

Supporting the uptake of resilient repair during the recovery process (FD2706)

Appendix 1: '360-Style' Case Study Report July 2019

Funded by the joint Flood and Coastal Erosion Risk Management Research and Development Programme (FCERM R&D). The joint FCERM R&D programme comprises Defra, Environment Agency, Natural Resources Wales and Welsh Government. The programme conducts, manages and promotes flood and coastal erosion risk management research and development.

This is an appendix to the report of research carried out by carried out by a research consortium comprising The University of the West of England, Bristol; Mary Dhonau Associates; Cunningham Lindsay; Kingston University and Collingwood Environmental Planning, on behalf of the Department for Environment, Food and Rural Affairs.



Research contractor: University of the West of England, Bristol

Contributing Authors: Tim Harries (Kingston University); Jessica Lamond (UWE, Bristol), Clare Twigger-Ross, (Collingwood Environmental Planning); Carly Rose (UWE Bristol, MDA); Mary Dhonau (MDA)

Quality Assured by: C Twigger-Ross

Publishing organisation

Department for Environment, Food and Rural Affairs Flood Risk Management Division, Nobel House, 17 Smith Square London SW1P 3JR

© Crown copyright (Defra); 2019

Copyright in the typographical arrangement and design rests with the Crown. This publication (excluding the logo) may be reproduced free of charge in any format or medium provided that it is reproduced accurately and not used in a misleading context. The material must be acknowledged as Crown copyright with the title and source of the publication specified. The views expressed in this document are not necessarily those of Defra. Its officers, servants or agents accept no liability whatsoever for any loss or damage arising from the interpretation or use of the information, or reliance on views contained herein.

Appendix 1: 360 report

Aims

- a. Understand the process of reinstatement as it is experienced by the various actors involved with individual properties
- b. Learn about these actors' views of, and experiences of, resilient reinstatement
- c. Understand how the relationships between these actors influences the use of resilience within the reinstatement process.

Objectives

- a. Interview a diverse range of owners of flooded homes and businesses
- b. As far as possible, interview those professionals that might have influenced the use of resilient methods/materials during the reinstatement of these properties.

Selection of geographical areas

The sampling began with the identification of parts of England where flooding had occurred during the three previous years. We ensured that, in at least one of the areas selected, there had been substantial flooding of small businesses; and that in one, the most recent event had not prompted the offer of a central government flood resilience/protection grant.

Five different areas of England were included. To protect confidentiality and anonymity, the details provided in this report are kept to a minimum.

Recruitment

Two recruitment methods were used to identify the owners of flooded homes and businesses:

- a. In two areas, the loss adjusting firm Cunningham Lindsey (on behalf of the research team) sent invitation letters to policyholders whose insurance cases it had managed during the most recent flood. To ensure sufficient scope for resilience during the reinstatement, in the case of householders, these were only sent to those whose insurance claim had been/was expected to be in excess of £10,000.
- b. In all the areas, a technique known as 'snowballing' was used: finding an initial contact and then asking them to suggest other potential participants.

During these interviews, participants were asked to name the people/ companies (henceforth, 'professionals') involved in the reinstatement of their home/business. Professionals were only approached if interviewees gave their permission and if there was no evidence of animosity between parties. They were not followed up in three cases. Professionals were approached by telephone/email.

Samples

Ten flooded households and seven flooded businesses were interviewed. Of these, five households and three businesses had had some kind of resilient repair; two households and four businesses had previously been flooded, and seven households and six businesses were in areas where flood resilience grants were available. While all of the householder interviewees owned their homes, four of the seven businesses were tenants. All but one of the businesses was a micro-enterprise (fewer than 10 employees and an annual turnover below $\in 2$ million). For further details, see Tables 1 and 2.

The nine professional interviewees comprised an architectural technician, an insurance broker, two independent builders, the manager of a restoration franchise, the landlord of a business premises, two surveyors and a loss adjuster. These were associated with three flooded businesses and three flooded households (see Figure 1). No interviews were conducted with the professionals involved in the reinstatement of the other seven households and four businesses that were in the sample.

Figure 1 – Relationship of the professionals to the sample of flooded businesses and households



Table 1 – details of the interview sample for flooded households

Some resilient repair		
Previously flooded		
Govt grant available	7	
	0-5	2
Time out of property (months)	6-11	2
	12-18	4
	24+	1
	n/k	2
Owner occupiers	10	
Household structure	Single adult	5
	Multiple adults	5
	Adults & kids	0
Total		

Table 2 – details of the interview sample for flooded businesses

Some resilient repair				
Previously flooded				
Govt grant available				
	<1 month		<1 month	1
Time out of			2 months	1
nonerty (months)			4 months	2
			5 months	1
			not known	2
Owner occupiers				
Business Category		Retail/ whole-sale		2
		Accommodation & food		1
(See the category definitions in the European Union's NACE Rev-2: http://ec.europa.eu/eurostat/ramon/nomenclatur es/index.cfm?TargetUrl=LST_NOM_DTL&StrNo	Κ	In	surance & finance	1
	R	A R	rts, Entertainment & ecreation	2
m=NACE_REV2&StrLanguageCode=EN)	S	Other services		1
Business (See the definitions used by the European		Μ	licro	6
content/EN/TXT/?uri=LEGISSUM%3An26026)		S	mall	1
Total				7

Data collection

Participants were interviewed for between 30 and 75 minutes. – The majority of the flooded business and householder interviews were conducted in person; professionals exclusively be telephone. Interviews were semi-structured and conducted by Harries, a fellow member of Kingston University's Small Business Research Centre and Mary Dhonau (the chief executive of Know Your Flood Risk). All interviews were audio-recorded (with consent of the interviewees) and professionally transcribed.

Quotes in the text are marked in such a way as to allow the reader to know the category of participant without compromising their anonymity: e.g. a quote marked with '(HH2)' would be taken from the interview with the second flooded householder to be interviewed; similarly, '(BU7)' refers to the seventh flooded business to be interviewed; and '(Builder1)' signifies the second builder to be interviewed.

Findings

Processes that characterise existing approaches to reinstatement

Due to its complexity and variability, one would not expect flooded householders and businesses to have a full understanding of the reinstatement process and the manner in which it varies from case to case. This is borne out by the interviews, in which they report a series of events, rather than a clear logical sequence. Even though understanding what is going to happen is "one of the secrets" of a good claims process (HH7), this was not always successfully conveyed; according to one builder (Builder1), "there didn't seem to be a lot of information flowing to the householders [...] about what was happening, the drying out, the timescale, everything". Businesses whose landlords held the buildings insurance felt particularly alienated from, and ignorant of, the process.

Furthermore, the descriptions provided included some variations on the standard process included in the Quick Scoping Report. In these cases, the builder who performed the stripout was more likely to also do the reinstatement, so the appointment of a reinstatement contractor typically occurred early in the process. The drying, surveying and planning activities can sometimes be a protracted process due to uncertainties in the art/science of predicting drying times and strip-out requirements. In one case, for example (HH8), the plan was revisited and revised six weeks after the initial survey. The situation is similar for the reinstatement work itself, where existing health and safety issues (e.g. wasp nests, or previous building work that does not conform to contemporary building standards as in HH9) can necessitate additional tasks being completed by the homeowner prior to the start of reinstatement, while the "sacking" of one set of contractors (for poor quality work) introduces a degree of repetition and additional delay.

Both the importance of, and difficulty with customer communication were recognised by professionals. Dryer1 explained that they try to ensure householders are present at their first visit and "... tend to speak to the policy holder and say 'we're going to be doing this and we're going to be doing that". HH4's loss adjuster (Loss Adjuster1) reported that officebased support staff would be the "main contact" for customers, but that company software automatically prompted him to get in touch with customers at regular intervals, sometimes to discuss practical matters. or "just a simple phone call, so that they'll know that they're not being left in limbo". In some cases, however, the value of such relationship building was undermined by frequent changes of loss adjuster during a single reinstatement (HH3; HH8) and by disputes over alternative accommodation (HH8).

One surveyor (Surveyor2) reported that he felt it necessary to introduce householders slowly to the full complexity of the process: drip-feeding it to them *"as we go along"* and *"as and when they need it"*. However, surveyors' ability to build the necessary relationships for good communications can be limited by the frequency and timing of their visits. HH4's characterisation of their surveyor as *"useless"* and obstructive may have been influenced by his only being appointed three months after the flood and only being able to visit every four

weeks. The geographical separation of professionals from flood areas can also generate emotional barriers to communication. Householders frequently commented on the towns and countries from which surveyors, loss adjusters and builders hailed, suggesting that this has some pertinence but not being able to say why. An explanation given by some (Builder1; Architect1) was householders' desire to work with professionals who not only understand the technical and process issues, but also have a grasp of the emotional effects of being flooded. The difficulties felt by some professionals in this regard may be due to an inability to fully empathise, because they had not lived through flooding in their own homes or home areas. Another explanation provided was the need for people to trust professionals, and the benefits of building on pre-existing relationships (Builder1; Broker1; BU1; HH10; BU7).

The failure of professionals to successfully communicate the reinstatement process is demonstrated by several features of the interviews with householders and small businesses: their confusion over the roles of different professionals; their inability to describe the process successfully to the researchers, and the difficulty they experienced in remembering the process, even when they referred to their own paper files during interviews. This is typified by the following quote from one of the householders, HH2:

"Somebody sent me a letter which said 'we have appointed so and so and so and so to do all the work. Sign this form to show that you agree that they can do the work.' What do I know? So I just signed it."

When damage management professionals preceded loss adjusters and surveyors into properties (as they usually did), this generated some surprise: pleasure at how soon after the flood they appear and the assistance they afford;but this was coupled with a lack of understanding of who sent them, and uncertainty as to their purpose. HH1 explained that their drying company was "appointed to us, without us really knowing what they were there for" and that although they were "quite glad to see [them] because at least you actually feel that somebody is coming to help ... the problem was that I didn't really know who they were or what they were doing". Similarly, HH7 describes how "the lady from the carpet shop [...] just appeared" even though "we hadn't asked her to come".

Late arrival of the loss adjuster can also delay stabilisation, in one case, by two weeks (BU6).

Cleaning and Strip-out

Decisions on strip-out were said to have been made by a range of actors, including the loss adjuster, the builder and (for those more able to engage in the process) householders themselves.

In most cases, it was the damage management specialist who decided what cleaning and strip-out should be done. There was some disagreement, however, about which professional group was best positioned to determine the strip-out strategy and, it was implied, a lack of consensus about how best to dry a property and the optimum extent of strip-out (e.g. Builder1; Surveyor2). This disagreement is reflected in the comments of homeowners and businesses, who sometimes felt that incorrect strategies had been employed. Interviewees

also called into question whether there are sufficient incentives for drying companies to ensure that properties are fully dry: it was suggested that they sometimes issue 'dry certificates' early for commercial reasons (e.g. because drying equipment is needed elsewhere, as in HH1). There was little indication of strip-out strategies being 'customer outcome based', which was what participants in the Quick Scoping Review had reported. One participant reported that insurers generally favoured greater strip-out because it increased their ability to reliably predict total costs and reduced the possibility of 'come-back' on the part of policy holders (Surveyor1).

Reinstatement

Whereas the professionals interviewed for the Quick Scoping Review described reinstatement as beginning after the drying process is completed, some participants in this part of the research described how delays can be caused by disagreements about pricing (between the contractor and the loss adjuster) and about the claim (between the loss adjuster and loss assessor – especially where the assessor is a 'one man band' – BU6). Such difficulties can make the path to reinstatement arduous and protracted for those concerned. Indeed, one builder reported that they had stopped doing insurance-funded reinstatement work altogether because of the "hassle" involved and the subsequent narrowing of profit margins (Builder1).

While the Quick Scoping Review data indicated that the agreed schedule of works is provided by the loss adjuster or building surveyor, some participants in this research reported that building contractors did this (HH4; Builder1; HH7; HH9) as a way of expediting progress in the face of loss adjuster/surveyor delays (Builder1).

In one of the research areas, local builders were considered more able to implement resilient repair than builders from further away. Participants reported this was as a result of the frequency of recent flooding: the community in this area had come to terms with the continuing flood risk and local professionals had realised that it was worth their while acquiring the necessary skills to offer resilience. By dint of their personal experiences of flooding and their connections with the community, these local builders were also considered more sympathetic to the emotional and practical issues and, therefore, as more able to understand both the needs of customers and the particular characteristics of local buildings and flood events. The need for relevant emotional intelligence and knowledge was stressed by a few professionals (e.g. Builder2) and is indicated by the resistance to resilience measures encountered by professionals (Surveyor1).

Reoccupation / claims closure

With the exception of a participant whose elderly mother moved into a care home after experiencing a flood, participants in this part of the research agreed with the aim of early reoccupation of the flooded properties. Some elements of the reinstatement process were seen as unhelpful in this regard: in particular, negotiations between loss adjusters and builders over the pricing of reinstatement, and between loss assessors and loss adjusters over the scale of the insured reinstatement work. Some small business and householder

participants reported that the reduction of such delays was one incentive for taking a cash settlement. Other householders said that the time they spent out of their home would have been substantially longer if they had not been so active at intervening in the process. Some professionals pointed out that the hurry to 'close a claim' was a deterrent to the consideration of resilient measures that might use up additional time. One participant (Builder1) felt that loss adjusters injected more urgency into the reinstatement of small business than of homes because of the greater financial loss incurred by business interruption (compared to the costs of alternative accommodation for residential properties).

Project management arrangements

Project management is made particularly difficult by the complex set of contractual relationships involved and the contractual/relational distance of loss adjusters from the "sub-sub-sub-contractors" who do some of the work (HH9). The negotiating difficulties caused by this complexity, along with extra stresses and delays caused by the perceived belligerence of loss adjusters, deters some builders from getting involved in the insurance-driven processes at all. Some householders felt that the process required their regular intervention if it was to move forward (HH4).

An example of the discontinuities in project management was provided by Dryer1. They argued that surveyors had a poorer understanding of the behaviour of moisture in buildings than did professional dryers, and that surveyors can therefore 'very, very rarely' make valuable contributions to the drying process. They also argued that because dryers *"don't go back in"* after the property has dried, it is not their concern whether their recommendations on wall finishings are heeded or not.

Policyholders who agreed cash settlements before the work was specified were able to feel more in control of the reinstatement process and, consequently, more able to include resilience measures in the work that was eventually done (e.g. BU6; BU7). This was especially true where they were able to appoint builders with whom they had a pre-existing, trust-based, relationship and/or where they were 'switched on' (i.e. had the necessary skills to deal with the professionals involved) and had the emotional and time resources to engage with the process (termed "lower maintenance clients" by Loss-Adjuster1). BU1, for example, described managing the process as part of "a threesome: the builder, insurance man and me" and said that, "we seemed to be able to [...] phone each other up and say 'what do you think to this?' or 'how about doing this?'" For others, project management was precluded by circumstances (e.g. a gravely ill family member) or overly difficult and stressful: for example, where homeowners felt the need to have a presence at the flooded property but had been relocated far away and were without easy transport (HH3). There were no reports of policyholders feeling excluded from decision-making processes, as is reported in the literature (see Quick Scoping Review) although this may be because those that were excluded were not aware that they should have had more of a say.

The early intervention of damage management companies was sometimes detrimental to householders' perception of control over the process. Arriving, as they did, before the usual

negotiations with loss adjusters could begin, led to "conflict with what our builders wanted to do" and was described as "people coming in and doing things when you've not been able to even organise [yourself]" (HH1).

The role of surveyors was sometimes unclear, with a lack of awareness of the distinction between them and the loss adjuster (HH1; HH3; HH5; BU2). This was reflected in the loss adjuster interview: "we're colleagues [of the surveyors] effectively"; loss adjusters and surveyors "are all coming from the same aim"; "[surveyors] are, in theory, appointed by the policy holder, but it's done on a scale and a procedure basis" (Loss-Adjuster1). Sometimes, no surveyor was involved (BU2; BU3), for example, because what was planned was 'just reinstatement' and no changes were planned.

Surveyors were not generally perceived by these customers as independent: none of the small business and household participants described them in this way, and HH4's surveyor commented that customers generally *"think I'm from the insurance company"*. Due to their relatively late, irregular and shorter-duration visits, together with a lack of obvious 'hands-on' input, they are sometimes considered as peripheral actors and, compared with 'first responders', as unreliable sources of assistance. There was little evidence of homeowners perceiving that surveyors were *"on the side of the insured"* as suggested by participants in the Quick Scoping Review interviews. By assuming that surveyors work for the insurer and will only make recommendations that reduce the claim size, householders are unlikely to trust their recommendations concerning resilience and are easily persuaded by others that resilience is not a good idea. This can deter surveyors from investing more in their efforts to persuade (Surveyor1).

How processes and project management arrangements restrict or encourage resilient repair

The insistence of some insurance companies on '**like-for-like**' reinstatement was mentioned as a barrier to resilient repair by some participants, but was not always considered insuperable. Some reported that their suggestions for resilience measures had been rejected because of the 'no betterment' principle (e.g. HH7) or even that it prevented loss adjusters from integrating grant-funded resilience measures into their reinstatement plans (Architect1). In addition, Builder1 refused to do any insurance-funded reinstatement work because they felt the 'like-for-like' principle obliged them to do work they considered unethical.

Resilience measures were, however, sometimes included as standard, with no mention of cost implications, for instance, the raising of power sockets and the use of sand-and-cement renders (Surveyor2); the latter, in part, because it makes reinstatement simpler and quicker (Surveyor1). In addition, Loss-Adjuster1 reported being able to implement resilience, not only if specific measures were cost-neutral, but also if they could balance the added cost of resilience by reinstating to a lower quality and cost elsewhere (one of the strategies also used by people who took cash settlements). Betterment was sometimes unavoidable due to

the need to comply with contemporary legislation, for example, by rewiring a whole property even if the flood damage had only impacted on some of the wiring. In addition, consistent with the finding in the Quick Scoping Review that some insurers are relaxing the nobetterment policy, one business reported that their insurer had been content to fund resilience because *"it's betterment, but it's common sense"* (Landlord1), and another implied that the insurance had paid for the extra expense involved in measures such as raised electrics and plumbing (BU1).

There was some evidence of a shift towards **reduced strip-out**. Where existing materials were considered sufficiently resilient and their replacement with more resilient materials would have prolonged the time needed for reinstatement, in-situ drying was sometimes preferred to strip-out. There was a suggestion that drying companies and loss assessors tend to exaggerate the need for strip-out in order to maximise their fees (Surveyor2).

There was some discussion of **how and when the topic of resilient repair was best introduced** to flooded businesses and householders. It was argued that people needed time to become familiar with the idea of resilience before they would be willing and able to go along with it (Surveyor1). Some felt that surveyors are, perhaps, less suitable for this approach, as they may lack the time to introduce resilience with sufficient care (Surveyor2), sometimes arrive too late in the process and sometimes prefer not to revise schedules of work with added resilience measures after they have drafted them following the first visit (Surveyor1). Surveyors' desires to be client-led may also prejudice their capacity to be 'sales-people for resilience': *"I wouldn't press it [... if they said] 'Oh no, I don't like that'. Then I'd probably leave it. I would advise but not sell. I'd be client-led."* (Surveyor1).

Loss adjusters do not all see it as part of their role to promote resilience and are not always confident that they are informed enough to do so (Loss-Adjuster1). Some interviewees (e.g. Builder1; HH1) said that, unlike those in their first or second flood, people that have been flooded numerous times do not need convincing about resilience because their experiences have taught them *"what they want"* and *"they know how they're going to get it"*. There was also some evidence that resilient options are sometimes simply presented to householders without any explanation, discussion or justification (HH4). This reluctance to 'sell' resilience might be a reflection of professionals' own doubts about resilience measures, or their past experiences of customers' negative reactions to them. For instance, the reported feedback had been that the designs of uPVC skirting and flood-resilient kitchens are more suitable for a commercial environment than for a home (Surveyor1; Surveyor2). It might also reflect customer assumptions that surveyors will only suggest alternatives that reduce the size of the claim and a consequent lack of a relationship suitable for selling such products (Surveyor1).

The interviews provided contradictory data on whether insurers' **cash settlements** are conducive to resilient repair. One surveyor (Surveyor1) felt householders were less likely to do a proper job of resilient reinstatement if they were in control, and that the surveyor would then become a scapegoat. However, two businesses (BU6 and BU7) reported taking cash settlements in order to be able to use insurance payments flexibly and include resilience

measures. Adding customer-funded resilience actions to an insurance process is complex and considered risky by many of those concerned. Surveyor1 argued that they tried to avoid this for three reasons: first, insurers' contractors would only do such work for a relatively high fee and this would be unfair to the customer; second using a customer's own builder would likely lead to disputes about which elements of a reinstatement are paid for by whom; and third, this arrangement makes the issue of warranties more complicated because they would have to apply to two separate contracts. Builders, too, are more willing to entertain resilience measures after a cash settlement, because no time-consuming negotiations with a loss adjuster are required in these cases, thereby avoiding the associated reductions in profit margins (Builder1; Builder2).

There are disincentives for insurers considering cash settlements. Surveyor2 reported that insurers hesitate to give cash payments for portions of the reinstatement (e.g. new kitchen units) because of potential complications if the service points provided by the insurer's contractors are not appropriate for the units fitted by the policy-owner's contractors. Also, insurers were reported to be uncomfortable closing cases on homes that were not yet habitable because they lacked operational bathrooms or kitchens (Surveyor2).

In some cases, **the challenge of co-ordinating different professional groups** leads to resilience measures being omitted even when surveyors recommend them. Surveyor2 *"always"* recommends that consumer units are raised. He reported, however, that different companies are responsible for the cabling and the units and that, during a 'surge event', they find it too challenging and uneconomical to co-ordinate with each other.

Sometimes, customers' own attitudes appeared to be significant barriers to resilient reinstatement. Some insisted on having their properties reinstated exactly as they were prior to the flood, and were opposed on principle to any changes (HH1; BU2). The interviews revealed three (common) reasons for this desire to return homes to their previous state. First, there were concerns that the changes suggested by insurers, rather than being well intentioned, were an attempt to 'con' homeowners (HH1; BU2). Second, there was an emotional desire to regain what was lost (HH1; BU2). Third, there was a belief that resilience fails to eliminate the possibility of future flooding and so does not address many of the longterm emotional impacts of flooding, such as anxiety (BU5). Customers also gave other reasons for opposing resilient reinstatement. Some householders and small businesses were afraid that any suggestion of differences in the reinstatement would extend the negotiation process, which would then delay their return to the flooded property (e.g. BU2, where listed building status was a further concern). In the words of Builder2, some domestic clients were unwilling to put up with the extra upheaval involved in "ripping out the core of your house, to make it resilient". Others were unable to cope with the additional stress of suggesting any change (HH1; HH3), especially when relationships with key professionals were already fraught (HH2), or did not want to risk compromising their relationship with their insurer by "making too many waves" (HH9). One builder felt that some policyholders were likely to "cause nothing but trouble" if he told them about resilience possibilities that were subsequently not funded by the insurance: "you've also got to be careful not to give people

bullets that they'll then fire" (Builder1). Some of those flooded for the first time argued that they were unlikely to be flooded again and that resilience was not necessary (BU2; Landlord1; HH8; HH9).

Two professionals (Broker1; Builder2) argued that their **motivation** for promoting resilience was both ethical and commercial (the promise of increased customer loyalty if clients witnessed their concern for their long-term interests). According to Insurance-broker1, flooded businesses were easily convinced to pay for resilient reinstatement when he told them they were unlikely to get any insurance and would have to pay for the next claim themselves. These businesses 'topped up' the available insurance payment to make their reinstatements resilient, as did two interviewees, BU1 and BU6. For BU1, this process appears to have been facilitated by regular contact with the insurer during the reinstatement period. In other cases, however, tenant businesses appeared to have had little involvement in decisions about how to reinstate the buildings they used and there was an apparent disconnect between the interests of the landlord and the landlord's insurer, and the tenant and their insurer.

How resilient repair is/can be resourced?

Some resilience measures were funded by insurance payments. There were cases where these constituted 'betterment': Landlord1 reported that insurers had paid for extensive measures in two tenanted properties that were not interviewed for this study; BU1 reported that watertight industrial flooring, raised plumbing, raised sockets and cabling, and removable furnishings were all funded by the insurers. In other cases, loss adjusters and surveyors agreed with policyholders to spend less on other aspects of reinstatement in order to free up money for resilience repairs, for example, HH6 agreed to have cheaper, standard doors and to put the money saved towards the replacement of carpets with floorboards.

Where insurers gave cash settlements, this allowed policyholders to top up their claim to pay for resilience and the insurance money acted, in effect, as a subsidy for resilience measures. For example, BU6 added £9K of their own money to the £24K paid out by their insurance company in order to replace fixed auditorium seating with removable seating, while BU7 added their own money to the insurance payment in order to use waterproof render and stone skirting. Builder2 and Insurance-broker1 reported that businesses were more likely than households to invest their own money in resilience, possibly because, they expected not to be able to afford future flood-insurance premiums, so saw this as their only option (Insurance-broker1).

When the implementation of grant schemes was concurrent with reinstatement, this sometimes provided a funding source for more resilient reinstatement. BU7 combined a grant with their cash settlement. HH6 anticipated the award of a grant in order to install a 'K11 tanking system' as part of their insurance-funded reinstatement; they *knowingly "took the risk"* (Surveyor2) that if they were not awarded a grant they would pay for it themselves. Participants reported that loss adjusters were not always amenable to the integration of

grant-funded works into the reinstatement plan, however, and some reasons for this are given above, (i.e. problems with warranties and the raised risk of contractual disputes). Architect1 reported that they were *"not allowed"* to talk to the surveyor appointed to BU6's case. The grants were also considered by some to be of insufficient size. Architect1 reported that the amounts of grant money sometimes made it hard to implement resilience to a sufficient standard and Builder2 reported accepting reduced profit margins as a way of topping up grant funds.

Some people took the opportunity of reinstatement to pay for and implement their own ideas for improved resilience. HH7 had their house rewired and asked their contractors to feed supplies down to sockets from the ceiling (instead of up from the floor).

The normalising of resilient materials and approaches leads to the inclusion of some resilient betterment, even in a 'no-betterment reinstatement' context. An example is the raising of sockets in domestic properties: although disability access legislation only applies to new-builds, it was found that some surveyors, loss adjusters and builders tended to apply the same standards to reinstatement work, claiming that this was nondiscretionary. Similarly, one surveyor said that recommendations for the use of sand-and-cement render had become standard practice in flood-prone areas.

Criteria for successful reinstatement from the perspective of different stakeholders

Homeowners

Homeowners want a reinstatement process that does not give them more stress than they can cope with (HH1; HH3; HH8) and that leaves them free to deal with the other demands that life throws at them (HH5). They also want to preserve their self-respect: by feeling *"listened to"* (HH6), by having their own expertise valued (HH6), by not being made to feel that their own efforts at flood resilience/resistance had been useless, and by not becoming embroiled in inter-professional battles (e.g. between loss adjuster and loss assessor) that make them feel *"dumb and really naïve"* (HH8).

Stress, anxiety and vulnerability are reduced if they feel able to trust the key professionals involved (HH8), likewise if they feel someone else is driving the process forward through what HH9 describes as the 'complex web' of contractual arrangements, and if regular contact with an empathic professional leaves means they *"don't feel alone"* in their struggle to cope (HH7; HH3). Being kept informed of what was going to happen was *"one of the secrets"* of a good claims process (HH7); in contrast, being given misleading information was anxiety-provoking (HH8). Speed was important (HH3; HH4), but without the haste and confusion characteristic of the scramble for business that is sometimes experienced (HH3) and without being given the feeling that someone else has taken over your home and that *"it's not my house anymore, this is the builders house"* (HH3). The interviews suggest that the desire of some homeowners for their home to be reinstated exactly as before is an attempt to reassert control after the despoiling of this intimate, identity-laden space (e.g. HH5; HH3).

Some householders also saw reinstatement as an opportunity to achieve pre-existing ambitions for their home at a reduced cost (HH2), or even as a chance to save money on bills (HH2). For example, HH2 was pleased at being able to replace most of their old white-goods with new ones; HH6 was pleased to be able to modernise their home while the insurance paid for alternative accommodation; HH8 got some other work done during the reinstatement.

Flooded small businesses

Small businesses want to get back to trading as soon as possible so that they can retain customer loyalty, save revenue losses, and reduce disruption/disappointment to staff and volunteers. They also want a clear timetable, so that they can plan more effectively. Some businesses want to be ready for future floods, especially if they anticipate that their insurance will no longer cover them for flood losses, which leads to a wish to control the reinstatement process and fund their own resilience measures as part of it (BU6; BU7). For other businesses, the financial cost of the flood was of less significance than the emotional cost of seeing water enter the business, so resilience was seen as irrelevant (BU1).

Although desiring control of the reinstatement process, small businesses appreciate external support. BU1 argued that one benefit of the recovery/reinstatement period was that he felt emotionally supported by others (e.g. clients, fellow businesses or insurers) and less alone than they were with other business issues. For example, he described how his insurer came to see him in person and regularly Skyped him to ask how things were progressing.

Flood resilience professionals

The interview with the loss adjuster revealed little of their notion of a 'successful reinstatement' but did suggest that they appreciated customers that were *"low maintenance"* because this reduced the amount of effort required of the loss adjuster. However, there was a suggestion elsewhere in the dataset that being seen as 'low maintenance' sometimes implied that the customer had been obliged to take on more responsibility than they would have liked.

The data suggests that surveyors have priorities other than resilience: being 'client led' in order to please the insurer; avoiding 'hassle' from the customer, and saving the insurer money by avoiding betterment and ensuring properties are reinstated to their 'pre loss' condition (Surveyor1; Surveyor2). There was also a suggestion that they avoid exposing themselves to customer criticism and the rejection of their advice (HH4-surveyor). The overarching motivation appears to be to gain repeat business from the insurer.

The builders in this study stressed that they were in business to conduct work that was profitable, "decent", customer-led and showed respect for the trauma homeowners had experienced. They expressed their dissatisfaction with putting back anything that was "wrong" meaning not optimally resilient. They also wanted to preserve their self-respect, so did not always argue with the loss adjuster lest they were made to look "stupid" and became embroiled in more of the kind of time-consuming and unpaid-for negotiation with which they characterised insurance-funded reinstatement (Builder1). Builder1 felt that householders

should not have to pay for resilience. To retain the element of their job-satisfaction that is based on the feeling that they are doing 'decent' work, they preferred not to antagonise the customer, for example, by refraining from suggesting resilience measures that they believed insurers would not fund (Builder1). As homeowners **"get sick of you and you only get appreciation six months later"** (Builder1), this sense of job-satisfaction could be elusive.

With respect to the other professionals, the landlord indicated that a good reinstatement was one that included improvements to the property, including (where further flooding was expected) improved resilience. The insurance broker characterised themselves as serving a community of small local businesses and described a good reinstatement as one that served them well, built strong relationships and avoided the risk of customers suing them when they flooded again.