring the capabilities and capacities of such a team correctly reflect the contemporary government position on such matters.

Recommendation 13: Following emergencies affecting more than one District Council area, the Ministry of Housing, Communities and Local Government should resource a central recovery grants unit, which could administer and coordinate all grant schemes with uniformity, whether delivered at County or District resolution.

NB. Grant deadlines will be discussed in Section 8.7.8

8.1.8 Data protection issues

156. Two recommendations were made in relation to data sharing during the acute phase of the Storm Desmond response:
 - a) Cumbria Local Resilience Forum should develop a framework and short guide for staff that outlines data protection considerations that should be implemented during emergency response and recovery.
 - b) Cumbria Local Resilience Forum should explore options for extending its protocols for setting up a casualty bureau/cell in order to encompass contingencies for the identification and management of incident-affected people during wide-area emergencies.

(Deeming, 2016a: p.37-38)

157. These recommendations were based on inconsistencies experienced across the county in the way that the sharing of personal data had been handled during the response phase.
158. Recommendation (a) relates the importance of informing staff about the implications of data protection law during emergencies, and of lawful reasons and routes through which they can share data, or expect it to be shared.
159. Recommendation (b) relates to the need for the LRF members to consider whether they need to set up a central bureau or cell (i.e. a single-point-of-contact) to collate and manage a single database of all emergency affected individuals/households, which would be accessible by all relevant partners. Such a database would also be easier to use to track displaced households; a key challenge for those trying to support the flood-affected.
160. These recommendations were felt to be important because there appeared to be confusion during the response activity in relation to which data was lawful to collect and to share and which were not.
161. Compliance with data protection law during recovery was not, however, uniformly problematic. Successful data collection was achieved through the use of instruments, such as the 'Gateway' registration form, which was developed in the South Lakeland area by Age UK and its partners, and used across other districts.
162. There are a number of circumstances in which the Data Protection Act 1998 allows the processing, including sharing, of personal data, but two are particularly relevant during recovery. The first is that "*the data subject has given his consent to the processing*"; the second is that it could legitimately be considered as "*necessary to protect the person's vital interests*".
163. In relation to the former, the key element of the Gateway form (Appx. 4) that should be widely emulated to reduce data protection issues is, therefore, the requirement for the registrant to sign a disclosure agreement. This allows the sharing of personal details to take place in order to support the registrant during recovery. All organisations collecting personal data during recovery should consider such a disclosure agreement, supported by a data sharing agreement between organisations.
164. In respect to the latter, processing of data as "*necessary to protect the person's vital interests*" is clearly applicable in many situations during the acute response, where it may be necessary to save life, but it is likely to be harder to demonstrate that it applies to many recovery activities.
165. However, the Civil Contingencies Act places a duty on Cat 1 and Cat 2 responders to share information (explained further in Box 3) that extends into recovery, and thus this does allow some data sharing during this phase.
166. Unfortunately, focussing specifically on emergency-management doctrine, it appears that neither the Civil Contingencies Act (CCA) nor the government guidance on data sharing says anything *explicit* about sharing data with other non-Responder partners, even if the sharing is directly related to an emergency (i.e. recovery is clearly regarded as part of an emergency in the same guidance).
167. All the guidance suggests in relation to data issues outside the relatively straightforward responder-to-responder sharing is:

"You should seek advice where you are in doubt – though prepare on the basis that you will need to make a decision without formal advice during an emergency." (HM Government, 2007)
168. This is all very well, but if recovery is to be considered as a part of an emergency (which it quite clearly is in this guidance), then there needs to be much clearer advice on how data should be shared with other partners, and particularly those in the third sector and communities, whose role is not effected during the confusion of response, but in the slow-time of the weeks and

months that follow; as individuals, households and communities slowly get back on their feet (e.g. Flood Advice Centres; Citizens Advice; Churches Together).

Box 3: Quotations from *Data protection and sharing guidance for emergency planners and responders* (HM Government, 2007)

- 1) “**2.19** For personal data to be fairly collected, data subjects should be informed of any potential disclosures of their personal data and the potential uses of this when information is obtained directly from them. This is described as ‘fair processing’ and the details can be stated in relatively broad terms and need not be in writing.

NB. **Simply stating** that the information may be passed to other government agencies and their partners for use in an emergency response or recovery context is sufficient.” (p.14 emphasis added)

- 2) “**3.2** Though the key law governing data protection is *the Data Protection Act 1998*, clear legal power to share data is found in secondary legislation made under the Civil Contingencies Act 2004. *The Civil Contingencies Act 2004* (through the regulations made under it) **places a duty on** Category 1 and 2 responders, on request, to share information relating to emergency preparedness/civil protection work **with other Category 1 and 2 responders**. This duty relates to the preparedness, response and recovery stages of an emergency.” (p.17 emphasis added)

169. Obviously, data sharing with private sector businesses would be a different matter (i.e. there could be clear issues in relation to providing companies with competitive advantage).
170. Although a data sharing agreement was put in place by the SRCG, and disclosure agreements were included on the Gateway (and other) forms, some organisations reported a reticence to share data with crucial community-based partners. This had an impact on organisations (for example, a lack of information on flooded properties made it more challenging for Cumbria Community Foundation to assess the validity of flood grant applications) and on people who had been flooded (who were sometimes asked for the same information by multiple organisations who did not have access to each other’s datasets).

Recommendation 14: Government should define additional data-sharing guidance, and if necessary legislation, to empower responders who may be required by circumstances and/or by the best interests of an emergency-affected public, to share information with non-responder partners operating during response and long-term recovery.

Guidance should include information and advice for local authorities on developing:

- ...data sharing agreements (inc. third sector & community)
- ...registration forms
- ...spreadsheet/database templates
- ...agreement on the designation of the Data Controller

Recommendation 15: Cumbria Local Resilience Forum (CLRF) members should define additional data-sharing procedures to best empower responders who may be required by circumstances and/or by the best interests of an emergency-affected public, to share information with non-responder CLRF partners operating during response and long-term recovery.

Procedures should include the implementation of:

- ...data sharing agreements (inc. third sector & community)
- ...registration forms
- ...spreadsheet/database templates
- ...agreement on the designation of the Data Controller

8.2 SRCG: Infrastructure Sub Group:

Purpose

- To provide a focus on infrastructure issues emerging from the emergency.
- To coordinate an asset register of all public assets impacted.
- To carry out an impact assessment of the infrastructure and assess funding requirements for repair.
- Plan and implement temporary and permanent re-instatements of infrastructure.

Role

- Roads and bridges checked, made safe and capacity restored temporarily to provide acceptable levels of transport access (including all drainage, street furniture, lighting and signage)
- Enable access for all emergency and essential transport activity to take place according to need.
- All public buildings and structures checked, made safe and / or access enabled
- Utilities securely reinstated initially to all essential health, security and economic assets and then to all other business, social / community and domestic premises.
- All modes of public transport optimised to reduce pressure on roads by private cars and to facilitate the free movement of people and goods.
- Port of Workington opened for limited access and then full access by road, rail and sea.
- Slopes and geo-tech surveyed, made safe and plans in place to stabilise long term.
- Permanent re-instatement of all roads, bridges and infrastructure agreed, funded and scheduled.
- Telecommunications reinstated.

“My trip to work was quadrupled with all the bridge closures and I was struggling to make ends meet with fuel costs along with all my other bills. As much as the money helped, I was still left in the red each month for about a year or more.”

“I am grateful, as without the [CCF] grants I would not have been able to keep in touch with my remaining friends, I am 90 and there was no public transport to Irthington or Burn Rigg that I could access, and I was able to use the volunteer schemes which were affordable.”

CCF Flood Grant Recipients

171. One of the greatest challenges to Cumbria following Storm Desmond resulted from the impact on infrastructure. The damage to roads, bridges, schools and corporate buildings seriously threatened the county’s ability to recover quickly to a state of relative normality. Accordingly, the development of an effective and efficient repair programme was essential. This task fell to the Infrastructure sub-group.
172. Whilst the workstream of this sub-group included oversight of all infrastructure recovery, certain elements in this stream drew more significantly on the capacities and capabilities of Cumbrian organisations. This section discusses these key issues.

173. The asset inspection and repair programme that was initially developed by the Infrastructure sub-group, including work by the Army contingent from 42 Brigade, focused on taking a risk-based approach that bore many practical objectives to support affected communities as quickly as possible (e.g. carrying out bridge inspections rapidly in order to get them open to traffic wherever possible). Also, from an outward-looking perspective, there was a need to ensure the county remained attractive to tourists and that business confidence was not undermined, i.e. there was a desire to communicate that Cumbria was returning to an ‘Open for Business’ status as soon as possible.

8.2.1 Funding the Cumbria County Council Capital Repair Programme

174. One of the primary lessons that emerged in relation to the infrastructure damage, and which illustrated something genuinely learned from 2009, concerned finance. As the scale of the physical damage to the County’s networks, hubs and public buildings became clear, it was obvious that repair costs would run into many tens of millions of pounds.

175. Until relatively recently, government standard operating procedures had determined that a programme of recovery works needed to be developed on the basis of an impact assessment. However, each project within that had then to be costed individually, with funding needing to be sought on a case-by-case basis – an approach that is enormously expensive in time and planning resources. As a direct result of this regime, the flood damage repairs from 2009 had still been ongoing alongside day-to-day maintenance work into 2015.

176. However, government thinking shifted following 2009 and other floods (notably the winter floods of 2013/14), and so following Storm Desmond the SRCG and its Infrastructure sub-group were encouraged to collaborate with the Department for Transport (DfT), the Ministerial Recovery Group (MRG) and trusted contractors, in order to agree to the scale and payment of a lump sum. This lump sum was intended to encompass all key elements of the transport infrastructure repair without the need for individual business cases. The bid was successful and £117.7m was awarded to Cumbria County Council’s Highways Capital Programme, with an additional £2m revenue grant for initial survey work.

177. This provision of so much up-front funding clearly reflected the degree of trust that government had developed, both in the SRCG’s ‘Cumbria Ask’ process and in the SRCG’s collaborative approach to dealing with other key partners. Importantly, the award of the grant was regarded as a crucial factor in supporting government confidence that plans could be rapidly enacted to bring elements of the county’s infrastructure back into operation as quickly as possible. This perception was best illustrated by the comments of two interviewees:

- *“Austerity has resulted in a situation where if the business case approach had been necessary [as in 2009], Cumbria County Council would simply not have been able to cope with the repair workload. We couldn’t have delivered a tenth of what we could have delivered” Interviewee*
- *“I felt the officials in the Department [for Transport] had learned from 2009. We didn’t have to negotiate particularly for this approach, the Department were fairly clear from day 1 that what they wanted to do was get the money into the system and get the recovery built and that they would be performance managing us by results not by projects” Interviewee*

178. Despite the provision of almost £120m in grants and the confidence this gave in enabling the development of a comprehensive recovery programme, the speed at which repairs can be carried out has been restricted by capacity and the availability of specialist capabilities.

179. However, by end of the 2016/17 financial year, a total of £25m had already been spent on repairs to bridges and roads alone, with an additional £45m set aside for financial year 2017/18.

Recommendation 16: The process underpinning the Cumbria County Council Highways Capital Programme should be prepared as a case study of good practice for future emergencies and appended to National Recovery Guidance

8.2.2 Bridges

180. The risk-based prioritisation of bridge repairs initially involved the Army visiting and visually surveying all bridge assets using a pragmatic 'red, amber, green' categorisation system and logging these inspections into an asset spreadsheet known as the 'Operation SHAKU - District Tracker'. As well as this initial visual inspection, 350 bridges that were recorded in the amber or red categories were then subjected to further expert structural inspection, including by Royal Engineers divers and other specialist capabilities.
181. Some bridge inspections were inevitably delayed due to the high river flows presenting too serious a risk to the divers. However, following deliberation between meteorologists, Council Highways and other experts, the inspection of Eamont Bridge in Penrith was accomplished using a Remotely Operated Vehicle (ROV) outside its normal operating parameters, thus posing considerable risk to the equipment and operators.
182. If the inspection had not been carried out at that time, further predicted rainfall and the ensuing high river flows would have negated all possibility of an inspection taking place for several weeks. The knock-on consequences of a delayed closure would have been considerable for the city, which was already suffering critical levels of traffic and pedestrian disruption and, therefore, were felt to justify the actions, which fortunately found the bridge to be structurally sound and safe to reopen on 18th December.
183. As a result of these experiences and the demonstration of the importance of being able to undertake bridge inspections in hazardous conditions, Cumbria County Council are now working with a consortium to develop a more robust ROV surveying system (Plate: 1).
184. Case Study 1 describes how the management of two bridge failures, in Pooley Bridge and Staveley were aided by further innovations in damage recovery and repair.
185. Due to the geographical scale and physical challenges caused by bridge damage, many communities also faced disruption, with sometimes considerable road diversions needed. These all added extra cost and time to day-to-day travel and presented real challenges for people's ability, especially those without cars, to be able to conduct activities as basic as food shopping. This latter challenge was mitigated by activities such as supermarkets putting on dedicated shopper-bus services in Cockermouth and Keswick.
186. Delegates at the Recovery Workshop referred to this challenge, with suggestions being made to better involve communities, especially isolated communities, much more into the planning of diversion routes and in communications about maintenance and repair schedules. These issues will be further discussed in the Communications sub-group section.



Plate 1: "Bridge Cat" bridge survey equipment undergoing testing in Cumbria (image courtesy Gaist™)

Case Study 1: Pooley Bridge and Staveley Bridge Repair

The two most significant bridge failures took place at Pooley Bridge on the shore of Ullswater, and Staveley near Kendal.

Due to the implications (including a 15-mile diversion) for the local community and anticipated impacts on Ullswater's visitor numbers, it was established that an interim solution would be needed at Pooley Bridge, involving the construction of a temporary, single-lane, metal road bridge over the River Eamont. This bridge was officially opened on 20th March 2016, with the permanent replacement options still under discussion.

The Army had provided the temporary 'Barker Crossing' pedestrian bridge in Workington following the 2009 flood, and the perceived efficiency of that work meant that some in the community expected that the Army would step in again and provide a solution at Pooley Bridge.

However, the deliberations between the Army, Cumbria County Council and contractors rapidly led to the decision that the civilian option was by far the most appropriate in the circumstances. The Army quite simply did not have the most appropriate bridging options available to deliver this type of civilian structure. This example again underlines the Army contingent's stated confidence that the County Council was on top of the challenges they faced.

In Staveley, it was felt that the availability of an alternative route to the village from the A591 provided sufficient access to allow for the necessarily slower development of a permanent repair. Following detailed planning and design work the £500k project culminated in the opening of the replacement Old Gowan Bridge, on 18th May 2017. Taking over a year longer to complete than the temporary fix in Pooley Bridge, the process perhaps inevitably caused considerable local concern and frustration regarding a genuine concern that the village businesses suffered from reduced footfall for the entire period the through-route was closed.

Now that it is in place, the new bridge's single-span design is capable of taking higher river discharges than previously and should, therefore, provide the village with a more resilient asset in the future. However, in the wider context of the overall 350 damaged bridges, it is worth pointing out that the repair of this bridge alone was calculated to have involved 8,000 worker hours.

187. In relation to bridges specifically, as the ongoing nature of the capital programme suggests, there do remain a considerable number of structures around the county that remain in a stabilised condition, whilst they await full repair (Plate 2). Accordingly, as part of the risk-based approach, a procedure has been implemented to continue monitoring these particularly vulnerable assets such as bridges and road surfaces.
188. Procedures will include river-flow monitoring and the installation of Differential Global Positioning System (DGPS) based remotely-sensed telemetry, which is sensitive enough to measure small structural movements. These technologies are being coupled to provide a warning when hazardous conditions are developing. In so doing they will enhance shared situational awareness of imminent damage and act to trigger a multi-agency operational response to close the bridge before further damage occurs.



Plate 2: Bell Bridge on the River Caldew, south of Carlisle, collapsed in late January 2016, as a result of damage sustained during Storm Desmond a month earlier. These images from July 2017 illustrate the closure (stabilisation) of the bridge pending the implementation of the full reconstruction (recovery) project. Note the information board which has been installed nearby to explain the on-going process to the public (images: Deeming)

Recommendation 17: Cumbria County Council and partners should continue their multi-agency initiative to develop Remotely Operated Vehicle (ROV) infrastructure surveying capability

Recommendation 18: Cumbria County Council and partners should continue their multi-agency approach to developing remote-sensing and infrastructure-monitoring capabilities

8.2.3 Roads

189. In addition to the bridges, the county's roads were also subjected to erosion and damage by the flood water and its related storm debris. Again, innovative use of IT enabled a rapid assessment of the impact of the storm on the road network.
190. High-resolution imagery was collected in a survey of the complete 2,500km length of Cumbria's Priority 1 and Priority 2 road network (Plate 3) using a vehicle-mounted system supplied by Gaist™. The data provided by this survey has proven invaluable in clearly identifying poor or damaged road surfaces with high accuracy, from which an on-going programme of prioritised road-repair and maintenance has been developed.
191. In respect to major road infrastructure damage, the A591 between Grasmere and Keswick provides a clear example of good project management achieving the rapid repair of a crucial transport link (Case study 2).

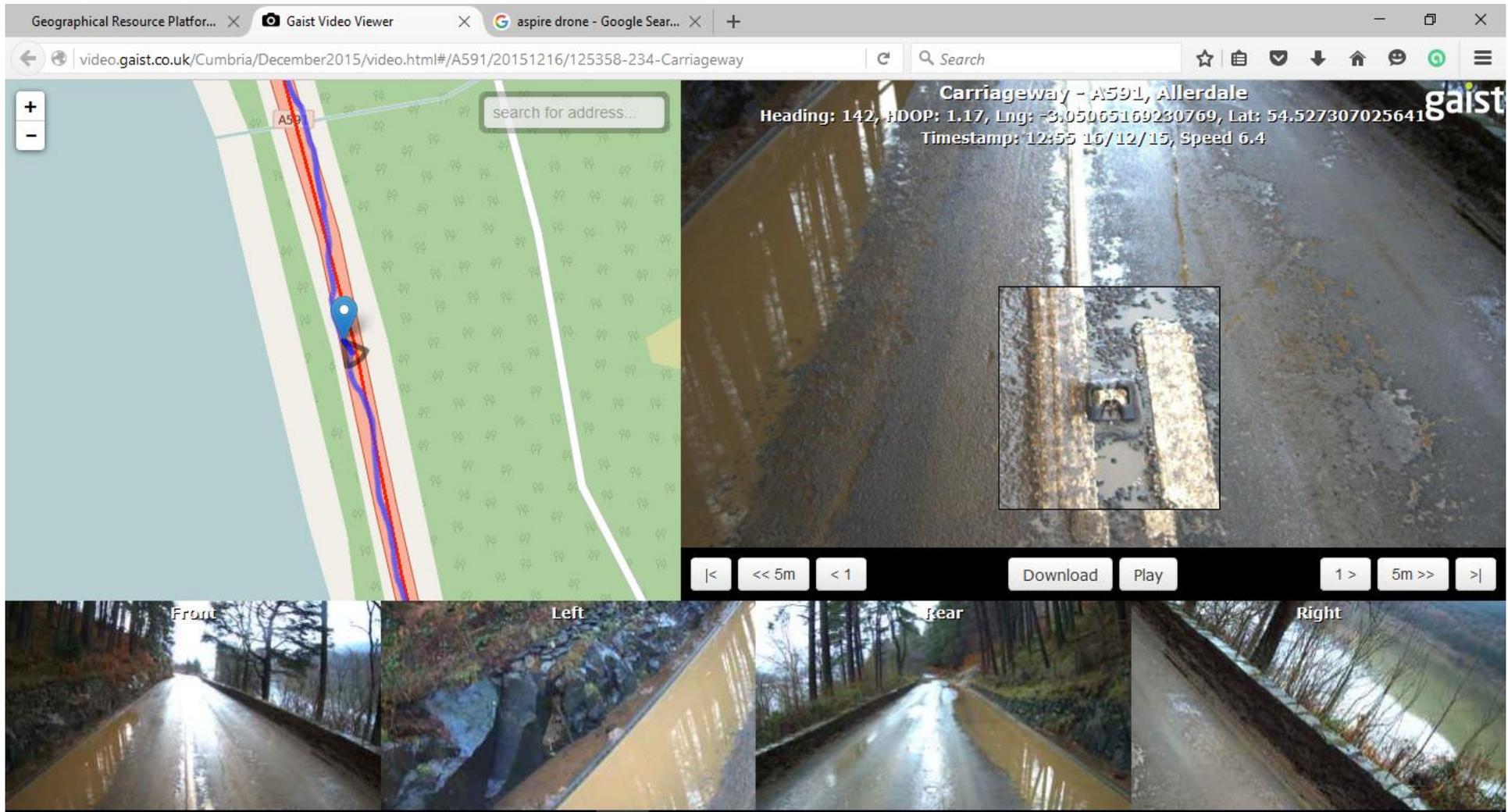


Plate 3: Screen capture of high-resolution geo-located road survey data (image courtesy GAIST®)

Case Study 2: The A591 – Thirlmere to Dunmail Rise

An abiding illustration of Storm Desmond’s impact on Cumbria’s infrastructure was provided by the images of the collapse of the A591 at Dunmail and the landslide deposits blocking the road’s path alongside Thirlmere (Plate 4). The damage completely closed the A591 and, cut off large parts of north from south Cumbria, resulting in car traffic needing to divert over 40 miles and HGVs to divert 70 miles in order to travel between Grasmere and Keswick.



Plate 4: Landslide deposits block the A591 beside Thirlmere (image: Cumbria CC)

These local effects on the community, as well as the image of disruption that the media coverage of the closure was having on national perceptions of Cumbria as a tourist destination, meant that re-opening this road was a principal priority.

The importance of this repair was clearly communicated by the SRCG to the MRG, who instructed Highways England to carry out the repair. The A591 is not a trunk road, and this broadening of Highways England’s remit (i.e. usually the maintenance of designated trunk roads and motorways) was extremely unusual. However, enabling Cumbria County Council Highways to access the additional capabilities available to Highways England for this work was, undoubtedly, a major reason for the project’s success.

It is important to note, however, that other factors had made the MRG’s instruction of Highways England as primary contractor more straightforward. These factors included Cumbria County Council’s existing relationships with Highways England and one of its principal contractors, Mott MacDonald. In effect, the early decision by the Infrastructure Sub-group and SRCG to commission Mott MacDonald to carry out the initial impact assessment on the A591, meant that there was an immediate clarity and mutual trust between the three contractual partners and Government in relation to what the project would involve, what it would cost and how it would be delivered.

Another valuable innovation was the use of drones to assess the damage to the A591. This use of technology speeded up the inspection process, whilst also reducing the exposure of ground-based surveyors to high risks presented by the landslide debris.

Whilst initial clearance and stabilisation was being undertaken, the importance of the A591's role as a vital community link was emphasised by the fact that local children and young people relied on the road to be able to get to and from school.

The learning from 2009 about the importance of providing temporary rights of way to facilitate travel between disconnected communities (i.e. the 'Barker Crossing' in Workington), the SRCG developed a contingency to open a footpath that formed diversion route around the roadworks, primarily for students traveling via a shuttlebus system to transit the damaged section of road. The path was opened on 5th January, exactly a month after the road was closed.

A second interim solution saw a series of forest roads upgraded on the eastern side of Dunmail Rise, in order to provide a full shuttlebus service open to the public between Grasmere and Keswick. This route opened on 8th February 2016, ultimately carrying 40,000 passengers as a result of the service becoming a tourist attraction in its own right.

The completed A591 was finally re-opened by Rory Stewart MP, on 11th May 2016, ahead of the original schedule (Plate 5).



Plate 5: Erosion damage to the A591 on Dunmail Rise was repaired through the construction of an engineered wall (image: Cumbria CC)

Throughout the programme of work, Cumbria County Council kept up a high-profile information campaign to keep the public informed about the status of the recovery operation. The challenges and some successful resolutions that affected this campaign will be discussed in the Communications Sub-Group section

* An example of drone footage: <https://www.youtube.com/watch?v=aY5cs3Sl8ml>

8.2.4 Public Buildings and structures

192. A total of 48 public buildings or assets in four districts were damaged due to storm effects¹⁷. Carlisle suffered most significantly, with 28 public buildings affected, of which 24 remained closed at the end of May 2016. Some of these, including the City's Civic and Sands Centres were partially reopened in January, whilst repairs were on-going, but there was significant disruption to services.
193. This is not the first time that several of these buildings have been put out of action for long periods. The obvious example is Carlisle's Civic Centre, where images of the building surrounded by flood water in both 2005 and 2015 appear uncannily similar. This is clearly a problem, both in terms of the cost to the taxpayer of repeated repairs, as well as the costs to the community of service disruptions.
194. Obviously, significant work has been invested in developing a risk-based recovery programme for these assets and it is understood that resilience has been built back into them. This has been done through the installation of resilience and resistance products as well through changing vulnerable areas to less critical uses. This provides evidence of learning and suggests an understanding that business continuity is a key aspect of organisational resilience.
195. However, given the nature of flood hazards that have now been experienced in the county over the past decade these twin concepts of resilience and business continuity must remain engrained with all public-sector decisions relating to estate management. From this perspective, the opportunities presented by the current 'invest to save' processes to rationalise estates to build resilience, rather than to create flood vulnerabilities (by investing in at-risk sites) should not be over-looked.

Recommendation 19: Public sector organisations across Cumbria should consider flood resilience as a key component of all risk-based decisions regarding future investment in estate.

8.2.5 Rail

196. The financial impact of rail delays over December 2015 and January 2016 amounted to around £9.3m simply in Network Rail's compensation costs to rail operators, not including actual repairs. Whilst the rail disruptions certainly had impacts on the population of Cumbria, the rail network is a national asset operated by Network Rail (a public-sector body) and commercial rail operators, and its resilience falls outside the remit of County authorities¹⁸. Therefore, the contingencies put in place by Network Rail and the operators to deal with the considerable service disruptions that occurred following Storm Desmond fall outside the remit of this report. Network Rail were, however, directly linked into the Infrastructure sub-group and SRCG in order that all agencies maintained shared situational awareness of the recovery work on the rail system and were able to build contingencies to reduce consequences of disruptions.

¹⁷ Not including schools, which are discussed in section 8.5

¹⁸ <https://www.gov.uk/government/groups/review-of-the-resilience-of-the-transport-network-to-extreme-weather-events-expert-panel>

8.2.6 Utilities

8.2.6.1 Utilities resilience

197. Utilities companies are classed as Category 2 responders under the Civil Contingencies Act (2004) and other Acts to adequately protect against and prepare for more exceptional circumstances. Accordingly, these companies have a lead role in developing resilience in their supply infrastructure. Despite this, many households and businesses had the telephone, gas and/or electricity supplies disrupted during December 2015 as a result of the storm and flooding. The loss of electricity impacted the most individuals, with an estimated 17,911 households experiencing power loss. However, due to the work undertaken by staff all non-flooded properties were recorded as reconnected within a critical 48hr period, meaning that no compensation payments to customers were made, as companies' strictly complied with Ofgem rules for extreme events (Electricity North West, 2016).
198. The temporary disruption of utilities was obviously problematic for flood-affected communities. However, whilst smaller sub-stations were affected, a key success was that flood defences protecting Carlisle and Kendal's main sub-stations operated as designed and protected the electricity supplies to 110,000 properties. Such successes should be seen as illustrating that lessons were learned from the earlier events where, for example the flooding of Willowholme electricity sub-station in 2005 disrupted power supplies "to most of Carlisle for up to 36hrs" (Cumbria County Council, 2005).
199. Such successes should not be seen, however, as completely excusing some perceived failures at a smaller scale. In Gote Road in Cockermouth, for example, one consequence of the failure of a small sub-station was the knock-on failure of the floodwater pumping system for the road. This failure, which was obviously perceived locally as a fundamental a design flaw in the flood defence system, contributed to several homes remaining flooded for 48hrs as the water could not drain away¹⁹.
200. These examples discuss the importance of utilities resilience during response. However, they do clearly illustrate that utilities resilience can bear direct consequences for those affected, by acting to reduce, or increase, the scale of households' and businesses' recovery tasks.
201. The utilities companies also stepped forward in other ways. As described in the Acute-phase debrief (Deeming, 2016a), the operation by Electricity North West to feed 20,000 people affected by flooding and power cuts during the week of 7th December should undoubtedly be regarded as notable practice by a CLRF partner.
202. There appeared, however, to be a general feeling that the utilities companies did not communicate effectively with affected households during recovery, and this resulted in considerable frustration. Householders felt that they had wasted considerable amounts of time attempting to get services reconnected to properties where meters had been flooded, and then faced problems with incorrect meter readings and bills following replacement of flooded meters.

Recommendation 20: The Cumbria Strategic Flood Partnership (CSFP) should ensure that collaboration occurs between the Environment Agency and power companies) to safeguard that an appropriately risk-based approach is taken to designing resilience into any flood defence measures reliant on electrical power (i.e. pumps).

¹⁹ Duration of flooding is one principal factor (along with depth and velocity) that defines the amount of damage flooding causes, i.e. longer periods of inundation tend to lead to greater damage.

Recommendation 21: Utilities companies should review their contingency plans to ensure reinstatement of household services occurs in the most effective way possible

8.2.6.2 United Utilities

203. United Utilities Group plc (UU), is the United Kingdom's largest listed water company, which manages the regulated water and waste water network in North West England - which includes Cumbria, Cheshire, Greater Manchester, Lancashire and Merseyside.
204. Bearing responsibility for potable water supply and waste water removal meant that UU inevitably became a key partner in the Infrastructure Sub-Group and as a facilitator of the wider recovery.
205. Actions put in place to mitigate water-related risks to public included:
- Engaged the Bay Search and Rescue specialist boat to access the pumping station cut off by flood water in order to restore supplies to Glenridding (see acute-phase debrief report)
 - Bills were suspended for all customers who needed to leave their homes and businesses, with this message shared widely by Cumbria and North Lancashire recovery groups and by the third sector
 - Precautionary boiled water advice notices were issued to a total of 373 properties – these were mainly properties that temporarily lost supply, because of the risk of flood water contamination.
 - Bottled water was made available to all customers in case power supplies were disrupted and they were unable to boil. In some cases, this was done in collaboration with other agencies such as the army and fire and rescue service
 - We identified a list of third sector organisations in Cumbria and north Lancashire that deal with vulnerable people and proactively communicated via email and social media. We also contacted each MP office and asked them to pass on this message through their networks and retweet to their followers our tweet on this subject.
206. UU's responsibilities were not, however, limited to water supply. As owner of the Thirlmere reservoir, UU also bore responsibilities for ensuring the slope-stabilisation work affecting the A591 was carried out. In recognition of this UU also contributed to ensuring the early development of the Thirlmere temporary diversion route and bus service.

8.2.7 Recovery Workshop

207. A number of other issues relating to the road infrastructure were mentioned during the recovery workshop. These ranged across a spectrum of concerns, from the importance of the M6 motorway to regional resilience, to the need to include culvert maintenance in local risk-reduction plans.
208. The specific mention of the M6 concerned its closure and the resultant diversions during Storm Desmond. Two clear issues were raised:
- I. The need was identified to factor in the importance of protecting the A6's resilience above that of some other roads, in order that it can always act as an effective diversion during any sort of motorway incident. Such concerns illustrate

the importance of understanding Cumbria's road network as not just being important to the county's population, but as an asset that underpins business and social continuity in the north-west region.

209. However, and perhaps more importantly:

- I. The concern was raised that the M6 was closed by Highways England during Storm Desmond, without any negotiation with the Strategic Coordination Group (SCG). This meant that a large volume of traffic was placed directly at increased risk by being forced onto a minor-road network that was itself subject to increasing hazards and numbers of flood-induced diversions.

210. Whilst these points are much more response than recovery issues, this lack of communication between Highways England and the SCG does highlight the need for better communications between this national agency and other, partner, highways authorities. The creation of a Cumbria Strategic Highways Group could enable this, creating the structure and relationships to coordinate both day to day highway closures (for example, following a major road traffic collision) and the response to (and recovery from) a major incident such as Storm Desmond.

Recommendation 22: The Department for Transport (DfT) should increase its active support for communication, collaboration and contingency planning between Highways England, Local Highways Authorities and other partners (e.g. Police), responsible for delivering the resilience of diversion route networks of regional importance. Consideration should be given to the creation of a Cumbria Strategic Highways Group in order to achieve this.

211. In addition to the larger infrastructure, more localised concerns related to gullies and culverts. Here, delegates pointed out the importance of ensuring the inclusion of these assets in a maintenance programme, with suggestions that empowering parish councils to play a greater role in this may be effective.

Recommendation 23: Cumbria Strategic Flood Partnership (CSFP) should develop its strategy on gully and culvert maintenance in consultation with all local authority tiers (including Parish and Town Councils) and explore opportunities for enabling local operations (e.g. Lengthsmen) where practical.

212. Also during the recovery workshop, delegates were informed that over the winter of 2016/17 around 85 bridges around the county had still required enhanced monitoring in order to provide early warning of potential further failure. However, principally due to the lack of rainfall during the winter, all these bridges had remained open, with the repair programme now focussed on bringing them all back to full strength during 2017.
213. What this information clearly demonstrated to the delegates was that recovery was not a straightforward linear process, wherein damage is caused and then repaired. Rather, the impacts that Cumbria felt as a result of Storm Desmond necessitated an approach that included an element of stabilisation work.

8.2.8 Limitations on suitably qualified, experienced and empowered (SQEEP) staff and the need for mutual aid arrangements to support recovery

214. The scale of the infrastructure damage meant that a small number of suitably qualified, experienced and empowered (SQEEP) staff were relied upon to carry out the considerable task of developing, resourcing, coordinating and delivering the infrastructure repair programme.
215. Obviously, this reliance on the capabilities and capacities of individuals was not confined simply to infrastructure repair. It was also the case across the wider recovery effort, with limited numbers of staff needing to deliver multiple streams of activity that mapped right across the SRCG sub-group domains.
216. In relation to infrastructure recovery, however, it rapidly became obvious that there were two key areas of knowledge required to undertake this work: technical aspects of infrastructure repair, and local authority rules and restrictions on the use of capital, revenue and emergency budgets. This knowledge was only held by senior local authority staff, and not by military or contractor personnel. As a result, the pressure on the small number of individuals with these skills and knowledge was enormous.
217. This is just one example of the immense pressures placed on recovery workers and volunteers, especially during the early weeks and months (see section 8.3.3.2). It suggests a need for mutual aid contingencies to be developed; these should identify subject-matter specialists (such as in this case, local authority infrastructure project managers), and develop opportunities to support these teams from across a national LRF pool.

Recommendation 24: Cabinet Office, the Ministry of Housing, Communities and Local Government (MHCLG) and the Local Government Association (LGA) should investigate opportunities for developing regional and national mutual-aid capabilities across local authority resilience-focused subject matter specialisms

8.2.9 Stabilisation

218. Stabilisation can be thought of as *“the exercise of interim control following an incident in order to increase public safety, mitigate other impacts and to reduce the likelihood of secondary consequences occurring”* (Deeming and Burgess, 2017). Taking this perspective, it becomes clear that the temporary replacement of Pooley Bridge and the making safe of Bell Bridge and of the Old Gowan Bridge in Staveley can be seen very clearly as stabilisation activities.
219. Recovery work was on-going, in the sense that plans were underway to deliver final recovery outcomes (i.e. new bridges). However, what initial stabilisation activity allowed, was for public safety to be maintained during this process.

220. Given the risks involved in relation to further floods occurring in the winter of 2016/17, the Environment Agency also conducted a degree of stabilisation work on their flood defences. Of principal importance to the Agency, however, was that any stabilisation of flood defence structures that they undertook *at least* brought those structures' standards of protection back to where they had been prior to Storm Desmond (e.g. 1% or 1 in 100 year). It was largely immaterial that the repairs had been fabricated from gabions or sandbags. The point was to get that standard of protection back in order that the more detailed work on developing permanent repairs or defence upgrades could be conducted through a more methodical approach.
221. That there was something of a lack of communication across the agencies about the role of stabilisation activity, as a vital part of the recovery process, was unfortunate.

Recommendation 25: Cumbria Local Resilience Forum should acknowledge and adopt the concept of 'stabilisation' as vital tool through which to develop contingencies for recovery from high-magnitude, high-impact events. Specifically, the importance of acknowledging the need for a stabilisation process within recovery should be clearly integrated into public communication plans.

8.3 SRCG: Health & Welfare Sub Group:

Purpose

- To coordinate the provision of full range of practical health and wellbeing assistance, support and, where necessary, counselling to those directly or indirectly affected by the emergency.
- Enable the community easy access to the required assistance.
- Brings together the relevant health expertise.

Role

- Provide welfare to those affected
- Maintain normal Health Service
- Allocation of welfare tasks to individual agencies
- Co-ordination of welfare assistance in order to avoid duplication of effort
- Collation of data on affected persons
- Prepare a health monitoring and protection strategy
- Establish extra health services if required
- Ensure public are informed about any health implications.

223. The impacts on the health and welfare of those affected by flooding can be considerable. Impacts on health include physical injury and mortality, exposure to infection and mental-health effects (Fewtrell, 2011). The primary physical danger and secondary infectious disease risk related to flooding that occur during the event's acute phase or in the early stages of recovery are well recognised. However, there is a growing evidence base to suggest that other, longer term secondary health effects can be considerable.
224. The longer term physical health risks often result from people living in damp properties, where they may be exposed to harmful mold spores, or in properties undergoing repair, where there may be heightened risk of accidental injury. Limited evidence also suggests that increased morbidity can occur following floods, particularly within vulnerable groups (e.g. the frail elderly and/or chronically ill) (Hajat et al., 2003) although measuring this effect is not straightforward (Milojevic et al., 2011). Likewise, although there is limited evidence of increased secondary mortality following flooding (Bennet, 1970), this too has been hard to quantify (Milojevic et al., 2011).
225. There are also frequently mental health effects, which can be serious and long-term (Tapsell et al., 2003, Waite et al., 2017). Whilst mental health effects may be caused by the experience of the flooding itself, there is also considerable evidence that they are often caused or compounded by the recovery process. Dealing with loss adjustors, builders and insurers can take up huge amounts of time, and is often experience as excessively bureaucratic, impersonal and disempowering. (Whittle et al., 2010).
226. Fear of re-flooding has been suggested as a further cause of mental health effects. These effects may be intensified if there is a general perception of a lack of visible action by the responsible

authorities to reduce future flood risks (i.e. if there is apparently insufficient progress towards building defences or to put other measures in place) (Tapsell and Tunstall, 2008).

227. Mental health impacts can also occur within population groups that have not been traditionally proactively considered by responding agencies as requiring focused health and welfare support. These groups include children and young people (Mort et al., 2016, Walker et al., 2010) and 'frontline recovery workers' - staff and volunteers working with the affected community, i.e. (Convery et al., 2007, Deeming, 2015, Whittle et al., 2010).
228. In this context, it is important to note that the Health and Welfare sub-group was set up early in the acute phase (as the Welfare Steering Group) as an advisory group to the SCG. It was chaired from the outset by Cumbria's Director of Public Health, and ensured the effective coordination of responding health and care agencies.
229. Given the clear primary health risks prevalent during and immediately following the acute phase of a major flood event, the early establishment of the Health and Welfare sub-group should be regarded as a clear illustration of best practice; the sub-group's role then extended to cover the secondary health impacts described above.

8.3.1 Health and Social Care Act 2012

230. The Health and Social Care Act 2012 made changes to the organisations responsible for commissioning and delivering health services. These included the transfer of the local public health function from Primary Care Trusts (a type of NHS organisation now succeeded by Clinical Commissioning Groups) to local authorities with social care responsibilities (Cumbria County Council). These changes had two major implications; there was no relevant institutional memory within the group around how the health and welfare response had been coordinated during earlier floods, and there was a lack of clarity around the extent of the responsibilities of the Director of Public Health. These changes in the health and care sector are not yet reflected in the National Recovery Guidance.
231. The Director of Public Health now bears responsibility for health protection during response and recovery, but the ability to commission or deliver the necessary work lies with other, independent organisations (NHS England, Public Health England, Clinical Commissioning Groups and NHS provider Trusts). It is rather unclear where accountability lies within these partnership arrangements.
232. This did not lead to any significant challenges following Storm Desmond; the health response is perceived to have worked well, and the group's understanding of its members' roles matured over the first few weeks. Nationally consistent NHS Emergency Preparedness, Response and Resilience (EPRR) contingencies were effectively deployed internally by NHS bodies within the county, coordinated by NHS England. There was appropriate liaison between the local public health system and Public Health England. The outcome of this evolutionary process is the perception across the partnership that the sub-group is now better prepared for future events.
233. However, a concern has remained that the splitting of responsibilities resulting from the Health and Care Act 2012 may have more significant implications for the efficacy of responses in events where there is a greater public health element such as pandemic flu.
234. This concern suggests that a risk exists for the leadership of SCGs, SRCGs and sub-groups, where the fact that there is not a clearly-defined single health lead could make decision-making and accountability for strategic decisions in such circumstances harder²⁰.

²⁰ See also: <https://academic.oup.com/jpubhealth/article/39/2/403/3002969>

Recommendation 26: Government and the Department of Health should clearly delineate and update *Emergency Response and Recovery* (HM Government, 2013a) and *National Recovery Guidance* (HM Government, 2013b) to explain the respective responsibilities of health and social care focused responders during emergencies

8.3.2 Health and welfare: examples of notable outcomes

235. In collaborating effectively, as an experienced network of health and social care providers whose familiarity with each other underpinned their good working relationships, the sub-group oversaw several examples of efficient consequence management.

8.3.2.1 Vulnerable people data

236. The ‘near-miss’ presented to the county’s responders by Storm Abigail in November 2015 had already acted as a stimulus for the county’s health and wellbeing providers to refresh their vulnerable group identification processes. These were ‘brought up to speed’ in the three weeks between Storm Abigail and Storm Desmond, resulting in robust and efficient procedures being in place and used during Storm Desmond’s acute and recovery phases.

237. Additional information on vulnerable people was collected during recovery as Local Recovery Groups coordinated the registration of flooded households. A desire to register all flooded households, in order to ensure people receive appropriate support, was noted following both the 2005 and 2009; and the “Kendal Gateway” group led on the development of a registration form. The format of this form (Appx. 3) is notable good practice, as it collects both the key personal information and a signature of consent to share these details (see section 8.1.8). However, there were challenges with convincing all flooded households to register (as not all those affected felt they were in need of support – a difficulty that was also noted in earlier flood events).

238. In the area where the Gateway data management system was used to collate the information, organisations outside the partnership experienced some difficulties accessing the data they felt they needed, whilst other areas developed local spreadsheets with limited consistency between districts. (Schulte, 2017) (see Recommendation 15 and 16).

8.3.2.2 Inter sub-group working

239. The interfaces and key dependencies between sub-groups (Table 1) clearly demonstrate the need for the Health and Welfare sub-group to cooperate with other groups. Specifically, close working between the Health and Welfare, Community and Communications sub-groups, created pathways for health and welfare advice and support to be directed into affected communities via the internet, Flood Advice Centres, third sector networks and community-based staff and volunteers. It also provided a mechanism to gather information on the need for health and wellbeing support.

8.3.2.3 Edenside Care Home as an example of resilience issues

240. Edenside Care Home in Appleby flooded during Storm Desmond, and residents had to be evacuated to Greengarth Care Home in Penrith. Cumbria County Council was then faced with a decision during recovery: was it more appropriate to refurbish and reopen the Care Home (which is owned and operated by Cumbria Care), or was the risk of future flooding to the facility and its vulnerable residents too great to justify its continued operation? This mirrored a similar decision over the future of the Ravensfield Care Home in Keswick following the 2009 floods.

241. This decision on Edenside’s future was not taken by the Health and Welfare sub-group, but was undertaken through Cumbria County Council’s standard procedures, including a period of public engagement and formal consultation. The outcome of this process is that Edenside has now been permanently closed, with most residents now living in care homes in Penrith.

242. From one perspective, the willingness of Cumbria County Council to consider the possibility of closing a care facility at risk of repeated flooding and putting in place alternative care provision demonstrates an important element of resilience thinking. The consequences of such a facility being at risk of flooding are not only the disruption and costs of refurbishment, but also the challenges of evacuating residents during an incident. Such an evacuation not only involves considerable resources (taking these away from other aspects of response), but is also reported to cause significant distress and confusion to residents, particularly those with dementia.
243. However, communities often have a different viewpoint, generally preferring that people are cared for within the local community where it is easier for friends and relatives to visit them. Travelling to care facilities in other communities will result in additional costs, but can also result in practical difficulties, meaning that residents tend to receive fewer visits. (Keswick Flood Action Group, 2010).

8.3.2.4 Return to business as usual

244. Importantly for the sub group, whilst the response phase evacuation of Edenside posed challenges, the decision on its long-term future was taken through Cumbria County Council's normal planning processes, rather than needing to be treated as a flood-specific issue.
245. This fairly early ability of the group to mainstream actions was replicated across other areas of the sub-group's work and underpinned the Chair's decision to deactivate the sub-group after 3 months; before any other sub-group. This was done, however, on the clear predication that if any other group identified a reason for the sub group to be re-convened, it would be.

Recommendation 27: Cumbria's health and care providers should continue to synthesize all lessons learned from Storm Desmond's diverse impacts on the sector and integrate them into cross-sector business continuity plans and develop opportunities for sharing these lessons outside the County.

8.3.3 Mental health and wellbeing

"The fact that these serious on-going mental health issues have been raised as a concern has already justified this whole workshop by itself"

Recovery workshop delegate

"Surprised me [that I] could apply for additions to resilience costs. Advice and help given to do this was appreciated and probably saved me from mental breakdown."

"The stress/anxiety of the flood has had a major effect on me. I also worry if my property will ever sell in the future, and the hidden cost of the loss of value of the property which will not be covered by insurance. The first problem is the shock, then you are involved in the process of repair, but it all takes such a long time, and you can't prepare for that, it takes years of your life. Emotional support does not do much for you when you are living in a damp house, no heating, drying machines whirring, dust and dirt, and the destruction of personal items that cannot be replaced, months and months of dirty damp chaos, and plans are out of the window."

"My daughter now suffers badly from anxiety and I have had to fight to get help. She does get help now but it isn't taken very seriously at all, especially at school, although they were good when we were flooded."

"When I realised I had a problem the GP was happy to put me on Prozac. It has really just been taking things one day at a time that has kept it manageable. Some days I would wake up happy"

and then receive an email saying we had to be out of the flat and I would spend the whole day chasing surveyors, loss adjustor and landlord to ensure my family would still be housed. I would be an emotional wreck and shattered at the end of the day and yet really would have done nothing that felt constructive. It was being a pawn at the mercy of the unknown “them”. At the end of the day I had to remind myself that I was lucky to be getting this support at all.”

“I don’t think anything could give you the emotional support you need during flooding. It really was a horrific time. Although there was lots of support from different people I think the only people who truly understood were other people in the same situation.”

CCF Grant Recipients

246. It is well established that flood events frequently have significant impacts on mental health. People may experience situations, such as being trapped in or by flood water, that are scary and potentially life threatening; for some individuals, this will result in a diagnosis of depression, anxiety or Post Traumatic Stress Disorder (PTSD) (Mason et al., 2010)
247. However, there is an increasing understanding that the recovery process can also have direct effects on individuals’ psychological well-being, for example as a result of the pressures of living away from home (or in a damaged home) and negotiating with insurers (Dixon, 2015).
248. Following the 2007 floods in Hull, the negative mental health impacts of these longer term recovery challenges was termed “retraumatisation” (Medd et al., 2015). This concept was introduced expressly to differentiate between the primary psychological impacts of experiencing a flood hazard, and the secondary mental health effects of needing to negotiate the bureaucracies of flood recovery.
249. Research has demonstrated that there were significant and widespread mental health impacts one year on from the winter floods of 2013/14, which affected large parts of the UK (Waite et al., 2017). Adults whose homes had been flooded were 6.5 times more likely to be suffering from anxiety, 5.9 times more likely to be suffering from depression, and 7.2 times more likely to be suffering from PTSD than people who had been unaffected by flooding (these figures are based on symptoms reported in a questionnaire, and it is unknown if individuals had sought diagnosis or support). The likelihood of suffering these symptoms was also shown to be significantly further increased when the flood water was deeper than 1m.
250. A similar, but less severe, effect was seen in people whose homes had not flooded, but who had suffered other disruption from the flooding.

8.3.3.1 Mental health effects: communities affected by Storm Desmond

251. The likelihood of mental health impacts was quickly identified by the Health and Welfare sub-group, and a mental health working group was briefly established. However, use of mental health services appeared not to reflect the same patterns as in 2009 (C. Cox, *pers comm*) and apart from a small initial peak, there was no notable increase in the use of formal mental health services throughout 2016. As the Director of Public Health, Colin Cox, also suggested in November 2016, however:

“This is not to say that there is no problem out there, but it’s just not being obvious at the moment”

252. Concerns began to re-emerge in early 2017, when those working within communities expressed concern that there appeared to be evidence of chronic psychological stress in many people who had been affected by flooding. Whilst these were felt to be potentially low-level impacts for many people, there was also concern that some individuals were experiencing more severe problems, such as symptoms suggestive of PTSD. These observations were obviously consistent with the academic research on the long term mental health impacts of flooding, but there was

still no evidence of a significant increase in use of the formal mental health services provided by Cumbria Partnership NHS Trust.

253. It is not possible to give a definite explanation of the apparent discrepancy between the observations of significant mental distress and the lack of use of mental health services, but several possibilities have been suggested by communities. Many people were reluctant to access mental health services, as they quite reasonably felt they were not mentally ill, but simply trying to cope with significant challenges; some of these people would have preferred more practical help with the logistics of recovery.
254. In addition, it has been observed that it can take a long time for people to seek help for mental health symptoms following flooding; they often do not do this until they are back in their own home, the practical recovery tasks are complete, and they have “space” and feel safe to consider their mental wellbeing. However, as this is often more than a year on from the flooding, people attempting to seek help, both from friends and professionals, did not always feel their concerns were taken seriously; the full impact of the floods had long since been forgotten by some of those who had not directly experienced them.
255. In line with this experience, a number of comments made in Cumbria Community Foundation’s survey of flood grant recipients suggested that some people would have preferred to access a flood-specific service, where they would have more confidence that their experience would be immediately understood rather than dismissed.
256. Additionally, there is also the consideration that for many people in Cumbria such mental health effects may be amplified by the fact that individual households may have experienced up to 4 repeated cycles of flooding and recovery over the last 12 years. There is also the fact that many of the flood-affected have undoubtedly been subjected to the ‘retraumatising’ effects of insurance and contractor negotiations as well as other bureaucratically induced pressures (e.g. meeting grant deadlines).
257. Specific concerns were raised about mental health issues within the farming community (Box 4).
258. Increasing concern over this potential presence of mental health conditions within the flood affected population led the Community sub-group to conduct a small survey of frontline staff, volunteers and community leaders to gauge their perceptions of this problem. Almost unanimously, the survey results confirmed experiences of regularly dealing with people exhibiting mental health related symptoms (e.g. householders spontaneously bursting into tears).

“When asked the right questions and given the opportunity many residents are quick to tears and talk about feelings of anxiety and apprehension. Many feel forgotten or unsure of ways forward. Some residents are planning to sell up and move as soon as possible. Elderly residents feel vulnerable and unsure of what is available to them. Families with young children feel stretched and overwhelmed. People express a sense of loss and sadness about their communities stating, 'It's not the same and never will be'”

Frontline staff survey respondent

259. What evidence there is, therefore, suggests there are likely to be significant and ongoing mental health impacts on the flood-affected population. It is likely there are at least 3 factors contributing to these:
 - 1) the experience of the flood itself;
 - 2) the experience of recovery and the impersonal bureaucracy experienced during this period (for example, concerns over insurance settlements, the quality of the repairs

to their homes, meeting deadlines and eligibility criteria for grant schemes, and threats to their businesses and livelihoods from delayed compensation payments);

- 3) the fear of being flooded again. There should also be concern that, without support, vulnerable groups (e.g. frail elderly, carers, children and young people) may suffer mental health effects disproportionately and even less visibly than others.

260. There is evidence that events in community venues can offer useful support, by enabling social contact and providing the social spaces necessary for encouraging supportive sharing and networking. This approach has been identified as a key driver of resilience to hazards in vulnerable groups (Pelling et al., 2015), and was suggested as an important source of support in responses to the Community sub-group questionnaire.

“We had learnt from experience of the 2009 floods that having a space to come to, that was continuing to function normally, was really appreciated by people whose lives had been turned upside down by flooding.”

Kendal Lions, Community sub-group questionnaire

261. There has also been reporting that door-knocking approaches, maintained by key frontline workers over sustained periods have, been found to be the only effective means through which to connect some particularly vulnerable individuals and households with the support they need. (see also section 8.9.4),
262. From this perspective, it is likely that many of the measures put in place or supported by the SRCG, through its sub-groups and through the wider community-based responses to support the flood-affected to recover since December 2015, have reduced some mental health effects amongst those affected. These approaches include Flood Support Centres, the **Encouragement** Cabin, door knocking and registration of flooded households by groups including the British Red Cross, the ‘Flood Suitcase’ project in Kendal schools, Flood Support Officers and the Agricultural Chaplaincy (amongst many others).
263. Combining the research findings, which demonstrate there are significant and long-term mental health impacts of flooding, with the observations of frontline recovery workers and community leaders, it is clearly reasonable to suspect that high levels of depression, anxiety and PTSD are still being experienced by many people who were affected by the flooding caused by Storm Desmond.
264. In summary, the mental health effects of Storm Desmond remain a concern two years after the flood. Also, given the nature of the flood risk that persists in the affected areas²¹ and the fact that there are areas, such as Carlisle, where numbers of householders are still not back in their homes 24 months after the storm, the importance of maintaining contingencies to reduce mental health risks cannot be understated in this report.

²¹ i.e. in the majority of locations flood defences have only been returned to their pre-Desmond condition, so a repeated storm of that magnitude may easily result in comparable impacts.

Box 4: Farmers' mental health and the Cumbria Farming Flood Action Group

An initial post-flood survey conducted by The Farmers' Network identified levels of "desperation" within the farming community. Farmers' concerns related to their businesses being impacted directly by the floods, including: significant loss of stock, damage to farm infrastructure and damage to land (including in one case, the complete loss through erosion of 3 acres of pasture land).

The pressure of restoring these impacts was, however, amplified again by the retraumatising effects of 1) having to complete a 35-page application before waiting for Farming Recovery Grant (FRG) applications to be assessed*, whilst also 2) experiencing a persistent problem in receiving farms' normal Basic Payment Scheme payments. The fact that both funding streams were either partially or totally the responsibility of the Rural Payments Agency meant that farmers' trust in this agency was low.

In order to mitigate the mental-health risks they were witnessing, The Farmers Network, Royal Agricultural Benevolent Institute (RABI) and the broader Cumbria Farming Flood Action Group (CFFAG) were actively passing on the details of individuals they were concerned about to the Agricultural Chaplaincy. The Chaplaincy then made contact with struggling farmers as quickly as they could and offered what help they could.

Whilst the pastoral support of the Chaplaincy was gratefully praised, the collaborative working of the CFFAG in reducing physical pressures on farmers with more practical help (e.g. through Forage Aid), underpinned the groups' success, which saw it awarded the Farmers' Guardian Hero Award in October 2016.

NB. What this example clearly illustrates is that it is important not simply to understand mental health as pathology, but to see its effects as having drivers that can be reduced through the provision of carefully targeted physical assistance as well as emotional support.

*It is important to note that the Farming Recovery Grant was a compensation grant. Unlike the LEP-coordinated business recovery grant, farmers needed to pay for their own repairs and then submit the paid invoices along with their FRG application. There was no option for a 75% upfront payment (see BERsG section).

Recommendation 28: In view of the increasing evidence for the existence of mental health effects from floods and the long-term disruptions and psychological pressures they cause, the Department of Health should review and update its interim guidance on dealing with the mental health effects of major incidents and disasters (DoH, 2009: now archived), to ensure that measures to reduce long-term mental health effects are appropriately addressed.

Recommendation 29: The Director of Public Health should review Cumbria health sector's capabilities and capacities in relation to the provision of mental health diagnosis (including referral guidelines), treatment and support, in order to assess whether they are sufficient to identify and mitigate long-term mental health risks to emergency-affected populations in Cumbria.

Recommendation 30: Organisations involved in recovery should understand the importance of providing, enabling and maintaining long-term access to social meeting spaces, where networking and sharing opportunities can assist people affected by emergencies to recover physically and emotionally.

Recommendation 31: Cumbria Local Resilience Forum members and partners should continue to actively improve and deliver contingencies to provide practical and emotional support 'on the doorstep' of the emergency affected. This support needs to be considered as a long-term commitment. Accordingly, the importance of maintaining recovery-support and resilience-building capabilities, which can be clearly signposted to those in need and which can integrate, over time, directly with other social safety-net provisions is vital.

8.3.3.2 Mental health effects: Recovery workers and staff welfare

265. Research following both the 2001 Foot and Mouth Disease crisis in Cumbria in 2001 and the Hull floods of 2007 identified role stress as a major cause of negative mental health effects in Frontline Recovery Workers, i.e. staff who work at the operational level, where they interact directly with the hazard-affected public (Convery et al., 2007, Whittle et al., 2010). In relation to this finding, Whittle et al. (2010) identified four types of Frontline Recovery Worker:
- Permanent and temporary staff whose jobs were created specifically to deal with the issue of flood recovery. In Cumbria, this would include the Red Cross workers who were recruited in each District following Storm Desmond, and Carlisle's Flood Advice Centre staff.
 - Those whose pre-existing job roles were extended to deal with flooding issues. An example of this would be Cumbria County Council's Community Teams.
 - "Traditional" intermediary roles, e.g. the work of the loss adjusters and Citizens Advice.
 - Work that was carried out in a voluntary capacity by community groups (e.g. Churches Together volunteers, CERT-UK)
266. Evidence reported to this review and discussions at the Debrief Workshop point toward people in these types of roles all experiencing mental health effects as a result of role stress invoked by needing to work directly with a flood-affected public for extended periods.
267. What has emerged during this review, however, has been the fact that it is not only frontline staff that have been experiencing these effects.
268. There were many staff and volunteers who were working extended hours for extended periods. For example, one staff team reported working 60-hour weeks for 8-9 weeks. This was a basic

requirement if they were to deliver their recovery-focussed work, whilst at the same time also managing their mainstream business-as-usual commitments, which never went away.

269. In addition to this, it should not be forgotten that the impacts of Storm Desmond were so widespread that many of the staff and volunteers working on flood recovery had also had their own homes flooded.
270. This scale of commitment obviously makes significant demands on individuals. It is hardly surprising, therefore, that anecdotal evidence suggests incidents occurring, such as a senior member of staff blacking out at work and many others bursting into tears in front of each other.
271. Possible explanations for these effects obviously include the sheer intensity of emotions unleashed by the impacts of the flooding and the scale of the recovery task. However, factors such as staff reductions since 2009, as a result of austerity, and the intense pressure placed on teams to deliver data to the MRG during early recovery cannot be discounted.
272. In effect, mental health impacts were seen across many types of staff and volunteer role; whilst previous research has concentrated on frontline staff who have contact with people who have been directly affected by the flooding, following Storm Desmond there were also clearly impacts on the staff involved in the SRCG and its sub-groups
273. The fact that staff were so involved in the recovery process should not, however, be viewed completely negatively. Whilst such experiences clearly cause stress (as they do to the affected public), they also helped recovery staff understand and remain connected to community and to display their own versions of the resilient 'Cumbrian spirit', which has underpinned the county's recovery narrative.
274. This was, however, something of a double-edged sword for all those involved to carry.

Recommendation 32: Cumbria Local Resilience Forum statutory members and non-statutory partners should all reflect on their mental health and wellbeing contingencies, both internally and as a multi-agency partnership, and use the lessons learned from Storm Desmond to ensure that appropriate future provisions are in place to safeguard the partnership's most important asset, its staff and volunteers.

8.4 SRCG: Business & Economy Recovery Sub Group:

Purpose

- To assess the business and economic implications for the affected area.
- Provides visible and strong leadership during the recovery phase
- Take advice from the sub-groups, decide the strategy and ensure implementation of the strategy and rebuilding of public confidence
- Ensures the co-ordination and delivery of consistent messages to the public and media via the Communications sub-group
- Assess the economic implications for the affected areas and provide assistance
- Enable businesses affected by the emergency to resume trading as soon as possible.

Role

- Feed in recovery issues whilst the SRCG is running
- Develop the overall recovery strategy, including communications, clean up, economic and business recovery
- Ensure stakeholders, especially the communities affected are involved in the development and implementation of the strategy
- Establish appropriate sub groups as required by the emergency
- Produce a business impact assessment on the situation
- Acquire a baseline scope and proactively manage through to completion
- Proactively support businesses through marketing campaigns and events
- Gather information on affected businesses through all available means, surveys on line and word of mouth.
- Coordinate recommendations and actions from the sub groups and monitor progress through the action plan
- Manage and monitor financial matters including the distribution of available recovery funding and pursue funding and other assistance
- Deal with other issues that fall outside of the scope of the working groups
- Provide support to affected businesses
- Create, implement and monitor the action plan
- Agree exit strategy criteria and timescale including gathering learning from experience.

276. The Business and Economy Recovery sub-group (BERsG)²² comprised officers from Cumbria County Council, the 4 flood-affected District Councils, Cumbria Chamber of Commerce, Lake District National Park, DEFRA/RPA, the Department for Business, Energy and Industrial Strategy (BEIS), MHCLG and Cumbria Local Enterprise Partnership (LEP). Having commenced drawing resources together on Saturday 5th December 2015, the group held its first meeting on the morning of 7th December²³. In July 2016 BERsG published a debrief report of its own activities, which offered 19 recommendations (Appx: 5)
277. The group met daily in the initial aftermath of the Storm Desmond, then weekly and monthly as it moved from the initial response phase into recovery and its make up changed to reflect emerging events.
278. BERsG scoped out its remit, which included assessing the impact to local Small and Medium Sized Enterprises – the mainstay of the local economy - as well as to larger strategic employers; it produced an Action Plan to help guide and focus the group’s work; developed the Flood Recovery Grant scheme which made grants to 648 businesses that were flooded or severely affected by the impacts upon local infrastructure; and circulated information and guidance for businesses to further assist recovery.
279. For this group, institutional memory, in the form of the memories of staff who had also been in post during the 2009 floods (including an officer in BEIS) and the plans written at the time, provided genuine assistance in helping this group set its priorities and to develop an action plan.
280. The biggest challenge in the initial stages proved, however, to be working with government. The daily data requests, delays in government stating how much funding would be available, eligibility rules changes made slowly, or only confirmed once local schemes were up and running.
281. The administration team even stated that keeping up with the daily reporting to the Ministerial Recovery Group approached a *“50:50 ratio between responding to ministers and delivering support for businesses”* (see Recommendation 7).

8.4.1 BERsG Work streams

282. The BERsG action plan consisted initially of four work streams, although, as each was dependent on government financial support, this soon reduced to three streams:
- Business Grants
 - Support for Strategic Businesses
 - Tourism impact
 - Key employment sites: this focus was dropped when government withdraw funding.

8.4.2 Business grants

283. To provide and an illustration of the difficulty faced by this group in defining grant payment procedures, between December and January the value of the business grant funding offered by government reduced from an initial £10k per business offer to £2.5k per business (NB. The sub-group developed its own 4-tier recovery grant scheme using this funding: below).

²² This acronym is used in this report in order to differentiate the work done by this group from that conducted by Prince Charles’ Business in the Community’s Business Emergency Resilience Group (BERG).

²³ The details of the BERsG recovery work are detailed in a debrief report developed by the group in June 2016. Some passages of descriptive text from that report have been reproduced here.

284. It is understood that this reduction was, at least in part, due to the scale of impacts wrought by Storms Eva and Frank, meaning that more businesses across the North of England needed to be offered support. However, this reduction had implications for Cumbria's local authorities, due to the potential reputational harm and loss of trust in the scheme, which could be caused by their seemingly going back on initial public statements, which had been made in good faith, but then had to be adjusted due to government inconsistency.
285. As well as the uncertainty over the level of funding available, there was also inconsistent information around who the grant funding could be given to. Eligibility for the Business Flood Recovery Grant scheme had initially been announced by BEIS/MHCLG to support 'flood-affected' businesses. This definition was later called into question by BEIS/MHCLG, and funding restricted to 'flooded' businesses, which meant that decisions on grant approvals to SMEs had to be delayed. This issue, which impacted directly on businesses which had (for example) been cut-off from their supply lines, was not resolved until April 2016, when BEIS/MHCLG agreed an extra tranche of funding (see Recommendation 8).
286. Working to support the clear government wish to get grant funding out into the community as quickly as possible, the group developed procedures for giving 75% of a grant to businesses so they could get on with their recovery work as an advance payment, with the final 25% then available upon the recipient businesses' surrender of invoices.
287. This process of advance payment was regarded by Cumbria as genuine improvement over previous defrayed payment systems (i.e. where the businesses bore all costs until all work was complete). The perception was that many businesses simply could not have afforded a defrayed cost approach, for what would have been for some their third flood damage recovery in 10 years. This clearly illustrated a keenness to support affected businesses. However, as the recovery progressed many companies did not apply for the final 25% payment, meaning that it became difficult to impossible for the team to gather the detailed evidence of expenditure that might be required by a subsequent treasury audit.

Compensation vs recovery assistance

288. Here there is a need to note the difference between two ways of providing grant funding for flooding or other types of disaster recovery: recovery grants and compensation payments. The recovery grant coordinated by BERSG was available to any business that could prove itself to be flood *affected* (as per the original BEIS/MHCLG communications). This meant that businesses isolated by the floods, such as those in Grasmere affected by the A591 closure, could apply for grant aid to support their recovery. Whereas, in other parts of the country affected by storms Desmond, Eva and Frank, local authorities operated a simple flood compensation scheme, whereby only *flooded* businesses could apply for a straightforward £2.5k grant.
289. In contrast, the district councils in Cumbria effectively operated a compensation scheme in relation to the £500 Community Grant that was made to every flooded household. This meant that everyone whose residential property was mapped as situated within the EA floodzone in the impacted areas was automatically sent the £500 grant via a reverse payment into the account from which they paid their council tax. As discussed in the section 8.1.4, this resulted in bad press for South Lakeland District Council, when people reported that they had not been 'flooded' and yet had received this compensation payment.
290. Whilst easier to administer, therefore, a *flood-damage* specific compensation scheme ideally needs to be supported by substantive evidence of actual damage suffered (i.e. more precise evidence than the simple fact that the property lies within the EA flood zone). Whereas, if it serves as compensation for the wider constituency of the *flood affected*, this requires a different type of evidence (e.g. extra fuel/commuting costs). Such approaches can also be harder to justify to the public without explicit explanations (e.g. "Why did they get compensation and not us?").

291. From Cumbria's experience of Storm Desmond, these data are incredibly hard to collate fast enough to allow the "as quickly as possible" distribution of aid that the Government desired. There is also the need to consider whether the costs incurred by mis-paying relatively few grants to unimpacted householders are outweighed, in the short-term at least, by the significant savings that are made in not having to collect unequivocal evidence of impact (i.e. knocking on every door to check) before paying out.
292. Taking this perspective, it should be noted that the general consensus across the evidence collated during the review, was that the rapid payment of the £500 Community Grant was overwhelmingly positive, regardless that it was carried out on limited information and that the media presented the, inevitable, glitches in the rapidly developed and delivered payment system so negatively.
293. Returning to the business grant. Here the straight flood-damage compensation payment of £2.5k, which was being used in other areas of the country, also risked excluding a large number of businesses who had suffered losses through indirect flood effects (e.g. isolation from markets). Also, for larger businesses in Cumbria, such an approach would be unlikely to be sufficient to support recovery at all effectively. As an interviewee suggested "for large businesses £2.5k doesn't touch the sides"
294. Accordingly, Cumbria's Business Flood Recovery grant (FRG) scheme was aimed at flood-affected businesses and provided four categories of maximum funding available (£3k, £5k, £7.5K and £10k), dependent on the size of business, with 75% paid up-front and 25% to be paid later upon surrender of invoices. Notwithstanding that such invoice checking proved in some cases to be extremely time and labour intensive.
295. The ability to offer these various categories of support within a recovery grant, rather than a flat £2.5k, was built on the accurate assumptions that 1) not every business would apply for the FRG (e.g. because many would have sufficient insurance to cover damage), 2) most affected businesses would require more than the flat-rate £2.5k that was suggested by government.

Recommendation 33: Government should explicitly accept a greater proportion of the risk related to the rapid payment of grants. (For example, business-recovery grant beneficiaries subsequently failing to provide evidence to local authorities for how the funds were spent). Passing this risk, even implicitly, to the local authorities, reduces their ability and willingness to act pragmatically in relation to supporting potentially large numbers of vulnerable SMEs.

NB. If the Government were to accept this risk, this could allow them to trust local authorities to be given a small amount of additional grant to carry out an on-the-ground scheme evaluation (rather than subject them to a full audit) (x-ref Recommendation 9).

Business-impact assessment: Growth Hub Advisors

296. As with other grants, it was important to carry out impact assessments in order to ascertain the likely scale of need around the county. These assessments were carried out on a face-to-face basis by 15 Growth Hub advisors, who had, fortuitously, recently been employed by the Chamber of Commerce to deliver another project funded by the Local Enterprise Partnership (LEP). Funding for these advisors was awarded to the Chamber of Commerce out of the business grant funds.
297. With these staff in place, it became easier to make the awarding of all FRG grants contingent on a visit from an advisor, who could assess impacts as well as need (e.g. whether insurance covered all losses). Having staff on the ground knocking on doors in this way not only provided

affected businesses with access to grant funding but, due to lessons learned from 2009, also meant that businesses could be given additional relevant information about other support available (e.g. about HMRC contingencies for small businesses, and how to manage supplier accounts).

298. The effectiveness of the growth hub advisors in supporting businesses was regarded as a real success of the whole operation. However, having the advisors working on recovery meant that they were not available to carry out the tasks they had initially been employed to do, i.e. this support came at an 'opportunity cost' to normal LEP activity.

Opportunity Costs

299. Opportunity costs arise when one alternative is adopted at the expense of others. The Growth Hub suffered opportunity costs, because its advisors were working on managing and facilitating recovery, rather than focusing on their core task, which is facilitating new business and growth.
300. Likewise with the local authority team, who were accruing opportunity costs as they worked on recovery, as a result of their resultant inability to carry out work that usually brought funds directly into their organisations (e.g. fees for regulatory work). An estimate was made that £50k (20% of the department budget) was lost due to the team's inability to carry out external work due to recovery commitments.
301. It was also estimated that some team members were working 60-hour weeks for 8 to 9 weeks, simply to keep on top of their dual workloads. This itself will have carried significant opportunity costs in terms of staff welfare (see: Section 10.1.2).
302. These various costs should be viewed, however, in parallel to the fact that whilst the Chamber of Commerce was eligible to receive funds for staff undertaking recovery work, the local authority was prohibited, by government rules, to use the funds to take anyone on for this purpose. In effect, the recovery work was costing the local authority twice, once through lost earnings and once through the need to have staff carrying out recovery work alongside (non-earning) business-as-usual tasks, without being able to use funding to hire additional support (see Recommendation 9).

Farming as a business

303. Another concern reflected on by BERsG officers related to the treatment of farmers within the grants system. From the outset, farms appeared to be treated as having suffered physical impacts (e.g. loss of fencing, gravel on fields), rather than business losses, whilst, obviously, farmers had experienced both types of losses. However, the expectation from government was that farming recovery would be dealt with through the Farming Recovery Grant and Defra, whilst residential and business grants would be dealt with via MHCLG, BEIS and, for tourism, by the Department for Culture Media and Sport (DCMS).
304. As discussed in the section 8.6, the additional layer of environmental regulation that farmers were required to go through to get their grants (including a 35-page application form), added significant bureaucracy to their claims application process compared to others. This was compounded by the fact that farmers' support tended to come from farm-related organisations (e.g. the Farmers' Network), which whilst incredibly valuable in providing expert farming advice, was potentially not as effectively linked as possible into the other grant/advice-giving structures.

305. Whether due to a perception that Defra was dealing with this or that farmers did not need business support, there was little support offered by Growth Hub advisors to farms. This was despite the fact that many farms rely on diversity activities (e.g. Bed & Breakfast) to support the farm business and tourism-related businesses such as B&Bs were seriously affected. It is also important to note here, that it is not unusual in Cumbria for the diversity activity on smaller farms to be the primary source of revenue for the business (Burton et al., 2011). Reflecting on this, the team felt that not dealing with farmers more directly, was a definite oversight by the business group, which would need reconsideration prior to another flood event.
306. From this perspective, it is also important to mention that rural householders reliant on private waste-water systems were also excluded from claiming damage to these systems under the available grants. For many this issue resulted in significant specific costs being borne by the household which were completely avoided by urban dwellers.

Recommendation 34: Defra and other government departments should examine whether often diverse farm businesses should continue to be dealt with separately from other businesses in terms of best supporting their grant eligibility, their applications for grants and their access to business advice.

8.4.3 Support for Strategic Businesses

307. Due to the impact on several strategic businesses in the county, the MRG approved the release of funds to directly support these businesses' recovery from the storm. This funding complied with EU legislation on state aid as it fell within the parameters of "*Aid schemes to make good the damage caused by certain natural disasters*"²⁴
308. The principal strategic businesses that were directly affected in the county were McVities, James Walker and James Cropper. These firms' importance to the local economy and as major local employers meant that getting them back into full and more resilient operation was regarded as a vital component of getting the county back "open for business". In effect, it was important for these businesses to be safe-guarded in order that they continued to see their sites as viable and as bearing tolerable levels of risk.
309. Given the damage sustained, it was always a possibility that these firms would consider moving away, at significant cost to the local workforce and to other local businesses in these companies' supply chains. Therefore, the use of 'Article 50' approved aid clearly illustrated the Government and county's commitment to ensuring Cumbria remained a place where these businesses would want to operate.
310. Initial negotiations arrived at estimates of storm related losses of £1m each for McVities and James Cropper, which would have been covered by Article 50 payments. However, as with other schemes operating in the early weeks following the storm, government then changed its mind on offering direct funding and suggested that the LEP should step in and pay the £2m.
311. This was immediately problematic, because all the LEP's existing funds had been provided under a specific Growth Deal and were clearly accounted against projects that the LEP was contracted to deliver. Despite this the Government insisted that "money that has already been allocated

²⁴ Article 50: EU Commission General Block Exemption Regulation (GBER) - Document C (2014) 3292/3 (p.86)

for other purposes” should be used to meet this recovery-focussed commitment. Accordingly, LEP defunded a number of Growth Deal projects and paid the £2m; thus, directly aiding the two strategic businesses and protecting their high-value jobs, whilst, simultaneously, also introducing opportunity costs directly to the County’s growth.

312. Following the initial £1m payments to McVities and James Cropper, McVities and James Walker continued to require state aid funding as a direct result of their flood damage. In McVities case, this related to the need to construct flood defences at their factory to mitigate their and their clients’ concerns over the site’s sustainability. In James Walker’s case, following repeated flood impacts, the decision was made to relocate the business within Cumbria.
313. Following significant time in development, business case appraisal and funding negotiations, McVities’ flood defences achieved practical completion in May 2017. James Walker’s relocation to its new Lillyhall site in Workington is still ongoing²⁵.

8.4.4 Tourism

314. Tourism is a principal pillar of Cumbria’s economy. Yet, during the last 17 years the county’s tourism-associated businesses have been seriously impacted as a consequence of a series of emergencies, including the Foot and Mouth disease outbreak (Cumbria Foot and Mouth Disease Inquiry Panel, 2002) and the floods of 2005, 2009 and now, 2015.
315. The impacts of Storm Desmond on the local economy were complex and in many respects scale-dependent. There were some clear, practical reasons for the impacts (e.g. road closures), but also issues of perception, with media coverage of a ‘struggling’ county believed to have affected tourist footfall. A *Cumbria Tourism* survey in January (2016a) found that 90% of 341 businesses surveyed had suffered “storm impacts”²⁶, including 33.3% medium and 20.1% major impacts.
316. Four months on, in March 2016, a further *Cumbria Tourism* survey identified that after “*two years of strong performance, and positive upward trends in profits and visitor numbers, this situation is now reversed. Three quarters (76%) of tourism businesses are reporting profits down and the same proportion report visitor numbers down*” (Cumbria Tourism, 2016b).
317. By ten months on, in September 2016, 40% of tourism businesses surveyed were still reporting on-going storm impacts (Cumbria Tourism, 2016c). This finding provides an important insight into the long-term effects of flooding and its related disruption on tourism in the county. This finding is also easy to understand as flood specific, whereas, by September 2016 other factors, such as Brexit, were also likely to have been influencing the industry’s turnover in more complex ways. For example, the fall in value of the pound, related to Brexit, may have influenced the fact that 42% reported an increase in international visitors.
318. Importantly, from the outset, the SRCG and other groups were conscious of the need to mitigate perceptions that Cumbria was so seriously affected that tourists would not consider coming. There was, however, a difficult balance to be made, because without doubt some areas of the

²⁵ Corrigendum: In July 2018 James Walker announced that it had abandoned plans to move to Lillyhall, that “it was staying put and looking into how best to protect the site from future floods.” <http://www.newsandstar.co.uk/news/West-Cumbrian-factory-ditches-plans-for-out-of-town-site-fd06361c-806b-4099-b646-25d731597702-ds>

²⁶ Understood to mean direct impacts (damage) and secondary effects (reduced business)

county were struggling, and many communities felt that the “Open for Business” message distracted from their ongoing need for support during recovery.

319. The long diversionary routes around damaged bridges and the closed section of the A591 meant that even unflooded businesses were experiencing difficulties. For example, some businesses in Grasmere were only able to open for restricted hours due to difficulties faced by their staff in getting to work. As many were small businesses, the reduction in footfall they experienced due to the A591 closure put many into financial crisis.
320. Reconstruction and resilience building also had direct impacts. For example, Pooley Bridge, whilst accessible, had for some considerable time the appearance of a building site, with flood-damaged shops and heavy machinery operating within the village centre; and will do again when the permanent bridge is constructed in 2018. Likewise, in Glenridding, complications with riverbank stabilisation have meant that the area around the refurbished tourist information centre was still cordoned with Heras barriers in August 2017.
321. Throughout, another factor was a sensitivity within the tourism sector about the need to stop talking about the floods, as this negative message was perceived as a potential brake on recovery. That being said, the risk then was that places and businesses that were still suffering would feel abandoned as the rest of the county apparently moved on.

Tourism funding

322. The LEP very quickly supported a number of local events and invested £250k, from council reserves, for targeted marketing for Easter 2016. Over time the LEP also invested £75k within each of the four affected districts for tourism activities. With match funding from the districts, this money helped to support a diverse programme of activities (e.g. funding supported Mary Berry’s attendance at the Kendal Food Festival in March).
323. The intention of this funding was always to raise awareness and bring in “an extra 1,000 people” and the perception in the group was that this had been largely successful. However, some recipients did stress their frustrations about the significant “Yes-No-Yes” confusion about whether they would receive funding or not.
324. This issue clearly reflects other concerns about grants and the importance of funding agencies making a decision about a fund and its eligibility criteria, and then sticking to it. Once a decision about grant support is made and broadcast to the public, any subsequent renegeing or criteria changing impacts directly on public confidence and willingness to engage with grant schemes, even if failure to engage means the affected may miss out on valuable help (See Recommendations 7 and 8).
325. Whilst these tourism funding initiatives appear to have assisted the industry in the county, national government appeared reticent to financially support the sector in the same way it had supported other impacted industries. *Cumbria Tourism* has a very clear understanding that, in the UK, its principal market and, therefore, its advertising focus is to draw visitors from *within the north*.
326. In relation to international visitors, *Cumbria Tourism* knows that the best results can be achieved through very specific campaigns (e.g. Beatrix Potter is particularly popular with tourists from Japan, and landscape and other cultural attractions draw Chinese visitors).
327. Accordingly, the focus for *Cumbria Tourism* tends to be on developing advertising campaigns specific to these known markets. Conversely, instead of supporting this type of approach, the

government actually funded an advertising campaign through *Visit Britain*, which focused primarily on drawing visitors *to the north*, and included a campaign based in airports (i.e. which would only be seen once international visitors had already arrived, likely with an itinerary already prepared).

328. DCMS also provide a marketing specialist for 3 days, but declined to fund any sort of additional consultants who could have helped to deliver a focused tourism strategy. Whether this refusal results from a government reticence to be seen to be supporting one area's tourist industry over another's is unclear. However, the general consensus within the group was that greater value for money would have been achieved if government funding had been given to the affected areas to spend on their own campaigns.

Recommendation 35: All Government Departments and other bodies involved (e.g. Local Enterprise Partnerships, Local Authorities) should understand the need for, and have financial contingencies to support, coordinated and targeted marketing to ensure tourism sector recovery following disasters. These contingencies should not be 'nationalised', but should be developed and delivered using the market-knowledge and expertise of the respective destination management organisation involved (e.g. Cumbria Tourism).

8.4.5 Corporate responsibility and business continuity

329. As with the response phase, business continuity and corporate responsibility played a key role in determining how effective businesses could be in supporting themselves and others. It is clear that local firms, such as Carrs, Storey Construction and Stobarts, not only had internal resilience, but also possessed capabilities and capacities that proved invaluable in assisting businesses in their own supply chains and also the wider county to recover.
330. On a smaller scale, the community-supporting activities of some businesses (e.g. Becksides Construction in Glenridding²⁷) and the community-promoting activities of others (e.g. The Gingerbread Shop's regional promotion of Grasmere), provided clear illustrations of the importance of understanding businesses are inextricably part of the communities in which they operate.

Recommendation 36: Understanding and developing an appropriate 'ask' of the private sector and effectively integrating its capacities and capabilities in support of response and recovery-focused activities, provides clear opportunities for the statutory sector to build resilience across the county. Therefore, Cumbria Local Resilience Forum members and partners should continue to actively develop their emergency and recovery contingencies using relationships with key business 'good neighbours' in the county.

8.4.6 Public and Private-sector collaboration in advocating for government support

331. A further useful lesson that was learned by the SRCG was the importance of collaboration between the authorities and the business sector in setting out a unified ask when advocating directly for government support. Holding meetings with visiting ministers. On several occasions, the presence of local business representatives at meetings with visiting ministers provided the

²⁷ <http://www.parishfloodgroup.org/flood-banners.html#6-beckside-Boys>

opportunity to illustrate that the SRCG's aims and objectives accorded directly with concerns in the business community (e.g. the need for specific bridge repairs to be prioritised, due to their closure's effect on local business continuity and sustainability).

8.5 SRCG: Schools and Learning Sub Group:

Purpose

- To put in place measures to secure education for children attending schools closed by flooding.
- Identify capital requirements to repair or replace education infrastructure.

Role

- Support continued education for children displaced or isolated by infrastructure failure.
- Deliver a programme of repair and replacement of damaged assets.

8.5.1 School transport

332. Across the county school transport was severely affected by the damage to roads and bridges. Immediate challenges included the provision of free transport for pupils of the 35 schools to which normal journeys were severely disrupted. A financial assessment suggested that free transport for eligible pupils up to the end of May 2016 cost the County in the region of £99k up until the end of May 2016.
333. The most notable initiative to both ensure children were able to continue their normal education, as well as providing an important message that Cumbria was getting back to normal, was the opening of the shuttlebus service along the A591, which for almost a month required students to walk through a section of the roadworks on Dunmail Raise (see Case Study 2 in Infrastructure section), but allowed them to continue attending school largely as normal.

8.5.2 School infrastructure repairs

334. As a result of Storm Desmond, damage and disruption was reported to up to 50 schools and 17 nurseries as well as to the activities of 6 registered childminders. These disruptions impacted directly on an estimated 15,285 children and young people, and the families of those children, in the short term. Despite these massive impacts, all pupils were back in learning by the first week of January 2016.
335. For many schools, the damage was limited and involved loss of power or utilities, or relatively minor surface-water flooding that resulted in damage to carpets and some furniture. Such impacts were dealt with rapidly by the utilities companies and by Cumbria County Council, whose operations teams got most facilities fully reopened within a week.
336. Although several schools suffered significant damage that took many months to restore, the most significant damage occurred at the Newman Catholic School in Carlisle. This facility was inundated by up to seven feet of water, which resulted in the loss of pupils' work, along with classrooms and administrative and learning resources.
337. Newman School is operated by the Diocese of Lancaster, but Cumbria County Council gained the approval of its council members to rapidly step in and support the Diocese, ensuring that pupils would suffer as little disruption to their education as possible.
338. Working in close collaboration with the Diocese, Cumbria County Council was able to identify alternate facilities at Harraby, where a recently vacated primary school was temporarily adapted for older children and its capacity supplemented with the addition of portable classrooms. Moving the school to this temporary location stabilised the situation (see section 8.2.9), and so enabled measured decision making on a permanent solution to take place. The

Newman school has now flooded four times in its history, including in 2005 and 2015, and so seriously considering a permanent alternative location was a clear priority.

339. Very quickly it was agreed that the old location could no longer be considered as sustainable; it was calculated that buildings would need to be elevated by eight feet in order to remove the risk of flooding. Accordingly, a process of identifying a new site was commenced, but bureaucratic challenges were very quickly experienced around the funding options for building a new facility in a different location.
340. Initial discussions between the Diocese, Cumbria County Council, the Education Funding Agency (EFA) and the Diocese insurers identified problems with the standard funding arrangements. This is because these arrangements were designed on the assumption that either substantive repair would have been carried out in place, or that any relocation would have been partially funded by the sale of the vacated land (i.e. the old school site). As the old site was now being categorised as non-development land, due to its exposure to flooding, this meant that additional negotiations needed to be conducted to convince the EFA and other stakeholders to contribute the shortfall.
341. In comparison to the proactive role of the Department for Transport, when it provided a significant lump sum to the County Council for transport infrastructure repair (see Infrastructure section), the initial reticence of the Department for Education and EFA to underwrite what should undoubtedly be considered as a genuinely resilient response to an impact on children's education appears to indicate the need for a more substantive policy change in this regard. At the moment, such conditions are referred to as a 'site abnormal', and thus attract considerable additional case-specific negotiation and administration to resolve.
342. The pupils of Newman School have been receiving their education in the temporary facilities since they opened in January 2016. Therefore, it is important to note that the effects of educational disruptions due to such flood-induced relocations do have impacts on children and young people. These include life-chance affecting pressures, which can impact particularly on pupils experiencing disruption during exam years (Walker et al., 2010).
343. From this perspective, it is also vital to acknowledge that in January 2017 Newman School was put into special measures by Ofsted (Ofsted, 2017), with justification that was directly questioned by a representative of the Diocese:

"It is a pity, however, that the inspection gave such little recognition to the great efforts made by governors, staff, children and parents at Newman to pull together after the floods that destroyed classrooms, much of the students' course work and the resources teachers had put together to prepare them for their exams." (McNamara, 2017)
344. Clearly it is not within the remit of this report to discuss, in detail, the factors underpinning school's special-measures status. However, the fact that this occurred following a disruptive year when the pupils had been taught in temporary facilities, and during which time the school management had been engaged in protracted negotiations over when construction of a new school could commence (let alone the discussions of when classes would start there), suggests a need for greater flexibility in understanding that capital investment in resilience in the educational sector should be more straightforward.
345. The Environment Agency (2009) has calculated that nearly 2,500 schools in England are situated in locations at risk of flooding. Accordingly, if the occurrence of high magnitude flooding continues into the future, as is projected under climate change (Committee on Climate Change, 2016), it is likely that other local authorities will wish to adopt Cumbria County Council's practice of relocating schools from flood exposed sites. In anticipation of this, the Government's national adaptation plan should include processes through which the relocation of schools at risk from flooding can be expedited with the support, rather than hindrance, of government departments and without undue bureaucracy.

Recommendation 37: The Department for Education and the Education Funding Agency should incorporate efficient procedures into their funding rules so that local authorities can consider and implement ‘resilient relocation’ of flood-affected educational facilities, or for educational facilities at significant flood-risk.

8.5.3 Children and young people’s agency, mental health and well-being

346. As a direct result of learning lessons from other floods, Cumbria County Council took a lead in providing teachers and others with guidance on ensuring flood-affected children and young people were offered appropriate care and support. These resources included the guidance document “*Helping Children to Deal with the Emotional Consequences of Flooding*”, which was published in the weeks following the flood by the Council’s Educational Psychologists.
347. There were also other initiatives, including the Kendal ‘Flood Suitcase’ project, which was specifically aimed at supporting pupils of Stramongate School in Kendal (Box 5).
348. From a broader perspective, it is important to note these positive outcomes as one illustration of the potential for innovative approaches to assist in protecting and enhancing children’s and young peoples’ mental health and welfare, taking them from “victims to actors” in flood risk management (Mort et al., 2017). The potential value of encouraging and facilitating innovative approaches to supporting children and young people in this way should, therefore, inform the strategy of Cumbria’s Emotional Wellbeing and Mental Health Multi-Agency Partnership (Cumbria LSCB, 2017) in the future.

Recommendation 38: Cumbria’s Emotional Wellbeing and Mental Health Multi-Agency Partnership should continue to explore innovative approaches to building children’s and young people’s resilience to hazards and to recovery challenges as an integral part of their partnership activity.

Box 5: The Kendal ‘Flood Suitcase’ Project

Following the flooding in Kendal and due to concerns how best to support the mental well-being of pupils, the Headteacher of Stramongate School contacted a team at Lancaster University who had recently completed a project focussed on helping children and young people to recover from floods and to build personal resilience.

As a result of a partnership between the school, the university, Barnardo’s, South Lakeland District Council and Cumbria County Council, The Kendal ‘Flood Suitcase’ Project went ahead in May 2016 with a one-day workshop. This was followed by a second workshop in July. The workshop activities involved children, supported by their parents and teachers, undertaking a range of reflective activities, including using cameras to record important images for themselves and then discussing them. The children also designed a ‘suitcase’, as *“a place to keep their memories safe at school but also available to take out and talk about, if necessary, in the future.”*

In effect, the “Flood Suitcase provided a material and conceptual repository to put [flood] stories safely away – not forgotten but ‘off the chest’.”

At the end of the project the participants were presented with the ‘suitcase’ they had created, and this was subsequently used by the school for a whole school assembly focussed on reflection about progress since the flood.

The project was independently evaluated in November 2016, with the evaluation recording very positive feedback from all participants, e.g. *“parents, whose children took part were, without exception, grateful for the opportunity that it had offered”*.

Overall the project was found to have been *“successful in being a timely intervention to help flood affected children when they needed it”*.

Source: Weldon, S (2016) *Evaluation of Lancaster University Children’s Flood Recovery ‘Suitcase’ Project*: Stramongate School Kendal

8.6 SRCG: Environment Sub Group:

Purpose

- Use expertise (and monitoring data) to give viable options for cleanup, repair and replacement. Liaise closely with stakeholders.

Role

- To develop a preferred remediation strategy for submission to, and agreement by, the SRCG to cover cleaning, repair or replacement of the physical infrastructure and clean-up of the natural environment to an agreed state
- Review integrity of key assets and prepare strategy for reinstatement where required
- To implement the agreed strategy(s).

“I would personally like to thank the dustbin men and other waste disposal people – they were excellent with a timely service.”

Age UK West Cumbria – Community sub-group questionnaire

350. From the outset, this sub-group needed to understand and facilitate the recovery of a range of impacts, including damage to public rights of way, to farms and to natural habitats and the removal of waste from streets.
351. Working collaboratively the group carried out surveys of damage that had occurred and, in a similar fashion to the Infrastructure sub-group, set in place a risk-based repair programme to restore assets and habitats in a specific order, whilst also, where possible, increasing their resilience against future floods at the same time.

8.6.1 Sub-group Leadership

352. The decision was made by the Chair of the SRCG, Dom Donnini, to place the Environment sub-group under the leadership of Richard Leafe, the CEO of the Lake District National Park Authority (LDNPA). This was slightly unusual from a civil protection perspective, as the Chairs of sub-groups would generally be taken by a local authority officer. However, in these circumstances, the decision made perfect sense. It allowed the Chair to quickly leverage into action a complex array of existing relationships between the LDNPA and other agencies, organisations, stakeholders in the environmental management sector and the wider community. The knowledge, expertise and familiarity in collaborative working, developed by these partners prior to the flooding, undoubtedly assisted the sub-group’s ability to gain situational awareness of the post-flood environment and to implement recovery processes.
353. Despite its success, however, the challenge with selecting a Chair from outside the usual civil-protection sector was, that there was a significant learning curve to be climbed in relation to how the Chair understood the workings of the Recovery coordination process. This should, therefore, be seen as an illustration of why recommendation 1 (Section 7) acknowledges the need for broadening the County’s current recovery training and exercising regime, to include a greater number and variety of suitably qualified, experienced and empowered people to lead during this phase.

8.6.2 Initial clean-up and waste management

354. Waste management responsibilities are shared between the district councils, which carry out waste collection, and Cumbria County Council, which is responsible for waste disposal. Both the county and district authorities deliver their respective duties through the use of contractors.

355. The scale of waste generated by the impact of Storm Desmond placed immense pressure on the arrangements in place for both collection and disposal. Clearly, normal waste management activities also needed to continue in areas unaffected by flooding, in parallel with clean-up work. This impacted directly on the authorities' and contractors' business continuity arrangements.
356. Due to scale of the challenges, combined with the tight margins in relation to fleet and staff capacities to sufficiently surge waste management operations, it quickly became obvious that additional capabilities needed to be brought in to deliver clean-up and collection effectively.
357. Accordingly, specialist contractors were engaged, initially to clean silt from streets (Plate 6) and then, once people started to return to their properties, to remove flood damaged household contents that were placed into the streets.



*Plate 6: Contractors use high-capacity water bowsers to clean streets
(Image: Carlisle City Council)*

358. Whilst there was a short pause between the street-cleaning and the refuse removal, once the contents started to be removed from flooded properties, it became clear that the quantities of waste to be dealt with were enormous. Not only this, but the material came in pulses, as different households started clearing at different times, dependent on, for example, different insurance companies' procedures.
359. This pulsing made it hard to predict demand for waste removal, and this made it challenging for the councils to apply for Bellwin funding as the deadline for that scheme fell before waste removal had finished. In some cases, contractors were asked to submit invoices for work, based on informed projections, because if they had not they would have been received too late to have been processed before the scheme's closure (see Section 8.1.6: Recommendation 12)
360. The quantity of waste meant that normal collection arrangements could not cope. Accordingly, the authorities and their contractors rapidly negotiated processes through which streets could be cleared during 24-hour operations, which included a series of overnight 'crunch cleans' (Plate 7)
361. These negotiations were complex, due both to the fact that so many locations across the county needed to be cleared, and to the real physical and environmental risks involved in waste management. It is these risks that make waste management such a risk-averse and highly regulated industry.
362. It was, therefore, necessary for the partners to arrange several dispensations and contractual adjustments, including a temporary relaxation of the requirement for only specifically listed, authorised vehicles to be allowed onto disposal sites.

363. The Environment Agency did provide guidance. However, as with other aspects of the recovery coordination, there was a perception that substantive decisions could have been made earlier at the higher (i.e. national) levels and guidance issued more quickly in order to avoid confusion and unnecessary cost (see Recommendation 8). An example of this was the management of white goods (e.g. fridges). Initially, guidance was given by the Environment Agency that all discarded white goods should be sent to landfill. However, this decision was later rescinded, and white goods returned to being categorised as items to be dealt with separately under Waste Electrical and Electronic Equipment (WEEE) regulations. A complicating factor at the operational level was that many fridges were being put out on the street full of decaying food matter, which presented both waste management and health related challenges.

8.6.2.1 Building waste and safety

364. The quantity of refuse also led to a decision to open a number of temporary material-handling sites (e.g. Devonshire Walk car park in Carlisle). Such decisions were not, however, straightforward, because such sites also needed their own security to ensure the safety of those on-site as well as to dissuade the exploitative use of these public amenity facilities for private profit (e.g. by informal 'house-clearance' outfits).

365. Collection services were also constrained to picking up flood damaged goods and furniture. Any fabric (e.g. floorboards, plasterboard) stripped from properties by builders was the responsibility of those builders, or the household's insurers, to deal with through their own contingencies and at their own expense.

366. Whilst this parallel stream of waste largely went to the same disposal facilities as the flood damaged material collected by council contractors, it was important that such differentiation was administered in order to ensure that public money was used equitably and not to facilitate private sector profit at such a time.

367. However, where risks to the public were obvious (e.g. where piles of nail-studded floorboards were found teetering at the roadside), pragmatic action was taken, and the hazard was removed. Such actions ensured public safety without creating the confrontations and antagonism that may have occurred if an enforcement approach had been taken. It is extremely gratifying to see that authorities were keen not to add to householders' stresses unnecessarily at this challenging time.



*Plate 7: Contractors carry out a 'Crunch' clean during an overnight road closure
(image: Carlisle City Council)*

368. One safety factor that caused some consternation was the fact that military personnel (see section 7.3) were allocated by their commanders to waste clearance operations without appropriate Personal Protective Clothing (PPE). This resulted in a situation where local authority staff were only prepared to allow these military personnel to assist with house clearance (i.e. moving items from houses into the street), rather than the more hazardous waste collection procedures (i.e. loading vehicles). This issue, of the Army's failure to ensure the correct use of PPE, reflects similar findings in the acute phase debrief.

8.6.2.2 Collaboration and coordination

369. Whilst waste management undoubtedly caused some frustrations, due to its interface across policy, contractual and legal contexts, the contingency planning that had been conducted prior to the event appears to have underpinned what several interviewees described as the 'slick' operation it rapidly evolved into.

370. This success must, in part, be attributed to Cumbria Waste Management's (CWM) position on the county's strategic waste partnership and to its sub-contractors' existing relationships with the county and district authorities. CWM was singled out particularly by interviewees. The perception was that the flexibility of this company's continuity arrangements had meant that, even after Storms Eva and Frank caused further flooding across the North of England, CWM took the lead in maintaining the continuity of operations in Cumbria, despite the massively increased draw on waste management capabilities and capacities across the wider region.

371. CMW has considerable experience of waste management during emergencies, dating from its significant role during the 2001 Foot and Mouth crisis. The institutional memory this experience and expertise embeds into the waste-management partnership, amplified by the fact that 'debris and rubble clearance' is a 'common consequence', which is specifically planned for by the LRF partners (Cumbria Resilience Forum, 2014), undoubtedly contributed to the operation's perceived success.

372. Despite this obvious success, however, it is important not to ignore challenges that were faced during the clean-up.

373. A principal challenge involved the amount of bureaucracy involved in enabling such intensive operations. Whilst there was a perception that Cumbria County Council acted, at times, as an impediment to efficient working, it is clear that compliance with Health and Safety legislation, regulations and contracts were valid concerns. For example, it was vital that contractors were issued with clearly defined instructions so, at the very least, they knew they would be paid. In effect, there were genuine reasons for the disposal authority to temper others' enthusiasms in order to ensure the safety and legality of operations.

374. Opening a disposal site overnight is an expensive proposition and requires careful coordination, from the waste's collection at the kerbside to its off-loading at the site. The fact that arrangements for this type of operation were reliant on effective communication and collaboration between several stakeholders suggests that lessons in relation to how these processes worked, or could have worked better, now need to be integrated into future contingency arrangements.

375. From this perspective, the development by Carlisle City Council of guidance on waste management, '*Responding to Flooding*', can be regarded as evidence of notable practice that should be replicated by other partners and integrated into a central strategic plan.

Recommendation 38: Cumbria's Strategic Waste Partnership should continue to develop and test collaborative, integrated, contingencies for managing hazard generated waste at all scales; from single district to whole county operations.

8.6.3 Initial clean up: gravel

376. As in previous extreme floods, a major challenge for farmers and land managers was presented by the sheer amount of rock, gravel and debris that had been deposited either at pinch points within river channels or across flooded land. This debris presented at least two problems:
- Good quality agricultural land was rendered unproductive
 - Community concerns were raised that blockages could increase the risk of flooding from any additional rainfall.
377. An initial plan was agreed to allow a two-month window in which affected communities could carry out ‘emergency’ land remediation, without needing to gain formal consent from the regulating authorities. A clear illustration of this type of remediation work was the activity carried out by the community and local contractors to clear the river channels above Glenridding²⁸ and Braithwaite.
378. Such examples of remediation work clearly display the affected communities’ proactive desire to recover and reduce risks. However, the fact that the two-month ‘window of opportunity’ was so short and occurred at a time where winter conditions inevitably meant that little could be done to move gravel from saturated ground (i.e. rather than from more stable riverbeds), produced some tensions. For example, farmers keen to clear their pasture of gravel very soon needed to apply for consent to do so.
379. The decision not to extend the moratorium on consenting was justified by the sub-group in terms of their belief that too aggressive and reactive a clear-up could introduce the potential to cause more damage to sensitive environments than could be justified.
380. The initial strategy of the group was, in effect, to free up communities’ ability to conduct rapid restoration, where flood damage presented ongoing risks to life and property (as was seen during the repeated flooding of Glenridding through December 2015), but also to retain regulatory control in a way that offered all parties the opportunity to ‘draw breath’ before further, unintended, harm was done to affected environments.
381. This ability to ‘draw breath’ was also regarded as important in allowing time to look at the damage that had been caused and to assess whether straightforward restoration was in fact the most sensible approach to take. For example, where rivers had been forced out of man-made, raised (‘perched’) channels, a pause allowed space for discussions as to whether returning the flow to this ‘unnatural’ (even if traditional) regime was the most sustainable approach, when an alternative could be to develop options and negotiate for the re-naturalisation of that river reach. This perspective correlates directly with the Cumbria Strategic Flood Partnership’s terms of reference, which include the objective to develop integrated solutions, which “*ensure that actions reduce flood risk but also deliver wider benefits for people and wildlife*” (Cumbria County Council, 2017).
382. Related to this point, it is important to note that the Environment Agency has also recently been awarded a Defra grant of £2.5m in addition to pre-agreed funding to explore and implement Natural Flood Management (NFM) measures in the county. This is a substantial award given the relatively low individual cost of such measures. And, whilst gravel management is likely to remain a contentious topic for the foreseeable future, the allocation of this funding to projects

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E.g. <http://www.parishfloodgroup.org/Examples%20of%20Community%20Flood%20Group%20Completed%20Activities%20since%20December%202015.pdf>

overseen by the Cumbria Strategic Floods Partnership may, over time, allow for a greater and more productive consensus on this issue to be reached, as the evidence is gathered to increase our understanding of the relative effects of gravel management and NFM in reducing flood risks.

383. A final point in relation to gravel, was that contaminated gravel needed to be removed and taken to specially-licensed landfill sites. This process increased remediation costs considerably, but these costs were expressly excluded from grant-eligibility criteria, meaning that the bill had to be met from the County Council budget.

8.6.4 The Farm Recovery Grant

384. The Farm Recovery Grant (FRG) was a grant of up to £20,000 available to each of the 650 farmers affected by the floods. This grant was intended to cover the cost of uninsured and/or uninsurable losses, such as access, drain and boundary repairs, and reseeded. Grant administration was carried out by staff from Natural England, the Environment Agency and the Rural Payments Agency (RPA), some of whom relocated so they were all based in the same office building in Penrith. This meant they were able to discuss any concerns or complicating factors with any particular claim directly with each other.
385. The £20k FRG replaced a farm grant payment of £6,800 available following the 2009 floods, meaning a genuine increase in the support that was provided for this sector. A shift in perceptions by farmers and agencies, related to the affected farms' obviously chronic exposure to flood hazards, also meant that working with the agencies allowed many farmers to use their grant to build flood resilience into repairs.
386. However, the FRG claims process was regarded as too complex, bureaucratic and unnecessarily demanding by many applicants; some of whom were in "desperation" (Interviewee) at the resulting delays in payment. These concerns were amplified for many of those affected as simultaneous delays also occurred in the settlement of farmers' Basic Payment Scheme (BPS) payments in 2016; also a responsibility of the RPA (FCC, 2016) (see section 8.3.3.1: *Mental health effects: communities affected by Storm Desmond*).
387. The challenges placed on the administration team by the need to assess all claims strictly on a case-by-case basis were met, in that they had approved 523 of the 597 applications submitted (by the scheme's April 2016 deadline), and paid out £6,967m across Cumbria by April 2017 (an average of £10,197 per claim). The remaining claims, totaling £648k, are due for settlement during 2017.
388. However, the conflicting messages from different agencies, evidenced by complaints from farmers that Natural England and the Environment Agency were giving different information about recovery grant conditions²⁹, should have been rectified through clarifications via Defra much sooner and, if related to public announcements rather than just through face-to-face discussions, through the communications sub-group (see Recommendation 50).

8.6.5 Public Rights of Way: infrastructure repair

389. Across the Lake District and Cumbria millions of pounds worth of damage was caused to rights of way and permitted paths, including bridleways, footpaths and bridges. The repair cost of bridges on the Keswick to Threlkeld Railway Track alone has been estimated at £5m.
390. To quantify the damage, the sub-group worked collaboratively to identify all assets affected by the storm and applied for funding from the Rural Payments Agency (RPA). In November 2016, following the intensive case-by-case and risk-based development of repair plans for key assets,

²⁹ Day, personal communication

the RPA awarded Cumbria £3.5m: £3m to be spent in the National Park and £500k for other affected areas.

391. Whilst approved by the RPA, it is important to note that the funds underpinning this *Cumbria Countryside Access Fund* actually came from the EU funded Rural Development Programme for England (RDPE) (GOV.UK, 2016).
392. This funding enabled the LDNPA to set up the *Routes to Resilience flood recovery project*, whose rangers have been steadily working through the list to reinstate 64 bridges, repair 102 paths and replace 56 gates and stiles. (Plate 8). The progress that has been made within the Park itself since January 2017 has resulted in Richard Leafe expressing his “optimism” that the project will be completed on schedule in 2018.
393. Although obviously welcome, the financial award was insufficient to repair all damage. Accordingly, work continues to secure an additional £2m to fill the shortfall, plus the exploration of opportunities to fund the major bridge replacement operation at Threlkeld.
394. In terms of lessons learned, the sub-group found itself in a surprisingly different situation than the Infrastructure sub-group, in relation to how they needed to collate evidence to support the access fund application. Whereas the Infrastructure sub-group worked closely with the Department for Transport (DfT) to develop a lump sum application, the Environment sub-group, working with the RPA, were required to conduct case-by-case repair assessments for individual assets.



Plate 8: Before and after images of rights of way damage and repair undertaken as part of the LDNPA ‘Routes to Resilience’ flood recovery project.

395. This approach inevitably meant that the process took longer, although the total cost and funding available was considerably less than that for infrastructure repairs. The fact that each assessment had also then to be validated by the RPA, left the impression within the group that they were not trusted to quantify these costs accurately themselves. Given the scale of the task and the inherent group expertise in this exact type of work – which has been built up over the last decade of flood damage assessment in Cumbria – it appears appropriate to expect Defra and the RPA to reconsider whether they should operate a system closer to that adopted by the DfT in any future event.

Recommendation 40: Defra should review its own and the Rural Payments Agency’s protocols and funding criteria for damage and repair assessment of Rights of Way, in order to enable the more straightforward development of funding applications by local authorities needing to conduct repairs

8.6.6 World Heritage Status

396. It is worth mentioning here that the successful bid for World Heritage Status for the Lake District National Park contains clearly stated objectives to build environmental and social resilience against extreme weather effects into management plans. A strategic aim of the Lake District National Park Partnership (LDNPP) during the bidding process was to make clear to UNESCO that the Park will not be preserved in aspic, but will be managed in ways that may be subject to change. This has left open the probability that landscape management in the Park will progress through the implementation of adaptations focused on bringing about the reduction of flood risks to communities in towns, villages and the countryside (Box 6).

Box 6: The strategy to include mitigation and adaptation as key components of flood-risk management within the Lake District’s operation as a World Heritage Site

Spectacular Landscape: strategy 4 – Increased resilience to flooding

Our strategy is to:

- a. Increase the resilience of the Lake District to flooding events. Flood resilience schemes will be tailored to provide the optimum solution for the catchment as a whole, balancing the need to reduce flood risk in towns and villages against potential impacts up and down stream, including on agricultural land.
- b. Mitigate and adapt to the increased likelihood and severity of flooding that is predicted to result from climate change. We will work with others, including local communities, land managers, and farmers to develop plans and projects which aim to increase resilience, for example, slowing surface water run-off by increasing absorption and storage, or protecting settlements with hard defences.

LDNPP (2016: p.133)

397. Such adaptations could clearly include the currently ongoing research and implementation of Natural Flood Management measures, as well as a potential increase in forest cover, without jeopardising the National Park’s World Heritage status. Also, when aligned with the farming sector’s increasing willingness to be seen to be contributing fairly to managing flood risks from the farm to catchment scales (NFU, 2017), and the increasing inclusion of communities within Cumbria Strategic Flood Partnership, such objectives should not be beyond reach.

Recommendation 41: The Cumbria Strategic Flood Partnership should continue to treat the development of catchment scale, integrated flood risk management as a priority, by encouraging all stakeholders to take advantage of opportunities to negotiate innovative approaches to reducing risk and building resilience from the fells and dales to the sea.

8.7 SRCG: Housing Sub Group:

Purpose

- To assess the strategic impact of the floods on housing in Cumbria and coordinate assistance to enable people to return to their homes as soon as possible

Role

- To assess the impact on households
- Facilitate households affected by emergency to find appropriate temporary accommodation or move back into their own properties asap
- Assist in the exchange of information on offers of housing.
- Assess the medium/long term impact on housing and households and action to address these issues
- To assess the implications for future housing develop and particular impacts on the AHP programme.
- To feed any recovery issues to SRCG

“[Recovery] takes a long time. It’s not quick wins [...] I’m still having these meetings 12 months on and that’s not because there isn’t the effort. If you think that’s because we haven’t put the effort in that’s nothing to do with that, it’s the actual practicalities of drying out a row of terrace properties that have been flooded to 6’ and in an area whereby we have not got contractors so there’s waiting lists for people to get good contractors to go in and to do the work. So, we haven’t got numbers of skilled people to do the work.”

Interviewee

“The administration of PLR resilience grants and arbitration in insurance issues have taken up 80% of Housing group capacity”

Interviewee

“I was without basic hot water for 15 weeks and unable to wash/bathe properly, I lived upstairs with my dog and used friends’ facilities once a week. The [CCF] grant allowed me to have an electric shower installed because the boiler was flood damaged, which was a god send.”

“I realised I was struggling to heat my home during the strip out phase. I am a carer at home as well, so to dry and heat our home was important. My request [to CCF] for a top up for extra fuel to heat helped us tremendously through a very difficult period....it helped me cope better with the situation. It also saved us from incurring damp issues in the bedrooms, something that has been a common issue for homes not aired and dried in the aftermath of flooding.”

“There is a need for a totally independent advice service re: flood prevention, otherwise victims are forced to depend on the advice of others like themselves, whose issues may be different, or on the biased advice of involved companies.”

“Insurance company was ripped off by all – surveyors, contractors, tradesmen, the lot! Not my problem but now I can’t get flood cover without £50k excess as the property will now be let out and I am a ‘landlord’ so don’t get Flood Re.”

CCF Grant Recipients

“Any flood resilience protection should be coordinated within a neighbourhood. This will ensure that one resident’s flood protection does not become a neighbour’s flood impact. This becomes a problem when schemes are carried out in an ad hoc way.”

Kendal Lions – Community sub-group questionnaire

398. The first two quotations, taken from interviews with a Housing sub-group member, illustrate the scale of challenge presented to the authorities by the flooding of 5,525 residential properties. Whilst the role of the Housing sub-group was relatively broad, the fact that 80% of the group’s time was spent dealing with Insurance and Property Level Resilience (PLR) issues, means that this section of the report will also concentrate on understanding lessons that can be learned from these two issues.

8.7.1 Insurance

8.7.1.1 Flood insurance: an overview

399. Insurance is a fundamentally important flood risk management measure, which enables the flood affected to share the cost of their losses with the wider population (Pelling, 2003). As such, insurance can, in theory, enable households and businesses to recover more quickly than if they were to rely on their resources alone.
400. However, the risk based nature of the insurance industry has meant that over the past two decades insurance companies have been becoming more averse to insuring against flood risk. This means that households and businesses that have flooded, and those at high risk of flooding, have been experiencing significant increases in the cost of flood cover for several years. (Harries, 2010). This is despite a “*statement of principles*” that was agreed between the Government and the insurance industry, which was predicated on the proposition that if government continued to invest in flood defences, then the industry would continue to offer insurance to properties exposed to flood risk of less than 1.33% (1 in 75 years) (Huber, 2004).
401. Realising the scale of flood impacts that were occurring across the country, a renegotiation of this agreement commenced, and in 2013 an announcement was made that a new flood insurance scheme, Flood Re, would be established. Flood Re was designed to ensure that households with properties at high flood risk could access flood insurance at a price that was capped at a ‘more affordable’ rate, with the cap linked to their council-tax band.
402. There are, however, a number of exclusions to the Flood Re scheme. Whilst home contents insurance is available to both homeowners and those renting their properties, insurance for damage to the structure of buildings is only available to homeowners. Landlords were excluded from the scheme, as were other businesses, because it was felt by the negotiators that the market still offered affordable options for this sector³⁰. The scheme also excludes homes built after 2009.
403. Private tenants, already a very vulnerable group, due to factors such as low income (Burby et al., 2003), seem to have been particularly prone to difficulties during refurbishment; this may have implications for the exclusion of landlords from the Flood Re scheme and is discussed in more detail later in this section.
404. Flood Re was to be financed by the insurance industry, but the Government agreed to retain a provision to invest “available resources” to fund relief in the case of exceptional flooding. After much negotiation Flood Re eventually came into operation on 4th April 2016; four months after

³⁰ A more critical perspective would be that many stakeholders in the insurance industry were averse to being held responsible for the potentially significant ‘business interruption’ clauses required by these clients.

Storm Desmond struck Cumbria. Later, in December 2016, following renewed concerns about the impact of floods on small businesses, the British Insurance Brokers Association announced a separate scheme which would insure small and medium sized businesses against flood risks.

405. Accordingly, whilst the situation with both home and small and medium sized business flood insurance is now objectively more available and affordable neither scheme was in place at the time of Storm Desmond.

Recommendation 42: Cumbria’s district councils should work with their social and private sector housing providers to explore and implement more effective methods through which to better protect tenants from the consequences of flooding (e.g. ‘insurance with rent’ schemes: Hood et al., 2005)

8.7.1.2 *The Statement of Principles approach, in a Storm Desmond recovery context*

406. The existing “Statement of Principles” approach, and consequent lack of formal flood risk insurance schemes, meant that many householders and small businesses in Cumbria were without flood insurance when Storm Desmond hit. This was for a mix of reasons: some had been unable to find an insurer willing to cover them for flood risk, some had considered the premiums unaffordable, and others had, for one reason or another, not attempted to get cover. In addition, many who were insured faced huge excesses (up to £10, 000) for flood damage.
407. During the impact assessment carried out by the Cumbria Intelligence Observatory, it was estimated that the affected communities in both Carlisle and Kendal were likely to have contained 1,000 households with no home *structure* insurance, with an additional 100 properties in each of Keswick, Flimby, Cockermouth and Appleby similarly lacking: plus, smaller numbers in other locations. The same analysis also suggested that 28.3% of affected households potentially lacked home contents insurance. One specific analysis suggested that one street in Flimby, two in Carlisle and three in Kendal were each considered likely to have 30 or more households without home contents insurance (Cumbria County Council, 2016: p.15-16).
408. Such analyses clearly illustrate the importance of the support offered to affected households by the provision of the Government funded grants and Cumbria Community Foundation’s Hardship and PLR top-up grants. They also highlight the importance of the additional financial support, e.g. offered by Lions and Rotary groups, and the more direct, practical support offered by CERT-UK and other community and third sector groups, in helping households replace possessions.
409. Without such support, it is likely that overall household and community recovery would have been significantly constrained. This point was underlined by a Housing Association responding to a Community sub-group’s survey:

“We have 62 households flooded and 80% did not have flood insurance cover. Quite simply without the support from the community organisations the recovery would have been much slower and more painful.” Community sub-group survey

8.7.1.2 *Insurance issues following Storm Desmond*

410. Even for those households and businesses whose losses were covered by insurance, the experience was still mixed. In many cases there appears to have been a genuine improvement in the way claimants have been dealt with by insurers when compared to early events.
411. Several companies have indeed been reported, by both householders and community-based staff, to have given positive support to their clients. Other companies have, however, been reported to have subjected clients to liability contestation, considerable delay and/or poor

settlement conditions. In these cases, the Housing and Community sub-groups, and the organisations involved in these sub-groups, have provided support where possible (Box 7).

Box 7: Concerted multi-agency pressure applied to poor practice by one insurance company

In late February 2016 a number of concerns were raised at a Community sub-group meeting around claims being refused by one specific insurance company.

Cumbria Community Foundation reported receiving applications from 4 individuals who had each experienced issues with this company:

- Gentleman was insured, company have refused his claim.
- Gentleman also thought he was insured, company insisted that he had not declared distance from water correctly.
- Lady thought she was insured, insurance company sent in contractors to rip out / dry out, they got rid of everything. Company then said insurance was not valid due to distance to water.
- Single mum, 3 children in hotel and then rented house, dry-out of house was commenced under insurance, but then company voided the policy.

It was clear that this company's practices were having direct effects on recovering households. Accordingly, a concerted approach was made to build awareness in government about this company. The Ministerial Recovery Group was approached directly by the SRCG using information gleaned from the Carlisle Flood Advice Centre and Carlisle and Eden Citizens Advice. Simultaneous to this strategic level response, additional pressure was also applied by the National Flood Forum, John Stephenson MP and others. Furthermore, there was media coverage of the company operating in a similar manner in other parts of the UK.

Confronted with such intense lobbying and media interest the problems were investigated, and it was discovered that the difficulties had arisen because of problem with the website of a broker. However, the insurance company eventually agreed to make substantial payments to the households affected.

412. As with previous floods, issues have been reported regarding loss adjusters and loss assessors. In the insurance industry, the former are employed directly by insurance companies to process claims, the latter, the loss assessors, work independently and must obtain permission to represent policy holders in negotiations with insurers (ABI, 2015). As with earlier flood events (Whittle et al., 2010), it appears that the practices of some loss assessors in generating work for themselves have been questionable. However, any clear differentiation between good practice and issues experienced with either of these professions is not possible from the data reviewed for this report.
413. Accordingly, policy-holders should always be reminded to take the Association of British Insurers' (ABI) advice to speak to their insurers directly before engaging a loss assessor (which will be at their own cost) (ABI, 2015), but to also be prepared to challenge their insurers directly, or to contact the ombudsman, if they have concerns about their loss adjuster. Where appropriate, local authority and third sector support staff should also be encouraged to keep familiar with the complaints processes in order to be able to support householders, particularly those most vulnerable, through them.

414. From this vulnerability perspective, the Community sub-group survey again illustrated the vital importance that supporting organisations attributed to helping those struggling the most with the often highly bureaucratic claims process:

“We have a number of very vulnerable people who felt totally unable to manage insurance claims alongside their caring role and whom quickly became overwhelmed”

Community sub-group Survey

8.7.1.3 Insurers and Property Level Resilience

415. The insurance industry has developed its flood insurance model by ensuring that restoration and reconstruction are undertaken at speed in order to reduce its costs (e.g. providing hotel accommodation for people out of their homes). This underpins the ‘stripping out’ process described later. However, this model is challenged by the Government’s £5000 Property Level Resilience (PLR) grant -an issue first seen following the winter 2013/14 storms and repeated during the recovery from Storm Desmond.
416. This grant introduced an impetus for insurers to work rapidly and closely with their flood-affected clients to utilise the grant in order to build-back flood resilience as their property was restored. However, in many cases highly pressured householders were unable to engage with the bureaucratic grant application processes, and some insurers had no real interest in facilitating what they would term the ‘betterment’ of properties. Insurers were often more comfortable operating in their standard like-for-like approaches, funding the reconstruction of properties with exactly the same vulnerabilities that led to the structural damage in the first place.
417. From a sustainability and resilience perspective, such business practices must now be seen as completely out-dated. Not only that, but if such practices are to be sustained within the Flood Re scheme, then it is unlikely that, without considerable additional government support, the nation’s considerable legacy of pre-2009 at-risk housing stock will be any more resilient than now, before the scheme ends.

Recommendation 43: The insurance industry and Government must ensure that Flood Re completely transforms from the industry’s previously favoured ‘like-for-like’ flood restoration model, to one that actively adopts, promotes and utilises flood resilient reinstatement best practices. This will ensure that long term benefits are more likely to accrue to policy holders living at flood risk.

418. Whilst insurers certainly have a role in delivering property level resilience (PLR), they are not the only stakeholders involved in this nascent business sector. Accordingly, the PLR issues overseen by the housing sub-group formed an associated theme in its workstream.

8.7.2 Property Level Resilience (PLR)

419. Property Level Resilience (PLR) is a label applied to a range of products designed to either provide flood *resistance*, which protect properties from water ingress (e.g. flood barriers), or flood *resilience*, which allow water into the property, but reduce the damage it causes (e.g. lime mortar, concrete floors). Whilst resistance tends to be a householder’s preference, there are circumstances where it is more logical to focus on improving resilience. For example, it is vital that resilience measures are prioritised wherever floodwater is likely to exceed 0.9m due to the potential for structural damage once floodwater exceeds this depth (Kelman and Spence, 2004).

420. Due to the depth of flooding experienced in many locations during the winter 2015/6 storms, the Government requested that the local authorities administering the PLR grants focus on encouraging households to increase their properties' resilience, whilst still allowing money to be spent on resistance where appropriate.
421. Ultimately, MHCLG offered sufficient funding to Cumbria to finance a £5k PLR grant, available to all flooded homes and businesses and to be administered by the district councils. Residents were later also given the option, by the Cumbria Community Foundation, to top-up this grant by a further £2k from the Cumbria Flood Appeal fund. Accordingly, most home owners could access a total of £7k for flood resilience work.
422. The financial administration of PLR grants and lessons that emerged from this aspect of the overall grant management were discussed in the Financial and Legal sub-group section (8.1) of this report. The operation and efficacy of the PLR grant scheme nationally has also been the subject of an investigation by Defra and the Ministry of Housing, Communities and Local Government (MHCLG). This section, therefore, will not go into these details, but will look at the impacts the management of the scheme had on the other stakeholders in its delivery.
423. Uptake of the PLR grant was initially slow; by 20th September 2016 only 34% of households had applied for a PLR grant. This was despite the fact that the district councils had been proactive in communicating to affected households, using various media messages, websites and correspondence sent directly to the affected properties. The scheme was also being advertised at flood support centres and through other personal outreach methods, with assistance being offered to complete forms and to organise surveys.
424. The reasons for this slow uptake are likely complex, with issues such as insurance complications, on-going drying issues and emotional exhaustion all having effects. The important issue to note, therefore, is the need to remain flexible in terms of how these schemes can be best delivered. An important factor in this is the use of deadlines.

8.7.3 Timescales: short-term, long-term

425. The experience of administering the PLR grants revealed that clear contingencies, protocols and capacities need to be in place to support rapid grant processing options. Whilst during the first few weeks following the announcement of the PLR scheme, the MRG and MHCLG's differing definitions of grant eligibility caused undoubted confusion and costs for administrators (see section 8.1.2), it was clear that there was a genuine desire to help householders and businesses as quickly as possible. However, this aspiration, and the associated pressure on district councils to ensure rapid distribution of the grant money, had its own issues, because it quickly became clear that the affected communities were largely not ready to accept PLR grant assistance at this early stage. Reasons for this included the fact that some properties took months to dry; that, for complex reasons (Grothmann and Reusswig, 2006) people did not want to consider installing PLR early on and/or that; negotiations with loss adjusters and insurers did not prioritise the inclusion of PLR into settlements.
426. The initial drive to get PLR work underway, and grants paid out rapidly, also introduced difficulties in pooling grants to develop street or community level flood defence options, which could be more effective in reducing flood risk to a group of properties than property level measures alone. 'Street-level' schemes have been an aspiration throughout the recovery period, and *Newground* (a third sector organisation commissioned by the EA to support this approach), has been relatively successful in working with communities to develop several such projects. However, because they have required a much more intensive, resource and time-consuming deliberation and negotiation process than single property schemes, success with these activities has been less than hoped.

Recommendation 44: The Ministry of Housing, Communities and Local Government (MHCLG) should be prepared to provide funding to enable property level resilience, and street (or community) level resilience initiatives to be undertaken as longer-term resilience building projects in flood exposed areas, rather than only providing grant funding in response to a specific flood event. Such contingencies should be developed collaboratively by key stakeholders, including government, the property level resilience and insurance industries, and user groups.

Recommendation 45: Development of the Property Level Resilience Action Plan and Environment Agency's procurement framework should be accelerated in order that they can act as the basis for delivering *any* future PLR scheme.

8.7.4 Standards

427. The impact flood water had on homes was enormous. In areas where flooding reached over 6 feet in depth, significant damage was caused to buildings' fabric. It should be noted, however, that water does not have to reach extreme depths for damage to occur. Research has clearly illustrated, and experiences in Cumbria have validated, the fact that damage and losses from flooding can be considerable from the moment the water begins to rise above floor level (Parker et al., 2007).
428. Flood damage needed to be carefully restored, but there is some debate over the best methods to achieve this. Many loss adjustors/assessors and insurers undertake a complete strip out of water-affected rooms. The 'strip out' (i.e. the taking back of internal walls to bare brick) has been a contested method of flood restoration for over a decade, with some experts considering such drastic measures unnecessary (URBED, 2017). However, without clearer industry standards to support alternative approaches, Cumbrians have once again seen many properties stripped and restored by a range of building contractors, with diverse levels of experience and capability. In some cases, properties that had been restored using resilient measures (e.g. lime render), following previous inundations, were once again stripped out, due to the apparent insensitivity of the insurance sector to adjust their standard practices. This approach has meant that PLR grants have rarely been used to install resilience measures, as it has been too challenging to combine this with the insurance companies' approach, and most have been used to install resistance measures such as flood barriers.
429. Whilst many people have found the PLR process complex and bureaucratic, there have been few formal complaints of poor-quality work. For example, by September 2016 Cumbria Trading Standards had only identified 18 complaints related to survey and installation issues against companies operating in Cumbria, with 42% of these complaints relating to one single business out of the 17 then operating in the County.
430. There have also been numerous reports of companies and individuals going the extra mile in ensuring the high standard of PLR installation (Box 8).

Box 8: The Business Emergency Resilience Group (BERG)

The Business Emergency Resilience Group (BERG), part of the Prince of Wales's Business in the Community (BITC) charity, provided support with the PLR process in Kendal, helping people fill in application forms and arrange the surveys required to access grant funding – and developing a 'Resilience House' to demonstrate PLR products. This was regarded positively by many in the local community, despite some initial skepticism from the local authorities about motivations of this group's principal affiliate, Adler & Allan, to invest so heavily in a field (domestic PLR) in which it had little previous experience.

However, as one community-based interviewee stated:

"When Adler & Allan [BERG] arrived in Kendal it was just at the right time when agencies were struggling. It was the sense of feeling that the cavalry had arrived to give added support when it was really needed. Alder & Allan have been very professional in their approach and been fully supportive to the people of Cumbria as they sought to design tailor-made flood resilient solutions for householders."

Interviewee

BERG subsequently expanded their operations into Cockermouth and Keswick, and in Carlisle worked alongside JBA to provide support to householders seeking advice. JBA Consulting had been commissioned by the City Council, through a County Council procurement framework, in March 2016 to provide independent property surveys.

Having facilitated the delivery of a number of installations in Carlisle (by Adler & Allan and other firms), BERG have also been seen to rectify other's sub-standard work (at their own cost) to ensure that property owners are as protected as they should be for the money that has been invested.

431. Despite the low incidence of *formally reported*³¹ sub-standard work, the issue is important to review. This is because, regardless of the standard of workmanship, there are several factors that influence the efficacy of PLR installations:

- the type of flood (e.g. flood depth, velocity and duration)
- the building type (e.g. stone, brick or timber frame construction)
- the people involved (e.g. frail elderly, working families)
- the budget
- the measure applied (e.g. flood boards, lime render)

432. All these factors should be considered during an installation process, because they all influence the type of PLR measure that is needed. For example,³² frail elderly people should not be expected to install heavy flood barriers or to use overly heavy flood doors. Likewise, people who

³¹ Not all concerns are likely to have been formally reported, e.g. without expertise, people may not know the difference between a good and a poor installation. Of most concern, however, should be the possibility that such concerns may not have been expressed to date, because the measures have not yet been tested by a flood event. If there is any perception of widespread PLR failure during a future event, the reputational damage to all agencies, organisations and businesses associated with their installation may be significant.

³² NB. All the 'examples' of poor practice in this section have been reported anecdotally by review participants, as having been witnessed as occurring at Cumbrian properties affected by Storm Desmond

regularly work away from home should be offered automatically operating or permanently in situ measures to avoid the risk that flooding occurs while they are away.

433. A difficulty emerges, however, because current standards for PLR installation are fragmented³³. So, even where a product has been awarded a British Standard Kitemark™ for its ability to provide a consistent standard of flood protection, it can still be installed inappropriately by an operator who is not adhering to the voluntary BSI scheme e.g. in a wall that is too weak to support water to the same depth as the product, thus risking the structural integrity of the building³⁴.
434. There is also an issue of human vulnerability again, as residents may not engage with the installation process sufficiently to understand what a well-designed installation should look like, how the products actually work, or what they need to do personally to ensure the products are maintained and installed correctly when needed. This means that residents may not be aware of potential problems with their PLR installations, including any problems with the quality of installations.
435. Accordingly, any company that focusses disproportionately on the technical aspects of installation, or who only considers specific types or brands of product when a full range of available options should be assessed, or who fails to consider the broader context into which any products are being considered (e.g. assessing one property within a terrace of other properties, or failing to consider all water entry routes to a building), risks not only installing an inappropriate product, but in the worst cases, may actually increase the risks faced by householders.
436. It should be stressed, again, that it appears that most householders and businesses who have received PLR grant settlement for work carried out appear to be content. However, concerns have been voiced within the business sector, by interviewees and during the workshop, that problems do exist in relation to industry standards, i.e. poor workmanship and companies only being interested in promoting their own products, not the most appropriate products.
437. Objectively, therefore, it appears that the volume of work needed to be carried out over such a relatively short period of time (see Section 10.2), has obviously stressed both the nascent PLR industry and the local authorities' abilities to support flood-affected households in receipt of a PLR grant.

8.7.5 Independent surveying

438. Across the districts it appears that different methods have been adopted to ensure products and their installation meet expectations. For example, Carlisle City Council commissioned work from JBA Consulting to ensure that householders had access to surveys that were independent of the product manufacturers or installers (Box 8), although applicants were still able to obtain surveys from other sources and in many cases did so, particularly if the survey was offered as 'free'. Across the county, there has been a mix of local authority building standards, industry and third sector led initial surveys and completion checks. Undoubtedly, such varied processes have introduced confusion into the PLR scheme's delivery (e.g. Who can identify poor workmanship, and who has the power to insist that it is rectified?).

³³ For example, whilst the new British Standards Institute (PP972) certification scheme "includes the process of conducting a Kitemark flood protection installation survey (KFPI survey), selection of appropriate product and installation of BSI Kitemark flood protection products. It does not cover the installation of non-Kitemark product and does not result in a 'Kitemark house'" (p.3)

³⁴ NB. Water should be allowed into the property in this case, rather than being prevented from entering.

439. From this perspective, it should be noted that other PLR schemes, such as those commissioned under the Environment Agency’s interim procurement framework for normal flood risk management work, includes a requirement that an initial survey is undertaken by an independent, qualified surveyor, and that a post-installation survey is undertaken by the same surveyor (Pers Comm: Jones, JBA Consulting). Such a requirement is likely to minimise the incidence of inappropriate or poor quality work, and is in line with BRE’s “6 Steps for Flood Resilience: Guidance for Local Authorities”³⁵.
440. However, any independent survey and inspection regime will likely bear additional costs over and above surveys offered by installation companies themselves. Accordingly, with the risks that non-independent, potentially sanction-free, surveying introduce to the PLR work, there appears to be a need for a strong business case to be developed to ensure such factors are reflected in government PLR grant packages from the outset. In other words, rather than expecting flood-affected householders to decide who should conduct a survey (whose cost will be funded from the PLR grant, thus reducing the money available for resilience products themselves), structures should be introduced to ensure independent and suitably accredited surveying is a mandatory component of government’s PLR grant scheme.

Recommendation 46: The Ministry of Housing, Communities and Local Government (MHCLG) and Defra should ensure that future Property-Level Resilience (PLR) grant schemes require and fund pre- and post-installation surveys, carried out by a suitably trained and accredited surveyor who is independent of the companies supplying flood resilience products.

8.7.6 A Property Level Resilience Code of Practice

441. Given the incidence of high magnitude floods that have occurred over the last two decades and the apparent societal move toward understanding the need for resilience, and given the growing industry focused around property-level resilience, the publication of guidelines that cover all aspects of installation good-practice is seriously overdue. It is important, therefore, that Cumbrian stakeholders contribute any lessons learned in relation to the technical aspects of PLR into the development of such guidance.

Recommendation 47: Cumbria’s County and District Councils should synthesise and contribute any lessons learned from the resilience building of properties damaged by Storm Desmond into the currently ongoing Property Flood Resilience Action Plan (Bonfield, 2016). This includes supporting the development by CIRIA of a Code of Practice and guidance for property flood resilience (CIRIA, 2017).

8.7.7 Sustainability

8.7.7.1 Market values

442. A number of residential and business areas across the county have now been flooded three or more times. Cumbria Strategic Flood Partnership (CSFP) is working in innovative ways to develop integrated whole catchment flood risk management solutions. However, the probability that extreme floods of similar magnitude to Storm Desmond may recur underpins

³⁵ <https://www.bre.co.uk/filelibrary/pdf/projects/flooding/Six-Steps-Professional-web-Aug2013.pdf>

the need to accept that a residual risk³⁶ will remain for many of these households, neighbourhoods and communities, regardless of the risk reduction measures that can be put in place. Cumbria's literal lesson over the past decade has been that whatever storm you experience, there is always the chance of a bigger one.

443. From this perspective, it is important to understand the impact of flooding on local housing market sustainability; enquiries suggest a complex picture emerging in relation to house prices. Discussions with individuals in the sector suggest that Carlisle has seen a stronger bounce-back of house prices than following 2005, although prices are still below pre-Desmond market values.

“[In Carlisle] We started putting properties up at a guide price of 50% their pre-flood value. Every one of them beat that by a considerable margin. That was useful, because until then surveyors had no real way of valuing these properties..... but these have always been solid selling areas so I'm confident that things will recover over time.”

Interviewee

444. In contrast, in Kendal, the situation after 19 months appears to be that properties that have gone to market are more likely to be able to reach their pre-flood value and in Keswick, whilst there is considered to be a 10% reduction in the value of flooded properties, other market variables mean that one estate agent could confidently say “We could sell these houses three times over”.
445. One interesting factor mentioned across the county was that market confidence appeared to relate directly to local purchasers, whereas potential buyers from outside the county are tending to not even view flood-affected properties.
446. These findings are providing the sector with a degree of confidence that the market will settle, despite the risk of future flooding.
447. Such findings should reflect optimism, but it is important to temper this with the need to continue to keep the residents of these areas aware of the residual flood risks they are exposed to in order that they can take measures to reduce that risk, whilst also building contingencies to support them in case the worst happens.

8.7.7.2 Future spatial planning and development

448. Another concern in relation to communities' sustainability is that planning legislation can now make it extremely difficult to develop sites that bear flood risk, which is problematic, simply due to the scale of legacy development that is already on the floodplain.
449. The National Planning Policy Framework (DCLG, 2012), quite correctly, does not ban floodplain development completely, but places the onus on planning authorities “to ensure other alternatives are considered first. If no alternative sites exist, then specific tests need to be applied before permission can be granted. Even applications for minor development and changes of use should “still meet the requirements for site-specific flood risk assessments”.
450. Whilst the evidence from the Cumbrian housing sector appears optimistic, the uncertainties about the way that legislation may influence future development in sites at flood risk should be used as a stimulus to revisit Local Plans³⁷ and broader development control. This will allow an

³⁶ Residual risk: The risk that remains after risk management and mitigation measures have been implemented. For example, many flood defences are designed to withstand water levels with a 1 in 100 chance of occurring in a single year, but in the relatively unlikely event of higher water levels occurring, there would still be a “residual risk” of flooding.

³⁷ “Local Plan: The plan for the future development of the local area, drawn up by the local planning authority in consultation with the community. In law, this is described as the development plan documents adopted under the Planning and Compulsory Purchase Act 2004. Current core strategies or other planning policies, which under

assessment of how these factors may influence these areas' sustainability in the future and also provide an opportunity to develop contingencies to mitigate risks.

Recommendation 48: Cumbria's Local Planning Authorities should review Storm Desmond's potential effects on the evidence base underpinning the flood risk related assumptions within their development planning processes. Any changes in flood risk understanding should be integrated directly into these assumptions.

Recommendation 49: The Ministry of Housing, Communities and Local Government (MHCLG) should commission research to investigate outcomes of all development projects to establish the efficacy of current policy in reducing (or creating) flood risk. In particular, MHCLG should establish whether individual projects on the ground meet their flood risk reduction expectations and whether flood risk management outcomes related to incremental development indicate a need to revise national policy.

8.7.8 Grant deadlines

451. The general perception has been that, despite the resourcing challenges, the district councils across Cumbria have been and remain proactive in *pulling* grant applications in from the affected public (e.g. via social media and local radio campaigns). Front line staff (e.g. Flood Recovery Officers, Community Teams) have also been collaborating with other third sector partners (e.g. Flood Support Centres and the Business Emergency Resilience Group (BERG)) in proactively *pushing* affected households and businesses into making these applications and supporting them to do this (e.g. by assisting with form filling and arranging surveys). This is commendable, as these two approaches have resulted in a high proportion of flooded households and businesses applying for PLR grants by the deadline³⁸. However, these deadlines themselves appear to have generated repeated waves of anxiety and concern across the affected communities.
452. Most notably, deadlines have been placed on households in order to get them to apply for Property Level Resilience (PLR) grants. They have also been applied to set a target date by which time claimants should have their PLR work completed. The final date for the completion of work and submittal of invoices for payment is currently 30th September 2017.
453. MHCLG allowed local authorities the flexibility to determine the length of time the PLR scheme should run for. This is a lesson that has been learned from previous floods, where the apparently arbitrary and short-term nature of flood support deadlines was identified as creating stress for the flood-affected population. It also caused stress for staff who were supporting flooded people, as they felt powerless to influence a policy decision that they could see first-hand was causing distress to people who had been flooded. (Deeming et al., 2011).
454. It should be recognised that the district councils have also been flexible, in that both the application and completion deadlines for PLR have each been extended by at least two months from the original target dates in many Districts. In both cases this has been prompted by information received suggesting that there was insufficient time for all claimants to comply with

the regulations would be considered to be development plan documents, form part of the Local Plan. The term includes old policies which have been saved under the 2004 Act." (DCLG, 2012: p.53)

³⁸ 89.7% of PLR applications were approved, which equates to 60.7% of those who were estimated to have been flooded. Total value approved was £15,140,416 of which 94.8% had been paid out by end Nov 2017.

the deadlines' requirements. Reasons for this included: that that people were simply physically or emotionally unable to apply without considerable assistance³⁹; that some householders, particularly the elderly and other vulnerable individuals, took time and encouragement to apply for assistance they felt was not meant for them; that homes were still not dry and resilience work could not yet commence; that there was a general lack of resilience products (e.g. flood barriers); or that they could not find trusted contractors with capacity to carry out the work by the deadline.

455. Likewise, the initial deadline for the Farming Recovery Grant applications was shifted from March 2016 to April 2016 once it was realised that people were seriously struggling to complete the application process in time.
456. It is, of course, understood that deadlines have a purpose, in bringing specific activities to an end in order that organisational activity can be returned to the mainstream 'business as usual'. In this sense, a deadline tends to be set in relation to '*the law of diminishing returns*', i.e. the target is set to end activity at the point where the costs of administration outweigh its benefits by a particular margin.
457. However, the timeline of the recovery of properties following flooding is known to be case and context specific; for example, the impact of flood inundation on a single building will depend on factors such as the type, depth and velocity of flooding, the materials from which the building is constructed, and the capabilities of the owner or occupier to understand procedures through which to access resources to undertake drying out and restoration effectively.
458. Accordingly, it is inherently difficult to apply a deadline that can satisfactorily encompass all these factors for every building type and household eligible for grant support. Some people and some buildings will inevitably take longer to reach important thresholds for action during the recovery process than others. Unfortunately, there is also the risk that the people least likely to be able to deal with the particularly bureaucratic nature of grant applications may well be the most physically or emotionally vulnerable.
459. Another issue with deadlines is that they support a perception that something should have 'ended'; research has repeatedly shown that this is not the experience of many people engaged in recovery from floods (Tapsell and Tunstall, 2008). Recovery, as the quote at the start of this section underlines, "takes a long time".
460. Yet the administration of grant schemes by stretched local authorities and agencies takes up resources that are needed for other tasks, something that has been especially evident since the recent restructuring of local authorities under the Government's austerity regime. '*Business as usual*' takes considerable resources to deliver, without additional tasks being added.
461. So, administrative deadlines can place pressure on flood-affected households and can also have the effects on frontline staff dealing with them. However, at the same time deadlines are an important measure through which to manage communities' expectations and staff resourcing (Eyre, 2006). Accordingly, it is also important to acknowledge the good practice of the district councils in developing contingency arrangements (e.g. the shifting back of deadlines), in order that the, perhaps, more vulnerable of the affected households did not miss opportunities to access resilience funding simply as a result of bureaucratic intransigence.
462. Therefore, the principal observation that can be made about the grant deadlines imposed has been that although knowing when closure will occur is an important component of any grant scheme. However, the Ministry of Housing, Communities and Local Government (MHCLG) and

³⁹ Concerns over this specific issue were raised by elected members who reported observing vulnerable constituents' reticence to apply for any sort of assistance until they were actively encouraged to do so, which was often later in the recovery process than it should have been.

the district councils (coordinated through the Housing sub-group), appear to have been *as flexible as possible* in developing contingencies to ensure that all eligible households and businesses were allowed reasonable time and support to access PLR grant funding. This would have been easier, however, if only a single administration procedure had been adopted and appropriately resourced across the whole county.

Recommendation 50: (X-Ref Rec 7) For any future recovery, Cumbria County Council should collaborate with district councils to create a single grant administration system in the county, which applies uniform and linked procedures across the entirety of its workload (i.e. from desktop to doorstep).

8.8 SRCG: Community Sub Group:

Purpose

- To reflect community concerns, feelings and initiatives and assist in informing the wider community. Assist in Impact Assessment of affected community. Be a strategic officer core group to champion community issues.

Role

- Reflect community concerns, feelings and initiatives and bring these to the attention of the SRCG
- Assist in informing the wider community of discussions and progress of the SRCG
- Liaison with the Business Community and taking their concerns to the Business and Economic Recovery Group
- Engaging the community in the recovery process.
- Consider the community's interests in the context of overall recovery aims and objectives, including the choice between 'normalisation' and 'regeneration'.

“The one person who’s important is the person behind the door”

Flood Recovery Officer

“Once you have flooded, the stress is always there every time it rains heavily. There is nothing you can do, you feel so helpless.”

“After the floods my ESA benefits were stopped I was really ill. As a result I had to use some of the recovery fund to live on. My front room is like a building site and I’m still living upstairs [nearly 18 months on]”

“The workmanship was appalling and they disrespected our home. Everyday was a constant battle; in the end we had to get rid of them. The new contractors were better but the paintwork has not been done to the standard we had it before. We are going to have to spend several weeks rubbing down gloss work and re-painting. Eventually we just had to accept things as they were; we needed to get ourselves and our children back home. We spent our first Christmas living in our flooded home as initially we didn’t have anywhere to rent and the second Christmas we were in damp accommodation paying huge oil bills. This is the second time our home has flooded and we are still battling with [district council re: PLR] and we are still trying to claim back money owed to us from our insurance company.”

“My landlord decided he didn’t want to repair the house which would have left me homeless if I didn’t have the grant to apply for [the deposit on] a new home.”

CCF Grant Recipients

“The establishment of a countywide registration scheme would have identified early the extent of those affected and allowed for a more complete understanding of the extent of the flooding, offered support earlier and ensured an effective triage of where that support needed to be targeted.”

“Structures have worked well, escalating issues and coordinating activity/working together.”

“[Recovery groups] established good links between the various groups involved in recovery and meant we all had a contact to hand for each agency. Helped with the sharing of information and they allowed information to be passed up and down between the local and strategic groups easily.”

“Much improved and greater acceptance of the role of third sector [than 2009].”

Community sub-group questionnaire

8.8.1 Introduction

463. The Community sub-group (often referred to as the Community Recovery Group) was established quickly, with its first full meeting on Wednesday 9 December. From the outset, the group included a wide range of organisations: Cumbria County Council, District Council, Cumbria Association of Local Councils, Cumbria Police, Environment Agency, Cumbria Community Foundation, Cumbria CVS, Churches Together in Cumbria, Rotary, Citizen’s Advice, National Flood Forum and British Red Cross were all involved.
464. Very quickly, it was clear that the widespread devastation caused by the storm meant that a single Community Recovery Group would be inadequate. It was clear that coordination would also be needed within local communities, to bring together the many groups working to support people who had been flooded. Although not described in existing Cumbria’s Recovery Plan structures, four Local Recovery Groups were established by Cumbria County Council’s Area Managers during the first week, one in each of the 4 Districts of Cumbria that had experienced significant flooding (Allerdale, Carlisle, Eden and South Lakeland). The membership of the Local Recovery Groups was deliberately “open”, with both formal and informal groups supporting flood recovery encouraged to participate. There was also a clear steer that these groups should include communities. As a result, the membership varied both between the groups and over time, but groups typically included representatives from town and parish councils, local flood action groups, churches, emerging community groups, existing voluntary organisations (such as Citizen’s Advice, Cumbria Law Centre, Age UK, Rotary, Lions, British Red Cross, Cumbria Community Foundation and Cumbria CVS), Housing Associations, local businesses, Cumbria County Council, the District Council (councillors and officers) and the Environment Agency.
465. Local Recovery Group chairs attended the (Cumbria-wide) Community sub-group, and this structure provided one of the key mechanisms for both gathering information on community concerns and needs, and for disseminating information about recovery progress and the support available to individuals. The groups also provided an opportunity for the wide range of people and organisations involved, many of whom had never worked together before, to develop relationships, understand each other’s work, and have some common understanding of the challenges involved in recovery. These groups undoubtedly helped to bridge the gap between the more formal, top down response of larger organisations and the community-led responses and helped to rapidly identify any gaps in provision.
466. Third sector organisations saw this early involvement as a significant improvement over 2009, when they had found it difficult to engage with the main recovery structures and had eventually established a separate third sector recovery group.
467. This improvement was made possible by the strong direction passed down from the SRCG that third sector organisations should be involved in community recovery and included as members of the Community sub-group and Local Recovery Groups from the very start. Local third-sector infrastructure organisations (Cumbria CVS and Cumbria Third Sector Network) were able to support this involvement, by providing a communication mechanism and practical support.

468. In the very early days, the close links between Cumbria Community Foundation (who were involved in the SCG/SRCG as they launched the Cumbria Flood Appeal: Box 9), Cumbria Third Sector Network and Cumbria CVS were also important in developing this third sector and community involvement.

469. As a result of this pro-active work, a survey designed by the Community sub-group and targeted at third sector organisations conducted in mid-2017, clearly illustrated overall satisfaction with the way they were integrated into the SRCG structures. The organisations that responded fell broadly into 4 groups:

- Existing Cumbria Voluntary Agencies Committee (CVAC – a subgroup within Cumbria Resilience Forum’s Communities Workstream) members with a pre-defined role in the welfare response, whose work then extended into recovery (e.g. British Red Cross, Churches Together in Cumbria, Rotary)
- Established local third sector organisations with no formal links to Cumbria Resilience Forum, but a clear role (and often previous experience) in community recovery (e.g. the local branches of Age UK, Citizens Advice, Mind and Flood Action Groups)
- National third sector organisations who extended their work into Cumbria’s during the recovery effort (e.g. Samaritan’s Purse working with Sandylands Church and the **Encouragement** Cabin in Kendal)
- New groups, that emerged to fill a perceived gap in local recovery support (e.g. Eden Flood Volunteers (who later became CERT-UK); the **Encouragement** Cabin).

These organisations had varied experiences of their involvement with the SRCG structures, but in general terms, well established and more formal organisations found it easier to engage with the SRCG structures. New organisations, and smaller community groups, often appeared less satisfied that they had a voice within the Local Recovery Groups.

470. These third sector organisations provided a variety of links into local communities, and the recovery structures largely ensured the third sector organisations had reliable information, enabling them to provide appropriate support and accurate information to the affected communities.

471. However, communities, and some of the emerging community organisations, still did not feel that they had the information they needed, or that they had a voice in the recovery process. Although challenging, this is an area that should be addressed in future recovery plans.

Recommendation 51: Cumbria Resilience Forum should ensure Recovery Plans are revised to embed the value of Local Recovery Groups, and the importance of involving existing networks of third sector organisations and community groups throughout the recovery structures.

Particular attention should be paid to understanding why smaller, newer and less formal groups found it more challenging to engage with the structures, and developing plans to support their future engagement.

8.8.2 Community Sub Group: Key Issues

472. The main issues discussed by the Community sub-group are summarised below, but most are then signposted to more detailed discussion in other sections.

473. During the first week, the Community sub-group focused on establishing the Local Recovery Groups (and ensuring the involvement of appropriate organisations), developing mechanisms to coordinate offers of help and match them to community need to ensure that information on flooded communities and properties could be collated to inform the “Cumbria Ask”.
474. The main concerns emerging from communities during the rest of December 2015 are summarised below; many are explored in more detail in other sections of this report.
475. The challenges of bridge and road closures – a feeling that there was a lack of information on closures, signage problems, and concern about the practical difficulties in accessing shops, health services, schools, work places and other services (Section 8.2)
476. Difficulties with collection of waste, and confusion around if district councils would provide skips, or if people should accept the offer of skips made by some insurance companies. The challenges were compounded because many households had had their wheelie bins washed away (Section 8.6.2)
477. Concerns began to emerge that although most people had found short term accommodation, this would often not be suitable or available longer term. There were many reasons for this, including that many people had initially found accommodation with friends or family, had been placed in hotels by insurance companies, were in properties that were only available short term (for example, holiday let properties that were only available until Christmas). In addition, some families were in temporary accommodation a long way from their home (a situation that caused particular difficulty for families who lacked transport, often because their car had also been damaged by floods and was uninsured for this), or in accommodation that could not accommodate the family’s pets.
478. Fears of future increases in insurance premiums began to emerge, along with concern around the number of flooded households that were uninsured or had inadequate insurance (Section 8.7.1). This was coupled to concerns about rogue traders, and the vulnerability of uninsured householders.
479. Fear of crime was significant in some areas, and led to people feeling forced to continue to live in flooded properties; arrangements for an increased Police presence and contracts between district councils and private security firms were put in place to address this.
480. Concerns about the short and long-term impacts of the floods on people’s mental health were raised (Section 8.3.3)
481. Tensions began to emerge as media coverage of the impacts of the flooding tended to focus on larger communities, and smaller communities and rural areas frequently felt that their experience and needs had been forgotten. The “Cumbria is open for business” message also caused a degree of tension. Whilst most communities understood the need to encourage visitors and support the local economy, they also felt the message suggested Cumbria had recovered from the floods, and this was a long way from their experience.
482. Perhaps most significantly, it became clear that there was significant anger within communities, particularly those communities that had flooded previously and who had been promised that they were “protected” by new flood defences. These flood defences were seen to have “failed”, and explanations that defences had “overtopped” rather than “failed” had little resonance with those whose homes and businesses had once again been flooded. This “failure” of flood defences led to significant anger and distrust of the statutory sector organisations seen to be responsible (particularly the Environment Agency), and an insistence that action, such as dredging, be undertaken to reduce the risk of future flooding. This was a topic discussed extensively at the Cumbria Floods Partnership, and whilst outside the scope of recovery work, this very understandable fear and anger, and the resulting distrust, had a significant impact on the ability of organisations to support and involve communities in their recovery.

483. In the first half of 2016, the major remaining concerns were difficulties with insurance claims (Section 8.7.1) and the challenges householders faced when trying to manage the logistics associated with Property Level Resilience (PLR) grants – for example, finding trusted surveyors, and juggling the demands of the PLR scheme with the requirements of their insurance company (Section 8.7.2). During this period there were many events at which people could obtain information and advice, including trailers (from the Environment Agency, National Flood Forum and other organisations) visiting communities (Section 8.9.2).
484. Later in 2016, as the autumn approached, community concerns became increasingly focused on the risk of future flooding, and a desire for reassurance that work (such as the removal of gravel that had been deposited under bridges during Storm Desmond) would be undertaken before any winter storms. The Environment Agency responded to this by increasing the information available on work that had been undertaken or that was planned during the autumn (Section 9.1).
485. Longer term, concerns about the PLR grant scheme continued into 2017, with a focus on people’s ability to meet the deadlines that had been set for applications to be submitted, and then for the work to be completed. Both of these deadlines were extended as a result of community concerns (Section 8.7.8)
486. Community concerns about mental health are still present 24 months on from the floods of December 2015. It is clear that many people did not feel settled or safe enough to consider seeking formal or informal support for mental health concerns until they were back in their home – but by this time, flooding no longer had a high profile, and those who had not been directly affected by the flooding were not always sympathetic to the ongoing impact (Section 8.3.3.1)

Box 9: Summary of Cumbria Community Foundation (CCF) Flood Recovery Fund:

Cumbria Community Foundation (CCF) had previously led three other disaster appeals from which a Disaster Appeal Toolkit had been developed. In November 2015, the Senior Management Team (SMT) reviewed arrangements for launching a disaster appeal and new decision-making protocols were agreed by trustees on the 26 November. As a result, when the flooding disaster occurred, with little prior warning, over the 4-5 December, CCF was able to respond rapidly to the emerging need.

Saturday 5 December 2015, decision to launch an appeal:

The CCF Chief Executive contacted Chief Executive of Cumbria County Council (CCC), who confirmed a major incident was taking place and that there was need for a disaster fund.

CCF trustees agreed an appeal document. Appeal launched at 9pm for charitable purposes in connection with the relief of hardship within the county of Cumbria caused directly or indirectly by storm damage and flooding in December 2015. The initial grant-making priorities were, individuals/families suffering financial hardship and community relief/rebuilding projects.

Targets:

An initial fundraising target of £1m was agreed by trustees and communicated through the web-based JustGiving™ site:

<https://www.justgiving.com/campaigns/charity/cumbriafoundation/cumbriafloodappeal2015>

The target was raised over future weeks to a final target of £7m. Ultimately, £10.3m raised in total, which included £4.7m from Government match funding

Plans:

As with other fund activations, the speed of response and effective communication were considered to be key factors in the schemes' success.

CCF was a core member of the Strategic Recovery Coordinating Group (SRCG), District-based Community Recovery Groups, Housing Sub-Group and Communications Group. They also worked closely with statutory agencies, local authorities, third sector organisations, flood action groups and other community groups. Information was received daily and the emerging need was kept under close review.

8.8.3 Community involvement in wider resilience activity

487. Whilst community groups and third sector organisations played a crucial role the Community sub-group and the Local Recovery Groups, many were also involved in other activities that increase community resilience. Recovery forms part of a cycle; activities to prepare for flooding (both through the management of flood risk and by developing emergency plans) influence the impact of and the acute response to an event, and communities that feel well supported and involved in the acute response frequently appear to fare better during recovery. Therefore, whilst these broader activities are not a recovery activity *per se*, this report will briefly discuss the roles community groups and voluntary organisations have played in both emergency planning and flood risk management following Storm Desmond, as both play an essential role in building long term community resilience.
488. Accordingly, much of the discussion in this next section reflects findings in relation to the role of Community Emergency Planning (CEP) which were identified during the Local Resilience Forum's *Storm Desmond* response phase debrief process (Deeming, 2016a: pp.32-34) and a

workshop for Flood Action Groups and communities with Emergency Plans convened by Cumbria Community Resilience Network (CCRN) to look specifically at CEP issues (CCRN, 2016). The following section will look at community involvement in Cumbria Strategic Flood Partnership, and its influence of flood risk management across Cumbria.

8.8.3.1 Community involvement during acute response

489. Communities across Cumbria have developed their own emergency plans since the floods of 2005 and 2009, with over 30 having a formal Community Emergency Plan. Some of these plans have been developed by Flood Action Groups (FLAGs) and focus on flood emergencies; others have been developed by Parish Councils or other community groups, and cover a wider range of possible emergencies (often including scenarios such as severe snow, loss of power and major road/rail accidents). Many of these groups have been encouraged and supported to develop their emergency plans by staff from the member organisations of Cumbria Community Resilience Network (CCRN).
490. CCRN is a sub-group within the Communities workstream of the LRF that comprises organisations working with communities to build their resilience; these organisations include the local authorities, the Environment Agency and third sector organisations including ACTION with Communities in Cumbria (ACT), Cumbria CVS, Cumbria Community Foundation and Cumbria Neighbourhood Watch Association. CCRN has focused on the development of the '10 Step Plan' community emergency planning (CEP) process (ACT, 2012), and the simpler '5-step' and 'Having the Conversation' resources, designed to encourage greater take up of CEP by parishes and other interested community networks⁴⁰. An important aim in developing these plans was to engage rural communities in the process of preparing themselves for large scale emergencies. This is because evidence clearly shows that during these events civil protection resources in Cumbria are stretched and less able to come to communities' assistance expeditiously other than in directly life-threatening circumstances.
491. The 10 Step planning process has, therefore, always been a way to encourage engaged communities to actively respond to warnings in order to implement their own risk reduction strategies in good time. At its most fundamental, in a flood event the 10 Step Plan should be seen as a means through which neighbours can ensure the prompt 'dry evacuation' of vulnerable people and properties, before active flooding results in a situation where specialist resources are needed to perform 'wet rescues'. This can both make the experience of flooding less traumatic for those affected (e.g. allowing them to save possessions, and walk out of their home rather than being rescued by boat or helicopter) and significantly reduce the demands on the emergency services.
492. Several CEP groups have gone through a process of participatory planning and plan evaluation by peer review, and had their plans formally certified by the LRF. Once certified, plans have been kept by the groups and are increasingly being stored centrally in the Cumbria's Community Messaging system⁴¹, where they can be accessed by groups as well as by partner agencies. Experience of this planning and evaluation process for those who have engaged has been very positive.

⁴⁰ <http://www.cumbriaaction.org.uk/What-We-Do/Community-Emergency-Planning>

⁴¹ <https://www.cumbriacommunitymessaging.co.uk/>

493. Without doubt, numerous CEP groups in Cumbria have proven themselves to be an important component of community response during the acute phase of incidents. However, in some cases a lack of formal guidance has meant that some groups' experience of response led them to question the efficacy of plans they had prepared themselves. Since Storm Desmond there has been a surge in interest amongst other flood-affected communities in developing CEPs.

8.8.3.2 Community Involvement in Recovery

494. It is becoming increasingly clear, around the world, that community participation is a critical component that underpins successful disaster recovery. The formal authorities and agencies simply cannot be expected to do the work themselves (Aldrich, 2012, Solnit, 2009, Tierney, 2014). This is why the aim of the SRCG, from the outset, was to "work *with* local communities to restore Cumbria to normality". The intention was always to support communities in delivering their own recovery, and Cumbria's SRCG were generally successful in achieving this.

495. Community organisations and networks played an important role in the recovery from Storm Desmond, with many FLAGs and other Community Emergency Planning groups expanding their work into the recovery period. They provided vital links through which community needs and concerns were highlighted to the Local Recovery Groups and Community sub-group, and so allowed resources to be directed to support communities in the most effective ways. As a result, a number of communities are now developing formal community recovery plans.

8.8.3.3 Community Involvement in Flood Risk Management

496. It is important to remember that the Flood Action Groups are often not focussed solely on Community Emergency Planning; indeed, some FLAGs have no interest or involvement in CEP. Many Flood Action Groups were originally convened as a platform for community advocacy and resilience building, aiming to influence future flood risk management options through lobbying and or collaboration with statutory agencies to co-develop solutions.

497. In both Cockermouth and Keswick, two of the larger communities with long-established FLAGs, the groups have now separated, forming a Flood Action Group (focussed on influencing local flood risk management) and a community Emergency Response or Recovery group (focussed on emergency planning, and expanding that planning into recovery).

498. These multiple roles (either within groups, or spread between groups within a community), means they have roles in planning, emergency response, recovery and advocacy, which makes recognition of their roles all the more important (see Deeming, 2016a: p. 32-34).

499. Accordingly, the coupling of third sector and community capabilities during recovery from Storm Desmond has undoubtedly proven invaluable in providing the key local support that has helped many flood-affected households and businesses back on their feet. Whether this coupling has been directly supported by Cumbria County Council (e.g. through funding a third sector organisation) or by groups themselves is interesting to note, but the end result has clearly been beneficial for those assisted.

500. This is not to say that any community should ever be expected to manage their recovery alone. Rather, it is to point out that the Cumbrian experience, since the Foot and Mouth crisis in 2001, has been one grounded in strong community involvement in disaster recovery and resilience building.

501. In many cases community groups have also provided, and continue to provide, a hub for community advocacy and support, including participation in the often-protracted negotiation

for and development of risk mitigation measures for their communities. This aspect of community participation is clearly illustrated by the fact that the community representatives have recently been elected onto the Cumbria Strategic Flood partnership. Group members have also been directly involved in Local Recovery Groups (e.g. Appleby, Keswick, Cockermouth), bringing important local knowledge into recovery activities and programmes.

502. This participation has also, however, proven immensely frustrating for some people, as apparent delays, or perceived bureaucratic inertia, which have seemed to prevent 'things from getting done', have added additional pressures for the community representatives involved.

8.8.3.3 Rebuilding Together

503. In recognition of value of community involvement in the response to, and early recovery from, Storm Desmond, Big Lottery approached Cumbria CVS to develop a partnership project to further develop the resilience of individuals, communities and third sector organisations across Cumbria. Cumbria CVS, ACT and Cumbria Action for Sustainability are currently working within the Big Lottery Funded *Rebuilding Together* Project, one aspect of which is assessing the current CEP frameworks and arrangements in the county in order to improve them for the future. Key elements of this work will include an examination of how response and recovery activity has been integrated into similar frameworks in the UK and around the world.
504. In view of the apparent effectiveness of the CEP concept, whether recovery activities formed part of their plan or not, it is important to restate here a set of recommendations that were made as part of the acute phase review and CCRN symposium. This is done in order to underline the importance of integrating recovery contingencies into all community emergency plans.
505. It is always important to understand, however, that communities will always vary in their capacity to organise (and in their interest in doing so) – and so it is important for the formal recovery structures to recognise this, to fill the gaps where necessary and not just to listen to who shouts the loudest.
506. Accordingly, it will always remain vital for the relevant authorities to maintain contingencies for assisting all communities, in ways that are sensitive to and respect their unique capabilities, capacities, vulnerabilities and resilience.

8.9 SRCG: Communications Sub Group:

The principal recommendations in relation to Community Resilience and community emergency planning restated from the acute phase debrief report are:

- Cumbria Community Resilience Network (CCRN) and Cumbria Police should agree a minimum set of key details that all Community Emergency Planning (CEP) groups must list at the head of their plan to achieve certification and inclusion in the Police notification and call-out procedure.
- The Local Resilience Forum should continue to support the engagement of communities with the process of Community Emergency Planning. It should also continue to integrate Community Emergency Planning (CEP) groups into the LRF's formal response protocols (e.g. building contingencies to take advantage of local knowledge and capabilities during all incident phases [including long-term recovery]).
- Cumbria Community Resilience Network (CCRN) should continue to advocate, within the Local Resilience Forum (LRF), on behalf of Community Emergency Planning (CEP) groups. This advocacy should clearly acknowledge the positive outcomes Community Emergency Planning (CEP) is having for those communities engaged with the process and should illustrate the clear justification for the LRF to invest resources in the further pro-active co-development of existing groups and recruitment of new ones.
- Cumbria Community Resilience Network (CCRN) should work with the Local Resilience Forum (LRF) and engaged Community Emergency Planning (CEP) groups to co-develop and deliver a realistic training and exercising regime that better integrates CEP groups into the county's civil protection arrangements.

All these recommendations have been accepted by the LRF and are currently under review/development.

Purpose

- To reassure the public through its communications activity that government locally and centrally, together with local partners, is working effectively to mitigate the impact of flooding, recover from the incidents, and prepare for future events.
- To oversee delivery of a coordinated programme of public service communications, with a clear recovery narrative, providing high quality information, and ensuring high visibility of the flooding response and a joint drumbeat on what is being done to address issues as they emerge.
- To deliver effective and coordinated communications to enable individuals, communities and businesses in flood affected areas to recover as quickly as possible.

Role

- To formulate and deliver an overall Communications Strategy
- To formulate, keep updated and deliver on a forward-looking Activity Grid of communications
- To introduce and maintain a community support landing page on gov.uk
- To develop, on an ongoing basis, Activity Summaries and Evaluation of communications.
- To maintain an active Risk Log and manage risks as they arise
- To maintain regular liaison with central government on communications
- To identify additional resource needs in relation to communications and liaise with central government on meeting those needs.

“Initially when most needed there was very little information provided on flood measures. Then there was so much conflicting information coming from different experts it was hard knowing if you were doing the right thing. In the end I am happy with what I chose, but more support would have helped.”

“To be honest, I didn’t seek any [support] because of pride, so perhaps more house calls?”

CCF Grant Recipient

“Volunteers responded to calls for help and gathered quickly, and from beyond the immediate vicinity. Help, donations and money poured in.”

The Encouragement Cabin – Community sub-group questionnaire

“Social media played an important role in identifying the areas of greatest need.”

Kendal Lions, Community sub-group questionnaire

507. A key factor in facilitating recovery is effective communication. From the outset, the communications team worked with the other sub-groups to develop and deliver a clear communications strategy. Communications support was also provided by MHCLG and the Government Communications Service at least until May 2016. Using these connections and channels, the focus of the sub-group was to provide a diverse range of communication outputs, in order to provide the highest number of interested recipients possible with concise, useful and accurate information.

508. Printed “Flood Bulletins” and “Flood Factsheets” were seen to have been very popular and successful in spreading information following the 2009 floods. Publication of Flood Factsheets started on Monday 7th December, and within a few days, Community Development Officers from Cumbria County Council’s Area Teams were producing Local Flood Bulletins. These

bulletins were initially produced in hard copy, so they could be handed out on the ground, but the same information was also transferred into an e-bulletin format, which was circulated on websites and via social media.

8.9.1 Local Media

509. Linking directly to the communications sub-group, local radio was roundly praised as providing a trusted channel for the sharing of key information throughout the response and early recovery periods. Local television and print media also provided important conduits to get information to the public.
510. In many respects, the value placed on local media is unsurprising, given how seriously broadcasters take their responsibilities as a public information service during emergencies⁴². It is also important, however, to understand that the effectiveness of the public broadcast information during response and recovery is also due to the fact that the media are valued associates in the communications planning undertaken by Cumbria Local Resilience Forum. As was illustrated so many times during the response and recovery, the value of pre-existing relationships like these, between the local authorities and key partners, proved invaluable in aiding the recovery effort.

8.9.2 One-stop-shops:

8.9.2.1 Flood Support Centres

511. The provision of one-stop Flood Advice Centres to give assistance and information to the affected was recognised as good practice by the Pitt review following the 2007 floods (Pitt, 2008). Perhaps more importantly, the value of one-stop-shops has also been understood in Cumbria since the ‘Communities Reunited’ initiative established in Carlisle a few months after the 2005 floods provided clear evidence of the importance of centralised recovery-information services for affected communities.(Convery and Bailey, 2008).
512. As recovery commenced, the importance of providing information to affected communities became a priority. Flood Support centres began to form and were supported in Appleby, Carlisle, Cockermouth, Kendal and Keswick. Local authority staff and partners also circulated information and support to other areas affected using various buses and trailers (e.g. Cumbria County Council/National Flood Forum/Environment Agency Drop-ins around Carlisle), and in South Lakeland, an Age UK vehicle was used to ensure support was taken to rural communities.
513. Other one-stop-shop activities around the county included the initial ‘Section 19’ flood investigation meetings, the National Flood Forum Trailer and the Age UK/Gateway van
514. All the Flood Support Centres contained a number of organisations, but those involved varied over time. For example, in Cockermouth, Christchurch (which had been used as a Flood Support Centre following the 2009 floods) opened almost immediately, and Rotary, Women’s Institute, church volunteers and other spontaneous community volunteers began to coordinate practical support. Within a few days (as the reception centre at Cockermouth School closed), they were joined by staff from Cumbria County Council (Community Development Officers, Adult Social Care and Children’s Services), Allerdale Borough Council (Environmental Health and Housing Officers), the Environment Agency, local Housing Associations, local third sector organisations (including Age UK and Citizens Advice), an insurance broker and Sellafield. The church continued to operate as the Flood Support centre for a number of weeks until the “Bridge Café” was established as a support hub north of the river (Plate 9).

⁴² For example, the BBC ‘Connecting in a Crisis’ initiative: <http://www.bbc.co.uk/news/uk-15250977>



Plate 9: Bridge Cafe support centre (image courtesy: Paul Mogford)

515. When the PLR grant scheme was established, a number of additional “support centres” were established, either through BERG or by independent private sector companies supplying flood resilience products. This caused some confusion about the best places to seek support, and which advice was independent of commercial interests. The commercial companies were generally not linked to the SRCG structures, meaning that they often lacked information on the overall support available (with some initially unaware that people could apply for a top up grant for resilience products from CCF).
516. Specifically, in relation to PLR work, such challenges will be hard to resolve until there is a formal industry code of practice (see section 8.7.2).

Recommendation 52: Recovery structures should continue to support the rapid funding, establishment and long-term provision of one-stop multi-sector, multi-partner centres in order to ensure that the information and support offered to affected communities is consistent.

However, responsibility for the ‘frontline’ oversight of information quality and effective support provision should not be devolved to the third sector alone. Contingencies should be in place to ensure statutory engagement with and oversight of all one-stop activities (e.g. to ensure third sector capacities are not being overwhelmed, with potential consequences for affected households).

Recommendation 53: Given the importance of informal social spaces in providing opportunities for social support and learning during recovery (see Rec 30), all agencies and partners should reflect on how they invest in communications programmes that utilise these social hubs and on how they value (e.g. actively listen to the concerns and ideas of), support and resource their staff who operate in these environments

8.9.2.2 Virtual one-stop-shops

517. The growing importance of the internet as a source of information during crises is becoming increasingly clear. The capability that the web offers to provide information and links to other sources has become a vital tool in building public awareness. Subsequently to the 2015 winter storms Defra, realising this – perhaps a little late – tasked the Bonfield Review to develop a virtual flood-information focused one-stop-shop as part of Defra’s Property Flood Resilience Action Plan (Bonfield, 2016)⁴³.
518. From an early stage, Cumbria County Council provided a virtual one-stop-shop for recovery, grants and contact information on its website⁴⁴. District councils also had dedicated flood-recovery web-pages, which linked to the County Council site for general information, as well as providing more tailored information for their own residents. These “flood pages” were publicised by many other organisations, including third sector organisations and community groups, in newsletters, eBulletins and on social media.
519. These virtual one-stop-shops evolved over time to become increasingly useful, providing a range of key information from advice on cleaning up, to insurance advice and road closure updates. In respect to the sheer amount of information provided, Eden District Council went a little further than others, by developing a particularly useful ‘A to Z of flood recovery’ that including the largest variety of links to information and support, including links to dynamic-information resources such as Northern Rail and the Cumbria Police Traffic Map.

8.9.3 The use of Social Media during emergency response and recovery

“[The Social Media response] seemed to kick in an awful lot faster and in an organised way than it did in 2009, and that more than anything else has probably mitigated some of the distress and the mental health challenges, and if I were going to push for anything to come out of this then it would be to build on some of that. Because this will happen again”

Interviewee

520. Recommendations were made in the acute-phase debrief report, which specifically identified the importance of authorities and agencies having the capability to improve and maintain their shared situational awareness during events, by monitoring social media. The recommendations were:
- **Acute-phase recommendation 41:** CLRF should develop a social media strategy that provides a formal structure through which partners and/or a Multi-Agency Information Cell (MAIC) can fully engage the public in information sharing during emergencies (i.e. information push and information pull)
 - **Acute-phase recommendation 42:** CLRF should proactively engage with other LRFs, Joint Emergency Service Interoperability Principles (JESIP) and Government Departments in order to develop a national Social Media in Emergency Management (SMEM) capability.
521. These recommendations have been accepted by the LRF and are currently under review/development. However, the use of social media during recovery, also revealed additional issues as well as notable practice.

⁴³ The Centre 4 Resilience resource even uses ‘The Toy Shop’ in Cockermouth as a business resilience case study: <http://www.centre4resilience.org/>

⁴⁴ <https://www.cumbria.gov.uk/floods2015/grantsandfunding.asp>

8.9.3.1 Myth-busting on YouTube™

522. Storm Desmond's damage to the transport infrastructure presented particular challenges. With roads and bridges closed for extended periods before repair, some sections of the public began to criticise the recovery efforts. This criticism appears to have been based on an apparent failure to appreciate the sheer scale of the challenges faced by the repair teams, but it was still starting to underpin unhelpful myths that needed to be 'busted'.
523. The chair of the Infrastructure sub-group was keen to express the importance with which his group treated communication with the public:

"...we were running on a daily or bi-daily comms approach for 6 weeks, probably longer, but what worked was that we could leave a planning meeting downstairs, [we'd then] decide on our actions for that day, the following day. Literally next door [the comms team] "This is what we're going to do, this is what we think the priorities are" They would think about how that would be communicated out and they would come back immediately to say, 'Right we need x, y and z people to put in front of the cameras or social media', or 'What do you think of this Tweet?' It's that intense melting pot [that] is what I think made the comms work."

Stephen Hall (Cumbria County Council)

524. The A591 closure drew particular criticism. Accordingly, an innovative myth-busting response to this was developed by the Infrastructure sub-group and the County Council comms team. Instead of simply reporting progress in the bulletins and traditional and text-based media, Cumbria County Council was proactive in creating a series of technical information videos which were linked from YouTube™. One video, presented by Dr Simon Ferley, the County's principal geotechnical engineer⁴⁵, has been viewed over 13,000 times since its release, with other films in the series recording over 2,000 views each.
525. As well as the A591, other challenges faced by engineers wanting to ensure the safety of the County's bridges, also proved themselves amenable to explanation via YouTube. For example, the film of the underwater survey of Victoria Bridge in Kendal⁴⁶ gained almost 23,000 views.
526. The impression across the SRCG leadership was that these videos effectively ended the complaints about the A591, and other on-going work, almost overnight.
527. These examples, however, relate to planned social media outputs that were developed over a period of time. What this particular usage of social media was not so amenable to dealing with were the myths which sprang up due to more everyday misunderstandings, where people (e.g.) 'Tweeted' their concerns about an issue in public, before seeking to clarify 'facts' from appropriate sources.
528. For some members of staff in recovery roles, this was frustrating, because these myths and misconceptions often developed and gained momentum in the evening, when offices were closed. This meant that, without any sort of central monitoring of social media, staff who were keen to 'nip these things in the bud' were left to either send a clarification using their own social

Recommendation 54: Any Social Media in Emergency Management (SMEM) policy, implemented by responders to monitor social media during response and recovery, should include guidelines and a process whereby designated staff would be able to (and feel confident to) respond to rumours and/or requests for issue clarification, expediently on-line (including out of hours).

⁴⁵ <https://www.youtube.com/watch?v=amYwSYgE1go&t=8s>

⁴⁶ https://www.youtube.com/watch?v=Hcsw_nD88pY&t=153s

media account (thus identifying themselves), or wait until a formal response could be circulated during office hours.

8.9.3.2 Social media use by the public

529. A powerful illustration of the effective use of social media by a community that was proud to show its achievements in recovering from Storm Desmond, was the 'Rebuilding Kendal' film project⁴⁷ which was developed with funding from Cumbria Community Foundation and presented at a formal reception in Kendal on 3rd September 2016⁴⁸.

530. More dynamically, however, throughout the flood event and its aftermath, social media was also used by the public to stay updated through their own social networks.

"Our family overseas saw Facebook and had better awareness of what was happening than we did"

Workshop participant

531. In terms of providing direct support, in addition to the formal usage (section above), social media was also used very effectively by third sector and community-based responders, to shepherd resources to those in need. Some groups, most notably Eden Flood Volunteers (now CERT-UK), were initiated by activity on social media, and rapidly developed to also have a physical presence. However, the acute-phase debrief report identified an important issue in relation to this type of emergent social media usage:

"In terms of the public's emergent use of SM to coordinate their own activities during the event, the Facebook account set up by Eden Flood Volunteers was quickly adopted by affected households as a means through which to ask for help and supplies. Given the implications in terms of how vulnerable these households may have been, it could be argued that this presents a clear justification for the statutory agencies to monitor and/or to interject if specific messages indicate evidence of emerging risks to public safety, which volunteers may not identify or be able to mitigate sufficiently well." (Deeming, 2016a: p.42)

532. This recommendation illustrates that this type of spontaneously organised coordination of relief for the hazard affected, can be, simultaneously, incredibly useful and challenging; both for the individuals leading the community response, and for the formal agencies wishing to facilitate community-led recovery (Defra, 2015). However, it is undoubtedly a powerful medium through which to engage with the public. Accordingly, it is appropriate to restate and to add additional clarification to recommendation from the acute-phase debrief, in order to underline the fact that the need for social media monitoring, by the responder agencies, is not confined to the preparation and response phases, but is needed in recovery too.

Restatement and clarification of Acute-phase debrief recommendation 42: Cumbria Local Resilience Forum should develop a social media strategy that provides a formal structure through which partners and/or a Multi-Agency Information Cell (MAIC) can fully engage the public in information sharing during [and in recovery from] emergencies (i.e. information push and information pull).

⁴⁷ <https://www.youtube.com/watch?v=lttlEHJCOFk>

⁴⁸ Given the inspiring nature of this film, it is surprising that as of 1st Sept 2017 it had only had 900 views on YouTube™

533. What must not be forgotten, however, is that not everyone has access to or the capacity to use social media. Accordingly, it should only ever be considered as one communications tool (see Section 8.9.6).

8.9.4 Challenges to effective communication and the importance of door-knocking

534. Given the amount of information that was provided through multiple channels into the affected areas, in the media, in Recovery Support Centres and virtually, it was quite surprising to find that lack of effective communication was raised repeatedly as an issue at the Recovery Workshop (Plate 10).

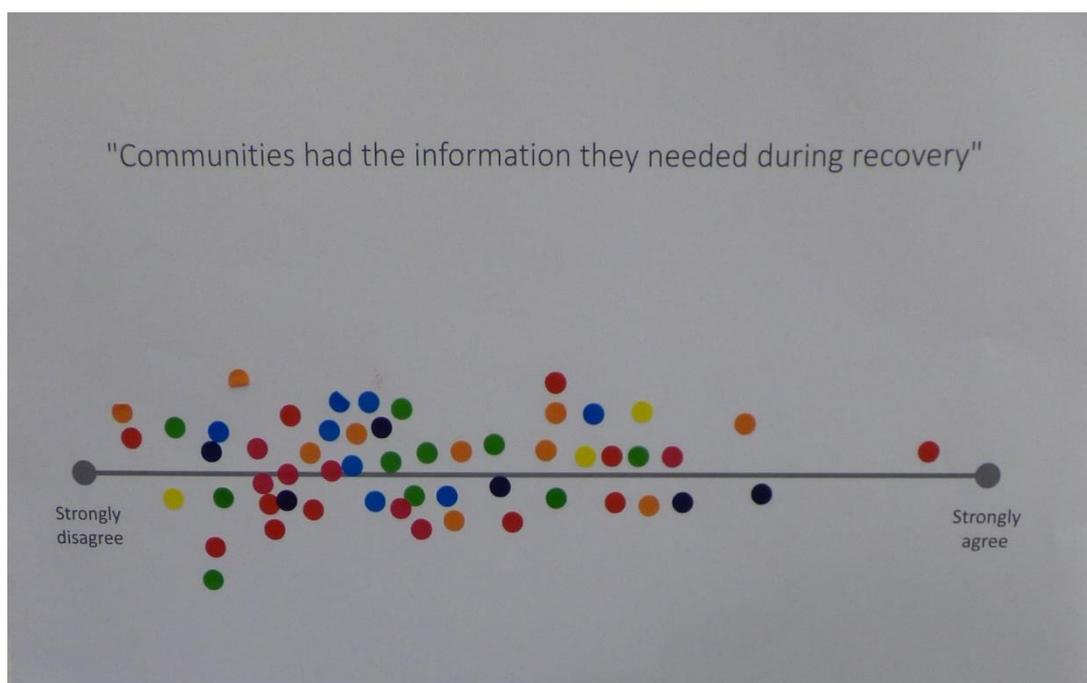


Plate 10: Recovery workshop exercise: delegates were asked to place a dot on the scale to indicate their agreement with the statement

535. One relatively straightforward reason stated was that not everyone has access to social media. This means that too great a focus on sharing information virtually, will never reach some potentially vulnerable individuals and groups. This also underlines the value of the sub-group's approach, of always using multiple channels to communicate information.

536. A second reason that was suggested, was that people were simply too busy, or too overwhelmed, to seek the information they needed. This perspective illustrates the value of having people on-the-ground actually door-knocking and offering support directly. Here the role of the British Red Cross in identifying and ensuring that large numbers of residents were kept informed of key information is relevant (British Red Cross, 2016). It also validates the decision made by the Foundations Independent Living Trust and Cumbria Community Foundation to provide funding to support a Flood Recovery Officer in Carlisle.

537. The apparently critical importance of these individuals, who actually speak to people on their doorstep and who are able to communicate the concerns they hear back up to the councils and coordinating groups, should not be undervalued.

538. Always, the critical thing to remember about communication is that it is a two-way process. The fact that vulnerable people, still struggling with the deadline to arrange PLR installations, were being identified through door-knocking as late as July 2017 – a few days before the scheme deadline – clearly illustrates the need for this type face-to-face support. The fact that it was communication from the street-level upward that sensitised the councils to this risk as it arose, and spurred them to improve contingencies for supporting these struggling households, is also an example of notable practice and learning that must be remembered.

Recommendation 55: Communication with vulnerable groups during recovery is extremely difficult and thus resource intensive, yet it is vital that effective communication between the authorities and these publics is maintained. It is recommended that Cumbria Resilience Forum recovery plans acknowledge, that although as time passes the number of people requiring information and support reduces, the importance of maintaining effective communications with those last few – who may be struggling the most – is a crucial social-safety contingency.

8.9.5 The Tour of Britain

539. As well as the advocacy undertaken by local businesses and communities, in an effort to promote the idea of Cumbria as a destination (see section 8.4.5), the organisation of the nationally significant *Tour of Britain 2016* cycling event was also influenced in order to present the County in a positive light. Following significant input and the chairing of the committee tasked with oversight of the Tour's Cumbria-based 'Day 2' by a senior County Council officer, the stage started in Carlisle and finished in Kendal after taking in a 195km route through some of the most severely flood-affected parts of the County. The event not only drew significant tourist revenue into the County, but also raised greater awareness amongst the wider viewing public that Cumbria was indeed open for business.

9. Winter 2016/17

“I think as for me, I’ve been flooded twice in 10 years!! People think we should be grateful when we are back home but it’s not that easy!! We are still left with depression, anxiety and feeling it’s not home, the funding helps us through this.”

“The resilience measures for individual domestic properties were, in the majority of cases, a complete waste of time and the money would have been better spent on the real source of the problem, namely dealing with the ‘run-off’ at source. I made this point when I was approached to apply for the flood resilience grant, on two occasions, and it would appear that this was a comment made by many of those affected by the floods.”

“People/agencies were supporting immediately after the flood, but the stress of refurbishment went on for 10 months. An ongoing listening ear, “shoulder to cry on”, would have been useful.”

“Support initially was useful, including the flood support centre located in the town. However, this should have been kept open longer, perhaps in a different format, to provide ongoing support for people still not back in their homes and who were still dealing with ongoing issues.”

CCF Grant Recipients

540. The scale of impacts from the storm, and the complexity of a recovery process that required so many actors across multiple sectors to coordinate their efforts, meant that by winter 2016/17 many people were still out of their homes. Reasons for this included the difficulty in drying certain building types, insurance issues (or issues to do with a lack of insurance), a shortage of contractors able to carry out work and, unfortunately, some situations where work had to be re-done due to some contractors’ poor-quality standards and/or lack of skills.
541. Ongoing issues with organising PLR work also meant that some households needed to take full advantage of the extension of grant scheme deadlines into 2017 (see section 8.7.8). Even now, however, there appears to be evidence emerging that some PLR installations may not live up to expectations. At the time of writing, some examples of questionable installation were being investigated and collated in order to assess whether appropriate action needs to be taken (see Recommendation 45).
542. Luckily, the winter of 2016/17 was drier than average. This allowed all stakeholders the opportunity to continue to recover, without the need to revert to preparedness and response activities, and without further significant flooding causing additional recovery challenges (e.g. bridge closures were kept to an absolute minimum, despite over 80 in the county requiring enhanced monitoring).
543. Despite this, however, there has been some evidence of ongoing trauma being suffered in the county. Unfortunately, these pressures were not only felt by people who were still out of their homes. Some people who were back in their properties were also struggling, with anecdotal evidence suggesting that those who had been flooded were feeling detached from the rest of their communities. This included stories of individuals who felt their peers were assuming that simply because they “got a new kitchen out of it” they weren’t badly off. In fact, this phenomenon as has been experienced with other floods (Whittle et al., 2010), where long-term mental health effects can persist long after a household has returned to their property and include perceptions that the newly refurbished building is no longer their ‘home’ (see: Recommendations 28, 29).
544. The ongoing pressure of recovery was, however, eased by a number of communities who celebrated the anniversary of the storm. Such illustrations of communities’ tenacity should undoubtedly be admired.

9.1 Communications regarding flood-defence asset repair and flood-risk management

545. This report is focused on understanding the effectiveness of Cumbria's *recovery* structures and not on the flood risk management work being undertaken by the Cumbria Strategic Flood Partnership (CSFP). However, given the importance of maintaining public confidence in flood risk management measures (see section 10.1.1), it is appropriate to briefly discuss communications as they relate to the Environment Agency and its partners' work to reinstate the county's flood protection standards to pre-storm levels before the next winter arrived.
546. This work was carried out from December 2015 and through 2016. Unfortunately, however, it was not until July 2016 that the Agency started to release its repair and maintenance work schedules to the public. Undoubtedly, prior to July a vast amount of work had been carried out to return channels and defences to their protective standards. However, the public had not been aware of this work in any detail, unless they had actually seen it happening. This underpinned a genuine fear within communities that not everything possible was being done to mitigate a repeat flood event during the next winter.
547. This lack of communication undoubtedly served to undermine public confidence in the Agency and also proved a bone of contention at every one of the six Cumbria Floods Partnership meetings from January to July 2016⁴⁹.
548. The complexity of the work being undertaken to develop additional flood risk management options across Cumbria is understood, and the sheer scale of the engagement activity carried out in relation to developing Investigation Reports and shortlist options has been admirable (certainly when compared to that achieved in other areas nationally)⁵⁰. However, it is quite clear that the public's general perception of the Agency's communication strategy in relation to explaining their on-going work has been one of frustration.
549. It is possible that the Agency will *never* be able to justify its post-event actions to the satisfaction of flooded communities. However, the apparent reticence to develop a process through which to announce work schedules to an expectant public sooner, should definitely be regarded as an error and a lesson to be learned.

Recommendation 56: The Environment Agency and other Cumbria Local Resilience Forum members should review all policies and processes related to public communications during recovery, to ensure that they are fit-for-purpose in building trust with affected communities and informing the public of recovery operations, their timing and their underpinning rationale.

⁴⁹ The Cumbria Flood Partnership was convened by Rory Stewart MP as a way to develop collaboration between affected communities and the authorities in the aftermath of the flooding.

⁵⁰ NB. It was particularly unfortunate that a General Election was called in early 2017, which meant that EA staff had to cease public communications for several weeks, due to purdah rules. This occurred at exactly the point when communities wanted to be talking to the EA about their catchments' long-list FRM options.

10. Final conclusions and recommendations

“[Recovery coordination] has been significantly better than in 2009 but there has not been the focus in planning and exercising recovery that has been given to response. It takes place over a longer period and as such will always test the resilience of organisations involved. Whilst there is a recognition of the need for and value to individuals and communities that has significantly improved, there is a tension with the recognition that resources are limited and people affected ideally need to have greater individual and community resilience. This demands an emphasis on identifying those who are most vulnerable to target scarce resources more appropriately and in fostering a community understanding of what can be done. There is clear evidence of this emerging in communities who have experienced more than one flooding event, but there are challenges in ensuring that this is maintained and can be invoked when flooding occurs again.”

Community sub-group questionnaire

“I think that the recovery has shown a tremendous awareness and ability within Cumbria to recognise the impact on people of exposure to major incidents and a desire to have appropriate and relevant support in place. There is a huge understanding of the need to do this in partnership, especially because of the scale of the flooding and the impact of organisations having to function with fewer staff.”

Community sub-group questionnaire

551. This review has focused on understanding the role of Cumbria’s Strategic Recovery Coordinating Group (SRCG) and its sub-groups in facilitating the affected communities’ recovery from Storm Desmond.
552. As such it has investigated the primary activities of the groups to identify notable practice, but also to recommend where improvements could be made. This is an important brief, because the over-riding perception within the county is one of it not being a case of ‘if’ it floods again, but ‘when’.
553. Innovative practice has been identified (e.g. the use of GAIST™ to survey the county’s road infrastructure), as too has been the vital importance of the Government supporting the county through the issue of a block grant to fund infrastructure repair, rather than insisting projects be dealt with on a case-by-case basis.
554. The resilience of communities has also been highlighted, for example, in the way the **Encouragement** cabin provided support in the Sandylands area of Kendal (Sandylands Church, 2016). The capacity and capabilities that the third sector, and the communities themselves, have invested in the recovery have been extraordinary. However, the long-term and pernicious consequences of extreme flooding felt by so many cannot be ignored.
555. Whilst, thankfully, the majority of affected households and businesses were able to get back on their feet during the course of this review, there are many for whom the need for ongoing support persists. The knowledge that such vulnerability continues to place real pressures on individuals and households within our communities should be a driving factor in ensuring an ongoing commitment by the county’s authorities, agencies, organisations and communities to

continue take pride in the way they have operated in adversity, but also to continue to learn from this experience and to maintain preparedness...for the next time.

Recommendation 57: Cumbria Local Resilience Forum should actively plan, train and exercise recovery activities with all stakeholders, including third sector and private sector partners and the hazard exposed communities themselves.

556. This report is now complete, but, given the increasing focus on resilience within public and policy dialogue, specifically in relation to the hazards and threats faced by society, two further recommendations appear appropriate. One is quite specific to the current bureaucratic landscape, the other offers Cumbria an opportunity to lead in a context where leadership is needed.

10.3 Resilience as future-planning within ‘business as usual’

“Resilience: The capacity of social, economic, and environmental systems to cope with a hazardous event or trend or disturbance, responding or reorganizing in ways that maintain their essential function, identity, and structure, while also maintaining the capacity for adaptation, learning, and transformation”

Intergovernmental Panel on Climate Change (IPCC, 2014)

“Resilience: The ability of the community, services, area or infrastructure to detect, prevent, and, if necessary to withstand, handle and recover from disruptive challenges”

Emergency responder interoperability: lexicon version 2.1.1. (Cabinet Office, 2013b)

10.3.1 Resilience as strategic direction

557. As Cumbria has now experienced three extreme floods in the last 12 years, as well as numerous other major emergencies, it is now clearly time for the County to be publicly embracing a resilience-focussed approach to managing all risks associated with hazards and threats.

558. From this perspective, it is important to point out that across the range of individuals and groups involved in developing this debrief report, there was a clear perception that building resilience is something that cannot simply be carried out as a ‘task and finish’ activity during a relatively short period following an emergency event. In Cumbria, resilience is increasingly being considered as an ongoing work in progress, as ‘business as usual’. Resilience building is becoming a cross-sector, multi-agency, whole-community endeavour.

559. Taking this perspective opens up the possibility of considering other ways to approach resilience building and how such approaches could be resourced. For example, using the recommendations from this report, Cumbria’s significant experience of flood recovery should be examined to identify opportunities through which the county’s local authorities, agencies, organisations and communities could re-characterise resilience, from something considered only by the ‘responder’ agencies as they plan, train and exercise their emergency capabilities, to a *process* which engages more fully with hazard-exposed communities; helping them to build their own resilience, whilst also providing the ‘safety-nets’ (e.g. regulatory oversight and backfill) to ensure equitable outcomes are pursued for all, including the most vulnerable. Such an approach would clearly correlate directly with the community-empowering and ‘building back better’ principles of the United Nations’ Sendai Framework for Disaster Risk Reduction (Deeming, 2017).

560. However, resilience building in this way, as a strategic direction for the county, requires bold leadership across all sectors.
561. Just as this report has been separated into sections, each describing the respective roles of the SRCG and its nine sub-groups in facilitating the county's recovery from Storm Desmond, so these same nine broad sectors (e.g. infrastructure, health and welfare, communities), could be seen as areas that are each vital in underpinning resilience building activities. However, as was illustrated in Table 1 many of the responsibilities of these sectors cross-cut. This, though, is the fundamental characteristic of resilience, that to be resilient requires the conscious acknowledgement of inter-connectivity and of the importance of taking an encompassing perspective (emBRACE, 2015, Norris et al., 2008).
562. For example, effective housing and wider development planning are crucial in delivering sustainable growth, whilst at the same time they are also crucial in regulating the types of development that are allowed to go ahead in areas at risk from hazards. Infrastructure too, needs to be resilient, with sufficient in-built robustness, and/or system redundancy, and/or capacity for rapid repair, to avoid disruptive failure (Bruneau et al., 2003). Dependent on these factors, the maintenance of the mental health of the hazard-exposed public, amongst other vulnerability-associated factors, increasingly requires that same public to have confidence in development decisions and in the condition of the key infrastructure that is so critical to their daily lives.
563. As key, democratically-empowered providers and gatekeepers of public services in Cumbria, the local authorities and elected members should, therefore, consider themselves as key facilitators in defining Cumbria's strategic direction toward resilience building. As such they should actively encourage multi-agency, third sector and community partners to adopt corresponding strategies and to develop and present coherent cross-scale messages and for supporting activities (local through to national) in this regard.
564. Taking a proactive approach to applying the principles of resilience across the entire workstream of the County's strategic partnerships and multiple other networks should be aspired to as it would illustrate clear evidence of leadership in uncertain times and provide an example for others to follow.

Recommendation 58: The Cumbria Local Resilience Forum membership and the Cumbria Strategic Flood Partnership (CSFP) should adopt the principles of the Sendai Framework for Disaster Risk Reduction within their strategic approach to building the resilience of the County's population. This approach should integrate resilience-focussed aims and objectives across all sectors of statutory responsibility and beyond.

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12. Appendices

Appx 1: Recommendations (aggregated)

Appx 2: *Storm Desmond Recovery Debrief*: 27th April 2017 - Programme

Appx 3: Recovery Debrief: Worksheet

Appx 4: Age UK / Gateway Partnership form

Appx 5: Business and Economy Recovery Group Debrief Report Recommendations (19)

Appx 6: Review Team: biographies

Appendix 1: Recommendations (aggregated)

Recommendation 1: Cumbria Local Resilience Forum (CLRF) should identify a broad spectrum of suitably qualified, experienced and empowered persons who could be approached to undertake future leadership roles within Strategic and other Recovery Coordination Groups, engage their interest and provide them with familiarisation and on-going training for that task.

Recommendation 2: The Cabinet Office and Local Government Association (LGA) should ensure that the definitive role of the Ministerial Recovery Group (MRG) and its relationship and procedures for working with Local-Authority Chaired Strategic Recovery Coordination Groups (SRCG) should be written into national guidance and HM Government Concept of Operations (ConOps) at the earliest opportunity.

Recommendation 3: The Cabinet Office should consider contingencies for transporting the Ministerial Recovery Group to a location near a recovery site during the early stages of recovery, in order for that its members are able to gain a greater situational awareness

Recommendation 4: The Ministry of Housing, Communities and Local Government (MHCLG) and Local Government Association (LGA) should discuss with Cumbria's Councils, how lessons from the creation of cross-party groups of Elected Members to work alongside Strategic Recovery Coordination Groups (SRCG) may be integrated into guidance to improve future recovery processes

Recommendation 5: Cumbria County Council and the Department for Communities and Local Government (DCLG) should develop guidance for Local Resilience Forums outlining methods for the creation of centralized "Cumbria Ask" style cost assessments.

Recommendation 6: The Government should consider bulk grants as the favoured mechanism through which to support local authorities facing extensive repair activities.

Recommendation 7: The Ministry of Housing, Communities and Local Government (MHCLG) (as Lead Government Department for recovery) should work with the Local Government Authority and councils in developing universal protocols for all recovery-related grant schemes it will fund. Protocols should be particularly precise in defining eligibility criteria, where the schemes' target claimants are individual households and/or businesses.

Recommendation 8: Government should decide which recovery grant schemes will be funded into the future and create single points of contact for Local Resilience Forums to contact in relation to each grant's administration.

Recommendation 9: Government should reconsider its current practice of refusing to provide additional funds in grant packages for administration purposes. The provision of such funds would genuinely assist local authorities, as it would reduce the considerable pressures placed on their capacity to maintain business continuity, whilst enabling them to more-effectively support complex, vulnerable, communities.

Recommendation 10: The Department for Communities and Local Government (DCLG) should ensure continuity in its delivery of administrative assistance to emergency-affected authorities. One aspect of this is to retain subject-matter experts in place for the duration of grant schemes, or to improve hand-over procedures between staff.

Recommendation 11: The Government should review Bellwin Scheme rules in view of being more flexible and open to compensating for the impacts of any emergency sufficient in scale to demand the activation of a Strategic Cell and/or to retrospectively compensate hazard losses from the trigger event of what subsequently becomes a series of emergencies.

Recommendation 12: The Government should review Bellwin Scheme rules in view of including arrangements to compensate for the remediation of longer-term primary and secondary costs of hazards and emergencies (e.g. longer-term clean-up, landfill tax).

Recommendation 13: Following emergencies affecting more than one District Council area, Cumbria County Council should resource a central recovery grants unit, which could administer and coordinate all grant schemes with uniformity, whether delivered at County or District resolution.

Recommendation 14: Government should define additional data-sharing guidance, and if necessary legislation, to empower responders who may be required by circumstances and/or by the best interests of an emergency-affected public, to share information with non-responder partners operating during response and long-term recovery.

Guidance should include information and advice for local authorities on developing:

- ...data sharing agreements (inc. third sector & community)
- ...registration forms
- ...spreadsheet/database templates
- ...agreement on the designation of the Data Controller

Recommendation 15: Cumbria Local Resilience Forum (CLRF) members should define additional data-sharing procedures to best empower responders who may be required by circumstances and/or by the best interests of an emergency-affected public, to share information with non-responder CLRF partners operating during response and long-term recovery.

Procedures should include the implementation of:

- ...data sharing agreements (inc. third sector & community)
- ...registration forms
- ...spreadsheet/database templates
- ...agreement on the designation of the Data Controller

Recommendation 16: The process underpinning the Cumbria County Council Highways Capital Programme should be prepared as a case study of good practice for future emergencies and appended to National Recovery Guidance

Recommendation 17: Cumbria County Council and partners should continue their multi-agency initiative to develop Remotely Operated Vehicle (ROV) infrastructure surveying capability

Recommendation 18: Cumbria County Council and partners should continue their multi-agency approach to developing remote-sensing and infrastructure-monitoring capabilities

Recommendation 19: Public sector organisations across Cumbria should consider flood resilience as a key component of all risk-based decisions regarding future investment in estate.

Recommendation 20: The Cumbria Strategic Flood Partnership (CSFP) should ensure that collaboration occurs between the Environment Agency and power companies) to safeguard that an appropriately risk-based approach is taken to designing resilience into any flood defence measures reliant on electrical power (i.e. pumps).

Recommendation 21: Utilities companies should review their contingency plans to ensure reinstatement of household services occurs in the most effective way possible

Recommendation 22: The Department for Transport (DfT) should increase its active support for communication, collaboration and contingency planning between Highways England, Local Highways Authorities and other partners (e.g. Police), responsible for delivering the resilience of diversion route networks of regional importance. Consideration should be given to the creation of a Cumbria Strategic Highways Group in order to achieve this.

Recommendation 23: Cumbria Strategic Flood Partnership (CSFP) should develop its strategy on gully and culvert maintenance in consultation with all local authority tiers (including Parish and Town Councils) and explore opportunities for enabling local operations (e.g. Lengthsmen) where practical.

Recommendation 24: Cabinet Office, the Ministry of Housing, Communities and Local Government (MHCLG) and the Local Government Association (LGA) should investigate opportunities for developing regional and national mutual-aid capabilities across local authority resilience-focused subject matter specialisms

Recommendation 25: Cumbria Local Resilience Forum should acknowledge and adopt the concept of 'stabilisation' as vital tool through which to develop contingencies for recovery from high-magnitude, high-impact events. Specifically, the importance of acknowledging the need for a stabilisation process within recovery should be clearly integrated into public communication plans.

Recommendation 26: Government and the Department of Health should clearly delineate and update *Emergency Response and Recovery* (HM Government, 2013a) and *National Recovery Guidance* (HM Government, 2013b) to explain the respective responsibilities of health and social care focused responders during emergencies

Recommendation 27: Cumbria's health and care providers should continue to synthesize all lessons learned from Storm Desmond's diverse impacts on the sector and integrate them into cross-sector business continuity plans and develop opportunities for sharing these lessons outside the County.

Recommendation 28: In view of the increasing evidence for the existence of mental health effects from floods and the long-term disruptions and psychological pressures they cause, the Department of Health should review and update its interim guidance on dealing with the mental health effects of major incidents and disasters (DoH, 2009: now archived), to ensure that measures to reduce long-term mental health effects are appropriately addressed.

Recommendation 29: The Director of Public Health should review Cumbria health sector's capabilities and capacities in relation to the provision of mental health diagnosis (including referral guidelines), treatment and support, in order to assess whether they are sufficient to identify and mitigate long-term mental health risks to emergency-affected populations in Cumbria.

Recommendation 30: Organisations involved in recovery should understand the importance of providing, enabling and maintaining long-term access to social meeting spaces, where networking and sharing opportunities can assist people affected by emergencies to recover physically and emotionally.

Recommendation 31: Cumbria Local Resilience Forum members and partners should continue to actively improve and deliver contingencies to provide practical and emotional support ‘on the doorstep’ of the emergency affected. This support needs to be considered as a long-term commitment. Accordingly, the importance of maintaining recovery-support and resilience-building capabilities, which can be clearly signposted to those in need and which can integrate, over time, directly with other social safety-net provisions is vital.

Recommendation 32: Cumbria Local Resilience Forum statutory members and non-statutory partners should all reflect on their mental health and wellbeing contingencies, both internally and as a multi-agency partnership, and use the lessons learned from Storm Desmond to ensure that appropriate future provisions are in place to safeguard the partnership’s most important asset, its staff and volunteers.

Recommendation 33: Government should explicitly accept a greater proportion of the risk related to the rapid payment of grants. (For example, business-recovery grant beneficiaries subsequently failing to provide evidence to local authorities for how the funds were spent). Passing this risk, even implicitly, to the local authorities, reduces their ability and willingness to act pragmatically in relation to supporting potentially large numbers of vulnerable SMEs.

NB. If the Government were to accept this risk, this could allow them to trust local authorities to be given a small amount of additional grant to carry out an on-the-ground scheme evaluation (rather than subject them to a full audit) (x-ref Recommendation 9).

Recommendation 34: Defra and other government departments should examine whether often diverse farm businesses should continue to be dealt with separately from other businesses in terms of best supporting their grant eligibility, their applications for grants and their access to business advice.

Recommendation 35: All Government Departments and other bodies involved (e.g. Local Enterprise Partnerships, Local Authorities) should understand the need for, and have financial contingencies to support, coordinated and targeted marketing to ensure tourism sector recovery following disasters. These contingencies should not be ‘nationalised’, but should be developed and delivered using the market-knowledge and expertise of the respective destination management organisation involved (e.g. Cumbria Tourism).

Recommendation 36: Understanding and developing an appropriate ‘ask’ of the private sector and effectively integrating its capacities and capabilities in support of response and recovery-focused activities, provides clear opportunities for the statutory sector to build resilience across the county. Therefore, Cumbria Local Resilience Forum members and partners should continue to actively develop their emergency and recovery contingencies using relationships with key business ‘good neighbours’ in the county.

Recommendation 37: The Department for Education and the Education Funding Agency should incorporate efficient procedures into their funding rules so that local authorities can consider and implement 'resilient relocation' of flood-affected educational facilities, or for educational facilities at significant flood-risk.

Recommendation 38: Cumbria's Emotional Wellbeing and Mental Health Multi-Agency Partnership should continue to explore innovative approaches to building children's and young people's resilience to hazards and to recovery challenges as an integral part of their partnership activity.

Recommendation 39: Cumbria's Strategic Waste Partnership should continue to develop and test collaborative, integrated, contingencies for managing hazard generated waste at all scales; from single district to whole county operations.

Recommendation 40: Defra should review its own and the Rural Payments Agency's protocols and funding criteria for damage and repair assessment of Rights of Way, in order to enable the more straightforward development of funding applications by local authorities needing to conduct repairs

Recommendation 41: The Cumbria Strategic Flood Partnership should continue to treat the development of catchment scale, integrated flood risk management as a priority, by encouraging all stakeholders to take advantage of opportunities to negotiate innovative approaches to reducing risk and building resilience from the fells and dales to the sea.

Recommendation 42: Cumbria's district councils should work with their social and private sector housing providers to explore and implement more effective methods through which to better protect tenants from the consequences of flooding (e.g. 'insurance with rent' schemes: Hood et al., 2005)

Recommendation 43: The insurance industry and Government must ensure that Flood Re completely transforms from the industry's previously favoured 'like-for-like' flood restoration model, to one that actively adopts, promotes and utilises flood resilient reinstatement best practices. This will ensure that long term benefits are more likely to accrue to policy holders living at flood risk.

Recommendation 44: The Ministry of Housing, Communities and Local Government (MHCLG) should be prepared to provide funding to enable property level resilience, and street (or community) level resilience initiatives to be undertaken as longer-term resilience building projects in flood exposed areas, rather than only providing grant funding in response to a specific flood event. Such contingencies should be developed collaboratively by key stakeholders, including government, the property level resilience and insurance industries, and user groups.

Recommendation 45: Development of the Property Level Resilience Action Plan and Environment Agency's procurement framework should be accelerated in order that they can act as the basis for delivering *any* future PLR scheme.

Recommendation 46: The Ministry of Housing, Communities and Local Government (MHCLG) and Defra should ensure that future Property-Level Resilience (PLR) grant schemes require and fund pre- and post-installation surveys, carried out by a suitably trained and accredited surveyor who is independent of the companies supplying flood resilience products.

Recommendation 47: Cumbria's County and District Councils should synthesise and contribute any lessons learned from the resilience building of properties damaged by Storm Desmond into the currently ongoing Property Flood Resilience Action Plan (Bonfield, 2016). This includes supporting the development by CIRIA of a Code of Practice and guidance for property flood resilience (CIRIA, 2017).

Recommendation 48: Cumbria's Local Planning Authorities should review Storm Desmond's potential effects on the evidence base underpinning the flood risk related assumptions within their development planning processes. Any changes in flood risk understanding should be integrated directly into these assumptions.

Recommendation 49: The Ministry of Housing, Communities and Local Government (MHCLG) should commission research to investigate outcomes of all development projects to establish the efficacy of current policy in reducing (or creating) flood risk. In particular, MHCLG should establish whether individual projects on the ground meet their flood risk reduction expectations and whether flood risk management outcomes related to incremental development indicate a need to revise national policy.

Recommendation 50: (X-Ref Rec 7) For any future recovery, Cumbria County Council should collaborate with district councils to create a single grant administration system in the county, which applies uniform and linked procedures across the entirety of its workload (i.e. from desktop to doorstep).

Recommendation 51: Cumbria Resilience Forum should ensure Recovery Plans are revised to embed the value of Local Recovery Groups, and the importance of involving existing networks of third sector organisations and community groups throughout the recovery structures.

Particular attention should be paid to understanding why smaller, newer and less formal groups found it more challenging to engage with the structures, and developing plans to support their future engagement.

The principal recommendations in relation to Community Resilience and community emergency planning restated from the acute phase debrief report are:

- Cumbria Community Resilience Network (CCRN) and Cumbria Police should agree a minimum set of key details that all Community Emergency Planning (CEP) groups must list at the head of their plan to achieve certification and inclusion in the Police notification and call-out procedure.
- The Local Resilience Forum should continue to support the engagement of communities with the process of Community Emergency Planning. It should also continue to integrate Community Emergency Planning (CEP) groups into the LRF's formal response protocols (e.g. building contingencies to take advantage of local knowledge and capabilities during all incident phases [including long-term recovery]).
- Cumbria Community Resilience Network (CCRN) should continue to advocate, within the Local Resilience Forum (LRF), on behalf of Community Emergency Planning (CEP) groups. This advocacy should clearly acknowledge the positive outcomes Community Emergency Planning (CEP) is having for those communities engaged with the process and should illustrate the clear justification for the LRF to invest resources in the further pro-active co-development of existing groups and recruitment of new ones.
- Cumbria Community Resilience Network (CCRN) should work with the Local Resilience Forum (LRF) and engaged Community Emergency Planning (CEP) groups to co-develop and deliver a realistic training and exercising regime that better integrates CEP groups into the county's civil protection arrangements.

All these recommendations have been accepted by the LRF and are currently under review/development.

Recommendation 52: Recovery structures should continue to support the rapid funding, establishment and long-term provision of one-stop multi-sector, multi-partner centres in order to ensure that the information and support offered to affected communities is consistent.

However, responsibility for the 'frontline' oversight of information quality and effective support provision should not be devolved to the third sector alone. Contingencies should be in place to ensure statutory engagement with and oversight of all one-stop activities (e.g. to ensure third sector capacities are not being overwhelmed, with potential consequences for affected households).

Recommendation 53: Given the importance of informal social spaces in providing opportunities for social support and learning during recovery (see Rec 30), all agencies and partners should reflect on how they invest in communications programmes that utilise these social hubs and on how they value (e.g. actively listen to the concerns and ideas of), support and resource their staff who operate in these environments

Recommendation 54: Any Social Media in Emergency Management (SMEM) policy, implemented by responders to monitor social media during response and recovery, should include guidelines and a process whereby designated staff would be able to (and feel confident to) respond to rumours and/or requests for issue clarification, expediently on-line (including out of hours).

Restatement and clarification of Acute-phase debrief recommendation 42: Cumbria Local Resilience Forum should develop a social media strategy that provides a formal structure through which partners and/or a Multi-Agency Information Cell (MAIC) can fully engage the public in information sharing during [and in recovery from] emergencies (i.e. information push and information pull).

Recommendation 55: Communication with vulnerable groups during recovery is extremely difficult and thus resource intensive, yet it is vital that effective communication between the authorities and these publics is maintained. It is recommended that Cumbria Resilience Forum recovery plans acknowledge, that although as time passes the number of people requiring information and support reduces, the importance of maintaining effective communications with those last few – who may be struggling the most – is a crucial social-safety contingency.

Recommendation 56: The Environment Agency and other Cumbria Local Resilience Forum members should review all policies and processes related to public communications during recovery, to ensure that they are fit-for-purpose in building trust with affected communities and informing the public of recovery operations, their timing and their underpinning rationale.

Recommendation 57: Cumbria Local Resilience Forum should actively plan, train and exercise recovery activities with all stakeholders, including third sector and private sector partners and the hazard exposed communities themselves.

Recommendation 58: The Cumbria Local Resilience Forum membership and the Cumbria Strategic Flood Partnership (CSFP) should adopt the principles of the Sendai Framework for Disaster Risk Reduction within their strategic approach to building the resilience of the County's population. This approach should integrate resilience-focussed aims and objectives across all sectors of statutory responsibility and beyond.



Cumbria Resilience Forum

2015 Storm Desmond Recovery Debrief Workshop

Thursday 27th April 2017

***Exhibition Hall 1, Rheged, Redhills, Penrith
09:00 for 09:30 start – 16:30hrs
Lunch included***

Programme

1. Introduction

Cumbria has now experienced three extreme flood events over a ten-year period (2005-2015), along with many other, smaller flood events. Many households and businesses have suffered repeated flooding, and this has had severe impacts on both the people flooded and the wider communities.

Recovery from flooding takes a long time, and a wide range of factors affect the speed at which people are able to get back home and businesses can reopen for business. But being back home or “open for business” does not necessarily mean that recovery is complete; even 16 months later, recovery from Storm Desmond is still very much a work in progress for many of those affected.

This workshop is part of the Cumbria Resilience Forum’s review of the recovery from Storm Desmond. It will investigate how the recovery from the storm was facilitated by statutory agencies, voluntary organisations and the communities themselves – identifying what went well, what has already been learnt, and what needs to be improved in order to better support recovery from any future floods.

The workshop will cover all aspects of recovery, including “acute” recovery work that started within the first few days of Storm Desmond. It will not, however, include discussion of other aspects of the acute phase (such as flood warnings or rescue) that have already been covered in the Acute Debrief, or of future work to manage flood risk or build community resilience.

2. Aim and Objectives

2.1 Aim:

To provide an opportunity for the statutory agencies, third sector organisations and community members to discuss and reflect on the recovery from Storm Desmond.

The objective of the Strategic Recovery Coordination Group was to:

“work with local communities to restore Cumbria to normality”

The workshop will examine if the structures, networks and activities put in place achieved this objective...and if it didn’t, to agree what needs to change.

2.2 Objectives:

1. To provide an opportunity for people to discuss key aspects of Cumbria’s recovery from Storm Desmond in an open and ‘no blame’ environment
2. To enable people to develop a share understanding of the successes and challenges of the on-going recovery process
3. To identify learning that can be included in the County’s debrief report and in the future recovery plans of Cumbria Resilience Forum.

It is important to emphasise that this debrief is aimed at identifying organisational and community recovery lessons. It is not an investigation of the performance of specific individuals or teams and it will not be seeking to apportion blame.

3. Provisional Workshop programme

09:00 – 09:30	Arrival and registration		
09:30 – 09:40	Welcome	Jonathan Burgess (Resilience Unit)	
09:40 – 10:15	Storm Desmond and the Recovery Process	Dom Donnini (Chair SRCG) Hugh Deeming (HD Research)	<ul style="list-style-type: none"> • Timeline • Key facts & figures • What is recovery? • What have we already learnt? • What are we doing today?
10:15 – 10:45		Syndicate Session 1	Collecting your memories of flood recovery
10:45 – 11:00		Plenary – identifying emerging themes	
11:00 – 11:15	Coffee		Introduction to Post card and Dot exercises
11:15 – 11:30	Coordinating and Communicating Recovery	Syndicate Session 2	How recovery was facilitated
11:30 – 12:15			<p>How well did the structures...</p> <ul style="list-style-type: none"> • ...support local partnership working? • ...provide the information you needed (for example, around bridge closures and grants)? • ...provide a way to raise issues you couldn't solve locally?
12:15 – 12:30			Plenary discussion
12:30 – 13:15	Lunch		Post card and dot exercises
13:15 – 13:20	Practical and financial support	Syndicate Session 3	Overview of grants and support schemes provided
13:20 – 14:00			<p>For each grant/support scheme:</p> <ul style="list-style-type: none"> • What was good about it? • What were the problems with it? • Were there gaps in the funding/support available? • Did anyone miss out on funding/practical support?
14:00 – 14:15			Plenary discussion

14:15 – 14:20			Reminder of recovery workstreams
14:20 – 14:50	Getting around and accessing services	Syndicate Session 4	<ul style="list-style-type: none"> What can we learn about the impacts on Cumbria's roads and bridges that we can use to improve future recovery planning?
14:50 – 15:00			Plenary discussion
15:00 – 15:20	Other recovery issues	Syndicate Session 5	<ul style="list-style-type: none"> Exploring any other issues identified by your group
15:20 – 15:30			Plenary discussion
15:30 – 15:45	Coffee		Post card and dot exercises
15:45 - 16:00	Wrap up: What happens next?	Management Team	Reflections and Conclusions

Feedback:

A workshop feedback form will also be circulated to be returned on the day or to:
emergency.planning@cumbria.gov.uk

If you have any questions or you wish to clarify any points about recovery after the day, please contact:

Hugh Deeming

HD Research, Lane Head Cottage, Bentham, LA2 7DL

T: 015242-62785

E: hugh.deeming@gmail.com

Syndicate Session 1: Theme Identification		Table _____
Key Theme Identified:	Key Issue across Theme [Positive or Negative]:	

How well did the structures...

- ...support local partnership working?
- ...provide the information you needed (for example, around bridge closures and grants)?
- ...provide a way to raise issues you couldn't solve locally?

What went well? OR What could have gone better?		What should we do differently? OR What should we keep doing more of?
Good Practice:	Key Issue:	Recommendation:
Good Practice:	Key Issue:	Recommendation:
Good Practice:	Key Issue:	Recommendation:

Complete for each grant / support scheme:

Scheme	What went well?	OR What could have gone better?	What should we keep doing? OR What should we do differently?
<p>£500 Community Grant</p>	<p>Good Practice:</p>	<p>Key Issue:</p>	<p>Recommendation:</p>
			<p>Recommendation:</p>
<p>£5,000 PLR Grant</p>	<p>Good Practice:</p>	<p>Key Issue:</p>	<p>Recommendation:</p>
			<p>Recommendation:</p>
<p>CCF Individual Grants (Hardship / Resilience Top-up)</p>	<p>Good Practice:</p>	<p>Key Issue:</p>	<p>Recommendation:</p>
			<p>Recommendation:</p>

Syndicate Session 3: Practical and financial support (continued)

Table _____

Scheme	What went well? OR What could have gone better?		What should we keep doing? OR What should we do differently?
CCF Group Grant	Good Practice:	Key Issue:	Recommendation:
			Recommendation:
Business Grants and Rate Support	Good Practice:	Key Issue:	Recommendation:
			Recommendation:
Farm Grants	Good Practice:	Key Issue:	Recommendation:
			Recommendation:
Other (e.g. CERT-UK, Lions)	Good Practice:	Key Issue:	Recommendation:

For example: Clean-up - Waste collection - Roads and bridges – Shops - Health services – Schools - Community facilities

Topic:	What went well? OR What could have gone better?		What should we keep doing? OR What should we do differently?
	Good Practice:	Key Issue:	Recommendation:
	Good Practice:	Key Issue:	Recommendation:
	Good Practice:	Key Issue:	Recommendation:
	Good Practice:	Key Issue:	Recommendation:

What was your group's theme/issue chosen for further exploration: _____?

What went well? OR What could have gone better?		What should we keep doing? OR What should we do differently?
Good Practice:	Key Issue:	Recommendation:
Good Practice:	Key Issue:	Recommendation:
Good Practice:	Key Issue:	Recommendation:
Good Practice:	Key Issue:	Recommendation:

What was your group's theme/issue chosen for further exploration: _____?

What went well? OR What could have gone better?		What should we keep doing? OR What should we do differently?
Good Practice:	Key Issue:	Recommendation:
Good Practice:	Key Issue:	Recommendation:
Good Practice:	Key Issue:	Recommendation:
Good Practice:	Key Issue:	Recommendation:

Flood Support Registration Form



Date of completion / / Organisation Recorded by (initials)

Name of referrer if not householder Contact number if not householder

Household			Relation key:		Main contact MC	Partner or spouse P
Title	First name	Last name	Gender	Age	Family member F	Other O
			M F			
			M F			
			M F			
			M F			
			M F			
			M F			

Household Pets Description

Yes No

Flood affected address

Line 1

Line 2

Line 3

Post code Resident? Yes No

Owner Occupier Private Rent

Social Housing

Temporary address

Line 1

Line 2

Line 3

Post code Leaving date? / /

Family/Friend Private Rent

Social Housing Hotel/B&B

Landlord details if applicable

Name

Phone number

Landlord details if applicable

Name

Phone number

Communication

Current landline Landline work

Mobile 1 Who's number?

Mobile 2 Who's number?

Email address 1

Email address 2

Urgent action required

Health/Physical
Financial

Health/Emotional
Social

Transport
Family

Business referral required

Housing
Grants/Insurance

Notes

Action already taken

Action required

Health/Physical
Financial

Health/Emotional
Social

Transport
Family

Housing
Grants/Insurance

Notes

Action already taken

Grant applications

CCF – Cumbria Flood Recovery Fund

SLDC - £500 Flood Grant

SLDC – Council Tax Relief

SLDC – Future Flood Resilience Grant

Eon – Energy Fund Application

Other –

Application made

Application required

Permission to share information

We wish to provide you with the most up to date information and advice and/or the most appropriate support. Everything that you tell us will be treated with the utmost confidentiality. In order that we can proceed quickly and efficiently with your enquiry, it may be necessary to liaise with other agencies on your behalf, such as statutory, non-statutory or other voluntary partner organisations, who may be able to help you. We need your permission to share the information about this particular enquiry, please confirm your agreement to this by signing below.

Signature

Name

Verbal consent given

Please Note: This signed permission relates only to information directly relevant to your current enquiry. This permission will become invalid when the current enquiry record is closed – or six months from the date of signature.

Appendix 5: Business and Economy Recovery Group – full list of recommendations:

CCC (2016) Business & Economy Recovery Group (BERG) *Storm Desmond – 6 Months on Evaluation Report* (Internal report)

RECOMMENDATIONS

- 1 - Acquire Environment Agency datasets on an annual basis for areas prone to flooding to ensure accuracy.
- 2 – To share this report with the Flood Resilience Grant steering group. Furthermore, to express the view that businesses making joint applications/ area-wide for resilience support might be more beneficial than individual applications.
- 3 – Each district to consider how it might further support existing businesses to continue trading.
- 4 – There is need for dialogue between local and central government, business and insurers to ensure that flood resilience can be embedded within policy measures.
- 5 - Produce a manual for future events so that officers would have a reference document.
- 6 - To engage with the local academic sector to explore possibility of securing funding to produce a collaborative best practice guide.
- 7 - To revisit existing business continuity plans and make these available to inform the manual/best practice guide.
- 8 - That a letter of thanks is sent to Panel members that gave up their time, free of charge, to assist in the FRG programme.
- 9 – To reconsider what forms of revenue spend would be eligible for support under a future Flood Recovery Grant scheme.
- 10 – Government should allow flood recovery funds it makes available to Councils to be used for any additional costs the Councils incur (including staffing).
- 11- Consider what data sets and frequency of reporting that would be manageable for partners to deliver.
- 12 - To consider how to ensure a future grant scheme can be flexible so it can fulfil need, yet is robust enough to ensure funding is allocated in an eligible fashion.
- 13 - In designing a future Flood Recovery Grant scheme give consideration to what other funding streams may be available and how these compare.
- 14 - Encourage Government to recognise the importance of investing in coordinated marketing activity to ensure consistent, coherent and responsible communication with various audiences.
- 15 – In absence of central government funding being available for investment in marketing activity, encourage businesses to use a portion of recovery grant to fund location-based recovery marketing plans.
- 16 - Consider how claims submission and reconciliation can be made simpler.
- 17 - Since the Flood Recovery Scheme was such a major piece of work undertaken by BERG it may benefit from some independent evaluation that engages with businesses to gather their views or how successful (or not) the scheme was, and how it might be improved.
- 18 – Investment in a sustained marketing campaign is required to boost visit confidence and numbers.
- 19 - Run “social media marketing” workshops for flooded/flood affected businesses.

Appendix 6: Recovery Review - Team Biographies

Dr Hugh Deeming: Principal Investigator

Qualifications

PhD Geography (2008): Increasing resilience to storm surge flooding: risks, social networks and local champions, Lancaster University

BSc Geography with Mountain Leadership (2004): Staffordshire University

Professional History

2015 - Independent Research Consultant (Civil Protection; Community Resilience) www.hdresearch.uk

2010 – 2015 Scientific Technical Officer, EU FP7 emBRACE Project, Department of Geography, Northumbria University

2009 - ongoing Research Associate, Emergency Planning College, Easingwold

2008 - ongoing Research Associate, Collingwood Environmental Planning

1988 – 2000 Police Constable: Devon and Cornwall Constabulary

Summary

Dr Hugh Deeming is a research consultant based in Bentham, North Yorkshire. Hugh's principal research interest lies in exploring the interface between civil protection and 'community resilience'. This interest was first seeded during his service as a police officer (Beat, Roads, ARV/AFO), but was subsequently reinforced by his PhD investigation into the role that social networks play in building community resilience to low-probability / high-consequence storm surge hazards. Whilst at Lancaster University, Hugh was part of the team that undertook the Hull Floods Project, in which innovative qualitative methods were employed to investigate the process of recovery as it is experienced by flood-affected households. His recent project experience includes his position as scientific technical officer for the FP7 Building Resilience Amongst Communities in Europe (emBRACE) Project: 2011-2015. Following the impact of Storm Desmond across Cumbria in December 2015, Hugh was commissioned by Cumbria County Council to write the acute-phase debrief report for the Local Resilience Forum. Hugh's primary focus is on using qualitative research methods (e.g. interviews, group discussion, workshops) to explore the issues under investigation in a way that attains a depth of understanding that is unattainable using quantitative methods alone (e.g. surveys).

Selected Relevant Research Publications

Deeming, H. (2017) Disaster Risk Reduction and the Sendai Framework: What does it mean for UK resilience practitioners? (Occasional Paper 21). Easingwold, UK, Emergency Planning College.

Deeming, H. and C. James (2017). Training Needs Analysis for Multi-Agency Strategic Coordinating Groups in Emergency Response and Recovery: a review of lessons identified (A report commissioned by Civil Contingencies Secretariat). Bentham, UK., HD Research.

Deeming, H. and J. P. Burgess (2017). Stabilisation: a short discussion of a concept's relevance to the UK civil protection lexicon. Bentham, UK., HD Research.

Deeming, H. (2016) A debrief-based review of the acute-phase multi-agency response to Storm Desmond in Cumbria, A report prepared by HD Research under commission from Cumbria Local Resilience Forum, Penrith, UK.

Abeling, T. **Deeming, H.** (2015) Mass Shelter Capability (MASC) Project Literature Review, MASC (on-line) www.mascproject.eu

Deeming, H. (2015). Understanding Community Resilience from the Perspective of a Population Experienced in Emergencies: Some Insights from Cumbria, (Occasional Paper 14), EPC, Easingwold, UK.

Dr Carolyn Otley: 3rd sector and voluntary-sector perspective specialist

Qualifications

PhD Pharmacology (1997): Adenosine and the Coronary Circulation, University of Cambridge

MA Natural Sciences (1994): University of Cambridge

Professional History

2004 - Third Sector Network Coordinator, Cumbria CVS

2002 – 2004 Patient Forum Development Officer, West Cumbria Community Health Council

1998 - 2004 Postdoctoral Research Assistant, Academic Renal Unit, Department of Medicine, University of Bristol

Summary

Dr Carolyn Otley has worked within Cumbria's Third Sector since 2004, coordinating Cumbria Third Sector Network and developing links and partnerships between local community organisations and the statutory sector. This has ranged from "hands on" development work with community groups to supporting third sector representatives on strategic partnerships such as the Cumbria Leaders Board. It has also included a full revision of the Cumbria Compact, work to demonstrate the "value" of third sector organisations, and facilitation of network meetings and consultation events. This builds on her previous experience in medical research, which started in laboratory based science, and progressed to working on an experimental clinical transplant programme. She has considerable experience of small group teaching and the supervision of student research projects. Much of her work has been at the interface between the public (patients and communities) and professionals, and involved managing the power imbalance that frequently exists here. Carolyn was involved in the response to Storm Desmond as a mountain rescue volunteer; she was a member of the Community Recovery Group on behalf of Cumbria Third Sector Network. This included coordinating the design and initial analysis of a questionnaire collecting qualitative data from over 50 (mainly third sector) organisations.

HD Research
1 Lane Head Cottage
Bentham
N. Yorks
LA2 7DL
T: 015242-62785
M: 07726-943499
E: hugh.deeming@gmail.com
W: www.hdresearch.uk

