



Rochdale Flood Poverty Report

March 2024



For further details please contact:

Sarah Parkington Delivery Manager (Roch Valley Flood & Climate Resilience), Economy Rochdale Borough Council Floor 3, Number One Riverside Smith Street, Rochdale, OL16 1XU O 10706 922566 resilientroch@Rochdale.Gov.UK Acknowledgements:

Funded and supported by the North West Regional Flood and Coast Committee and Environment Agency

Produced by Rochdale Borough Council, supported by National Flood Forum

Collaboration and editing – Paul Cobbing and Paul O'Hare, with contributions from Sarah Parkington, Francis Comyn and Pete Maynard

All photos copyright of Rochdale Borough Council Cover Photo – Littleborough

A full list of contributors and interviewees can be found at Appendix 7

Rochdale Council encourages printing or copying of information for personal or non-commercial use with proper acknowledgment of Rochdale Borough Council. The opinions expressed in this report are those of the authors and do not necessarily reflect the views and policies of Rochdale Borough Council, the North West Regional Flood and Coast Committee or the Environment Agency. The authors and Rochdale Borough Council do not guarantee the accuracy of the data included in this publication and accept no responsibility for any consequence of their use.

Executive Summary & Key points

This report demonstrates the importance of understanding community dynamics, place-based socio-economic conditions, and cultural and ethnic diversity, both historically and in the present day, when engaging with the contemporary and future challenge of flood risk management. The research is based on the increasingly well-recognised principle that any work to address community and neighbourhood-based flood risk must also address other factors framed by individual, household and community vulnerability. This requires adopting holistic, integrated approaches involving coordination across sectors and actors.

The work focuses on two discrete areas within Rochdale (North West England) long defined by the River Roch and its tributaries, which run through the town and its surrounding settlements. The areas are subject to relatively high levels of exposure to flooding; a risk that is exacerbated by challenging socio-economic conditions and characteristics.

We deploy recent analysis of climate and flood justice to understand relationships between community cultural, demographic and socio-economic conditions and exposure and vulnerability to flooding, alongside the capacity to respond to flood risk. We use the term 'flood poverty' as a particular characteristic of flood risk. Similar to more recognised terms such as 'fuel poverty' the term conveys the challenge of affordable and achievable flood resilience for communities that face flooding not as a singular, occasional threat, but as part of a series of interlinked (multiple) deprivations.

This report brings together those first-hand, on the ground accounts of the motivations of diverse households and stakeholders in the borough, from areas of intense deprivation, about the challenges they face living with the threat of flooding, along with the wider academic work and publicly available data to illustrate flood poverty as a social problem worth further exploration, both within Rochdale and as part of wider policy approaches to flood resilience in the future at both local and national level.

The report demonstrates that active, ongoing communication with individuals, communities and a broad range of stakeholders is key to building flood resilience, but this can only achieve so much unless wider measures to mitigate deprivation are in place. In particular, not all individuals and not all communities have the same resources to take on additional burdens. The view that the local authority not only should provide, but inevitably will do, is deeply embedded in Rochdale, and is probably paralleled in other areas in the country. Telling people that they are responsible for their risk can be ineffective, or worse merely reduces trust in local institutions without changing any individual behaviour. Moreover, in areas of multiple deprivation, the demands on both local authority and household budgets may make investment in resilience against flooding events seem far less of a priority compared to more immediate concerns. There is a necessity, therefore, to ensure flood resilience work is integrated across wider local authority agendas.

Fundamentally, therefore, poverty (deprivation) and flood risk are intensely linked; povertyalleviation work can be seen as flood resilience work, and vice versa. The report, therefore, takes an integrated approach, but focusses in particular on the issues of flood risk, resilience and flood poverty through housing, financial resilience, maintenance issues surrounding property flood resilience and flood literacy. The report also contains chapters on the Rochdale context and learning from other projects and research. Practical work involved workshops, interviews with stakeholders, questionnaires and surveys.

The project has been possible because of the long term, integrated approach to flood risk management in Rochdale, particularly working across sectors in Rochdale Borough Council. It has also benefited from having a National Flood Forum project officer working in the communities since 2013. Nevertheless, local authority resource constraints mean that integration can be challenging and

will require a continued innovative approach to ensure the most efficient and effective use of collaborative approaches, expertise and funding.

Overall, this report has shown that there are significant opportunities to increase resilience to the impact of flooding through taking an integrated, cross sectoral approach to policy and service delivery. In a disadvantaged community there cannot be an assumption that long term property maintenance will occur without long term support and intervention from third parties such as a local authority or a housing provider. There is a question about how we incentivise other sectors, such as the insurance industry, how we reach out to these more challenging markets. Residual risk is more than what remains after tackling physical aspects of flooding. Affordability, housing standards and maintenance, as well as literacy deficits reduce resilience and the Flood and Coastal Resilience and Innovation Programme (FCRIP) offers the opportunity to test how these can be addressed. The report makes a number of recommendations, most of which will be taken forward through the Resilient Roch project and the integration of sectoral delivery of programmes in Rochdale. Many recommendations are operational, where the work of different sectors, particularly housing, can contribute to residents and business resilience to flood risk. Others are more policy orientated. All are outlined later in this Executive summary, and in more detail in the relevant sections in the report. The overall approach is outlined below:

- **Financial resilience** is a key element of resilience. In particular, access to affordable, clearly defined insurance is a vital component of this. Work will be undertaken to increase penetration of what already exists through developing promotional material and working across pre-existing networks, but also through cultivating new opportunities to enhance insurance and broader financial resilience through more innovative initiatives, including savings schemes and debt and money management charities.
- Property level flood resilience has a vital role to play, particularly in managing residual flood risk. However, the standard approach of expecting households and property owners to maintain resilience measures is sub-optimal. Support for both raising awareness of property resilience measures and providing support and - ideally - intervention for longer term maintenance is required, and has been piloted in this research.
- In terms of **housing and property management**, opportunities to increase flood resilience through interventions at both operational levels (e.g. private landlords team) and in terms of policy (including wrapping considerations of flooding into housing policy and strengthening the obligations on landlords and the professional bodies). Some of these will have limited impact on the sector but are important from a flood risk point of view, such as working with Rochdale Borough Council's Private Sector Landlord Office to broach flood risk issues with tenants.
- The report has also identified both a need to and opportunities for enhancing **flood and climate literacy**. This will require nuanced approaches that are integrated across other activities, that are multi-sectoral and that both reflect the complex diversity of (micro) communities and using the existing ecosystem of civil society, faith-based and advocacy organisations.

Principles

A series of principles were developed as the project evolved, underpinning the research and recommendations for future work.

Principles

Recognising risk and disadvantage

Recognise the ways in which climate disadvantage (and flood poverty) is dependent upon and exacerbates broader aspects of socio-economic disadvantage. In particular, there is a need to identify how and why certain sectors of society are more vulnerable to climate change, and have differentiated capacities to respond to climate risk.

'Just' (fair) adaptation

Care must be taken to ensure adaptation initiatives recognise, account for and ultimately address climate disadvantage, both now and in the future as risk (climate change, flood risk and broader socioeconomic risk) evolves. Use and promote already existing adaptation systems and initiatives, particularly where we can demonstrate these address social injustices and boost financial resilience.

Avoid unintended consequences

Avoid unintended adverse consequences ('maladaptation') and 'lock-in' to decisions that may prove to be counter-productive to ensuring future resilience.

Adaptation that links to broader social, economic, environmental and public policy agendas Integrate and embed flood adaptation and financial resilience initiatives within broader public policy and organisational activities. Identify opportunities to place flood risk adaptation within wider climate change agendas (e.g. integration with climate mitigation initiatives and Net Zero policies).

Collaboration & networking

Work through and collaborate with existing networks and with organisations (particularly those already working on financial resilience) that already have a presence established in areas that are trusted and have credibility.

Working with communities

The large number of distinct communities of place and topic makes working with all communities through standard forms of engagement difficult. Alternative approaches are required that use existing networks that are sensitive to cultural requirements and the specific conversations needed.

Targeted engagement

The level and type of flood and financial literacy required varies with flood risk, deprivation, type of housing and whether PfR is involved. Stakeholder literacy requirements vary according to sector and the organisations' role.

Embed lessons learned

Embed the innovation, engagement and lessons learned through this project to become business as usual, especially through the Resilient Roch Project, as part of the Flood and Coastal Resilience and Innovation Programme and the Theory of Change project used in evaluation.

Findings

The project generated a number of findings, listed at the head of each chapter and which are collated here. These are linked to the key workstreams in the Resilient Roch project.

Housin Progra	er 3 The relationship between Flooding, g and the Neighbourhood Investment mme in Rochdale	1 Physical Measures	2 Financial Resilience	3 Stakeholder and community engagement
1.	The impact of flooding in Rochdale is not distributed evenly.			
2.	High flood risk areas in Rochdale often have high Indices of Multiple Deprivation (IMD) populations partly because housing is relatively cheap for both homeowners and tenants. Compared to other areas, housing is relatively cheap because of different combinations of the risk of flooding, poor build quality and a lack of maintenance. But there is also a multi- layered and multi-faceted evolution of the communities that contributes to this. This all leads to a self perpetuating cycle.			
3.	Significant investment is required to tackle low build quality, energy efficiency, damp, mould and services in cellars that are at risk of inundation			
4.	Deprivation heightens people's vulnerability to the impacts of flooding and reduces their ability to develop resilience.			

5.	Homeowners, including landlords, often do not have the resources to invest in their properties. There are also those who have the money, but lack the inclination, knowledge or motivation to invest. There is a huge expectation amongst some people that the local authority should		
6.	invest on their behalf. The current market conditions do not enable or encourage many private landlords to borrow to invest in their properties. Even if market conditions improve, it is unlikely that the incentives will exist for landlords to do more than the basic minimum to make their property habitable and rentable.		
7.	There is a legislative/ regulatory gap that makes it difficult to encourage landlords to invest in their properties to reduce flood risk and reinstate their properties after a flood.		
8.	Local authorities have an important role in coordinating and integrating investment to achieve multiple and co-benefits, e.g. property standards and future proofing property resilience in climate and flood resilience.		
9.	There are sometimes social justice issues where grants are targeted at the "able to pay", e.g. energy efficiency measures that focus on larger properties due to the greater carbon reduction opportunities.		
10.	There is a lack of specific regulation and guidance on landlords' responsibilities for tenants when a property floods, for informing them about flood risk, and helping them understand measures installed to reduce those risks.		

11. Letting agents and managing agents are important stakeholders for engaging with landlords and tenants. The quality of the service they provide is highly variable. Improvement will require knowledge, incentivisation and much better targeted legislation.		
12. Many SMEs in central Rochdale believe that the River Roch scheme will protect them and consequently are not concerned about property insurance. Overall, they lack adequate flood cover.		
13. There are opportunities to use the development of Flood Performance Certificates to help improve the physical resilience of properties, but there are also social justice issues that need to be addressed.		

Chapter 4 Financial resilience	1 Physical Measures	2 Financial Resilience	3 Stakeholder and community engagement
14. Flooding, like fire, can be a major shock to financial wellbeing of individuals, families, small businesses and communities.			
15. In considering flood risk, property insurance is recognised as the single most important mechanism to support financial resilience. Insurance is commonly used as a proxy for overall financial resilience.			

 16. Insurance is a voluntar certain circumstance requirement as part of property owners and to take out property in 17. Many homeowners and have property insuratives property insuratives affirmed they had 	es, such as a f a mortgage policy, cenants do not have nsurance. nd tenants do not ance. Of the 74 tionnaires, 50 (68%) some form of	
insurance. For ren respondents to the 2 (50%) had contents ins seven respondents to two (29%) confirmed insurance. However, sample size and statements given by t had some form of figure may be lower.	2021/22 survey six surance while of the the 2022/23 survey they had contents both the small the qualitative hose affirming they	
18. Many people canno insurance and/or ha associated with depriv	ve other priorities	
19. There appears to understanding, par younger people, ab insurance.	be a lack of ticularly amongst out the need for	
20. Some people have a la of how to get insuranc	-	
21. Many do not have the in their properties to resilient.		

22. There has been a very significant reduction in the number of insurance brokers with a physical presence, leading to a lack of access to insurance.		
23. Whilst 97% of owner-occupiers had at least one of buildings or contents insurance with 95% having both in the Blanc Review in Doncaster in Rochdale, of 40 homeowners who replied to our 2021/22 survey, 22 (55%) had either buildings or contents insurance (the questionnaire did not differentiate). In our 2022/23 survey of the 34 homeowners who replied to our survey 28 (82%) had either buildings insurance or buildings and contents insurance together.		

Chapte	r 5 Property Flood Resilience (PfR)	1 Physical Measures	2 Financial Resilience	3 Stakeholder and community engagement
1.	The health check demonstrated that the use of a local contractor provided a different approach to PfR maintenance. This indicates an opportunity to upskill people and channel funds into the local economy.			
2.	The majority of properties with PfR required maintenance that would not be available through traditional routes, i.e. through maintenance agreements. There are associated social justice issues.			
3.	There is a need to improve working arrangements with landlords and Responsible Providers (RPs) in relation to PfR inspection and maintenance and			

	future property refurbishment and improvement.		
4.	The health check identified a need to improve specific points in the British Standard for Flood Protection Products (BS851188).		
5.	The health check identified opportunities to improve national policy and some simple steps home or business owners can take to keep their PfR working well?		

Chapte	er 6 Increasing Flood Literacy	1 Physical Measures	2 Financial Resilience	3 Stakeholder and community engagement
1.	The research identified a need, and some broad opportunities, to improve flood literacy for homeowners, landlords and tenants, businesses, local construction trades and property management professionals, amongst others.			
2.	Improving literacy extends beyond the understanding of flooding and flood risk. Linkages can be drawn to the river, issues around water supply and drainage, broader engagement with the environment and to climate change mitigation and adaptation more generally.			
3.	It would be helpful for every person and organisation with a role in the community to understand how climate change and the water cycle affects them, those at significant flood risk require a different understanding. These need to be shaped by the different places, communities and			

	proximity to the River Roch and take account of a variety of ways of engaging.		
4.	Active participation by residents, businesses, risk management agencies and others with a role in the community are required in some places where flood risk is high. But this can relate to many dimensions, including PfR, financial resilience and community action.		
5.	There is an opportunity to deliver joined up climate and flood literacy through the Rochdale Climate Change Action Plan. The plan has a programme of work designed to support carbon literacy ('Carbon literacy for all' - CC43) and a further objective to 'improve flood literacy so that residents and businesses understand their flood risks and how they can be more flood resilient' (CC2).		
6.	Communities in the areas are complex, with many micro communities each of which would need a separate engagement approach to build relationships.		
7.	There are many existing networks that engage with micro communities		
8.	There are opportunities to use existing networks to engage with the many micro communities to promote and animate community action, including street champions, citizen science. There are also significant difficulties in setting up		

bespoke engagement with	all of the		
communities.			

Chapter 7 General findings on flooding and deprivation learning	1 Physical Measures	2 Financial Resilience	3 Stakeholder and community engagement
 Flood risk is a significant and increasing threat. Climate change and urbanisation have altered precipitation patterns and the behaviour of water catchments placing more people and places at flood risk. In urban areas some causes of flooding can be at the microscale and driven by surface water. 			
2. The notion of <i>disadvantage</i> draws attention toward wider perspectives and the complex social factors compound inequalities and injustices. In particular, flood disadvantage recognises differences in exposure and vulnerability of people to flood risk and the divergent capacity of citizens to cope with, and to recover from, flooding. Flood Poverty recognises the economic barriers and challenges and is an element of disadvantage. It translates to location poverty and therefore issues of health and environment, for example.			

3. Resilience refers to the ability of individuals, communities, businesses, and the environment to withstand, adapt to, and recover from the impacts of natural disasters, climate change, and other hazards. It encompasses the capacity to anticipate, prepare for, respond to, and recover from disruptions, while also taking measures to reduce vulnerabilities and to enhance long-term sustainability.		
 Flood insurance and property flood resilience are vital elements of contemporary flood resilience. However, they are not without critique nor are they without practical challenges. 		

Recommendations

Listed below are the key recommendations, linked to the Resilient Roch project workstreams. More detailed recommendations are listed at the end of each chapter.

Housin	er 3 The relationship between Flooding, ng and the Neighbourhood Investment mme in Rochdale	1 Physical Measures	2 Financial Resilience	3 Stakeholder and community engagement
1.	Support Rochdale Boroughwide Housing (RBH) to encourage residents to become more resilient.			
2.	Support Rochdale Boroughwide Housing (RBH) and Responsible Providers (RPs) of supported housing to make their properties more resilient.			
3.	Work with Rochdale Town Centre Business Improvement District Manager to provide support and advice to small and medium sized enterprises (SMEs)			

4.	Working through Rochdale Borough Council's Private Landlord Sector Team to improve resilience in the private rented sector.		
5.	Explore opportunities to ensure that Flood Performance Certificates (FPCs) apply to all residential properties, should the concept be taken forward.		
6.	A higher level of responsibility should be placed on utility companies to ensure that whatever they are putting into a property is not vulnerable to flooding.		

Chapter 4 Financial resilience	1 Physical Measures	2 Financial Resilience	3 Stakeholder and community engagement
 Raise awareness of the importance of financial resilience and the value of property insurance by working in partnership with RPs and insurers to reach social housing tenants. E.g. through the distribution of literature and e-training 			
2. Promote existing schemes (and demonstrate why property insurance cover is important) through enhanced engagement with social housing tenants that have either never purchased insurance or have allowed their insurance cover to lapse.			

3. Provide a variety of routes for people to learn about and access insurance, particularly for those on low incomes, who have limited digital access, where English is not a first language, or people who feel more confident with face to face contact.		
4. Promote financial resilience against the impacts of flooding through engagement with local, trusted organisations already in existence in the area (e.g. Citizens Advice Bureau, local religious organisations, housing associations, local food banks and other charities).		
5. Explore opportunities to expand the current insurance scheme offered to RBH tenants to tenants in the private housing sector, and those eligible for social housing and on social housing waiting lists.		
6. Consider whether different models of insurance are needed for residential property insurance for low income households		
7. Raise awareness of the importance of financial resilience and value of property insurance by working in partnership with stakeholders. E.g. co-producing events		
8. Work with the insurance industry to improve access to residential property insurance.		
9. Develop a multi-agency/ multi-sectoral approach to promote increased uptake of insurance and/ or savings.		

10 Promote schemes (and their importance both to flood resilience and to community resilience more generally) within the local authority and social housing providers.		
11. Develop training on the Housing Act 2004 and financial resilience that is targeted at all housing professionals, including managing agents, letting agents, RSLs, all property holders.		
(n.b. to be offered at Executive, policy and operational tiers of the organisation, and potential contractors)		
12. Assessing how accreditation for landlords could be improved to deliver significant benefits to tenants at flood risk (particularly through already existing landlord schemes).		
13. Contribute to raising landlord and managing agent standards as a means of increasing tenant resilience to flooding.		
14. Assessment of possible regulatory changes. That would improve the resilience of tenants.		
15. Explore opportunities to develop simple savings schemes to build financial resilience		
16. Promote the value of flood insurance to small businesses		

17. Consider whether a formalised way of gathering information about small businesses would be beneficial to promoting financial resilience	
18. Developing partnerships with larger property owners to establish the opportunities for collaborative working to deliver financial resilience benefits for tenants.	

Chapte	er 5 Property Flood Resilience (PfR)	1 Physical Measures	2 Financial Resilience	3 Stakeholder and community engagement
1.	Identify the skills, capacity and practicality needed to set up a local resilient repair network.			
2.	Improve engagement with landlords, estate and letting agents and managing agents to ensure that PfR is regularly inspected and properly maintained.			
3.	Influence PfR guidance and BS standards			
4.	Consider ways to implement UPVC health check specific recommendations			
5.	Explore building control and planning implications of installation and maintenance of PfR and related building assets.			

Chapter 6 Increasing Flood Literacy	1 Physical Measures	2 Financial Resilience	3 Stakeholder and community engagement
 Follow a series of good practice principles: Follow a series of good practice principles: Using pre-existing networks (rather than using a flood advisor). II. Commissioning services through pre-existing providers. III. Providing training, information and support first with and then through key stakeholders and networks. IV. Using community hubs. V. Deploying cross sectoral approaches. Understanding and working with diversity. Build on existing relationships with 			
stakeholders and networks to engage on flood resilience issues.			
 Work with Rochdale Boroughwide Housing to extend organisational and staff flood literacy and to support their work within flood risk communities. 			
 Work with key stakeholders (including professionals, elected representatives, officers and the community and voluntary sector) to support flood, climate and water literacy and understanding. 			
5. Promote collective literacy in communities of place or interest, for example at a street scale where people understand risk and when neighbours change it isn't lost and also they understand when and how to help each other and the value of collective action.			
 Work with communities at significant risk of flooding to support their flood, climate and water literacy and understanding. 			

 Work with the wider community (including those at limited risk of flooding) to support their flood, climate and water literacy and understanding. 	
-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--

Chapter 10 Conclusions and Legacy	1 Physical Measures	2 Financial Resilience	3 Stakeholder and community engagement
 Embed and disseminate the lessons learned from the Flood Poverty project in to Rochdale's work 			

Figure 0.1 The River Roch 2015



Contents

Executive Summary & Key points	i
Principles	ii
Findings	iv
Recommendations	xii
Contents	1
List of figures	6
1 Introduction	10
Flood risk and history of flooding in Rochdale	11
The Borough of Rochdale: A Brief History	11
Floods and the Borough	13
The current flooding challenge	14
Climate (and flood) exposure in Wardleworth and Littleborough	16
Flood hazard maps	17
What is 'flood poverty'?	22
Why this project?	23
The context	23
Characteristics of 'flood poverty'	26
Project approach	27
Funding	27
Project Aim	28
Objectives	29
Methods	29
Programme of work	30
2 Flooding and deprivation – the context	33
Introduction	33
The flood risk challenge	33
Flood disadvantage & flood poverty	33
Dimensions of climate and flood disadvantage	34

	Flood risk management	36
	Insurance	37
	Property Flood Resilience	38
	Flood insurance and property flood protection	39
3 R	The relationship between Flooding, Housing and the Neighbourhood Investment Progra ochdale	mme in 40
	Rochdale - Setting the scene	41
	Housing in Rochdale	43
	Social vulnerability indexing in Wardleworth and Littleborough	49
	Flood risk, the housing market & deprivation in Rochdale	57
	The social housing sector.	60
	The private rental sector	63
	Rochdale Borough Council Private Sector Landlord Office capacity	66
	Flood Performance Certificates	67
	The Neighbourhood Housing Programme and flooding	69
	Marketing	69
	Grants and loans	70
	Innovation - Rochdale Borough Council's coordinating and integrating function	71
	Small businesses	72
	Good landlord schemes, licensing and guidelines	73
	Landlord accreditation and charters	74
	Selective licencing	74
	Redress schemes	75
	Recommendations	75
4	Barriers and challenges financial resilience and to residential property insurance uptake	78
	Thematic (qualitative) analysis	78
	Questionnaire responses	79
	Insurance	81
	Confidence	83
	Financial Resilience and Insurance	85
	Property insurance	86
	Residential Property Insurance	87

	Flood Re	88
	Commercial insurance	89
	Savings	89
	Market penetration	92
	Perceptions and perceived value of insurance	100
	The affordability challenge	106
	Accessing insurance	109
	Insurance brokerage	112
	What is the insurance offer? The insurers' perspective	115
	Market barriers	117
	Possible solutions and opportunities	118
	Raising awareness of social housing schemes	118
	Landlord obligations	119
	Networks and advocacy organisations	119
	Support for local brokers	121
	Suggestions from social housing insurance providers	121
	Engaging with businesses	122
	Community engagement	123
	Managing Agents, estate agents, letting agents	123
	Recommendations	124
5	Property Flood Resilience (PfR)	129
	Introduction	129
	Local PFR context	130
	Questionnaire results	132
	Maintenance issues	134
	UPVC door specialist - health checks	135
	UPVC door specialist feedback	138
	Recommendations	139
6	Increasing Flood Literacy	142
	Introduction	142
	The Flood Literacy challenge	144

	The Rochdale context	146
	Assessing flood literacy in Rochdale	147
	Diverse communities	148
	Community dislocation	150
	Business engagement	151
	Perceptions of roles, responsibility and accountability	151
	Stakeholder analysis	154
	Engaging with local civil society and other local networks	155
	Perceptions of flood risk - insights from the questionnaires	158
	First questionnaire (conducted in late 2021/ early 2022)	158
	Second questionnaire (conducted in late 2022/ early 2023)	160
	Summary	162
	Recommendations	164
7	Findings on flooding and deprivation	168
	Introduction	168
	The flood risk challenge	171
	Flood disadvantage & flood poverty	172
	Dimensions of climate and flood disadvantage	173
	Flood risk management	180
	Resilience	180
	Community resilience	182
	Insurance	184
	Insurance as a form of resilience	184
	Critiques of the insurance industry	185
	The affordability challenge	186
	Accessing appropriate insurance	188
	Other insurance related issues	189
	Flood Re	191
	Businesses and insurance	192
	Property Flood Resilience	193
	Flood insurance and property flood protection	197

8	Monitoring and Evaluation Framework	200
	Project management and steering group	200
	Stakeholder Analysis	201
	Mapping	201
	Desk-based work	201
	Questionnaire surveys	202
	Data storage & analysis	204
	Workshops	204
	Interviews	205
	UPVC Specialist	206
9	NW capacity building	208
	Future opportunities	208
10	Conclusions and legacy	210
	Legacy recommendations	211
	Principles	211
	Findings	213
	Recommendations	221
Re	eferences	228
Ap	opendices	239
	1. Terms of Reference	239
	2. Detailed project plan	240
	3. Risk Assessment	242
	4. Financial workshop summaries	243
	Workshop held on 6 th July 2021	243
	Watermark case study	243
	Workshop held on 13th September 2021	247
	5. Questionnaire results	250
	Results from the 2021/22 Roch Valley Neighbourhood Flood and Climate Resilience Proj Questionnaire	ject Resident 250
	Free text responses to first questionnaire survey	266
	Results from the 2022/3 questionnaire	269
	Free text responses to second questionnaire survey	279

6. Good landlord schemes, licensing and guidelines

7. List of interviewees

List of figures

	Page
	number
Cover photo The River Roch in Littleborough	Cover
0.1 The River Roch in Rochdale 2015	xviii
1.1 2021 Census Figures on Race & Ethnicity (%)	11
1.2 Rochdale, Cooperative Society Ltd	12
1.3 Revealing the Roch Scheme - Flood alleviation on the River Roch that exposed the river	15
1.4 Extent of Flooding from rivers in Wardleworth	17
1.5 Extent of Flooding from surface water in Wardleworth	17
1.6 Extent of Flooding from rivers in Littleborough	18
1.7 Extent of Flooding from Surface Water in Littleborough	18
1.8 Storm Eva flooded properties overlaid on the ClimateJust Map of present- day surface water	19
1.9 –Littleborough, 30 year flood prediction maps, JBA, prepared for Rochdale Borough Council	20
Flood and Coastal Resilience Innovation Project submission.	
1.10 – Littleborough, 100 year flood prediction maps, JBA, prepared for Rochdale Borough	20
Council Flood and Coastal Resilience Innovation Project submission.	
1.11 Wardleworth, 30 year flood prediction maps, JBA, prepared for Rochdale Borough Council	21
Flood and Coastal Resilience Innovation Project submission.	
1.12 Wardleworth, 100 year flood prediction maps, JBA, prepared for Rochdale Borough Council	21
Flood and Coastal Resilience Innovation Project submission.	
1.13 The National Flood Forum logo	25
1.14 Flood poverty - some key questions	27
1.15 Summary of methods	30
1.16 Programme of work	31
1.17 Rochdale – Birthplace of Cooperation	32
2.1 Framework for understanding climate disadvantage	34
2.2 Conceptual framework for assessing socio-spatial vulnerability and climate disadvantage	34
2.3 Homeowners' experiences during flood damage to their property	36
2.4 Increasing take up of action on flooding	39
3.1 Example of housing in the study area in Rochdale	41
3.2 Distribution of people in NS-SEC Groups 1-3 in the borough of Rochdale and surrounding areas	42
3.3 Indices of Multiple Deprivation against 2015 flooded properties	43
3.4 Office of National Statistics 2021 Housing Tenure Data	44

281 286

3.5 Location and boundaries of the Wardleworth and Newbold Brow, and Littleborough North and Calderbrook MSOAs	44
3.6 Different property types and ownership arrangements require a range of engagement	45
approaches	45
3.7 Household Tenure in Littleborough North and Calderbrook MSOA	46
3.8 Household Tenure in Wardleworth and Newbold Brow MSOA	46
3.9 NS-SEC map of an Output Area in Littleborough from 2021 Census against occupation	47
3.10 NS-SEC classifications	47
3.11 Housing Tenure map of an Output Area in Littleborough from 2021 Census	48
3.12 Housing Tenure and Output Area in Littleborough from 2021 Census	48
3.13 Housing tenure in different parts of Rochdale 2021 Census	49
3.14 2015 properties against Indices of Multiple Deprivation (IMD)	50
3.15 Economic Inactivity (Census data 2021)	51
3.16 2015 Flooded properties against economic inactivity	51
3.17 A map of the affected properties from the 2015 Boxing Day floods overlaid on the	52
Neighbourhood Vulnerability Index	52
3.18 People in Wardleworth and Newbold Brow and North Littleborough and Calderbrook who	53
Cannot Speak English Well. (Census data 2021)	
3.19 A map of the affected properties from the 2015 Boxing Day floods overlaid on the Age	54
Vulnerability Index	
3.20 A map of the affected properties from the 2015 Boxing Day floods overlaid on the Children	54
under 5 Years data	•
3.21 A map of the affected properties from the 2015 Boxing Day floods overlaid on the Persons	55
over 75 Years data	
3.22 People in Wardleworth and Newbold Brow and North Littleborough and Calderbrook who	55
are aged 65 and over (2021 Census)	
3.23 People in Wardleworth and Newbold Brow and North Littleborough and Calderbrook who	56
are aged 15 and under (2021 Census)	
3.24 A map of the affected properties from the 2015 Boxing Day floods overlaid on the Lack of	56
Private Transport Index from	
3.25 Social housing in Rochdale	61
3.26 Mixed tenure housing in Rochdale	63
3.27 Number of complaints received by Rochdale Private Sector Landlord Team for 2022/23	66
3.28 Flooding in Littleborough, Boxing Day 2015	67
3.29 Speculative impact of Property Flood Certificates (PFC) on different categories of	68
homeowner and householder with and without enforcement through the Housing Act 2004	
4.1 Survey respondents by tenure type (2021/22)	79
4.2 Survey respondents by tenure type (2022/23)	79
4.3 Tenure in the borough (from ONS 2021) and MSOAs (Census 2021) against questionnaire	80
responses	00
4.4 How Important is it for you to Insure your home? 2022/23 Questionnaire	81
4.5 What Insurance do people have? 2022/23 Questionnaire	82

4.6 Confidence in flood resilience measures (2021/22 Survey)	83
4.7 Has PFR reduced anxiety around risk?	84
4.8 The four drivers of vulnerability and example characteristics (FCA, 2020)	86
4.9 Typical characteristics of different types of flooding	87
4.10 - Question 2 - On a scale of 1 to 5, how important do you think it is to insure your home?	92
4.11 - Question 3 - Which of the following best applies to you?	93
4.12 - Question 4 - Do you have home insurance?	93
4.13 - Question 5 - If you do have buildings insurance, how was it organised?	94
4.14 - Question 8 - If you do have contents insurance, how was it organised?	94
4.15 - Question 11 - Do you have any property other than your main home (for instance a garage	94
or lock-up) which could be affected by flooding?	
4.16 - Question 12 - How easy do you find it to understand insurance	95
4.17 - Question - 13 - Would you like training/ further info on insurance	95
4.18 - Question 15 - Thinking about how you shop around for insurance and discussions with	96
insurance companies, how straightforward have you found it to get the insurance that you feel	
meets your needs	
4.19 - Question 16 - If you have insurance, how did you renew?	97
4.20 - Question 17: If you do not have insurance, what were the main reasons why? Please select	100
as many as apply.	
4.21 – Question 18: If you do have insurance but found the process difficult, what were the	100
difficulties in getting insurance? Please select as many as apply.	
5.1 Surveying properties	132
5.2 PFR installations	133
5.3 Tenure type cross referenced with knowledge of flood risk area	133
5.4 Tenure type cross referenced with sign-ups to Environment Agency Flood alerts	134
5.5 Properties visited by the UPVC door specialist	136
5.6 Number of doors in properties checked	137
5.7 Extra repairs on the Property Flood Resilience doors checked	137
6.1 Five challenges of working with communities	143
6.2 Flood risk management responsibilities in England	145
6.3 Challenges in community outreach	150
6.4 Summary of stakeholder analysis	154
6.5 Networking organisations	156
6.6 Question 1 - Knowledge of flood risk	158
6.7 Question 2 - Subscription to Environment Agency alerts	159
6.8 Question 3 - Awareness of flood action groups	159
6.9 Question 4 - Extent of flooding	160
6.10 Question 5 - Concern about flooding	161
6.11 Importance of insurance	161
6.12 Summary of home ownership	162

6.13 Key points	163
7.1 Flood Risk Management Authorities - Roles and Responsibilities	170
7.2 Framework for understanding climate disadvantage	175
7.3 Conceptual framework for assessing socio-spatial vulnerability and climate disadvantage	175
7.4 Differential experience of the social impacts of floods	176
7.5 Homeowners' experiences during flood damage to their property	177
7.6 Components of resilience; National Flood and Coastal Erosion Risk Management Strategy	181
7.7 Resilience - approaches and actions	181
7.8 The Blanc Review of flood insurance - objectives	187
7.9 Key findings of the Blanc Review	190
7.10 Increasing take up of action on flooding	195
8.1 Tweet to disseminate the questionnaire link	202
8.2 Data protection of information provided in the questionnaires	203

1 Introduction

The threat posed by flooding is already a significant concern for many parts of the UK (Committee on Climate Change, 2021; 2023). As the world continues to warm, future UK weather could bring not just wetter winters, but the prospect of heavy convectional summer rainfall and storms. However, the drivers of flooding extend beyond climate change. An ageing and under-invested urban infrastructure - including drainage and sewerage networks - as well as ever more pressure to allocate land for construction of housing and infrastructure - is further exacerbating the urban flooding challenge.

Nationally, over 5.2 million homes and businesses in England are at risk from flooding and coastal erosion (Environment Agency, 2020). The consequences of flooding can be immense, with significant long-term social and economic impacts as well as serious impacts for the health and well-being of communities. Recovery can be a long protracted process, causing further stress and inconvenience for those that have been flooded.

These challenges are often most pronounced in towns and cities. The majority of the 2.7 million properties currently at risk of flooding from rivers and the sea are in urban areas (Environment Agency, Chief Scientist's Group, 2021). Surface water flooding is now acknowledged to be the most serious threat of all, with some 3 million properties believed to be at risk (Bevan, 2018). It is not possible to remove the risk of flooding completely, but steps can be taken to *reduce* the risk of flooding and to be better prepared to deal with the consequences of flooding if it does occur.

There is, therefore, an urgent need to improve our **resilience to flooding**. The National Flood and Coastal Erosion Risk Management Strategy (Environment Agency, 2020) outlines the components of resilience across four related themes:

- **Improve place making**: Making the best land use and development choices for managing flooding and coastal change.
- **Better protect**: Building and maintaining defences and managing the flow of water in a catchment or a place.
- **Ready to respond**: Planning for and responding effectively to incidents.
- **Recover quickly**: Getting back to normal and building back better.

Of particular interest to this project, there is a need to deal with residual flood risk; that is, the risk beyond or 'behind' protective structures such as walls or levee defences.

Property flood resilience and insurance are just two elements that are integral to this aspect of flood resilience. However, both these approaches are problematic. People have reported that they struggle to get insurance, or that premiums and/or excesses increased in the wake of flooding. Although the advent of FloodRe has eased this particular challenge, there remain difficulties for people accessing and affording insurance. Similarly, property flood resilience is far from a perfect solution to managing residual flood risk. Resilience measures installed in properties are usually only partial, often prohibitively expensive (necessitating significant grant support) and require long-term monitoring and maintenance to

ensure their efficacy. This research project explores these themes and others with reference to issues regarding flood and climate disadvantage.

Flood risk and history of flooding in Rochdale

The Borough of Rochdale: A Brief History

Rochdale Borough lies to the north east of Manchester and within the Greater Manchester Combined Authority. Created by changes to local government boundaries in the 1970s, the borough has a population of 224,000, and contains several settlements with their own identity. As well as the town of Rochdale itself, the borough has a large population centre in Middleton, a market town that became an overspill for Manchester in the middle of the twentieth century, and where people to this day are far more likely to think of themselves as Mancunians than Rochdalians. Smaller towns such as Heywood and Littleborough also have their own character. Other areas of the borough are more distinctly rural, contrasting with the highly urbanised Rochdale town centre. Like many former mill towns, the borough has a highly diverse ethnic make-up, but this is unevenly distributed, with some areas being "minority-majority", and some almost entirely white British according to the 2021 Census (Figure 1.1).

MSOA	White	Asian, Asian British	Black, Black British	Mixed or Multiple Ethnicities	Other
Wardleworth & Newbold Brow	23	67	3	2	4
Littleborough North & Calderbook	97	1	1	1	0

Figure 1.1 - 2021 Census Figures on Race & Ethnicity (%)

Rochdale can trace its history to the 11th century¹. It was a market town at the centre of sheepherding countryside, and was sited at a crossing of the River Roch. Wealthy cloth merchants constructed large houses for themselves close to the river, with a surviving example located at 17 Yorkshire Street, originally built in 1708 for the Vavasour family. Wool products remained key to the town's economy until around the 1830s, when it was replaced by a burgeoning cotton industry for which Greater Manchester was to be known globally. The change from a hand-operated cottage-based industry to a machineoperated factory-based industry brought both great wealth to some, but well-documented exploitation for many.

The first textile mills used water-power and were located in close proximity to the rivers that conveyed water from the surrounding hills and moorland. The Rochdale Branch Canal (1798), which led close to the town centre, again emphasised the centrality of water and control over it to the economic

¹ A detailed history is available at: <u>https://manchesterhistory.net/rochdale/history.html</u>

life of the town. Water has therefore always been key to the placement, economy and history of the town; the river runs through the centre of the borough both physically and metaphorically.

According to manchesterhistory.net, the mechanisation of the wool industry was slower than the 'progress' seen in cotton. Consequently, the way Rochdale developed was somewhat different from some of its cotton industry dominated neighbours to the south and to the north in the Rossendale Valley. Industrialisation saw farmer-weavers move into cottages in Rochdale. By 1841 Rochdale had a population of 68,000, up from around 23,000 just twenty years earlier. Like other parts of the region, living conditions were very poor. Housing was overcrowded and squalid, and there was significant pollution.

Rochdale weavers fought an ongoing campaign during the early decades of the 19th century to draw attention to living and working conditions. In 1819 Sam Bamford led a march from Rochdale (Middleton) to St Peter's Field for a protest that would be attacked in the Peterloo Massacre. A local, democratic response to both squalor and economic uncertainty emerged via the Co-operative movement and the Rochdale Pioneers, (Figure 1.2) rising from 28 subscribers in 1844 to over 3500 by 1860. Through this, the people of the town had sought a way to independently build their own structures of financial and social resilience in the face of hardship.

This history echoes today. Rochdale continues to be afflicted by a high level of deprivation. Deindustrialisation has further undermined the resilience and security of an area where many ordinary people never made a great deal of money even in the good times. Communities which migrated to the area, whether in the nineteenth century from surrounding Lancashire or in the second half of the twentieth century from the Indian sub-continent, continue to face structural challenges around employment, health and opportunity. They also, whether through religious institutions, civic groups, tenants associations or the democratic structures of the local authority and its townships, demonstrate a desire to find a collective solution to those issues.



Figure 1.2 Rochdale Cooperative Society Ltd

Floods and the Borough

As expected from a locality tracing its existence back to the river, the towns of the borough have a long history of flooding through to the modern day. Much of this history - and many extracts from contemporaneous newspaper reports - is documented in a 2020 report by the JBA Trust, *Lancashire: A chronology of flash flooding*. The first documented flood mentioned in the report dates from 10th October 1765:

"Heavy rains at Rochdale (also Ripponden West Yorks), swelled rivulets, bearing down bridges, and carrying stones of incredible magnitude. Rivers changed course."

10th Oct 1765, Gentleman's Magazine

Others are also reported. In 1838 the Manchester Courier reported:

"A very severe thunderstorm affected mainly south Lancashire and Yorkshire with much loss of life both from lightning and from flood...the greatest damage was done by flooding from the small streams which rise above Rochdale and Bolton. These have been filled with such rapidity that bridges were soon swept down and doing great damage to buildings of all kinds...Three men were drowned in a coal pit near Rochdale, a boy was swept from a stable at Bradley and another lost his life at Bolton. Extensive further details are provided but this must be one of the worst flooding incidents in the last 200 years for loss of life."

(7th July, 1838, Manchester Courier)

Flooding in August 1875 reported in the *Manchester Times* (on the 4th August) recorded that cellars flooded in Middleton, that the Irk was swollen to the extent that "*fears were entertained for the safety of the bridges*", low lying parts of Heywood were flooded and that in Rochdale: *Sewers were unable to carry off the water and houses were flooded to a considerable depth in the lower parts of the town notably in Drake Street where a sewer was under construction.*"

A report from the Rochdale Observer on the 13th August 1915 stated:

"Heavy rain fell for more than half an hour. Streams dashed down every incline and flooded houses on the way and carried masses of debris. The Flying Horse Hotel and the shop adjoining the church Steps were flooded. The cellars of a bank were flooded. The water level in Sudden Brook rose four or five feet in an incredibly short time; it overflowed the bank and flooded the Sudden Manufacturing Company's mill. Several other mills were flooded."

Further floods were reported including in 1968 when a boy was drowned in the River Beale: "*The river, usually a trickle had grown to 6 feet deep.*" (Manchester Guardian, 2nd July, 1968).

Flooding has always been a part of the story of the borough. However, the complex and shifting nature of the response over the centuries, the geography of the town with its culverts and drainage

systems, and the distribution and demographics of the population, has meant that there has not always been institutional or social memory around these events.

The current flooding challenge

More recently significant flood events were recorded in 1991, 1995, 2008 and 2015. On the 26th and 27th December 2015, 324 properties were flooded during Storm Eva. The flood exceeded the previous highest recorded levels along the River Roch, causing widespread damage and disruption in the area. There was further, less severe, flooding in March 2019, July 2019, November 2019 and February 2020 (Storm Ciara). Several flood warnings for the River Roch at Littleborough and Rochdale were issued during Storm Christoph during January 2021.

Of these recent events, Storm Eva brought the most significant consequences. In part this was due to the severity of the event, but also the time of year (Boxing Day) meant it had an enduring significance for many of those affected and for a wider audience who saw the devastating effects and disruption on their televisions. Storm Eva saw more than 320 residential properties in Rochdale and Littleborough suffer significant internal flooding, with many more subject to cellar and curtilage flooding or 'near misses' where flooding was averted through swift reactive measures or where properties came very close to being flooded. In addition, many town centre and neighbourhood businesses were flooded and suffered both severe damage and business disruption.

Storm Eva undoubtedly caused significant personal and community hardship for residents in affected areas and has further impacted on the local economy, especially small businesses. Assistance was made available in the form of grants towards the purchase and installation of PLR products and other recovery measures. In excess of 370 property level resilience grants were provided to residential and business properties in Rochdale, in addition to significant local support from the Council's housing, health and welfare services. The additional practical and financial support that the Council provided to support grant administration and professional property surveys, providing access to reputable contractors and ensuring that post installation inspections, maintenance agreements and warranties were in place, was considerable. Yet these reactive measures risk creating an ongoing belief that, ultimately, the council will bail people out, both literally and financially, in the worst case. This raises vital policy questions about whether the council has this capability in the future, and whether, even if it does, it is the correct actor to shoulder that burden in its entirety.

Work carried out by Rochdale Borough Council and the National Flood Forum (NFF) as part of the Defra Flood Resilience Community Pathfinder (between 2013 and 2015) has helped provide a basis for further community and stakeholder engagement. The Pathfinder project focused on identifying and understanding the challenges and barriers to community resilience, and exploring approaches for engagement to help improve both awareness and preparedness within communities at significant risk of flooding. Specific challenges and barriers included widespread lack of flood risk awareness, multiple deprivation, the existence of so-called 'harder to reach' sections of the community and a mixed view of who was responsible and who was to blame if floods did occur. Aspects of the project continued into 2021 and formed some of the foundation for later work, including this project and an on-going Defra funded FCRIP Project (which will be returned to later in this report). Prior to this work was undertaken for Defra by the University of Manchester (UOM) and its subcontractor, the Building Research Establishment (BRE)

as part of the wider Era-Net Crue research project from 2006 to 2008, following the pluvial floods in Heywood in 2004 and 2006.

In addition to the Pathfinder project, there have been other projects including:

- Calder Brook Flood Storage, Littleborough. Completed in 2016 this provides better protection to 66 properties from surface water and ordinary watercourse flood risk.
- Whole House Climate Resilience/Green Deal Programme. The Council, supported by the NW RFCC, carried out a limited project to pilot embedding flood resilient specification for cavity wall insulation products being used in areas of higher flood risk. This would create better value for money over time by removing the need to replace flood damaged insulation materials.
- Revealing the Roch. This was a multi-million pound scheme for de-culverting sections of the river in Rochdale town centre to conserve heritage, enhance the public realm, improve water quality and biodiversity and provide additional flood risk management benefits for town centre businesses, (Figure 1.3).
- Storm Eva Property Flood Resilience Programme provided PFR measures to 367 homes and businesses (as noted above).
- Littleborough Natural Flood Management. This scheme will provide up to 12,200m3 of flood attenuation through NFM measures in the upland fringes of Littleborough. The general benefit of these 'slow the flow' measures has been calculated as the equivalent of better protecting 36 properties.
- Environment Agency Flood Alleviation Scheme. The first phase of the scheme involves the construction of a storage reservoir at Gale, just off Todmorden Road, and a programme of measures to improve water flow and flood defences along the River Roch and its tributaries. These measures will improve flood protection for 1,000 residential properties and 200 local businesses.



Figure 1.3 - Revealing the Roch Scheme -Flood alleviation work on the River Roch that exposed the river.

Flood risk is, however, not the only challenge that Rochdale faces. Rochdale continues to lag behind economically and in terms of deprivation. Details on this will be given later in the report, but it is clear that building resilience against the threats of flooding is necessary, both to support economic growth and to realise greater social justice.

Rochdale and its surroundings have a history of severe social and economic challenges, but also of community resilience in the face of these challenges. By understanding the links between flooding and wider axes of poverty and deprivation, we hope to find modes of intervention that, combined with more traditional physical prevention methods, will better protect communities and support them to flourish more sustainably in the future.

Climate (and flood) exposure in Wardleworth and Littleborough

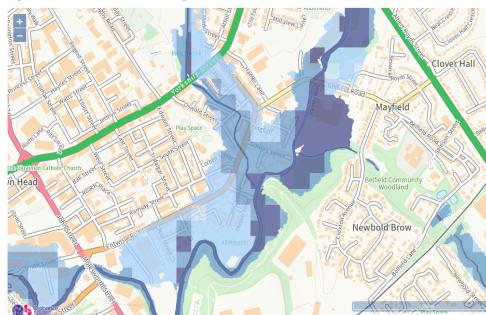
In July 2019, Rochdale Borough Council declared a Climate Emergency. In Rochdale, climate change is likely to bring more periods of heatwaves and water shortages and more frequent and intense storms, increasing the likelihood of flooding events. In March 2022, Rochdale Borough Council published its Climate Change Strategy and Delivery Plan (Rochdale Borough Council, 2022). The plan identifies the urgent action needed to achieve environmental sustainability. Specific flooding related actions in the borough's Climate Action Plan include:

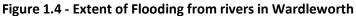
- Implementing a programme to harvest rainwater from public building roofs to supplement mains water supply.
- Identify opportunities for tree and woodland planting across the borough as part of our local Pennine Edge Forest and the trans Pennine Northern Forest to help deliver improved carbon management, manage pollution, reduce flood risk, enhance biodiversity and recreational opportunities and make our town centres and neighbourhoods more resilient to heat stress.
- Engage with United Utilities who have responsibility for maintaining surface water drains to reduce flood risks.
- Work with the Environment Agency and United Utilities to invest in flood defence measures in areas where homes are at a higher risk of flooding from rivers, surface water and groundwater.
- Identify opportunities to work with Moors for the Future and landowners to deliver 'Slow the Flow' measures for natural flood risk management in the borough's uplands and river valleys.
- Improve flood literacy so that residents and businesses understand their flood risks and how they can be more flood resilient.

These objectives are also linked with a wider focus on addressing the social and economic justice aspects of climate change to meet the local authority's goals in those areas.

Flood hazard maps

The maps presented in the figures below (Figures 1.4 - 1.7) show the risk of flooding in Wardleworth and Littleborough from rivers and from surface water as taken from the Government Flood Risk Service². This highlights the extent of flood risk in the areas covered by the project in a simple overview.





Extent of flooding from rivers or the sea



Figure 1.5 - Extent of Flooding from surface water in Wardleworth

Extent of flooding from surface water

² <u>https://check-long-term-flood-risk.service.gov.uk/map</u>

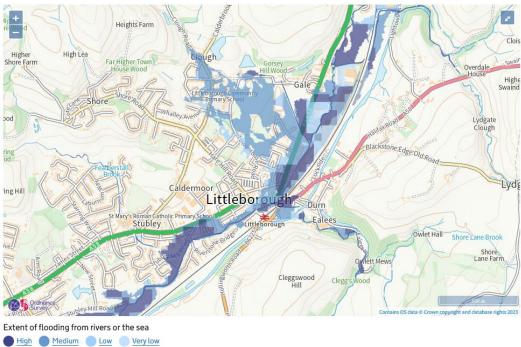


Figure 1.6 - Extent of Flooding from rivers in Littleborough

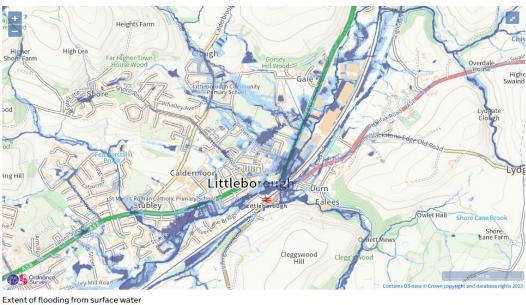


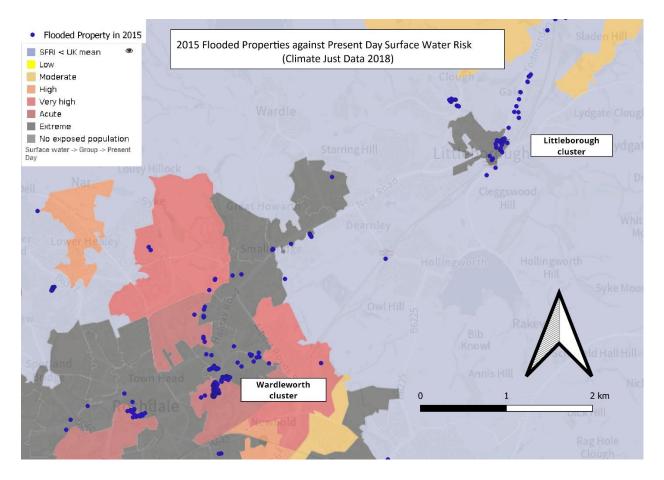
Figure 1.7 - Extent of Flooding from Surface Water in Littleborough

Extent of flooding from surface water

 High
 Medium
 Low
 Very low

Figure 1.8 shows 2015 post-Storm Eva flooded properties overlaid on the ClimateJust Map of Present Day Surface Water, with risk ranging from Low (yellow) to Extreme (black). This shows that both Wardleworth and Littleborough have areas which lie within the highest "Extreme" risk category, with some Wardleworth areas in the second highest "Acute" category. These were also the areas where the majority of properties flooded. Note that each dot may represent several properties.

Figure 1.8 - Storm Eva flooded properties overlaid on the ClimateJust Map of present- day surface water flood risk (Climate Just Data 2018)



Figures 1.9-1.12 show the Environment Agency Maps for flood risk in the affected areas over the next 30 and 100 years respectively. While these are projections, they are the best currently available data for the areas concerned and demonstrate the intensification of threat from flooding in Wardleworth and Littleborough over the next century.

Figure 1.9 - Littleborough, 30 year flood prediction maps, JBA, prepared for Rochdale Borough Council Flood and Coastal Resilience Innovation Project submission.

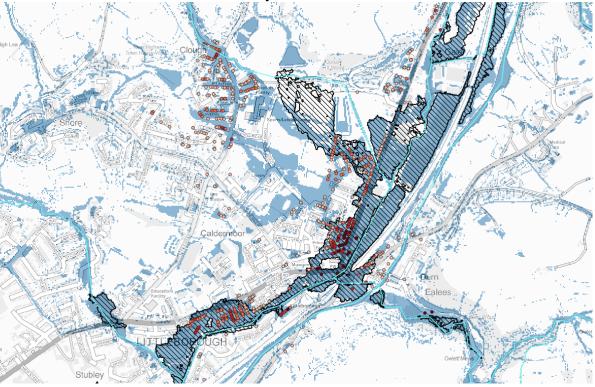


Figure 1.10 - Littleborough, 100 year flood prediction maps, JBA, prepared for Rochdale Borough Council Flood and Coastal Resilience Innovation Project submission.

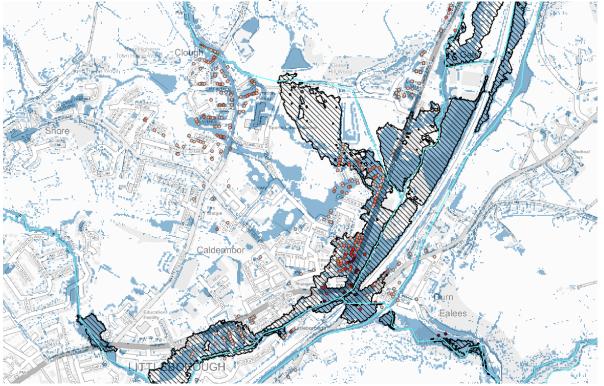


Figure 1.11 - Wardleworth, 30 year flood prediction maps, JBA, prepared for Rochdale Borough Council Flood and Coastal Resilience Innovation Project submission.

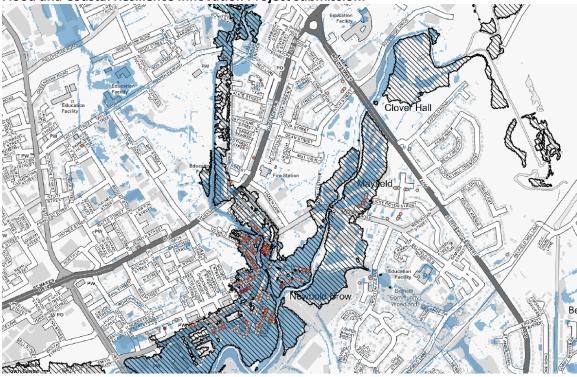
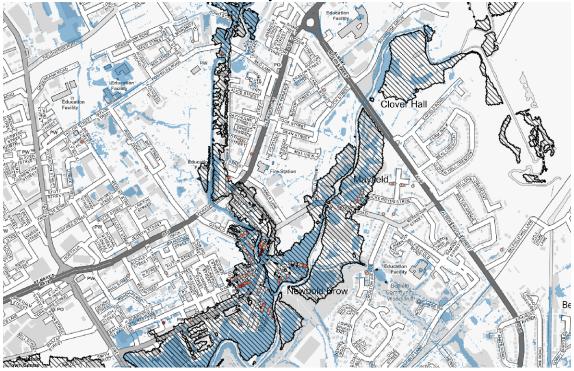


Figure 1.12 - Wardleworth, 100 year flood prediction maps, JBA, prepared for Rochdale Borough Council Flood and Coastal Resilience Innovation Project submission.



Clearly parts of Rochdale are at significant flood exposure, an exposure that will intensify in the future. Many local decision makers and policy makers understand this and recognise the importance of building community resilience and addressing poverty as part of meeting the challenge of flooding.

What is 'flood poverty'?

Climate change and, with specific reference to this project, flood risk, has significant social and environmental justice implications. This extends beyond not just the distribution of risk across certain sectors of society, but also in terms of the vulnerability of certain individuals, households, businesses and communities, and their capacity to respond to flooding when it occurs. This might extend, for instance, to the ability of people at significant flood exposure to be able to access (and afford) and retain comprehensive flood insurance that will assist in their physical and financial recovery if a damaging flood occurs.

A further dimension of this is the ability of property owners in particular to afford property flood resilience products beyond those provided by a local or central government grant scheme. This would also entail considering the effect on the ability of people to maintain these resilience products and the property itself. The challenge of affording resilience measures and insurance have recently increased substantially given the intense pressures on households to balance their own budgets against a context of soaring inflation and a widely recognised cost of living crisis. Rather perniciously, not only is it the poor, powerless and disadvantaged that possess a reduced capacity to respond both to generic flood risk and specific flood events, but these same populations have contributed the least to the generation of the greenhouse gases accelerating global climate change; what has been referred to as 'triple injustice' (Walker & Burningham, 2011).

Socio-economic status is not the only dimension of this. Race, ethnicity, health, tenancy, employment status, and even the extent of family and friendship networks can all influence the impacts of flooding when it occurs as well as the capacity of people to respond to risk. Moreover, there is a temporal dimension to this, as circumstances and conditions alter, waxing and waning over time.

A comprehensive analysis of risk must extend far beyond a rather simplistic analysis of proximity to hazards. The concept of 'flood disadvantage' (Lindley et al. 2011) captures the nuances of risk across multiple attributes and characteristics recognising that flood risk is "highly uneven, contextual and intertwined with other social disadvantages" (O'Hare & White, 2018: 386). Critically, this is a mutual correlation: not only can disadvantage exacerbate the impacts of flooding, but incidents of flooding and being prone to flood risk can exacerbate disadvantage. Consequently, a more nuanced understanding of flood disadvantage, and how elements of this co-exist and intersect, is a vital "prerequisite to delivering a socially just (i.e. fair) approach to prioritising flood risk management efforts" (Sayers, 2017: i), and ultimately to realising more just climate adaptation (Lager, et al. 2023).

Moreover, beyond these immediate characteristics of risk and vulnerability, we must also recognise the longer-term stresses and possible shocks that foster socio-economic vulnerability and precarity; that is, the broader context against which flooding takes place. For instance, 'place inequalities' are one such frame of reference for understanding social vulnerability, nested within a landscape of social and economic conditions (c.f. Cutter et al, 2003). Many of these conditions are influenced by public policy

initiatives that are much broader than flood risk management. To fully address flood disadvantage we must, then, also engage with policy and practice across the wide range of public policy:

"The pursuit of more 'just' flood risk management can usefully, therefore, be linked to social and economic policies that offer the hope to alleviate disadvantage in a broader sense." (O'Hare & White, 2018: 392)

We must identify and take opportunities to link flood resilience to broader climate change and other public policy programmes, including, for example, housing renewal and maintenance programmes, or broader climate mitigation initiatives. For example, there might be opportunities to encourage property holders and tenants to engage with property or neighbourhood organised micro-generation schemes, or to fit insulation that will not only improve the energy efficiency of buildings, but that also has capabilities to enhance flood resilience. Perhaps too, such interventions will reap other dividends; for example, by decreasing people's energy bills, initiatives could assist in relieving household budgets, and go some way to alleviate disadvantage.

Why this project?

The context

Greater Manchester experienced substantial flooding from both fluvial and surface water flood events from Storm Eva in December 2015 and through numerous localised events before and since. In particular, as denoted above, Storm Eva saw more than 320 residential properties in Rochdale and Littleborough suffer significant internal flooding, with many more properties having 'near misses'. Small and medium sized businesses were also badly affected.

When flooding has coincided with national events, such as Storm Eva, assistance has been made available through government grants for the purchase and installation of property flood resilience products and other recovery measures. After Storm Eva, in Rochdale 370 property flood resilience grants were provided for residential and business properties. In addition, there was local support from the Council's housing health and welfare services, including hardship payments and more bespoke interventions supporting health and well being. However, following other more localised flood events support for recovery and future resilience measures has been more limited, often at the discretion of, or subject to, the affordability of individual local authorities.

All such interventions have been reactive. Interventions have taken place only after a property has been flooded and rarely, if ever, are updated or maintained, even though many measures, such as flood doors, have a finite operational lifespan. The local authority has also had to expend significant practical and financial support. There is mounting concern that there is a need to embed more proactive approaches to resilience for communities at risk. Knowledge and acceptance of flood risk, the affordability of integrating and maintaining property flood resilience, and accessing affordable and adequate property insurance, all pose significant challenges. Such concerns increase in areas with high levels of social exclusion and deprivation, and where there is greatest dependency on third parties to provide support for flood resilience. These same communities are those where there is least ability to maintain the

benefits derived from flood resilience, for example the ability to replace ageing and deteriorating property flood resilience and to adapt property resilience to meet future challenges.

Specifically, there a number of challenges and concerns that need to be considered:

- Integrating property flood resilience measures into properties necessitates a combination of physical and technical solutions. However, it also includes other, linked measures, such as having adequate and appropriate insurance to deal with residual risk, ensuring landlords have the knowledge and capacity to respond appropriately to tenants who have been flooded, to ensure buildings (and, for that matter, any installed property flood resilience measures) are adequately maintained to reduce the impact of flooding and to support enhanced flood literacy to enable individual and collective action. Better prepared individuals and communities may result in reduced levels of damage and disruption, reduced reliance on support from local authority recovery services and more affordable and efficient recovery for those most affected by flooding.
- Encouraging greater personal 'resilient behaviour' through the take up of appropriate flood damage insurance that is right for the needs of a home or business and is affordable and accessible to owners and residents. Despite the Flood Re scheme, it is suspected that many in the community still do not have appropriate insurance. There is a need, therefore, to understand the barriers to effective and comprehensive insurance cover in 'excluded' groups and communities and how this situation might be addressed. This requires access to an ongoing programme of flood and financial literacy training within communities, especially in areas of high turnover of residents and where there are significant numbers of social and private rented housing stock.
- Increased awareness (or even 'ownership') of flood risk as a basic element of good housing standards and management across private sector ownership and the social and private rented sectors. Deprived areas, where social exclusion can be high, can have a higher turnover of tenants. There may also be additional issues such as language, health and cultural challenges. Consequently, engagement with landlords and tenants can bring significant challenges undermining ambitions to realise longer term resilient behaviour and good letting and property management practice. Embedding 'flood literacy', good communication and improved flood resilient property standards is essential in reducing the fear and impact of flood events.
- Identifying opportunities for investing in flood resilience in non-standard investment streams, particularly through housing improvement interventions and programmes and associated land and property management practice at household and neighbourhood scales. Realising greater flood resilience through a wider range of measures including procurement and specification of products, design and maintenance good practice and the ability to blend investment sources will create opportunities to strengthen flood resilience, and potentially reduce the ongoing financial pressure on tenants, residents, businesses and the local authority.
- Creating a community scale language of flood resilience where all with a stake in the agenda can develop shared objectives, appropriate ownership and management of risk, and to break down barriers to potentially realise greater resilience.

• The role of the 'honest broker' to foster better links between communities, businesses, risk management authorities and other facilitators and providers will be central to fostering and managing such relationships. A third sector partner can assist with this. In Rochdale, for example, the National Flood Forum (NFF) (Figure 1.13) has performed this role, particularly through working with marginalised and deprived communities, or perhaps where relationships with or trust in the local authority or other agencies (e.g. the EA and United Utilities) may be strained or difficult to forge directly. Building such relationships is iterative and time-consuming.

Figure 1.13 - The National Flood Forum logo



The case study areas have already been subject to efforts to manage flood risk. The Environment Agency is developing and delivering a capital project to reduce flood risk from the River Roch and its main tributaries with an estimated completion in 2027. Whilst this scheme will significantly reduce fluvial flood risks, residual risks remain, primarily from surface water but exacerbated by the vulnerability of community 'infrastructure' to further flooding, including ageing housing stock, poor public realm and local green infrastructure, stubbornly low levels of insurance cover and SME business operations. There have also been a range of previous and ongoing measures to help manage flood risk including PFR, flood attenuation and natural flood management and enhanced gully cleansing at targeted 'hot spot' locations.

The recently commenced Defra funded FCRIP Resilience Roch project will align with and complement the Environment Agency fluvial scheme facilitating opportunities for innovative, more holistic and cross sectoral approaches to engagement, design and delivery and maximising the opportunities to better manage "residual risks", that is, the risks that remains after all cost beneficial measures have been undertaken to reduce flood risk. In many situations flood risk will be at a level that is "acceptable" to residents, businesses and society and which takes account of climate change. But this is not always the case. Cost beneficial measures may not, for instance, reduce flood risk to "acceptable levels". Moreover, flooding does not affect everyone equally, with those more disadvantaged likely to be impacted to a greater degree by a flooding event and lacking the resources to reinstate their physical surroundings and networks. The latter gives rise to the aforementioned concept of "Flood Poverty" (or flood disadvantage), analogous to the idea of "Fuel Poverty" where a lack of access to energy is associated with many aspects of deprivation and vulnerability.

Characteristics of 'flood poverty'

Rochdale Borough Council, working with the National Flood Forum and other partners, participated in the national Community Flood Resilience Pathfinder programme. That work, alongside local knowledge, established what could be termed 'flood poverty' which was a key characteristic of many communities in which the Pathfinder operated.

The Greater Manchester Combined Authority has an ambitious set of objectives for growth, prosperity and delivering change to address the climate emergency (declared by, alongside fellow local authorities, Rochdale BC). There is a shared aspiration to address the root causes of poverty and inequality in terms of quality of life and opportunity, and to create sustainable and resilient communities and a high quality environment for all.

Many of the issues identified by the Pathfinder work were crystallised and graphically illustrated in the devastating impacts from Storm Eva and subsequent flood events affecting vulnerable communities in Rochdale (including one of the most deprived Wards in England) and more widely.

There are multiple issues affecting 'flood poverty' and the ability to address it, including:

- Individuals and communities that, due to cultural characteristics, the extent of rented property and variety/quality of landlord and tenant relationships/ high turnover of residents, are less engaged in issues surrounding flood risk management.
- Areas where there is a lack of local leadership (or enablers) or where there might be limited flood action groups or other civil society activity.
- Low levels of adequate insurance cover due to affordability, access to providers, access to insurance information and 'denial' of risk.
- An ageing housing stock, combined with lower and often poor standards of wider property maintenance.
- Affordability of property flood resilience, and longer term replacement/ maintenance/ adaptation of property flood resilience.
- Challenge of the limited durability of 'protection' products and the long term affordability of keeping resilient
- A persistent perception that flood resilience is not the householder/ businesses responsibility, but the responsibility of the state, local authority, water company or Environment Agency. There might also be an associated sense that there will always be financial help elsewhere e.g. grants and other support from the Council and other sources.
- Growing concerns about being 'left behind' i.e. regeneration and growth bring resilient new build which accentuates the risk to existing residents in older housing stock.
- A fear of flooding due to increased storm events (catalysed by climate change amongst other drivers) and associated near misses and flood impacts (low level and more significant).
- Communities who are less likely to use self-help and web based resilience advice and tools, therefore requiring more active and bespoke support.
- Need for the support of an 'honest broker' to act as intermediary between the community and agencies such as the Council, EA, etc. that will help to avoid a 'blame culture' and help manage expectation/remove barriers to change.

- Market challenges in securing greater proactive measures to improve flood resilience at the individual property and neighbourhood scale. There is a sense that the property protection market only fully functions after a significant flood event and where grant funding for measures has been made available.
- Despite increasing flood risks due to climate and other factors, there is not always scope for a major infrastructure scheme to substantially reduce risks. Even where such schemes are established or programmed for the future, residual risks (e.g. from surface water or the standard of protection afforded by a fluvial scheme) can be significant and require active management.
- More broadly, there may be new or further challenges affecting communities arising from COVID-19 and its impact on such factors as employment, household incomes, business viability and Council Tax arrears.
- Although the current cost of living effects, such as inflation, bills, rental increases, mortgage repayments, etc., may have temporary impacts, their impact could last several years and further spikes may occur.

Figure 1.14 - Flood poverty - some key questions

The concept of flood poverty is explored in much greater detail later, particularly in Chapters 2, 3 and 7. For now, however, it is useful to outline some guiding questions:

- How does flooding and flood risk impact other aspects of people and communities' lives? Some aspects of the impact of flooding, such as financial resilience, have been less well studied, in particular in disadvantaged communities.
- The impact of flooding on SMEs has recently been documented, alongside some work to identify practical interventions to improve financial resilience. However, little work has been done specifically in businesses in disadvantaged communities.
- What novel approaches can be developed specifically with disadvantaged communities in mind and by working with different sectors across such neighbourhoods?
- How can all of the strands of flood risk management, resilience and managing residual risk be combined to reduce Flood Poverty?

Project approach

This section summarises the approach to the project, including the project funding, it's aim, objectives and methodology, and a summary of the programme of work.

Funding

Rochdale Borough Council and National Flood Forum submitted a project proposal to North West Regional Flood and Coastal Committee Finance Committee on 10th October 2020 - *Property flood resilience and vulnerable communities*. The proposal aimed to develop interventions that would embed long term flood resilience in vulnerable communities and households to address 'flood poverty' and support flood literacy.

The Rochdale Flood Poverty Project was funded by the North West Regional Flood and Coast Committee with support from Rochdale Borough Council.

Due to a successful Flood and Coast Resilience Innovation Programme application, the project and its outputs have been provided with a major opportunity to test and develop ideas and approaches to demonstrate and deliver many of its recommendations. The Thai project, therefore, provides a valuable and rich source of evidence to help underpin the Resilient Roch project.

The Rochdale Flood Poverty Project has taken a novel approach to the concept of resilience and residual risk by:

- Investigating other aspects of resilience, particularly financial resilience.
- Working with other sectors to establish whether novel practical interventions can be piloted to increase the resilience of individuals and businesses.

The results of these two strands of work are likely to be of direct relevance to other disadvantaged communities at flood risk in North West England and beyond. There are also potential policy implications for investment in flood risk management, for property resilience schemes, and for residential and SME property insurance. Consequently, a core element of the Rochdale Flood Poverty Project will focus on dissemination and project legacy.

Project Aim

As noted, resilience is still often considered in physical and engineering terms. Socio-economic and financial dimensions are only partly considered, and so too are the broader landscapes and conditions that frame flood disadvantage. The project will facilitate a better understanding of the factors affecting 'flood poverty' and their impact. This is of significant concern and interest within the Environment Agency, as well as the North West RFCC and the delivery of its business plan.

The project investigated the barriers to sustainable property flood resilience and take-up of flood insurance cover where issues such as affordability, tenure, property condition and maintenance can have a significant influence. It included looking at some physical factors e.g. the condition of currently installed PFR assets which link to issues of affordability, product knowledge, etc. The project carried out a neighbourhood scale review in two locations within Rochdale Borough and a programme of demonstration and dissemination to test, share and recommend practical approaches to address 'flood poverty' issues and achieving more sustainable property flood resilience outside of post flood event recovery schemes. This work will also provide a body of evidence and practice that supports and complements national work streams.

Objectives

The project seeks to deliver the following objectives:

- Identifying and understanding the barriers to take-up of appropriate flood insurance cover and encouraging increased take up of insurance in the target communities.
- Building relationships between LLFA's, RFCC and the insurance sector to identify shared objectives and a platform for future collaboration and step change in insurance cover.
- Sharing lessons learned from different approaches to securing residential property insurance including flood risk for those that don't currently have it.
- Identifying and understanding the barriers and challenges for small local businesses around insurance, resilience and viability.
- Building greater confidence and knowledge in 'at risk communities' to engage with insurers and property flood resilience at a personal and community scale through targeted engagement, awareness raising, training, promotional activities and demonstration.
- Improved understanding of how to engage and communicate with harder to reach communities at significant flood risk across key stakeholder interests in property flood resilience and insurance.
- Improved understanding of personal flood risk and greater shared flood literacy within the community and stakeholder organisations.
- Improved cross-sectoral working with insurers, property flood resilience providers and installers, developers, landlords (social and private), local authorities and risk management agencies to extend and enhance the flood resilience delivery and management community and encourage appropriate (including indirect) investment opportunities in flood resilience.
- Key learning and good practice from community and stakeholder engagement approaches.
- Key learning from community and property flood resilience test and demonstration activities.
- A body of shared learning contributing to national and regional knowledge and initiatives and provides a toolkit and inspiration for adaptation elsewhere in the North West and beyond.

Methods

As outlined, the project engages with complex themes including climate and flood disadvantage, flood resilience and climate adaptation (particularly the contribution of insurance and property flood resilience), community engagement, and climate and flood risk understanding and literacy. The evaluation and the empirical work placed particular emphasis on appraising the characteristics of flood disadvantage and poverty, the challenges to penetration and uptake of insurance, and difficulties and opportunities for the better use and integration of property resilience in the urban fabric.

A multi-methods approach has therefore been taken to conduct the research, drawing upon a number of both quantitative and qualitative techniques, alongside a spatial analysis of both areas. Full details, including details of how the questionnaires were conducted and analysed, are outlined in the Appendices and summarised below.

Figure 1.15 - Summary of methods

- A **desk-based review** of recent policy developments and key research literature on a series of themes pertinent to the project.
- Conducting **social vulnerability mapping** of the two case study areas. Understanding this backdrop is crucial both to develop a composite image of the areas and its risk to flooding in the most holistic sense of the word, but also to frame understandings and perceptions of insurance and property resilience.
- **Questionnaire surveys** conducted across the project designed to provide a baseline for the more in-depth qualitative inquiry.
- **Property Flood Resilience health check (PfR)** of a sample of properties that had PfR fitted following flooding in 2015 to establish whether they were fit for purpose and to pilot a new approach
- Workshops held with key stakeholders both to discuss substantive issues around flood poverty, insurance and property resilience.
- Focus groups with small groups of people to consider specific issues.
- A series of detailed **qualitative (semi-structured) interview**s were conducted with key stakeholders to explore the core research themes in further detail.
- A **detailed debriefing** (by way of a semi-structured interview) with a UPVC Specialist contracted to undertake a health check of the property resilience installed across the communities.
- A final workshop to discuss the project's recommendations.

Programme of work

The Programme of work for the project was delineated into a series of Tasks (please see summary in Figure 1.16 below).

Figure 1.16 - Programme of work

Task 1 - Initiation Package

To establish Terms of Reference, governance arrangements, produce a detailed project plan, prepare a risk assessment and a monitoring and evaluation framework.

Task 2 - Assemble and review available learning

Review and assemble relevant baseline learning including from Communities Flood Risk Pathfinder, Doncaster Insurance report, Storm Eva PFR and local housing programmes.

Task 3 - Housing and Neighbourhood Investment Programme

Carry out a high level assessment of neighbourhood housing stock including property condition and climate/flood vulnerabilities. Work with home and business owners, landlords and other property professionals and develop targeted case study and demonstration/training actions in respect of property flood resilience and associated property management.

Task 4 - Barriers and challenges to flood insurance take up

Survey, compile and review evidence of insurance take up and associated barriers and challenges including community based interviews. Develop and test alternative approaches to engaging with insurers and communities with associated case studies.

Task 5 - Property Flood Resilience

Produce overview of existing PFR installations/measures and a review of installed PFR vulnerabilities including a health check, update of warranty cover, assessment of affordable/practical repair opportunities and the need for maintenance/replacement. Explore and test options for establishing a local resilient repair network and strengthening engagement with landlords and housing managers around good practice and a landlords' charter.

Task 6 - NW capacity building

Delivery of a dissemination and demonstration/event programme as established in a Communication and Engagement Plan for local, Greater Manchester and North West target audiences.

Task 7– Increasing Flood Literacy

Prepare and deliver a plan for improved flood literacy (understanding and capability to respond) for homeowners, landlords and tenants, businesses, local construction trades and property management professionals, schools.

Task 8 - Monitoring and Evaluation Framework

Establish and deliver a monitoring and evaluation plan throughout the project and produce a final project report. Provide evidence to support RFCC post project review as required.

Task 9 – Legacy

Identify and produce a legacy programme which includes activities to be developed and embedded in future local housing and environmental programmes and the Resilient Roch Project.

Figure 1.17 – Rochdale – Birthplace of cooperation



2 Flooding and deprivation – the context

Introduction

Chapter 7 reviews recent research and policy on themes that are relevant to the project. This section summarises these insights, providing context for the research and informing the recommendations.

The flood risk challenge

The scale of the threat posed by flooding is already a significant concern for many parts of the UK (Committee on Climate Change, 2022). Changing weather due to climate change, and ever more intensive urbanisation have altered precipitation patterns and the behaviour of water catchments (Miller & Hutchins, 2017; Sayers et. al. 2020), placing more people and places at flood risk. The drivers of flooding extend beyond climate change. An ageing and under-invested urban infrastructure as well as ever more pressure to allocate land for construction, will further contribute to the urban flooding challenge. These challenges will be most pronounced in towns and cities. The majority of the 2.7 million properties currently at risk of flooding from rivers and the sea are in urban areas (Environment Agency, Chief Scientist's Group, 2021). Moreover, surface water flooding is now widely acknowledged to be the most serious threat of all, with some 3 million properties believed to be at risk (Bevan, 2018).

Flood disadvantage & flood poverty

Climate change and, more specifically for this project, flood risk has **significant social and environmental justice implications**. This extends beyond the distribution of risk across certain sectors of society, but also in terms of the vulnerability of certain individuals, households and communities, and their capacity to respond to flooding when it occurs (Sayers et al, 2020). The concept of **flood disadvantage** recognises differences in exposure and vulnerability of people to flood risk and the divergent capacity of citizens to cope with, and to recover from, flooding. A better understanding of flood disadvantage is vital as a "prerequisite to delivering a socially just (i.e. fair) approach to prioritising flood risk management efforts" (Sayers et. al. 2017: i), and to realising more just climate adaptation more generally (Brisley *et al.*, 2012).

In particular, deprived communities are acknowledged to face higher flood risk (Environment Agency, Chief Scientist's Group, 2021; Hall & Bailey, 2022). However, socio-economic status and/ or deprivation is not the only factor that both drive and exacerbate these disparities. Race, ethnicity, health, tenancy, employment status, and even the extent of family and friendship network all act as determinants of flood risk and the consequences of flooding if it occurs. Consequently, a comprehensive analysis of risk must extend far beyond the rather simplistic analysis of proximity to hazards.

Dimensions of climate and flood disadvantage

As suggested, distributional analysis of environmental risk occurs across an array of intricate intersecting social, demographic and economic variables, including spatial and temporal dimensions (Cutter, et al., 2003: 242). This socio-spatial vulnerability to the impacts of climate change has been explained by, amongst others, Lindley, et al. (2011) who have developed a framework to understand climate disadvantage and climate injustice (see Figure 2.1 for a summary of these, and Figure 2.3 for an insight into how these dimensions interact).

Figure 2.1 - Framework for understanding climate disadvantage.

Sensitivity – personal biophysical characteristics such as age and health which affect the likelihood that a heatwave or flood event will have negative welfare impacts.

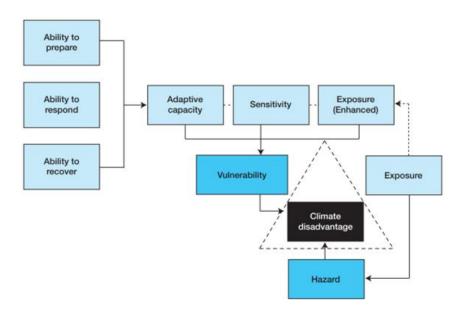
Enhanced exposure – the aspects of the physical environment, such as the availability of green space or housing characteristics, which tend to accentuate or mitigate the severity of heatwave or flood events.

Ability to prepare – the personal and social factors that enable an individual or community to prepare for heatwaves or floods, such as insurance, income and knowledge.

Ability to respond – the personal, environmental and social factors that enable individuals and communities to immediately respond to heatwaves and flood events, such as income, insurance, personal mobility, fear of crime, community networks, availability of public spaces, local knowledge and personal autonomy.

Ability to recover – the personal, environmental and social factors that enable individuals and communities to recover from heatwaves and flood events, such as income, insurance, housing mobility, social networks, knowledge, availability of hospital and GP services.

Figure 2.2 Conceptual framework for assessing socio-spatial vulnerability and climate disadvantage (Lindley et al., 2011)



Researchers have also explored the detailed socio-economic elements of flood disadvantage. They include the varying abilities of different households to afford adequate insurance to assist with recovery and reinstatement efforts, to being able to purchase flood protection or flood resilience measures. They also include the capacity of households to draw upon savings or investments to pay for flood recovery (sometimes referred to as self-insurance). Notably for this project, differential experience of the social impacts of floods may depend on housing and living conditions. For example, housing tenure and the quality of the physical construction and state of repair of properties can have a significant influence on an inhabitant's vulnerability to flooding (Kazmierczak & Cavan, 2011; Houston et al. 2011). Elsewhere, perceptions of risk, and experience of flooding, has also been identified as potentially vital to understanding vulnerability (c.f. Tunstall & Parker, 1999; Buckle et al. 2000; Lujala et al. 2015). Most recently further research has also explored how risk can also be correlated to a sense of attachment to a place of residence (Devine-Wright & Quinn, 2023).

Work by Samwinga, et al. (2004) charted homeowners' experiences during flood damage to their property across a series of themes and sub-themes and considers how these frame flood vulnerability and capacity to respond. These include economic aspects, emotional and psychological considerations, the impact on and response of service providers, social considerations and what they call 'physical' dimensions of the flood event itself (see Figure 2.3).

Beyond charting the attributes and characteristics of disadvantage, any comprehensive analysis of flood risk requires a recognition of the longer term stresses and possible shocks that foster socioeconomic vulnerability and precarity and that, by extension, composes the broader socio-economic, cultural and political landscape within which flooding takes place. These stresses and shocks might include economic conditions and wealth distribution and disparity, economic recessions, inflationary pressures, unemployment and ill-health. To fully address flood disadvantage (and to work towards greater justice in this respect), there must be engagement with policy and practice across the landscape of public policy:

"The pursuit of more 'just' flood risk management can usefully, therefore, be linked to social and economic policies that offer the hope to alleviate disadvantage in a broader sense." (O'Hare & White, 2018: 392)

Despite the undoubted usefulness of these frames of analysis, care must be taken not to assume that any particular demographic, cultural attribute, or particular circumstance (or any combination of these) *necessarily* means that individuals or communities are inherently vulnerable. Moreover, communities that might, as an aggregate, appear well placed to avoid the worst impacts of flooding may have individuals or households that are, in fact, extremely exposed or vulnerable given their personal or household characteristics and circumstances (O'Hare & White, 2018). Rather, the aforementioned characteristics of flood disadvantage should be treated as *indicators* of potential flood disadvantage. Understanding nuance within 'at risk' and vulnerable communities is, therefore, absolutely vital.

Economic Aspects	 Financial – expenses associated with living in temporary accommodation. Insurance Cover Fears – fear of potential premium rises and/or refusal by insurers to extend cover. Property Value – fear of potential reduction in property value and/or demand. Loss of Property – some of which may not be replaceable. Loss of Earnings – associated with staying off work to oversee repair work.
Emotional Issues	Fear of flooding – in the aftermath of a flood event. Leaving home – upheaval associated with leaving in alternative accommodation. Loss of Memorabilia – things which may be of sentimental value and irreplaceable. Fatigue – associated with cleaning up and repair work. Reaction to flooding – included Disbelief, Shock, Surprise, Devastating, Stressful, Worried, 'Get on with Life'.
Service Related	How their service providers dealt them with and how well their needs have been met. Communication – consistent, timely and information and/or advice. Loss of Control – while the repairs are being carried out Temporary Accommodation – proximity to home, comparability. Speed of Return to Property. Confidence in service providers – makes it easy for homeowners' to get on with other aspects of life while repairs are ongoing. Fairness – how fair the homeowner perceives the settlement to have been.
Social Aspects	 Family support network – helps to cushion the impact of the catastrophe. Children – families with children experienced more difficulties in day to day running of the household. Friends support network – another source of help for flood victims Community Spirit – may be fostered when a neighbourhood empathises Situational Issues – other personal circumstances such as family tragedies can compound the stress felt by flood victims. Homeowners' Characteristics - Individual characteristics may have a bearing on coping with the flood and its aftermath. Experience of Flooding –previously flooded homeowners find it easier to cope next time Personality – each homeowner is different and will cope differently in crisis Vulnerable Groups such as the Infirm, Elderly people – had unique requirements and some found it difficult to cope with the resulting upheaval
Physical Aspects	Flood characteristics – e.g. floodwater depth, contamination, amount of floodwater, and duration of flooding, define the nature of the flood event. Extent of damage – extent of property damage and whether or not its insured. Flood warning – how much warning homeowners had before the flood. Flood Timing or Season – holiday time can be particularly distressing.

Figure 2.3 - Homeowners' experiences during flood damage to their property (Samwinga, et al., 2004)

Flood risk management

The escalating impacts of flooding, combined with an ever-greater appreciation of the wider socio-technical contexts of floodscapes, have catalysed a discernible shift in the response to flood risk. Academics have characterised this as an evolution, over many years, from 'flood defence' to 'flood risk management' (Butler and Pidgeon 2011; Johnson & Priest, 2008; Begg et al. 2015). Specifically, the 2020

National Flood and Coastal Erosion Risk Management Strategy for England presents an explicit shift in approach from flood protection to flood resilience, a systemic approach to reduce and to live with increasing risk (Environment Agency, 2020).

Contemporary flood risk management is complex and multifaceted. It emerges partly from an acceptance that, given the uncertainty and complexity surrounding flood risk, achieving full protection against flooding is an almost unattainable goal. Demonstrating this, in 2021 the Environment Agency presented five climate reality checks, the first one of which was: "We cannot protect everyone from increasing flood and coastal risks" (2021: 28).

Moreover, large scale, civil engineering projects such as levees and embankments are carbonintensive, expensive, disruptive, and potentially only offer a misplaced sense of security for populations that place too much faith in them. Even where such schemes are established or programmed for the future, residual risks (e.g. from surface water or the limited threshold of protection afforded by a fluvial scheme) can be significant and need active management at the individual and neighbourhood scale. Instead, it has been suggested that at risk communities should learn to 'live with water' (c.f. House of Commons, 2015). Consequently, those exposed to hazards have been rearticulated as active agents of flood risk management (O'Hare et al. 2016). Crucially, however, the aforementioned concern regarding divergent vulnerabilities and capacities to respond to flood risk against contexts of disadvantage becomes all the more pertinent; most notably the uneven abilities across and within populations and communities to engage with risk agendas (O'Hare and White, 2018: 385).

Insurance

In the past, the close association between the provision of formal flood defences by the Government and the wide provision of commercially available insurance is vital to the flood risk management system in England (Green & Penning-Rowsell, 2004). Elsewhere, the Climate Change Committee has identified comprehensive insurance as an essential component of contemporary flood risk management; a prerequisite for "quick and effective recovery from flooding events." (Climate Change Committee, 2023: 236). Insurers can "reduce both vulnerability and exposure, support post-disaster recovery and reduce financial burden on governments, households and business" (Pörtner et al., 2022: 99).

That is not to say that insurance and insurers are not without critique (a point explored in more detail in Chapter 7). In particular, insurance products rarely have clear conditions, requirements, or incentives for policyholders to adapt to the potential risks (Climate Change Committee, 2023). Moreover, there is an emerging concern that insurance is a financial tool that is itself under increasing pressure from a changing climate, with growing concerns around affordability and availability (Dodman et al, 2022: 945). Consequently, concern has been raised that the insurance industry could, in the future, witness splintering protectionism: "a patchwork of high risk, high reward areas where insurance is available only to those with the ability to pay rising premiums, leaving the state to manage the retreat and relocation of less remunerative properties and populations" (Johnson, 2015: 2503).

'Uninsurance' has been identified as a problem in the UK for some time now (Priest et al. 2005; Booth & Tranter, 2018). There is a dual challenge to uninsurance: first those who have traditionally been excluded from insurance cover due to price or other factors such as credit rating, and second those who live in high-risk areas who may become cost-prohibited through the introduction of risk-related premiums (Priest et al. 2005). Unsurprisingly, the most socially vulnerable are the least likely to be insured, with under-insurance having the capacity to entrench socio-economic polarisation (Booth & Tranter, 2018).

Property Flood Resilience

Over the past 20 years, property flood resilience (PfR) has emerged as a flood risk management intervention with the potential to enable property holders (that is, flood receptors) at acute risk to mitigate against, and adapt to, potentially significant damage (White et al, 2018). This is aligned to a push in recent years for 'technological fixes' such as adaptive technologies and the promotion of green growth in the face of climate change. From a policy perspective, the National Flood and Coastal Risk Management Strategy for England states that there is a need to "mainstream property flood resilience measures and to 'build back better' after flooding to reduce damages and enable faster recovery for local communities" (Environment Agency, 2020: 14). More particularly, the long-term investment scenarios show the potential for an estimated 200,000 homes in England to be fitted with property flood resilience over the next 50 years (Environment Agency, 2019a).

However, despite the promise of PFR and its perceived centrality to the future of flood risk management and the management of residual flood risk in particular, property flood resilience measures are subject to a range of motivating and demotivating factors (Grothmann & Reusswig, 2006), whilst human behaviour requires careful assessment (Kuhlicke et al, 2020). For instance, barriers to integrating property flood resilience have been well documented both in the academic literature and in practice and policy reviews conducted in recent years as PFR has been promoted across flood affected communities, albeit in a rather piecemeal fashion. Analysis distinguishes between situational factors such as communication and economic subsidies, and personal factors such as personal and psychological components influencing individual behaviour (Attems et al. 2019). Recent research by the Social Market Foundation (funded by Flood Re) suggested that barriers occur at three stages in the decision making process: the motivation to take action, the ability to access and assess information, and the ability to take action (Oakley, 2018) (Figure 2.4). There are also concerns with the maintenance and longevity of PFR over longer timeframes (again, explored further in Chapter 7).

Motivation

Households need to be motivated to engage in the market in the first place. They need to believe both that they are at risk of flooding and that they are responsible for protecting their property against the likelihood of this or the damage that it might cause.

Access and assess information

Households need to access information about the various products available in the market and then be able to assess the costs and benefits (including quality and price). Together this means that households can understand the best value for money option.

Take action

Households need to be able to take the appropriate action. This requires that they can afford to take that action and that there are no behavioural biases that restrict the likelihood of action.

Flood insurance and property flood protection

Traditionally, risk transfer (e.g. insurance) and risk reduction (e.g., hazard mitigation) have typically been treated as two separate planning and financing processes within disaster risk management (c.f. Reguero et al. 2020). However, consideration has been given to how the integration of adaptation investments is related to, and interplays with, insurance in order to both encourage adaptation, and to price insurance risk more appropriately. It has been asserted, for instance, that strengthening the link between flood insurance and financial incentives can guide household level adaptation (Hudson, et al, 2016), and calls for much closer alignment between insurance and broader disaster risk reduction initiatives (Surminski et al, 2015).

In particular, several reports published in recent years have examined the relationship between insurance, adaptation and in particular the integration of PfR into properties. Particular attention has been turned to how adaptation can be linked to financial products, including through loans, grants and insurance products: "Key is to develop financial instruments that monetise adaptation and insurance products designed for adaptation" (Climate Change Committee 2023: 320).

3 The relationship between Flooding, Housing and the Neighbourhood Investment Programme in Rochdale

Key findings

- 1. The impact of flooding in Rochdale is not distributed evenly.
- 2. High flood risk areas in Rochdale often have high Indices of Multiple Deprivation (IMD) populations partly because housing is relatively cheap for both homeowners and tenants. Compared to other areas, housing is relatively cheap because of different combinations of the risk of flooding, poor build quality and a lack of maintenance. But there is also a multi-layered and multi-faceted evolution of the communities that contributes to this. This all leads to a self-perpetuating cycle.
- 3. Significant investment is required to tackle low build quality, energy efficiency, damp, mould and services in cellars that are at risk of inundation.
- 4. Deprivation heightens people's vulnerability to the impacts of flooding and reduces their ability to develop resilience.
- 5. Homeowners, including landlords, often do not have the resources to invest in their properties. There are also those who have the money, but lack the inclination, knowledge or motivation to invest. There is a huge expectation amongst some people that the local authority should invest on their behalf.
- 6. The current market conditions do not enable or encourage many private landlords to borrow to invest in their properties. Even if market conditions improve, it is unlikely that the incentives will exist for landlords to do more than the basic minimum to make their property habitable and rentable.
- 7. There is a legislative/ regulatory gap that makes it difficult to encourage landlords to invest in their properties to reduce flood risk and reinstate their properties after a flood.
- 8. Local authorities have an important role in coordinating and integrating investment to achieve multiple and co-benefits, e.g. property standards and future proofing property resilience in climate and flood resilience.
- 9. There are sometimes social justice issues where grants are targeted at the "able to pay", e.g. energy efficiency measures that focus on larger properties due to the greater carbon reduction opportunities.
- 10. There is a lack of specific regulation and guidance on landlords' responsibilities for tenants when a property floods, for informing them about flood risk, and helping them understand measures installed to reduce those risks.
- 11. Letting agents and managing agents are important stakeholders for engaging with landlords and tenants. The quality of the service they provide is highly variable. Improvement will require knowledge, incentivisation and much better targeted legislation.

- 12. Many SMEs in central Rochdale believe that the River Roch scheme will protect them and consequently are not concerned about property insurance. Overall, they lack adequate flood cover.
- 13. There are opportunities to use the development of Flood Performance Certificates to help improve the physical resilience of properties, but there are also social justice issues that need to be addressed.

There is a direct relationship between the location of poor quality housing and flood risk in Rochdale. There is also a relationship between the quality of housing and the impacts of flooding that is linked in various ways to housing policy and regulation, as well as tenure, resources and the housing market.



Figure 3.1 Example of housing in the study area within Rochdale

Rochdale - Setting the scene

By many metrics, Rochdale faces greater challenges than the average local authority. The proportion of economically active adults is 69%, ten percentage points below that of the country as a whole. Figure 3.2 illustrates how the population who are in work are less likely to be in jobs in National Statistics Socio-economic Classification (NS-SEC) groups 1-3 (Managers, directors and senior officials). Fewer than 40% of people were in these roles compared to both a regional and national average of around 50%. Full time workers earn around £100 less a week than the national average, and around £50 a week less than the regional average.

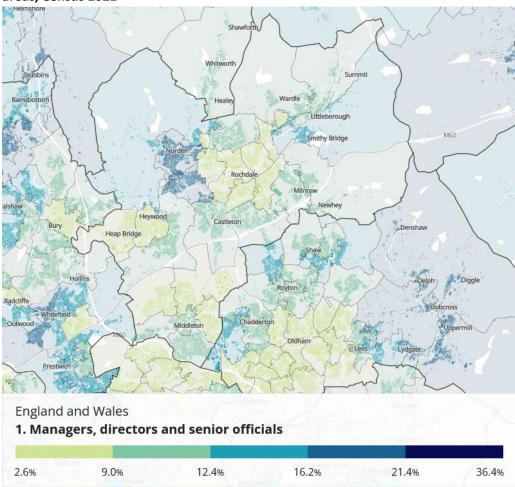


Figure 3.2 - Distribution of people in NS-SEC Groups 1-3 in the borough of Rochdale and surrounding areas, Census 2021³

Yet against that backdrop there exists a strong legacy of innovation and mutual aid, as might be expected from the area that created the Co-operative Movement (The Rochdale Pioneers⁴). The borough has retained strong communal institutions such as its township-based model of highly local governance, and the local authority itself has adopted an interventionist approach to its interactions with the public. This has created both an expectation that the Council will act as an agent of change for the people of the borough and will be there to help should the worst happen, as seen in the Council's reaction to the 2015 Boxing Day floods and the subsequent work on community engagement with flood risk communities.

Littleborough and Wardleworth are the project case study areas, representing two of the areas most at risk of flooding and where there was extensive engagement following the 2015 Boxing Day flood events.

Despite being geographically close, the areas are demographically quite distinct. Wardleworth is in the most deprived decile (Indices of Multiple Deprivation 2019), while Littleborough is in the second

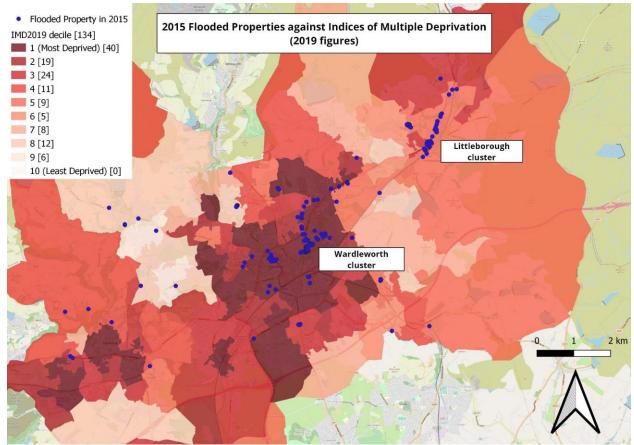
³ <u>https://www.nomisweb.co.uk/reports/lmp/la/1946157085/report.aspx?town=rochdale</u>

⁴ <u>https://www.ica.coop/en/cooperatives/history-cooperative-movement#toc-the-rochdale-pioneers</u>

most deprived decile, though with areas around it experiencing significantly less deprivation, as in Figure 3.3 below. A local authority officer provided some further context to this in an interview:

"In Wardleworth there are families that are asset poor and within the policy context are poor. Nevertheless they are relatively cash rich because they do work cash in hand or have top up benefits, such as Working Families Tax Credit or equivalents. You might have a family on £50k a year but if a lot of that is made up of various benefits, then the core benefit only gives them an income of £25k per year as far as the system is concerned. That's pretty typical of Wardleworth, but if you go to Littleborough, you have families that may be asset rich, and they may own a property worth £250,000, but they have got an income of £10k a year from a state pension."

Figure 3.3 - Indices of Multiple Deprivation against 2015 flooded properties.



Housing in Rochdale

Rochdale has a diverse mix of housing across the borough. The last decade has seen a small increase in the number of people who own their home, presumably as older people have paid off their mortgages. Within the rental sector however, there has been a shift of five percentage points away from the social housing sector and towards private accommodation. Despite there being some 4500 extra

dwellings within the borough built over those ten years, there are 500 fewer social rented dwellings than there were in 201 (see Figure 3.4).

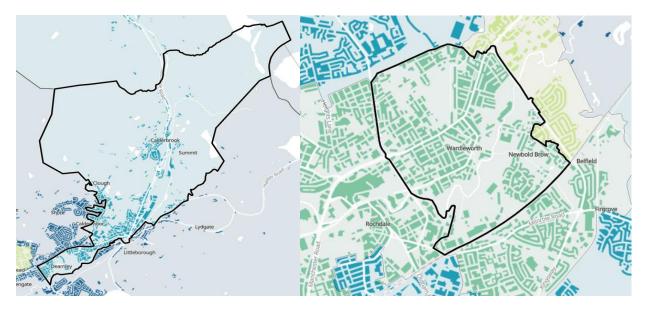
Home Tenure in the Borough of Rochdale

Year	Owned Outright	Owned with a mortgage	Private Rented	Social Rented	Total
2012	28.50%	32.80%	15.20%	23.50%	100%
	(25,779)	(29,633)	(13,721)	(21,286)	(90,420)
2021	30.40%	30.30%	20.90%	18.50%	100%
	(32,953)	(25,605)	(15,586)	(20,729)	(94,873)

Figure 3.4 - Office of National Statistics 2021 Housing Tenure Data⁵

The maps in Figure 3.5 below show the location and boundaries of the Wardleworth and Newbold Brow, and Littleborough North and Calderbrook MSOAs. While these areas do not entirely cover the areas of interest, they are the best fit given the data and boundaries available from the 2021 census and are illustrative for these purposes.

Figure 3.5 - Location and boundaries of the Wardleworth and Newbold Brow, and Littleborough North and Calderbrook MSOAs



5

<u>https://www.ons.gov.uk/peoplepopulationandcommunity/housing/datasets/subnationaldwellingstockb</u> <u>ytenureestimates</u>

Figures 3.7 and 3.8 show the breakdown of housing tenure by ownership in the two Medium Super Output Areas (MSOA) which best correlate with the areas of interest for this report. In Littleborough North and Calderbrook, the figures for social housing are considerably lower than across the borough as a whole, with the gap being made up equally by the other three tenure types. Two thirds of people own their own home. In Wardleworth and Newbold Brow, by contrast, homeownership is a minority condition. One third of households are in the private rental sector, half as much again as the borough average.

This would indicate a difference not just in the economic and life circumstances of the two areas, but also a concomitant need for a different approach. For example, a communications campaign around residential property buildings insurance is less likely to be effective in an area where the majority of householders rent properties, while one working with social housing tenants will be less influential in an area where that only applies to one in ten households.

Figure 3.6 - Different property types and ownership arrangements require a range of engagement approaches



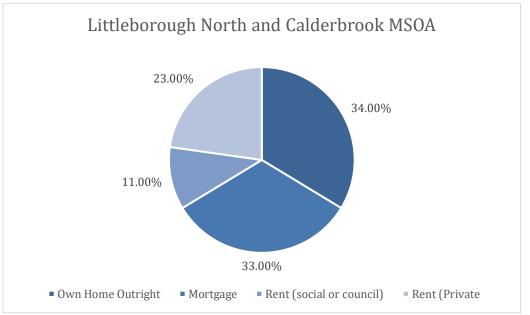
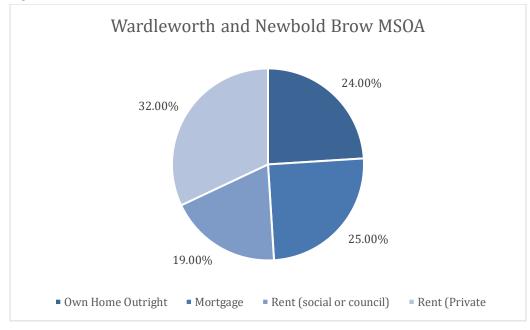


Figure 3.7 - Household Tenure in Littleborough North and Calderbrook MSOA (2021 Census)

Figure 3.8 - Household Tenure in Wardleworth and Newbold Brow MSOA 2021 Census



In contrast to the two target areas of the borough, in locations such as Bamford or Alkrington outright home ownership can peak at over two thirds in some Lower Super Output Areas (LSOA), reflecting a wealthier demographic. However, in some areas of the borough, such as Littleborough, this high level of home-ownership does not map on to a lack of deprivation, but rather reflects a combination of an older population, who have had more time to pay their mortgage off, and a historic trend of lower house prices relative to income and settled communities. In one Littleborough OA for instance, illustrated above in Figures 3.7 and 3.8, and below in figures 3.11 and 3.12 two thirds of the housing is owned outright by its

occupiers, despite fewer than 14% of households being in the top three National Statistics Socio-economic Classification (NS-SEC).

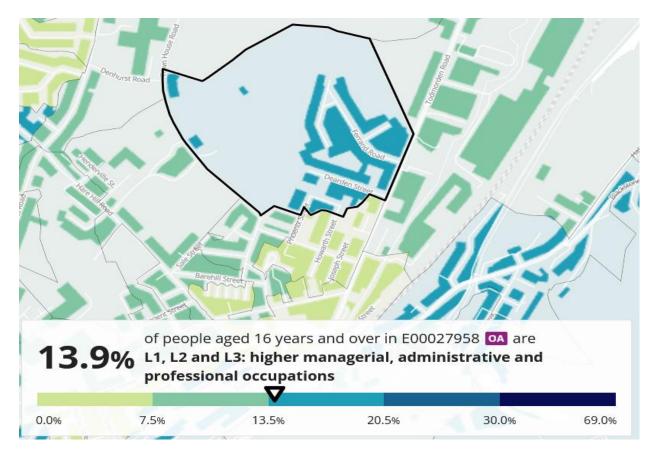




Figure 3.10 - NS-SEC classifications⁶

Output Area	L1, L2 and L3	L4, L5 and L6	L7	L8 and L9	L10 and L11	L12	L13	L14.1 and L14.2	L15
E000279 58 OA	13.90%	23.70%	10.80%	15.50%	6.20%	10.3 0%	9.3 0%	9.80%	0.5 0%

⁶https://www.ons.gov.uk/methodology/classificationsandstandards/otherclassifications/thenationalstatisticssocio economicclassificationnssecrebasedonsoc2010

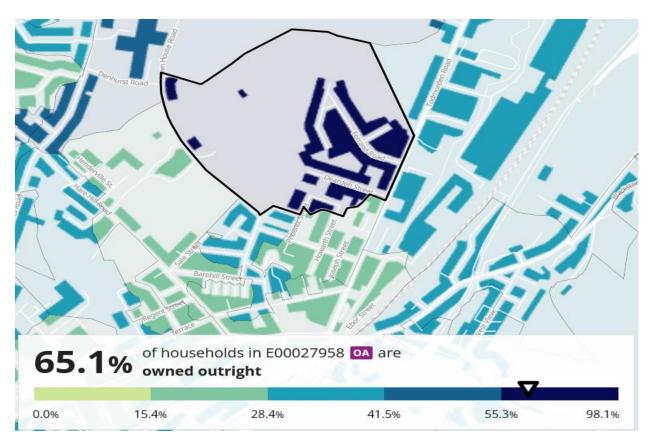


Figure 3.11 - Housing Tenure map of an Output Area in Littleborough from 2021 Census

Figure 3.12 - Housing Tenure and Output Area in Littleborough from 2021 Census

Output Area	Owned: Owns outright	Owned: Owns with a mortgage or loan or shared ownership	Rented: Social rented	Private rented or lives rent free
E00027958 OA	65.10%	22%	1.80%	11%

These trends include substantial variation across Rochdale. There are Output Areas within the borough where the proportion of private rented sector housing is over 50%, such as in parts of Wardleworth, Deeplish & Central Rochdale (see Figure 3.13). These are also areas associated with other axes of deprivation, such as economic inactivity (see figures 3.9 and 3.10) and lower fluency in English.

Output Area	Private Rented	Social Rented	Own with a mortgage	Own outright	Cannot speak English/ well	Economically Inactive
E00027763 (Central Rochdale)	57%	9%	21%	13%	10%	37%
E00181750 (Deeplish)	56%	39%	2%	4%	9%	46%
E00028259 (Wardleworth)	58%	12%	11%	23%	12%	44%

Figure 3.13 - Housing tenure in different parts of Rochdale 2021 Census

Several areas facing numerous challenges in terms of the provision of quality housing also face a high level of flood risk. This correlation can be seen in Figure 3.14 In an interview with a senior local authority representative they said they knew local landlords were charging lower rents because *"they know they've got lower value properties"*. These properties, the officer elaborated, are lower value because they are of poor build quality on ground that is damp, or at significant risk of flooding. These conditions would, he said, propagate damp and mould far quicker than it would in a property on higher ground or in a flood plain. A number of respondents to the questionnaire concurred, telling us that beyond the immediate impacts of flooding, and the damage to property and possessions, the floods caused longer term issues from damp, mould and odours.

The link between deprivation and poor quality housing was highlighted by the Coroner's review of the death of two year old Awaab Ishak in Rochdale in December 2020. Awaab died from a respiratory condition caused by "extensive" mould in a one-bedroom flat property owned by RBH, the large social housing provider which now manages and maintains the former council stock. A further investigation by the Housing Ombudsman, *Special Report on Rochdale Boroughwide Housing*, stated:

"We found a culture of 'othering' of the residents lies at the heart of the issues in Rochdale Boroughwide Housing. This is a pattern of exclusion and marginalisation based on identifies [sic] that are different to the norm. This pattern was exacerbated by an extremely poor data culture." (2023: 4)

Social vulnerability indexing in Wardleworth and Littleborough

The IMD map (Figure 3.14) demonstrates that the Wardleworth cluster of properties affected in the 2015 floods overwhelmingly falls within the most deprived decile. In Littleborough, there is a distribution between the second, third and fourth most deprived deciles. In both cases therefore we are dealing with

households which face challenges beyond those of just flood vulnerability and which may lead to compounding vulnerabilities.

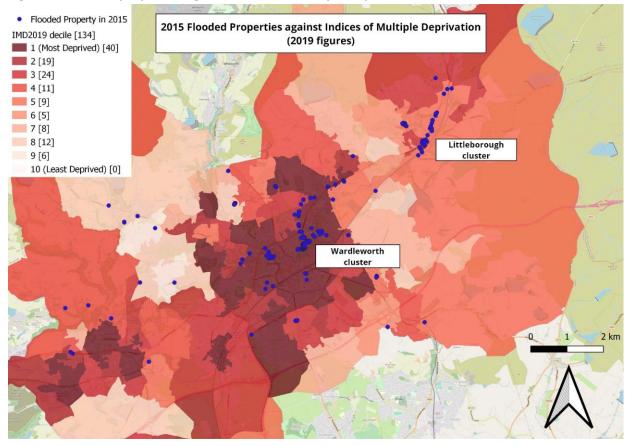


Figure 3.14 - 2015 properties against indices of multiple deprivation (IMD) (2019 data)

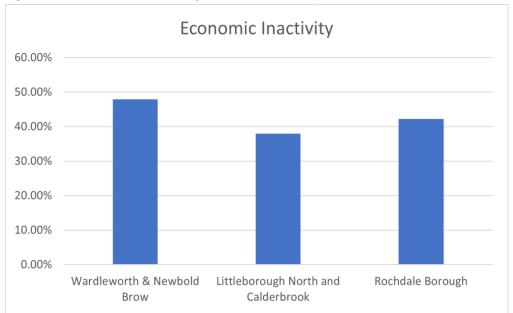
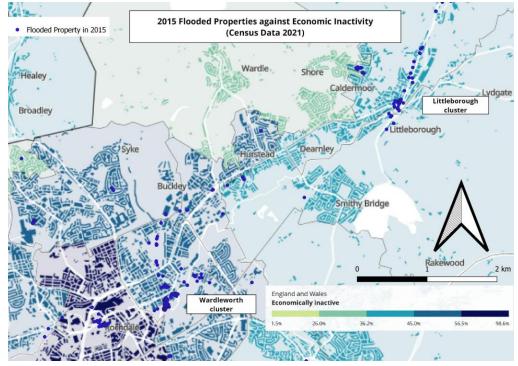


Figure 3.15 - Economic Inactivity (Census data 2021)





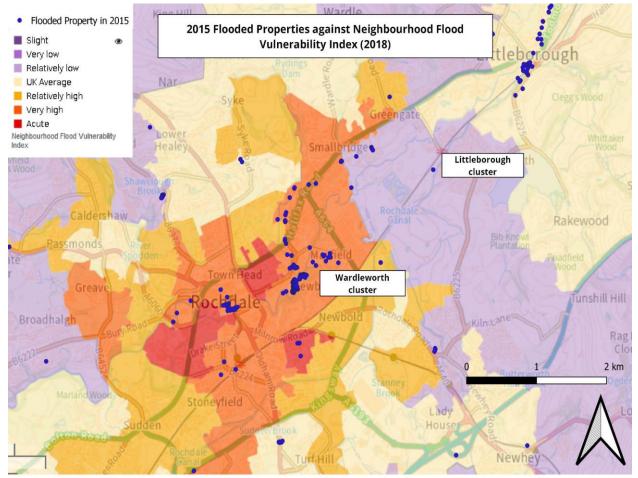
Likewise, we can see a distribution in terms of economic inactivity, (Figure 3.15) a partial proxy for levels of poverty, which indicates both Wardleworth and Littleborough face challenges. Littleborough has over one third of households economically inactive, while Wardleworth lies in the bracket of over 45% of households. This is against a borough average of 42% and a national average of 39%. While Littleborough may seem to be 'doing better' than average, these statistics should be seen in the context

of an older population in Littleborough, with a large number of people over 65 (see Figure 3.22), who do not show up in this dataset.

Figure 3.16 is a map of the affected properties from the 2015 Boxing Day floods overlaid on Economic Inactivity data from the 2021 Census, with lighter green being less inactivity and darker blue being greater inactivity.

Figure 3.17 shows a map of the affected properties from the 2015 Boxing Day floods overlaid on the Neighbourhood Vulnerability Index from ClimateJust, with vulnerability going from slight (purple) to acute (red).

Figure 3.17 - Map of affected properties from the 2015 Boxing Day floods overlaid on the Neighbourhood Vulnerability Index (from ClimateJust)



The crossover between areas of deprivation and areas of flood risk is seen not just at the IMD level but across other datasets and mapping projects undertaken in recent years. The ClimateJust data above (Figure 3.17) shows the Wardleworth area highlighted as an area of vulnerability as we would expect. While Littleborough is not highlighted here, it faces its own problems which are not immediately evidenced on the overall ClimateJust map but become apparent as we go deeper into the datasets.

Figure 3.18 (using 2021 Census data) illustrates that the axes of deprivation diverge in some places. Wardleworth has areas where one in five people cannot speak English well or at all, whereas in Littleborough there are almost no such individuals.

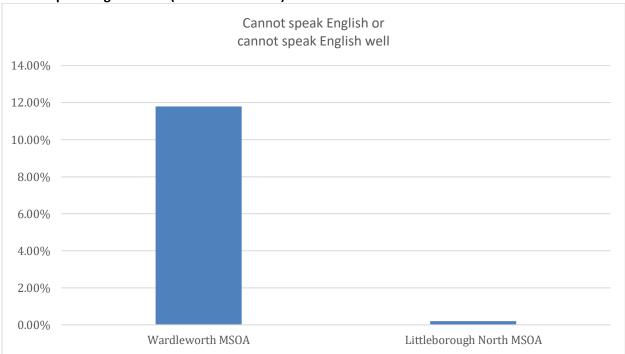


Figure 3.18 - People in Wardleworth and Newbold Brow and North Littleborough and Calderbrook who Cannot Speak English Well. (Census data 2021)

The map below (Figure 3.19) shows that both areas face challenges on the basis of vulnerabilities linked to age. However, these are not the same vulnerabilities. Indeed, the areas represent risk at the opposite ends of the age spectrum; Wardleworth's arise from a higher proportion of very young children, and Littleborough's are due to a greater percentage of older people Figures 3.19 - 3.22. Here we see how the figures from Climate Just and from the Census reenforce each other to give a different demographic picture of the two areas in terms of age and its subsequent vulnerabilities.

Figure 3.19 - A map of the affected properties from the 2015 Boxing Day floods overlaid on the Age Vulnerability Index from ClimateJust, with vulnerability going from slight (purple) to acute (red).

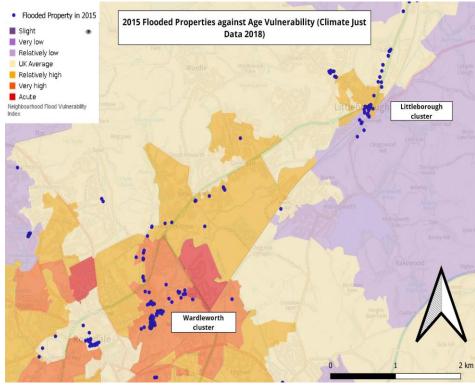


Figure 3.20 - A map of the affected properties from the 2015 Boxing Day floods overlaid on the Children under 5 Years data from ClimateJust, with percentage of households with a child under five going from 0.1% (light yellow) to over 9.9% (red).

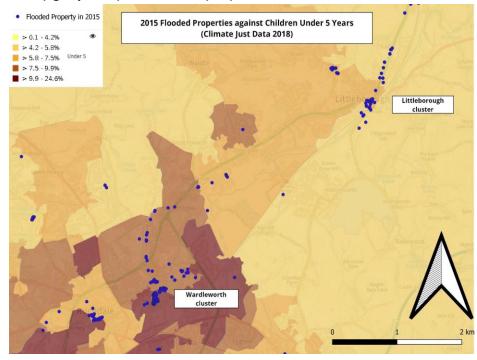


Figure 3.21 - A map of the affected properties from the 2015 Boxing Day floods overlaid on the Persons over 75 Years data from ClimateJust, with percentage of households with a person over 75 going from 0% (light yellow)) to over 16.8% (red).

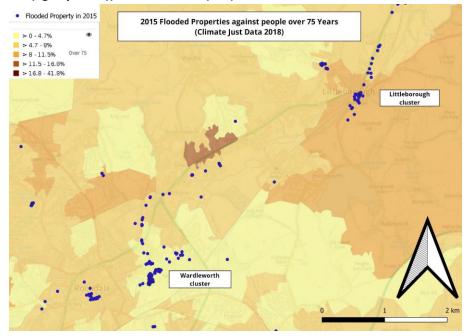
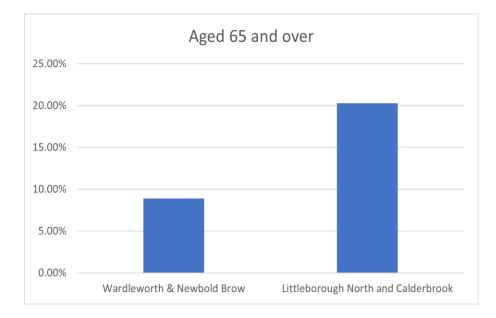


Figure 3.22 - People in Wardleworth and Newbold Brow and North Littleborough and Calderbrook who are aged 65 and over (2021 Census)



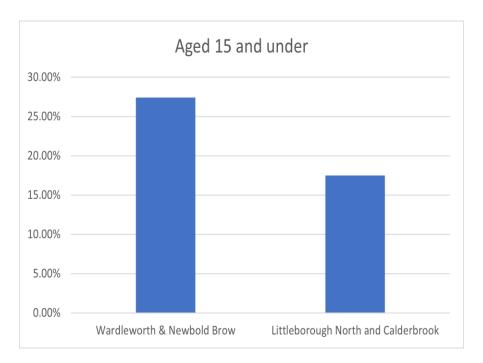
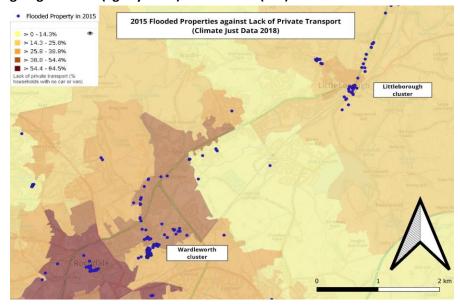


Figure 3.23 - People in Wardleworth and Newbold Brow and North Littleborough and Calderbrook who are aged 15 and under (2021 Census)

The above age vulnerabilities are then compounded by the relative lack of access to private transport creating a situation where much older or much younger people, less able to physically move and more reliant on public transport options, face further, linked vulnerabilities; see Figure 3.24.

Figure 3.24 - A map of the affected properties from the 2015 Boxing Day floods overlaid on the Lack of Private Transport Index from ClimateJust, with percentage of households without a private vehicle going from 0% (light yellow) to over 50% (red).



These contextual demographic, socio-economic and cultural factors make flood risk management and climate change adaptation pathways complex. Communications and engagement must go beyond those at highest risk given that exposure may well change in the future and given the extending responsibilities and opportunities for wider populations to play a more active role in flood risk management and in enhancing resilience. In addition, especially in Littleborough, households may not appear to be at risk if only certain metrics, such as the Flood Vulnerability Index above, are used. Listening to, dialogue with, and messaging must, therefore, be tailored to different audiences, from those who need to take positive action because they are at high risk, to the wider community who might become more aware of and embrace the River Roch and water in general in their lives. Care also needs to be taken to ensure we understand the challenges in reaching populations with a lower level of English language proficiency and those isolated by age or ill health.

Flood risk, the housing market & deprivation in Rochdale

Figure 3.17 demonstrates that a high proportion of the properties at risk of flooding in Wardleworth and Littleborough are located in more deprived areas. This housing is cheaper housing to buy and, therefore, people on low incomes tend to purchase in these areas. This insight was corroborated in interviews with an insurance broker and local authority officers who told us that after the 2015 floods, people who could afford to move did so, with buy to let landlords then purchasing and leasing cheap housing. Many tenants also moved.

A local authority interviewee told us that buy-to-let landlords wanting to invest choose places that had been flooded because they were cheap. The consequence is that rents are relatively low, especially where landlords do not invest in the properties. When flooding occurs, circumstances are exacerbated as homeowners and tenants may not have good quality insurance, or indeed have any insurance, making reinstatement difficult. Consequently, after a flood, landlords may not reinstate their properties properly, and the quality of the housing deteriorates still further. Tenants may also not have insurance for their contents, or for the fixtures or fittings in their homes. In all cases, people struggle to get back on their feet following a flood with deprivation often being intensified.

Interviewees reported that the housing market has changed radically in recent years. The stamp duty holiday introduced in 2021 resulted in lots of buy to let properties being bought. Landlords, in particular, bought cheaper properties in order to generate a rental income. A housing officer in RBC told us that adverts encouraged people from as far away as China to buy a 2-3 bedroom property, unseen, and convert it into a House for Multiple Occupancy (HMO). More recently, this has led to a shortage of properties for sale, especially those suitable for young first time buyers, forcing people to stay in the rented sector. The result is a massive demand for rental accommodation and not enough supply. In consequence, a housing officer told us that prospective tenants will take any residential property that is offered for rent, whatever its condition or extent of its risk to flooding.

The situation was made worse as mortgage rates increased significantly for both homeowners and for landlords. Average rates for landlords stood at almost 5.5% with a 75% loan to rent value in March 2023. The result is that landlords now cannot make a profit on newly bought rented properties and so

are avoiding investing in the buy to let market. We were also told that a further factor constraining the rented sector will be the need for properties to have an Energy Performance Certificate level C in 2024.

However, the high mortgage interest rates have also affected people wanting to buy a home to live in, with people who might have aspired to own a home now only able to rent, putting further pressure on the rental market. This is a particular problem for potential new entrants, often younger people trying to establish themselves. At the same time new residential housing is not being built in Rochdale in the numbers necessary to fill the gap in both the homeowner and rental markets. Where properties are being built, developers are building family homes rather than accommodation for new entrants because these are more profitable.

Such is the current pressure in the housing market in Rochdale, with demand so much higher than in the past, that the rents in areas with previously below average rental values are now rising to match those in other more desirable areas. There has, a local authority manager told us, been an average £150 a month rise in rents for a 2 bed terrace and between £200 and £250 a month rise for three bed terraces in these areas. There are no vacancies, with rental properties being taken almost as soon as they become available. Moreover, the local authority has been unable to discharge its homeless duties into the private rented sector because the properties are not available, and consequently these areas are becoming even less affordable. There's been no change in Universal Credit or Housing Benefit levels with a further consequence that there is a rising number of repossessions.

Rochdale has, the local authority interviewee informed us, an increasing number of Section 21 "No Fault" repossessions where landlords can try and increase the rent by putting the property back on the market. This affects affordability for tenants significantly, such that "non-essentials", including property insurance, are no longer affordable. If there is a flooding event, their ability to recover is further eroded because there is no disposable income left for anything other than day-to-day survival.

Costs for tenants have been spiralling upwards, with prices subject to inflation whilst wages have decreased in real terms. Areas of highest deprivation have been hit disproportionately hard because of their complete reliance on benefits and these have not increased. Consequently, the demand for fuel vouchers and other charitable giving through the programmes run by the local authority has been enormous. On top of rising utility and food costs, food banks (an instructive indicator of local social and economic conditions) that we spoke to as part of the research have reported record demand. An interviewee from The Lighthouse Project in neighbouring Middleton commented:

"The number of people using the Pantry has risen from 80 per week in January [2023] to 150 now. There are 3 sessions per week, on Tuesday, Thursday and Friday. The people who come usually represent families, so a very large number are catered for. For people who struggle, it offers cut price food. Delivery is from Fair Share twice a week topped up by what we buy in. We have 4-5 debt advisors authorised by the FCA. We also cover insolvency. We are inundated."

Although market values have risen, this is not always reflected in Royal Institution of Chartered Surveyors (RICS) valuations which take time to catch up with the market. Problems are caused for both lenders and borrowers when the market value of a property is 20 or 25% above its RICS valuation and the post crash tendency is that lenders will net off the market value the cost of any repairs or upgrades that are required in order to reach the RICS valuation. Therefore, if a property requires investment, a RICS

valuation will not generate a value that allows a landlord to borrow against it. The practical implications from a flooding perspective is that funds are not available for measures such as PfR, household SUDs or improving the fabric of the building to make it more resilient. It is a situation that is unsolvable in many cases.

There are additional pressures affecting Rochdale's housing market, limiting the supply of properties both to buy and rent, therefore creating difficulties for both homeowners and tenants and creating consequences for people at risk of flooding.

- 1. The Government's resettlement and temporary accommodation programmes are operated by Circo, who are cash rich and able to offer what both RBC and the general public cannot. They are buying up private rented sector accommodation at prices that others can't afford.
- 2. Housing placements into Rochdale from other areas are creating challenges. Pressures on housing can emerge due to pressures in other areas having wider impacts.
- 3. There are two prisons within the borough. If a prisoner is released with Accommodation for Ex-Offenders (AFEO) licence conditions (meaning they are not allowed to go back to their place of origin), the Probation Service will look to house them as close as possible to the prison. The result is that prisoners out on licence are disproportionately represented within Rochdale communities, putting further pressure on the local housing market.
- 4. The housing market in Rochdale is relatively cheap compared with other surrounding areas, so charities sourcing accommodation for their work with the Probation Service in the Borough will generate a higher profit than if they sourced their accommodation elsewhere.
- 5. Heywood and Middleton are on the north Manchester Local Housing Allowance rate. The remainder of Rochdale is on a lower rate. This skews the market in the sense that rented property is less affordable in most of Rochdale. Landlords who specialise in people on the Housing Component of Universal Credit (i.e. the lower end of the market) are incentivised to buy property in the area where they can claim more from the state for the same people.

Supported housing benefitting from Intensive Housing Management payments generates significant sums for landlords, encouraging them to purchase property, especially in more affordable areas, further constraining the market. When combined with RPs commission for delivering the scheme, this can amount to just under £1,000 per week per tenant. In Rochdale Borough in March 2023 there were 1822 addresses under the scheme. The bigger providers are often delivering significant support but others are not. In addition, there are issues such as landlords putting in electricity meters in each room, but because it is one source of supply to each property tenants have been unable to claim the £350 Heating Allowance, whereas the landlord can. This is forcing some tenants into fuel poverty. There are also reports of energy providers providing metered supplies into properties which require electricity cards that can only be purchased from the landlord, at much higher cost than on the open market.

Together, these issues created challenges that can stretch affordability, restrict tenure and drive deprivation. People who would in the past have bought a property now try to rent privately. Private rent

is quite often higher than a mortgage, so deprivation is reinforced. As reflected in Rochdale's housing register there are currently 9,500 applications to the local authority for housing representing 21,000 people.

Whilst there is a land supply problem within Rochdale, there is brownfield land, and green belt land that is currently not designated for development. The cost of building in Rochdale is not necessarily different to the cost in any other area in Greater Manchester. However, because the availability of land is at a premium, the finished price of property is not proportionately cheaper than in Trafford or Salford. It is still cheaper, but in terms of the finished or the market value of the property once built it is not the same as it is in other areas, and it is a complicated equation between land value and finish value. In short, even though the land value is higher in, say, Trafford, the finished value of a property makes it economically more viable for a developer or a Registered Provider to build new in Trafford than in Rochdale.

The consequences are that Rochdale faces a combination of issues that, whilst not unique, creates a complex and difficult housing market. The pressure on cheaper housing, relatively high property prices and costs links to flooding and flood risk in that there is less incentive for property owners of all sorts to regenerate, replace or upgrade housing stock in flood risk areas to make it more resilient to flooding, or to install measures such as PfR. This makes householders particularly vulnerable to the impacts of flooding, as set out in Chapters 2 and 7. It also reduces the opportunities for people to reduce their flood risk and develop different types of resilience.

The social housing sector.

The Local Housing Authority is embedded in the local authority but has a wider duty to ensure that the whole housing stock (of whatever tenure, across the whole borough) meets a certain minimum standard. This responsibility exists in every local authority. That standard, however, is currently somewhat confused because the 'fitness standard', which was clear, was dropped and the Housing Health and Safety Rating System (HHSRS) was introduced. This looks at risks to occupants in a different way. It can be interpreted to focus on the condition of the housing stock and, if an area has got very poor quality or damp housing, intervention is required.

One interviewee stated that the local authority needs to start building good quality, affordable accommodation. Whilst it will never be possible to let at a social rent, the Council is still able to borrow through the Public Loan Board or on the open market at around 4.5% compared to social borrowing and social lending at between 8 and 10%. This is a significant difference. New building has to pick up the elements not being provided by the open market or Registered Providers (RPs), i.e. single person accommodation, where there is higher turnover, more intensive management and higher costs. Whilst returns are better, the client group has higher levels of dependency and substance abuse issues as well as misbehaviour and anti-social behaviour.

Figure 3.25 - Social housing in Rochdale



The research suggests other issues are important:

- Whilst grants are being provided for certain categories of refugee due to be rehoused outside of the government's provision, others are not. RPs rehousing Afghan families will receive the LAHF grant at 50%. However, RPs cannot make a grant of 40% for single Ukrainians work when government support ends.
- 2. Whilst RPs are building properties to be let at "affordable rents", they are not building properties to let at "social rent". Affordable rent is now creeping up above the local housing allowance level (the amount of housing benefit or universal housing element that a claimant is able to get from the government). Benefit recipients must 'top-up' that rent element, making it even less affordable, reducing their disposable income.
- 3. It is possible to get a disabled facilities grant of up to £30K to help with disability adaptations. If it is a rented property, the landlord has an adapted property that only suits a narrow portion of the population. If the landlord can't find another disabled family who meets exactly the same criteria, the property may be let for general needs. But the landlord can't then receive the additional

benefits to cover that additional cost of renting the property and so it ends up being rented at a loss, which RPs are not allowed to do.

- 4. Turnover in social rented accommodation is the lowest it has ever been. The housing register is growing at a faster rate per month than the number of social rented properties available.
- 5. The right to buy and right to acquire are still available, and although they are at a lower discount level than they've been in the past it is still an attractive proposition for tenants. A couple of the RPs have said that even with their build programmes, their total stock holding is coming down year on year.
- 6. RPs are putting together build programmes that are generally for family accommodation. All have very strict affordability criteria on the back of increasing utility costs. Even people who are working or are full benefit claimants are now failing the affordability tests. A mobile phone contract or a full Sky subscription is sufficient to ensure that someone will fail the affordability criteria. All the Registered Providers have "working extra" criteria, where they will give additional priority to applicants who are working and pass the affordability test. They will leapfrog ahead of others with a greater housing need.
- 7. RPs set their own lettings policies which supersedes those of the local authority. Whilst a nomination agreement exists with RPs and all local authorities and as part of the stock transfer with Rochdale Borough Housing, Rochdale had an 80% nomination agreement. So 80% of what becomes available to let is meant to be passed to the authority and go through Rochdale's letting system. However, monitoring and administering the system is difficult so the Council is unaware of availability. There are no restrictions on what that 80% is composed of, so it could be all one property type or could be clustered in a less desirable area.
- 8. There are additional local difficulties. Following the recent inquest into a death in one of their properties. RBH are now operating under special conditions, with the regulator and the Ombudsman paying particular attention to the management of properties. They have, we were told, had to internalise a lot of their efforts and focus on their existing stock. Consequently, they are carrying a much higher level of voids while they refurbish it to a better standard. Moreover, they are operating more internal transfers with their existing tenants, moving them out of substandard properties so that they can then invest in refurbishing them. With time, these voids will become available in the system again, but that may not be the case for four or five years, depending on how much of the stock of 12,000 houses need upgrading. The result is that less than half the number of lets are becoming available compared to 5 years ago.

There is huge pressure on housing stock in areas of Rochdale at risk of flooding. Properties are often of poor build quality and in poor condition, making interventions such as PfR unsuitable without addressing core build quality issues. Even with major investment, this will take time to address.

The private rental sector

Rochdale's housing stock condition challenges are predominantly around two bedroom terraced housing. The stock has lacked investment over the years and since the demise of local authority grant systems and programmes, there has been little investment, either from homeowners or landlords. Where investment has occurred, internal finishes are often prioritised rather than the structure or services of a building with people wanting modern living conditions. When the local authority has entered properties, such as following a private rented sector tenant complaint about conditions or faulty services, they have frequently found electrical, plumbing and heating systems that require upgrade.



Figure 3.26 - Mixed tenure housing in Rochdale

There is far less housing available in the private rented sector than there used to be. In an assessment undertaken by the local authority in March 2023 there were 42 properties available for rent in the Borough, of which about 35 were so far above the local housing allowance level that they would not be affordable for people eligible for social housing. The private rental market is now spiralling out of control, with many more people needing to rent than there are properties available.

It was repeatedly stated by interviewees that statutory change is needed in the private rented sector because duties for landlords, letting and managing agents are insufficient to protect both tenants and landlords. One interviewee stated:

"As a landlord you are automatically responsible for somebody's health, wealth and life. It's as simple as that. If you don't have smoke detectors in the property and a fire plan you are automatically putting peoples' lives at risk."

Many of the issues that people face - and their behaviour - are ultimately determined, at least partly, by property rights; who owns what and what powers and responsibilities are associated with ownership, or lack of it. For example, those that own property may be perceived to have more power than tenants who rent it, including through regulation and its enforcement. One interviewee stated:

"The presumption is and still remains in English law that the landowner or property owner needs to be superior in all this...everybody else's ability to question them needs to be hedged around with all these opportunities to put the landowner property owner to faff everybody else about. It's not good enough."

No staff training, accreditation or certification is required for someone to set up as a managing or letting agent. Consequently, interviewees reported a huge range in the quality of the services provided. Several interviewees said that all managing agents should have their staff educated and trained in the Housing Act 2004, Part 1 for HHRS, Part 2 for licensing and in the provisions of the Protection from Eviction and Harassment Act.

Managing agents are required to register with one of two redress schemes; see below. All the managing agents interviewed were registered as required. However, the scheme is not widely known or publicised. Similarly, it was reported by interviewees that landlords often assume that managing agents are properly looking after a property when there is a management agreement and do not feel they need to take an interest in their asset. They are, in effect, "absent landlords" who, alongside their managing agent, are unaware of their responsibilities even if they have the best intentions. When we asked a managing agent about absent landlords, he told us that whilst there were some, many could be more accurately described as "veteran landlords that simply don't care". Whilst there are good landlords in Rochdale, many are interested solely in maximising their revenues for the least investment. The interviewee went on to say:

"A lot of the issues are down to trust. Some just care about residential income from properties."

One interviewee singled out managing agents as being the source of many problems:

"Many do not manage the properties properly, Landlords assume that properties are being managed properly, but often this is extremely poor."

Change, this interviewee and several others told us, is needed to ensure tenants are properly protected. The Awaab Ishak case has raised the issue of how problems are reported, and how providers must respond within a specified and short timescale, for example.

A number of interviewees suggested that it should be a legal requirement for landlords to register an interest in properties being let out for rent (see section on licensing). Several interviewees also raised the issue of landlord and tenant property insurance. There is no requirement for either to have property insurance. But a number of interviewees felt that this should be mandatory and should include provision for rehousing tenants where the property was not fit for habitation, such as following a flood (see Appendix 6 for an example where Manchester Student Homes Accreditation requires landlords to provide alternative accommodation). Tenant insurance in general and in social housing in particular is discussed in Chapter 4.

The Rochdale Borough Council Private Sector Landlord Office focuses on housing standards and legislation outlined in the Housing Act 2004. This is delivered through a Landlord's Forum, with letting and managing agents, as well as delivering Housing Health and Safety Rating System (HHRS) Assessments through property inspections. An interviewee stated that this function is usually delivered by Environmental Health Officers in Environmental Health Teams in local authorities where the focus is often on food standards and safety, rather than housing. They stated that in Rochdale Borough Council it sits within Strategic Housing and staff are certificated to perform the HHRS Assessment.

Following the 2015 flooding the team dealt with many tenants who reported that landlords told them that it was up to them to reinstate the property. The initial response was to send out an inspector to examine the property then send a landlord a schedule of works through an Improvement Notice, based on the HHRS. It covers 29 hazards and looks at the health and safety of that property over the next 12 months. The Team typically dealt with 300 - 400 complaints per year. If the landlord did not respond to Improvement Notices, the local authority would prosecute. If the court found favourably the court received the fine. The local authority would have used considerable resources to tackle the problem, including in taking forward the prosecution, but would not have been compensated for this.

Changes in legislation now allow the local authority manager to deal with rogue landlords and, rather than just send out an inspector, focus on building the relationship between the tenant and the landlord. The first port of call for a tenant is their landlord giving them the opportunity to fix the problem. If they don't, the local authority will do an inspection, perhaps followed up with an Improvement Notice carrying a financial charge penalty of £300 to reflect that they have already been told that there is a problem and they have failed to act.

In Rochdale, these changes reduced the amount of inspections by half to just over 200, in part because tenants were given the opportunity (or responsibility) to contact their landlords first, preferably in writing. This also stopped tenants who are in breach of their tenancy agreement trying to get around a landlord by coming to the local authority first. The new arrangements also mean that following the serving of an Improvement Notice the local authority can issue a fine of up to £30,000 that covers a range of offences. That money can then be used in a Working Default Budget. This fund allows the local authority to remedy the problems in the property directly, with a charge then put on the property to recoup the costs. The fine pays for the work to be done and the tenant gets their property remediated without having to wait for the landlord to respond. Rochdale Borough Council has also provided the Private Sector Landlord Office with a £250,000 pot to commence the initial working default process. As of March 2023 there were 30 civil penalty cases underway for landlords failing to implement Improvement Notices. This is a significant reduction on previous years and is due to the First Point case officer working with landlords and tenants, educating them, explaining the enforcement powers that the local authority has and warning that they will be used if they do not engage.

Enforcement is vital. Across Greater Manchester Combined Authority (GMCA), every local authority is being funded to recruit an apprentice who will participate in a 3 year course with a housing qualification. Participants become a Grade 4 Housing Practitioner. The training includes housing standards, enforcement, fixed penalties, legislation and law and will include working in other teams across the Council such as planning and building control.

The biggest remaining challenge for the Private Sector Landlord Office is the length of time that it can take to carry out enforcement, which can range from 18 to 30 months. In particular, a landlord can appeal an Improvement Notice to the Residential Property Tribunal, at which point the local authority is unable to take any further action. During this time, however, the tenant will continue to live in poor quality housing. Interviewees reported that if a landlord is willing to appeal, then generally that means that they are not willing to do the work; they would be unlikely to appeal otherwise. They stated that significant changes are required at a national level if local authorities are to be effective at supporting tenant's interests. Similar issues with compulsory purchase and in other areas were reported.

Reform of the private rented sector as outlined above would enable the Rochdale Borough Council Private Sector Landlord Office to be better able to tackle flood risk issues such as in private rented stock that has flooded and needs reinstatement, alternative accommodation for tenants and to begin to develop programmes to improve build quality.

Rochdale Borough Council Private Sector Landlord Office capacity

RBC's Private Landlord Team engages with the private rented sector to ensure that it complies with legislation. In particular, there is a focus on whether properties are habitable with direct relationships to flooding and flood risk.

The local authority regularly informs landlords that if they can't invest in the maintenance of their property they are not a fit and proper person to be a landlord. There are, however, no specific sanctions available unless there have been breaches of statutory responsibilities. The level of demand on the Private Sector Landlord Team is significant, as illustrated by the number of complaints received Figure 3.27, to the extent that five additional permanent staff have been recruited to deal with the demand.

Complaints received from private tenants	518
Complaints received from RP Tenants in addition to the above	89
Number of HHSRS Surveys conducted	142
Complaints of Illegal Eviction / Harassment	100

The team is currently largely demand-led because of the size of the market and the difficulty involved in utilising regulatory frameworks. Cases are not quick or easy to resolve and there are many levels of appeal open to private sector landlords. The guidance emphasises the importance of working with landlords and not to go straight to enforcement. Legislation around selective licensing and additional licensing is helpful, but only to a point.

Flood Performance Certificates

A number of interviewees from both the public and private sectors thought the level of flood risk should be made clear to tenants and new homeowners in the same way that Energy Performance Certificates are made available. There is a proposal to introduce Flood Performance Certificates (FPCs) as a way of recognising and encouraging flood risk property owners to better protect their properties from flooding. These could be a material consideration in obtaining residential property insurance and property purchases (see Figure 3.29).

This initiative may enable 'at risk' residential property owners who are able to pay for works to their property to secure residential property insurance on more favourable terms. Beyond this, it may also make their property more marketable. Critically, however, those homeowners who are at flood risk but unable to pay for measures would consequently be at a disadvantage because they may incur higher property insurance premiums, lower RICS valuations and property sale prices.

Residential property landlords may or may not be affected by insurance premiums because their properties are regarded as a commercial activity requiring commercial insurance. RICS valuations and property sale prices may be affected, as for all residential property. The availability and price of contents insurance once Flood Re has ended may be contingent upon whether the landlord has produced a FPC and its score.



Figure 3.28 - Flooding in Littleborough, Boxing Day 2015

Figure 3.29 - Speculative impact of FPC on different categories of homeowner and householder with and without enforcement through the Housing Act 2004

Ownership	Insurance	Mortgage	Sale		
Home owner able to pay for PfR	Lower/maintainedAccess to a variety of mortgages (and therefore competition) maintained.ableLower/maintainedAccess to a variety of mortgages (and therefore 		RICS valuation and sale price maintained or increases. Property may become more attractive to buyers.		
Homeowner not able to pay for PfR	Higher insurance premium and/or excess.				
Landlord where the Housing Act is applied for FPCs	Lower /maintained insurance premium and/or excess. Ability to charge higher rents or greater market access	Access to mortgages and loans maintained if PFC score is good. If FPC score is poor, access may deteriorate until flood risk issues are remedied and FPC score increases.	RICS valuation and sale price maintained.		
Landlord where the Housing Act is not applied for FPCs	Higher insurance premium and/or excess. Rental income and marketability may be constrained in the future	Access to mortgages and loans may be reduced if FPC not in place.	RICS valuation and sale price may fall if FPC not in place.		
Tenant where the Housing Act is applied for FPCs	Lower or maintained contents insurance premium and/or excess. Access to insurance more likely to be maintained.				
Tenant where the Housing Act is not applied for FPCs	Higher contents insurance premiums or excess. Access to insurance may be reduced post Flood Re.				

Under current proposals, FPCs would benefit homeowners with an ability to pay and disadvantage those who are not able to pay, as well as tenants of properties without an FPC. In other words, unless carefully designed and implemented a Flood Performance Certificate scheme has significant potential to disadvantage those who are less well off.

If FPCs were to be added to the regulatory framework that the local authority currently has to enforce, on a similar basis to Gas Safety Certificates and periodic electrical checks there may be an opportunity to address equity issues. Potential new regulations around damp and mould could provide an opportunity to introduce these, ensuring tenanted properties, in particular, had a Flood Performance Certificate. This would be contingent on how the system would operate and the regulatory framework behind it, given its dependency on the authority's obligation and right to enforce.

The introduction of FPCs under the Housing Act 2004 may benefit private sector tenants by driving up housing quality and reducing flood risk and the impacts of flooding. However, social justice issues remain for homeowners unable to pay for flood risk measures such as PfR through reduced access to insurance post Flood Re, lower RICS valuations and property sales prices. This may then be another factor driving deprivation and poverty as it would reinforce a cycle of decline; see Social Vulnerability Indexing section in this chapter.

To help gain an understanding of how many properties would be affected, calculations were done using Census 2021 NS-SEC Group data in each of the MSOAs and data on tenure type. Whilst the resulting figures showed that many hundreds of homeowner properties would fall in to categories where people could not afford to install and maintain measures to manage flood risk to improve their FPC status, and thus risk potentially relatively higher insurance premiums or excesses, reduced availability of insurance and/or lower property sale prices, should FPCs be introduced in the currently proposed format, particularly in Wardleworth, the results are dependent on assumptions that may not be valid. Thee are similar issues where landlords may not be able (or willing) to pay for resilience measures where tenanted properties might place tenants at a disadvantage.

There may also be an opportunity to introduce FPCs to the rented sector by looking at provisions of the Housing Act2004. If so, local authorities may be in a good position to undertake FPCs as they already have responsibilities for inspecting rented properties.

All of these issues could be explored further.

The Neighbourhood Housing Programme and flooding

Several interviewees spoke about the need for innovation, in particular to link energy with lifestyle, housing and with flooding preparedness. Innovation, an interviewee told us, necessitates looking at that bigger picture, thinking about resilience holistically and being forward-looking. There are opportunities through the Resilient Roch project to pilot some of these approaches.

Currently, a property floods, it is dealt with, people and the property recover, and very often people take limited action until there are flood warnings or a further flood event. There is a need to promote long term engagement with flood risk issues not just with the communities, but with the professionals that serve the communities as well. Listed below are some of the opportunities associated with flooding to explore and pilot.

Marketing

Currently, someone selling or letting a property probably won't want to admit that it's in a flood zone because it might restrict its marketability and price. There may be a negative connotation around

flood resilience, but with the right risk mitigation measures this could become a significant positive, demonstrating, for instance, its capacity for climate resilience in the longer term.

An estate agent could cross-reference a property with a flood map and check if they are at risk of flooding. They might then ask if the prospective vendor has had any flood resilience measures installed that can be referenced on the particulars, promoting them as a positive intervention. Prospective buyers could be informed that the property, whilst at flood risk, has resilience measures that also make it more energy efficient, and cheaper to run and live in. If the property does flood, there may be a reduced recovery time. These and similar messages need to be linked together and the flood message not dismissed as something that occurs occasionally and is then ignored.

A narrative needs to be developed so that purchasers of property and renters see investment in property flood risk management as positive, but see Chapter 5 for evidence of attitudes and behaviours.

Grants and loans

Whilst some grant systems have been available to tackle the worst housing cases, (some charitable grants are available to replace boilers and heating systems as are some of the government's Eco funding) these have had limited penetration. Additional factors include:

- Many people who don't qualify for grants and who don't have the finances to be able to invest.
- A lack of willingness to invest because the market value of the property is not necessarily improved as a result of investment.
- The payback periods are very long for investments, and therefore property owners are very reluctant to do it.
- Grant schemes such Housing Market Renewal have been short lived, lasting two or three years, with programme momentum being lost each time a grant scheme is replaced.
- Where grants have been a contribution to a scheme, rather than where they have covered the full cost of the work, homeowners have been reluctant to participate because they have struggled to fund their contribution to the scheme.
- Buy to improve, or borrow to improve, loans have not been easily available. Where they are available, the rates have not been favourable. A lot of lenders are currently offering to lend half the costs, but many homeowners simply have not been able to afford the difference, meaning that properties have not been maintained or improved.
- Where work has been undertaken it has tended to be superficial "top surface finish" rather than looking at the structure of the building and doing things properly because that's what people have been able to afford.

Improving grants and loans to make them more predictable, accessible and more attractive would ease many of these issues.

Equity loans are available where the cost of works is greater than what is reasonable and where people have sufficient equity in the property. There are a number of different models available that enable a practical approach to be taken, including linking the loan to a disabled facilities grant

Innovation - Rochdale Borough Council's coordinating and integrating function

The infrastructure support for property maintenance is dependent upon the local authority intervening for a very significant proportion of housing in the deprived areas of Rochdale because the national policy context and market, including the regulatory framework, are not delivering positive residential housing outcomes. This is as much an issue for flooding as for health, energy efficiency, family finances and overall wellbeing. The need to adapt to climate change will add increasing pressures.

In Rochdale, investing in poor quality build properties to make them more resilient to flooding requires investment in the fabric of the building as well as standard PfR measures to be effective. It also misses the opportunity to improve health, quality of life and financial resilience. It is most efficiently done when different funding sources are combined.

A deep investment programme at scale was last available with the Housing Improvement Programmes in the 1970's and 1980's. Whilst contributory, the local authority was able to take out loans to make up the difference of the 75 - 90% grants available.

Defect typologies for properties in typical blocks in all areas across the borough have been developed from surveys of stock condition and the private rented sector. The level of investment required to bring properties up to standard is therefore well understood and is considerable.

Interviewees explained that a private rented sector property may need new gas carcassing, rewiring and a new heating system as well as a range of structural measures in order to get rid of all Category 1 hazards, (under the Housing Act 2004) make it wind and water tight and fit for occupation. Making a building watertight is a necessary precursor to using options such as property resilience measures, whilst removing service meters and access points from cellars reduces the time that it takes to reinstate a building following a flood.

Economically this investment may not make sense for a landlord, whose rental income is being squeezed by higher interest rates on buy to let mortgages, despite typical rents having risen significantly. In short, the current market conditions do not encourage investment by landlords and imaginative approaches are required to generate investment. Many homeowners will simply not be able to afford to invest.

Rochdale Borough Council still has a capital programme funded through its capital borrowing. In most instances, it allows people to participate in a programme free of charge without having to find additional funding. The funding is extremely limited but is augmented, integrated and coordinated with funding from other sources. For example, Rochdale Borough Council has received two tranches of £500,000 health sector funding aimed at trying to stop hospital admissions and that has allowed the Council to invest in making sure that properties are wind and water tight and to undertake some essential repairs. The funding has been preventing hospital admissions and reducing the pressure on GPs for revisits, so has proved a worthwhile investment from a health perspective.

The Council has been working with the energy provider Ovo on a pilot scheme on Prince St in Rochdale, a precursor to working in flood risk areas using Hug 2 and Eco 4 funding. The aim is to raise all the properties up to a mid or higher C EPC rating and to try and use the Council's grant scheme to make this free at the point of consumption for homeowners, whether they be landlords or owner occupiers. The intention is that the grant will deal with some of the structural issues and focus on heating and insulation, whilst the local authority will fund essential repairs. Local authority funding limits the number of properties that can be treated. The same issue applies to other funding sources. For example, £3.1 million is available from Hug that can be extended to £6.2 million, but the impact of this is limited by the lack of availability of match funding. Similarly, significant funds are currently available from Eco, but match funding is lacking.

Many of the energy grants that have been available, such as Eco and Hug, have operated on a pepper pot basis, targeting wealthier "able to pay" neighbourhoods and leaving the Council out of the equation, because they perceive that they will get bigger carbon savings through a bigger Energy Performance Certificate (EPC) shift on larger properties that give larger carbon savings. This is a social justice issue, because those who are able to pay get priority over those that can't. Repairing one property in a block of 10 has only solved some of the problems with that one property. The other nine probably still have issues, so Eco and Hug funding in Rochdale have been focussed into a strategic programme that aims to future proof the whole of a block of properties.

To be effective in places like Rochdale property flood risk management interventions need to be made alongside these wider investments. The role of the local authority is to coordinate them in order to provide a holistic, integrated programme.

Small businesses

Insurance brokers, Rochdale Town Centre Management and a number of small businesses reported that businesses in the town centre (though not the new development) could get a range of insurance policies, but could not get insurance with flood cover. However, they also said they believe that the Environment Agency scheme will solve all of their problems. This will become an issue because, if and when the area does flood, many of the businesses will flood and will be at serious risk of failure. It also suggests little or no understanding of the difference between fluvial flooding and surface water flooding. Whilst a high proportion of the businesses are short term tenants and do not see a long term trading future, it may nevertheless drive deprivation in the area, and will certainly undermine the area's reputation. Some very small businesses are also very dependent on cash flow with poor availability of credit/loan facilities to buy stock or carry out improvements. Examples suggest that some businesses may be able to get buildings insurance but not insurance cover for stock which may amount to a significant value.

There is a division of responsibilities between landlord and tenant, though sometimes a lack of clarity regarding this. Some of the properties are managed by a managing agent, which can also be confusing. Landlord and managing agent attitudes towards investing in their properties and the needs of their tenants can also have a significant impact. A significant proportion of properties are administered by managing agents on behalf of owners with large landholdings across the Borough.

A perceived interest in generating short term profits may be a barrier developing tenant resilience.

Ways to tackle this issue include:

- 1. Developing insurance schemes for small businesses that provide flood cover, perhaps on a reinsurance model. This would need to be a national approach that has so far not found favour with the insurance industry or Government.
- 2. Regenerating the area. Apart from the investment required, one of the consequences might be to force many of the smaller, local businesses to relocate elsewhere, with a consequential impact on local economic activity.
- 3. Fostering better links between tenants, landlords and the local authority to promote key messages and demonstrate that they have common interests. For instance, following a flood, all stakeholders would be hit. A small business that can't get an insurance claim through for the stock would go out of business. There would be a void period with the landlord losing income and incurring costs to reinstate the property.

Some possible opportunities include:

- 1. Working with town centre managers and Rochdale Development Agency to investigate the possibility of getting an insurance company or broker to develop a town centre policy.
- 2. Where the owner has other interests, such as a desire to build elsewhere on difficult sites, RBC has an opportunity to look across the totality of the Borough and enter discussions across the range of issues where there is a common interest.
- 3. Some Registered Practitioners are offering tenants contents insurance. Rochdale has in the past worked with Registered Practitioners with a right to buy scheme on an estate, to encourage neighbouring owner occupiers into their discounted structures of insurance. Although the Registered Practitioner's insurance will respond and reinstate their property, they are often left with a severely damaged and uninsured neighbouring property that is challenging to contend with.

These options will be further tested and developed through the Resilient Roch (FCRIP) project.

Good landlord schemes, licensing and guidelines

The issue of poor quality private sector housing is a long-standing one. There have been many attempts to raise standards through guidelines, charters, licensing and accreditation, with varying degrees of success. Further details are at Appendix 6

Landlord accreditation and charters

Private Landlord Accreditation Schemes provides a mechanism for landlords to demonstrate that they are a 'good landlord'. They also gain benefits such as early knowledge of grant schemes and possibly training.

Several interviewees told us that good landlords will only come forward to be a 'good landlord' if they want to be known. 'Good' landlords are already known to the local authority and usually are not on the radar of enforcement because they have not been reported for infringements. There is an accreditation scheme and good landlords will want to put things right when HHRS inspections are done because the property is an investment. In contrast, poor landlords will not come forward to be a part of this scheme. They don't want to do any additional work and, if they did join the scheme, would be very wary that the local authority would be dealing with any complaints.

There are several other charters or accreditation schemes in the area or in development including:

- Greater Manchester Combined Authority Good Landlord Charter
- Manchester Student Homes Accreditation Scheme. This scheme has specific measures to deal with flooding: "1.14.f. In the event of 'an act of God, fire, flood' or any other unforeseeable circumstance and the property is deemed temporarily uninhabitable the Landlord is to provide to the Student Tenant a package with measures to support the Student Tenant during the interim period. This may involve providing Student Tenants with suitable alternative accommodation or consideration given to the termination of the tenancy. If the situation warrants it compensation should be considered."

There are a number of national Landlord Accreditation Schemes for letting and managing agents, promoted by sector trade bodies. They offer a range of services including, to varying degrees, certification, training and promotion. To gain membership and certification a number of these schemes require someone from an organisation to do a foundation course. Schemes are entirely voluntary for letting agents and managing agents. They do not have to have any training or accreditation, unlike estate agents who organise property sales. However, where a mortgage is involved, some lenders require a letting or managing agent to be registered with one of the organisations above.

Selective licencing

A selective licensing scheme means that all private landlords in a designated area must have a licence to rent out a privately rented property. Selective licensing aims to improve the private rented market. It means property must be of a decent standard and adhere to certain conditions. Selective licensing also gives tenants confidence that houses and flats in a designated area will be healthy and safe to live in. Interviewees had mixed views on their benefits.

Redress schemes

It is a legal requirement for all letting agents and property managers in England to register with a Government approved redress scheme if they let or manage property⁷. These enable customers, landlords and tenants for rented accommodation to complain to one of the approved redress schemes if a complaint cannot be resolved between the participants.

Recommendations

Improve residential and SME flood resilience by coordinating resilience activity and offering information, advice and support through pre-existing networks.						
Support Rochdale Boroughwide Housing (RBH) and Responsible Providers to make their properties and residents more flood resilient through the Resilient Roch Project and Rochdale Strategic Housing Partnership						
WE WILL BY						
Support Rochdale Boroughwide Housing (RBH) to encourage residents to become more resilient.	 Identifying ways of supporting RBH tenants at risk of flooding or that have flooded. Providing training and other support to RBH Moneywise teams, particularly with information about insurance Mechanism - Rochdale Strategic Housing Partnership 					
Support Rochdale Boroughwide Housing (RBH) and Responsible Providers (RPs) of supported housing to make their properties more resilient.	 Supporting RBH and RPs to access information about flood risk to their properties. Providing support and advice on maintenance for properties with PFR. Providing information to maintenance teams about which of their properties are at flood risk and which have PfR. Mechanism - Rochdale Strategic Housing Partnership 					

⁷ Redress Schemes for Lettings Agency Work and Property Management Work (Requirement to Belong to a Scheme etc)(England) Order 2014 (SI 2014 No. 2359) <u>https://www.legislation.gov.uk/uksi/2014/2359/contents/made</u>

	e resilient through Rochdale Town Centre Business I the Resilient Roch Project
Work with Rochdale Town Centre Business Improvement District Manager to provide support and advice to small and medium sized enterprises (SMEs)	 Disseminating messages about flood risk, insurance and resilience through newsletters and WhatsApp groups. Developing town centre events with a focus on linking people to the River Roch on flooding, the water cycle and climate change Working with commercial landlords to explore the opportunities for improving physical and financial resilience.
	Rochdale Borough Council's Private Landlord Sector am
Working through Rochdale Borough Council's Private Landlord Sector Team to improve resilience in the private rented sector.	 Disseminating information through newsletters, websites, emails, etc. Promote tenant awareness of who has responsibilities for what, that they can take action and how, and how the local authority can support them. Participating in on-going and upcoming events targeted at landlords. Providing specific support for individual cases. Supporting the relaunch of the Rochdale Landlord Accreditation Scheme, making sure that it has appropriate provisions on flooding and flood risk management and providing alternative accommodation should a property flood. Exploring opportunities to encourage Responsible Providers (RPs) to provide appropriate insurance for Right to Buy and Right to Acquire properties.

Support the development of Flood Performance Certificates (FPCs) through the Resilient Roch project					
Explore opportunities to ensure that Flood Performance Certificates (FPCs) apply to all residential properties, should the concept be taken forward.					

Provision of services					
A higher level of responsibility should be placed on utility companies to ensure that whatever they are putting into a property is not vulnerable to flooding.	• A higher level of responsibility should be placed on utility companies to ensure that whatever they are putting into a property is not vulnerable to flooding. This will enable services to be maintained in an event, such as pumps, and improving resilience.				

4 Barriers and challenges financial resilience and to residential property insurance uptake

Findings

- 1. Flooding, like fire, can be a major shock to financial wellbeing of individuals, families, small businesses and communities.
- 2. In considering flood risk, property insurance is recognised as the single most important mechanism to support financial resilience. Insurance is commonly used as a proxy for overall financial resilience.
- 3. Insurance is a voluntary activity. Except in certain circumstances, such as a requirement as part of a mortgage policy, property owners and tenants do not have to take out property insurance.
- 4. Many homeowners and tenants do not have property insurance. Of the 74 responses to the questionnaires, 50 (68%) affirmed they had some form of insurance. For renters, of the 12 respondents to the 2021/22 survey six (50%) had contents insurance while of the seven respondents to the 2022/23 survey two (29%) confirmed they had contents insurance. However, both the small sample size and the qualitative statements given by those affirming they had some form of cover indicate this figure may be lower.
- 5. Many people cannot afford property insurance and/or have other priorities associated with deprivation.
- 6. There appears to be a lack of understanding, particularly amongst younger people, about the need for insurance.
- 7. Some people have a lack of understanding of how to get insurance.
- 8. Many do not have the resources to invest in their properties to make them more resilient.
- 9. There has been a very significant reduction in the number of insurance brokers with a physical presence, leading to a lack of access to insurance.
- 10. Whilst 97% of owner-occupiers had at least one of buildings or contents insurance with 95% having both in the Blanc Review in Doncaster in Rochdale, of 40 homeowners who replied to our 2021/22 survey, 22 (55%) had either buildings or contents insurance (the questionnaire did not differentiate). In our 2022/23 survey of the 34 homeowners who replied to our survey 28 (82%) had either buildings insurance or buildings and contents insurance together.

Thematic (qualitative) analysis

Data presentation and analysis of the interviews and workshops are presented below. Notes, recordings and associated documents, including some limited e-mail correspondence and any documents that participants pointed us toward, were coded. The main codes that were identified were:

- Market penetration: An initial assessment of the extent and cover of insurance.

- Perceptions and values of insurance: An assessment of how participants perceive insurance, including an evaluation of perceptions of responsibility.
- Challenges of ensuring insurance is affordable.
- Issues regarding accessing insurance.
- Viewpoints of brokers and key social housing insurance providers.

Toward the end of the chapter, the analysis turns attention toward stakeholder suggested solutions and opportunities.

Questionnaire responses

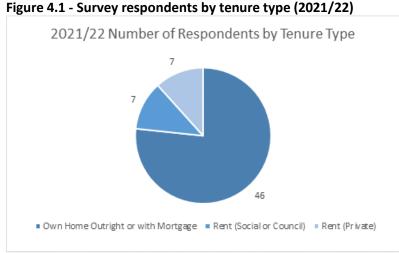
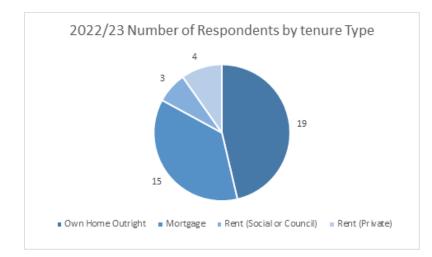


Figure 4.2 - Survey respondents by tenure type (2022/23)



Tenure of the respondents to the questionnaires did not align with tenure in the target areas (Figures 4.1 and 4.2). It is clear that homeowners are disproportionately represented, as homeownership in the MSOAs which cover Littleborough and Wardleworth is 67% and 49% respectively according to the 2021 Census data (see Section 3). Home ownership among questionnaire respondents was 77% and 83% respectively in 2021/22 and 2022/23 as seen in Figure 4.3. Businesses who responded to the questionnaires have not been included in these tables (figures referenced in the summary did include businesses).

This then reveals a necessary issue around engagement to be addressed. Tenants, both social and those in the private sector, remain highly vulnerable. In order to tackle their concerns and get their necessary buy in, we need to find other ways of getting in contact and building relationships. There is also a geographic crossover between areas of high rental tenancy and areas identified in Ch3 as having people who do not have fluency in English. Not only do both of these trends make comms and engagement harder, but they may have a compounding effect.

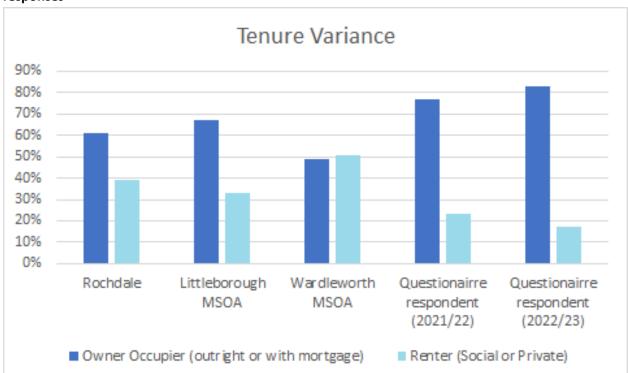


Figure 4.3 - Tenure in the borough (from ONS 2021) and MSOAs (Census 2021) against questionnaire responses

The questionnaire results primarily reflect the views of people with first-hand experience of flooding. While the affected properties do not neatly match administrative or data collection boundaries such as those in the 2021 Census. Although not all respondents gave full address or tenure details, it does appear that the respondents were more likely to be older, settled homeowners. Almost all respondents to the 2021/22 survey had lived in the area for more than 3 years. Of the 19 people who owned their home outright who responded to the 2022/23 survey, 11 were pensioner households. This highlights the

issues identified in this report of the difficulties in engaging with communities, particularly renters and more transient groups. Responses also reveal some interesting qualitative results.

With the caveats laid out above, the story which emerges is of a settled community, that understands that they are susceptible to flooding and have lived experience of flooding. They are aware of the post-2015 interventions by the council. There are two key areas that arise from the questionnaires. They are insurance, and confidence.

Insurance

Those who did not have insurance fell into two sometimes overlapping groups; those who could not find any insurance, and those that could but found the premium financially unviable. These issues remained a barrier even to very well-informed individuals, including in two cases members of the local flood group.

Tenure Type	Extremely Important	Very Important	Moderately Important	Slightly Important	Not at all Important	Total
Own home outright	15	2	0	1	1	19
Mortgage	13	1	1	0	0	15
Rent (social or council)	1	0	1	0	1	3
Rent (Private)	2	1	0	1	0	4

Figure 4.4 - How Important is it for you to Insure your home? 2022/23 Questionnaire

The responses (Figure 4.4) show that most people believe that insuring their home is important. Most respondents were home owners, indicating that tenants perhaps had less interest in the questionnaire. This may cross over with the fact that respondents tended to be those with direct experience of flooding. If a tenant has not had that, because they have only been in the property for a short time, then the deciding factor in response may not be tenure as such, but length of time in the property, with which tenure correlates.

Tenure Type	Buildings and contents	Buildings only	Contents only	No Property Insurance	Don't Know	Total
Own home outright	13	1	1	4	0	19
Mortgage	11	3	0	0	1	15
Rent (social or council)	0	0	0	2	1	3
Rent (Private)	0	0	2	1	1	4

Most homeowners had property insurance, including all those with a mortgage. All tenants either did not know whether they had insurance or had none at all, which when compared to the table above (Figure 4.5) shows the difference between aspiration and reality.

Below are a selection of comments from respondents indicating this issue from the questionnaires:

"Due to being in flood risk area we cannot be insured but have tried."

"Insurance companies do not cover for floods as we live on a flood plain."

"They don't cover us for flooding."

"Too close to river, can't get insurance after 2015"

Access to insurance - or at least *perceived* challenges around accessing insurance - is clearly a challenge. Working in partnership with insurers to address this is vital for developing resilience. A follow-up exercise could determine whether certain specialist insurers would cover the property. Where there was access to insurance in principle, however, affordability was an issue. Several questionnaire respondents had not been able to handle the high costs and either had reduced cover or had no cover at all, with others considering whether the cover they had was sustainable. Demonstrating this, qualitative comments included:

"Can't afford, I live next to a river so price out of my reach."

"No money"

"Doesn't provide value over payment versus risk."

"They want £1000 up front and I have not got this. I was on sick leave for a year so I am unable to afford this."

"I have always had building insurance, makes me feel safer. I don't have contents insurance because it is too expensive."

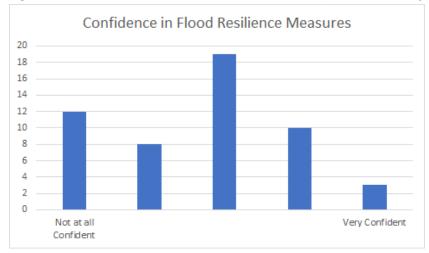
"I got insurance after the floods to cover me if it happened again, I ended up paying a lot more than normal insurance just for content insurance"

"Had to stay with same Company too for last 5 years and couldn't get insurance to cover a flood area and if there was the direct debit was ridiculous per month"

Clearly, for some, the affordability of insurance is an issue, even among people exposed to flooding. Being uninsured must not, therefore, be viewed as an issue of a lack of education and awareness, but perhaps as a rational response which cannot be justified for those on low incomes. In the case of tenants, where fewer than half said they had any insurance, this calculation may be even more weighted towards not having insurance given the transient nature of their tenure if in the private rented sector, or from a belief, if a social housing tenant, that they are covered by the social housing provider. These issues warrant further investigation.

Confidence

A further issue arising from the questionnaires is one of confidence. Of 52 households who answered the question, (Figure 4.6) only 3 were very confident in their Flood Resilience measures installed by the local authority following Storm Eva. This demonstrates the importance of ongoing links between a trusted institution, most likely the council and those who have flood defences installed.



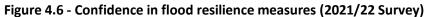


Figure 4.7 illustrates that of the 54 respondents, only one said that the measures installed had entirely reduced their anxiety over flood risk. 19 respondents (35%) said measures had made no difference. We need to reflect on the ramifications if one-third of households who have lived experience of flooding do not believe that the agreed material response to this has made them safer. Interrogating this is necessary to understand why their anxiety is not being assured. This also raises the mental health aspects of living in a flood risk area and how building resilience must also address questions of anxiety to ensure people feel confident in both their own and the wider communal response. Again, the thread running through these concerns is a trusted authority who can be relied upon; from installation to maintenance to response in emergency. 'Fire and forget' is not a valid mode of flood defence, even with the best PfR.

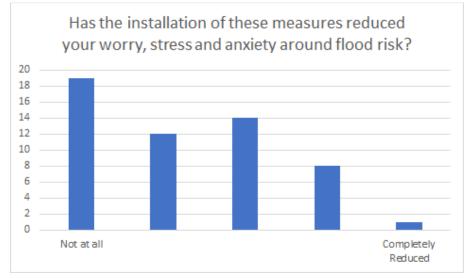


Figure 4.7 - Has PfR reduced anxiety around risk?

There is also a point about the efficacy of the measures themselves. 47% reported that they are fully capable of using their measures, though only 38% said they knew how to maintain them. Despite this, only 18% of households had purchased their own flood resilience measures. As well as the issues of follow-up on flood resilience measures, there is a gap between what is currently being done and the psychological benefit we would expect from such measures which must be bridged. An emergent question is why such people have not taken further action, and whether this is educational (they don't know what to do), financial, (they know what to do but can't afford it) or cultural (the council/government will help if something bad happens, there is nothing which can be done). There is strong qualitative evidence from the interviews that all three elements are at play, but further research may help to develop appropriate interventions.

What is clear from the questionnaire responses is that even the most engaged households with the most to lose need some sort of other factor in order to feel confident that the measures that have been taken will be sufficient during a flooding event, and that only a minority are of that opinion even among this group.

Financial Resilience and Insurance

Everyone is at some risk of flooding. However, some people are more vulnerable than others, with "...lower-income households...most exposed to the financial consequences of a flood when it occurs. Despite the importance of insurance, just one-in-three (33 per cent) of the poorest households currently have contents insurance." (Judge & Marshall, 2022).

A report from the Financial Conduct Authority (2020) describes financial vulnerability under four headings Health, Life Events, Resilience and Capability (Figure 4.8). Whilst acknowledging that this definition is not complete, it has enabled three surveys of vulnerability to be undertaken in 2017, 2020 and 2022, providing a useful and practical approach to evaluating financial resilience.

The 2022 FCA survey includes the following key findings:

- 12.9 million UK adults had low financial resilience 1 in 4 (24%) of all UK adults. These are people who are in financial difficulty, or who could quickly find themselves in difficulty if they suffer a financial shock. They may have no savings or are heavily burdened by their domestic bills or credit commitments.
- 2. There is a large jump in the proportion of adults reporting being burdened by their domestic bills and credit commitments: 7.8 million adults (15% of all adults) felt this way in May this year, compared with 5.3 million adults (10%) in February 2020 due to the significant increase in the cost of living in 2021 and 2022.
- 3. People in the North East and North West are much worse off in May 2022 than those in the South East and South West. Adults living in the most deprived areas of the UK are nearly 7 times more likely to be in financial difficulty than those living in the least deprived areas.
- 4. Low financial resilience is one of four drivers of vulnerability. Its increase has driven the overall proportion of UK adults with characteristics of vulnerability from 46% to 47%, or from 24.0 million to 24.9 million, between February 2020 and May 2022. The other drivers are poor health, recent negative life events and low capability.

Health	Life events	Resilience	Capability
 Physical disability Severe or long- term illness Hearing or visual impairments Poor mental health Addiction Low mental capacity or cognitive disability 	 Caring responsibilities Bereavement Income shock Relationship breakdown Domestic abuse Having non- standard requirements such as people with convictions, care leavers and refugees 	 Low or erratic income Over-indebtedness Low savings Low emotional resilience 	 Low knowledge or confidence in managing finances Poor literacy or numeracy skills Low english language skills Poor or non-existent digital skills Learning impairments No or low access to help or support

Figure 4.8 - The four drivers of vulnerability and example characteristics (FCA, 2020)

The 2022 report also recorded an increase from a fifth (20%) to nearly a quarter (24%) of UK adults showing low financial resilience between February 2020 and May 2022.

Insurance is commonly regarded as a proxy for financial resilience to major shocks. A report by the Financial Inclusion Commission in 2017 reported that almost 15 million adults have no insurance cover for their possessions - that is around a quarter of the population. A report by Defra (2022) noted that a very high proportion of owner occupiers have both buildings and contents insurance (91%), with very little difference between those in flood risk or control areas. However, far fewer households in rented accommodation had contents insurance (57% in at risk areas and 55% in the control).

Property insurance

The Association of British Insurers (ABI) defines insurance as "Insurance is a financial product sold by insurance companies to safeguard you and / or your property against the risk of loss, damage or theft (such as flooding, burglary or an accident).⁸" However, an alternative definition, "Insurance is a means of protection from financial loss in which, in exchange for a fee, a party agrees to compensate another party in the event of a certain loss, damage, or injury"⁹ is perhaps more accurate given that there is no implication that possessing insurance will reduce the likelihood of a hazard occurring.

We identified a number of different markets (Figure 4.9), each with their own characteristics.

⁸ <u>https://www.abi.org.uk/data-and-resources/tools-and-resources/how-insurance-works/</u>

⁹ <u>https://en.wikipedia.org/wiki/Insurance</u>

	Type of insured client	Types of property insurance	ls insurance compulsory?	Bespoke	Flood Re
Residential	Home owners	Property buildings and contents	Buildings insurance for mortgages	Not usually	Yes
	Private rented tenants	Contents	No	No	Yes
	Social housing tenants	Special contents insurance including damage protection, etc	Νο	Νο	Not in practice
Commercial	Private residential sector landlords	Income protection, property buildings protection, plus limited contents cover	No	No	No
	Social housing landlords	Bespoke insurance negotiated	No	Yes	No
	Small enterprises	"Off the shelf" property buildings & contents insurance	No	No	No
	Medium enterprises	Bespoke negotiated insurances	No	Yes	No

Figure 4.9 - Typical characteristics of different types of insurance

Residential Property Insurance

Residential property insurance is provided to cover properties that are used as residential homes. Buildings insurance typically provides cover for the structure of a building and its fittings whilst contents insurance generally covers fittings and contents. Both are available to homeowners. Contents insurance is available to tenants. Social housing tenants have access to standard contents insurance, but where their social housing organisation enters into an arrangement with an insurance provider, they are also able to access a tailored product through the housing provider. There are currently three insurance providers, Aon, Thistle and Zurich. In addition, some councils such as East Riding¹⁰ have negotiated the option of contents insurance for council tenants.

Those not in social housing can access property insurance through price comparison websites, directly through individual insurers through the internet or by phone, or through an insurance broker. The internet has transformed the way that people access insurance through price comparison websites and directly through insurers. At the same time, there has been a significant decline in insurance brokers dealing with residential property insurance. One insurance broker reported that he used to have 35 branches and that now he only had one. A search revealed that there was only one insurance broker with a shop front in each of the two study areas offering the full range of products across all markets. The stakeholder analysis, as well as local knowledge indicates that many insurance brokers that had been trading quite recently had closed.

Both brokers that we interviewed reported that people don't realise what a broker does. They confirmed that people tend to use price comparison websites and then, if they are unable to get insurance, they don't know where to go. This was also acknowledged by the social housing provider. Across the interviews from different sectors it was suggested that people need to understand: what insurance is; why you need it; how to get it; what to look for in a policy (particularly exclusions).

The social housing provider and the two insurance companies interviewed also suggested that whilst older people had a better understanding of the need for insurance, many younger people didn't appreciate its value. This was reflected by one insurance broker who stated that they tend to have older people taking out policies who then keep coming back and business is spread by word of mouth. He added that a significant proportion of people find using the internet difficult. The example he gave from the day of the interview was of a lady who said that she struggles to get online, let alone use the internet. The Centre for Ageing Better State of Ageing 2022 report¹¹ states that there has been a dramatic increase in internet use by people over 75, rising 7% in 2020. Although internet use is still growing among 55-74 year olds, the growth is slowing and there are still over 3.1 million people aged 55 and over who have never used the internet. A quarter of people aged 65 and over with internet access lack the skills to use it independently.

Flood Re

Flood Re¹² is a reinsurance scheme that makes residential property insurance more widely available and affordable for properties at a high risk of flooding. The initiative is the result of a joint approach between the insurance industry and Government, with statutory backing through the Water Act 2014. Flood Re was set up as a mutual company but now has Public Body status, reporting to Defra and

¹⁰ <u>https://www.eastriding.gov.uk/housing/council-tenants/homeinsurance/</u>

¹¹ <u>https://ageing-better.org.uk/state-of-ageing</u>

¹² https://www.floodre.co.uk

Parliament. The Flood Re Scheme runs from April 2016 to March 2039, at which point it will cease to exist.

Flood Re's purpose is to promote the availability of residential property insurance to eligible homes and to manage the transition to risk reflective pricing for households. It provides reinsurance cover for policies ceded to Flood Re by insurance companies. This is financed by a levy on UK residential property insurers. The number of policies assigned to Flood Re has increased each year with 256,634 written in 2022¹³. The scheme is eligible for households that meet eligibility criteria¹⁴. Key amongst them are that the property must have been built prior to January 2009 and is lived in as someone's primary residence during the period of the policy.

As noted, Flood Re's purpose is to manage the transition to risk reflective pricing by 2039, i.e. the situation where the open market is able to provide affordable insurance to the majority of residential properties without the need for subsidies. To achieve this, Flood Re has developed a Transition Plan which it reviews through Quinquennial Reviews. An example of the work that it is undertaking is the Build Back Better Scheme, which supports people to reduce the risks of flooding to their property and/or reduce its impacts when a property is reinstated following flooding.

Commercial insurance

Insurance for commercial properties operates on a different basis, often with different insurance providers compared to residential property insurers. Landlords, SMEs, larger businesses and social housing organisations all fall into this category. SMEs and small scale landlords may be able to access "off-the-shelf" insurance policies in a similar way to residential property insurance, often through the internet, but also through local and national insurance brokers. Otherwise, policies are often negotiated on a bespoke basis. Insurance brokers are still very prominent in this sector, though larger companies may negotiate directly with insurers.

Savings

An alternative approach to insurance is to effectively self-insure. For those who are wealthy enough this might be a realistic approach, particularly if measures have been taken to reduce the impact of flooding, should it be a regular event. Those who are less affluent run the risk of having to reinstate their property before they have built up sufficient savings to meet their needs. For most people, this approach is unlikely to be realistic. However, one interviewee had taken this approach, together with reducing the financial impact of flooding when it does occur. He was also quite cynical about the insurance industry as a whole:

"I used to have insurance and now I don't... I have been a bit off and on with it. There have been times in the past where I have used a property to secure a loan and there has been a necessity to have it, so from early doors of dropping insurance I have picked it up once or twice along the way.

¹³ https://www.floodre.co.uk/wp-content/uploads/2021-22-Annual-Report_Design_Parliamentary-version.pdf

¹⁴ Full details are at https://www.floodre.co.uk/find-an-insurer/eligibility-criteria/

But, as you get towards retirement you don't need to use your property as security for anything because everything's paid for; it just doesn't matter."

The interviewee continued to explain his current perception of and approach to insurance:

"It had become such a huge bill, for nothing, and if I got flooded tomorrow it might cost a few hundred quid...I have altered the house to reduce the damage, I can dry the house out and we can carry on and it's a few hundred quid. This is miles less than the premiums. So, I just don't care. I just don't need it at all."

The only risk that I would consider would be fire. If my house burnt down and I had nothing left in it, could I cope with that? Well, yes, I could. So that doesn't bother me either. And as I said, I have more than one property. I don't care about them either. If people in them want to insure their contents, that's fine. If I can get out of paying it I will because it is just a pain. It is so much money, it's tens of thousands of pounds that I haven't paid in premiums to keep somebody's nice oak desk in an office somewhere, it just doesn't matter. It's not important. If you are not desperate, if you are not running close to the edge, you know some people if they lose their house and lose all their possessions and they have got borrowed money for everything all over the place are stuck, so they have to have the insurance. I don't see myself being in that position. It is not that important.

For people who can't afford insurance, the concept of saving may also be irrelevant. But there are options for some people:

The **Help to Save scheme**¹⁵ for people on low incomes allows people on certain benefits to save £50 per month for four years. Regular savers get a 50% bonus after two and four years, the maximum saving of £2,400 will receive a 50% bonus of £1,200. A review of the scheme that looked at why people weren't using it, reported on Money Box Live, noted limited take up. Those on a low income can't afford to save.

Following flooding in 2016, the **Community Foundation for Calderdale** took a proactive approach that went beyond the traditional role of a community foundation. They recognised that if businesses fail as a result of flooding, then people lose jobs with a major impact on the community. Communities in the Calder Valley that flood frequently are particularly vulnerable. They established two schemes:

1 - Watermark¹⁶ is a campaign to build a resilience fund for towns in the Calder Valley for future flooding. The aim is to build a pot of money that can be accessed by businesses & households immediately when future floods hit. Watermark is a not for profit campaign and is a joint venture between <u>Totally Locally</u> and <u>Community Foundation for Calderdale</u>. Shops, businesses, growers and service providers produce a "Watermark" product. They badge it up with the "Watermark" stickers or branding. The shop or business sells their "Watermark" product, and a percentage (or all) of the profits go into a fund. Products could be a beer, a book, tea towels, bags, notebooks, a coffee & cake special, a climbing course, an artisan lamp, an insurance policy, or a concert or event. A local solicitor provided premises so that a presence could

¹⁵ <u>https://www.litrg.org.uk/tax-guides/savers-property-owners-and-other-tax-issues/savings-and-tax/help-save-savings-scheme</u>

¹⁶ <u>https://watermark-flood-fund-calderdale.business.site/</u>

be provided for the goods. The fund is managed by the Community Foundation for Calderdale who then distribute the money if floods hit Calderdale again.

Following flooding in February 2020 when lots of businesses were uninsured, £230,000 of grants were awarded and £175,000 of match was received from the Government. Evidence of flooding was gathered by photographs. The current (March 2023) Watermark fund balance is £164,000.

The organisers reported some challenges: including questioning how many times people would continue giving after successive floods; Post-Covid 'giving fatigue' making it a struggle to get donation;, and the fact that the fund had a finite amount of money with difficult decisions about distributions. The business community - our interviewee told us - contributes the most, so they had to get 'their fair share'.

2 - Watermark Floodsave¹⁷ helps businesses and homes to be more flood resilient by match funding their savings. The scheme is organised by Community Foundation for Calderdale with funds held by Calderdale Credit Union. Match funding is raised through donations, grants and, on occasion government. The fund was set up using £125,000 set aside from money raised for the flood fund following flooding in 2016.

People and businesses can deposit up to £150 per month up to a total of £10,000 and it will be matched. This can be withdrawn at any time, without penalties. If a flood happens the money saved will be doubled. Funds are distributed if a Gold Command incident is declared for the Calder Valley. The whole process is managed by a committee of local people who agree where the funds go. There are currently 19 savers.

Our interviewee identified the following characteristics, and many benefits, from Floodsave:

- It is much more proactive than a traditional scheme of raising and distributing grants.
- There are no strings attached.
- It is not called a replacement for insurance, and shouldn't be treated as such.
- It is quick to respond/ administer and can respond much faster than the local authority.
- The scheme works with a pot of money and recycling that pot of money.
- This is about the community investing in itself.
- Funds from 2020 have been invested carefully to grow the pot.
- The scheme evolved very quickly with a clear vision.
- In theory funds can be used "to do good things" while waiting for the next flood.
- Other opportunities for funding include dormant trusts and assets, Section 106 money.
- It is local to Calderdale and therefore is associated with place, responsibility for the community's own destiny more control and more autonomy. The Community Foundation for Calderdale is really recognised in the community now.

The interviewee did, however, report a number of challenges:

- A lot of time was spent trying to convince people.
- The scheme never really got the big donations that they wanted.

¹⁷ <u>https://www.facebook.com/watermarkcalderdale/</u>

- Marketing was important, in terms of getting people involved. A huge amount of time was spent setting the scheme up and running it in the early days, including a dedicated member of staff.
- It was very tiring to set up "an awful lot of work".
- Interest in the scheme dissipates between floods.

Market penetration

Wiseman & Hughes 2018a [Defra, Availability and affordability of insurance July 2018 <u>https://sciencesearch.defra.gov.uk/ProjectDetails?ProjectID=19990&FromSearch=Y&Publisher=1&Searc</u> <u>hText=FD2705&SortString=ProjectCode&SortOrder=Asc&Paging=10</u>] compiled an evidence base on residential property insurance uptake, one of a series of three reports supporting the introduction of Flood Re.

For residential property insurance, 88% of respondents in an "At risk group" had insurance policies covering both buildings and contents insurance compared to 89% for a control group. 6% had separate policies for contents and buildings insurance. The Blanc Review https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/93 2523/review-flood-insurance-doncaster.pdf reported that 97% of owner-occupiers had at least one of buildings or contents insurance with 95% having both.

The 2022/23 questionnaire included questions about residential property insurance. Details can be found at Appendix 5.

Figure 4.10 - Question 2 - On a scale of 1 to 5, how important do you think it is to insure your home? There were 43 responses to this part of the question.

Option	Total	Percent
1. Extremely important	31	72.09%
2. Very important	5	11.63%
3. Moderately important	3	6.98%
4. Slightly important	2	4.65%
5. Not at all important	2	4.65%
Not Answered	0	0.00%

Most people (72.09%) felt that it was extremely important to insure their home.

Figure 4.11 - Question 3 - Which of the following best applies to you? There were 43 responses to this part of the question.

Option	Total	Percent
I own my home with a mortgage	15	34.88%
I own my home outright	19	44.19%
I own my home through a shared ownership scheme	0	0.00%
I rent my home from a Council (Local Authority)	2	4.65%
I rent my home from a housing association, housing co-operative, charitable trust or registered social landlord	1	2.33%
I rent my home from a private landlord or letting agency	4	9.30%
I rent my home from my relative or friend or the relative or friend of another household member	0	0.00%
Other	2	4.65%
Don't know	0	0.00%
Not Answered	0	0.00%

These responses represent a disproportionately high number of homeowners versus tenants, probably reflecting different levels of people being vested in their property, and therefore the level of interest in these questions. This in turn qualifies the results from the following questions.

Figure 4.12 - Question 4 - Do you have home insurance? There were 43 responses to this part of the question.

Option	Total	Percent
Buildings	4	9.30%
Contents	3	6.98%
Both buildings and contents together	26	60.47%
I have no property insurance	7	16.28%
I don't know	3	6.98%
Not Answered	0	0.00%

Noting the point about representativeness, it 23.26% either did not have insurance or didn't know. Of those that did respond a significant proportion had buildings insurance only.

Defra - Review of affordability and availability of flood insurance to help evaluate the effectiveness of FloodRe. - FD2721 2022 noted that households in at risk areas without insurance stated that their reasons for not renewing their insurance were strongly related to pressure on finances. 38% of all of those with no insurance believe it is not needed, Summary report p3.

Figure 4.13 - Question 5 - If you do have buildings insurance, how was it organised? There were 40 responses to this part of the question.

Option	Total	Percent
I/we organised and paid for my/our own buildings insurance policy	29	67.44%
My landlord organised the buildings insurance	3	6.98%
I am a leaseholder and the freeholder organised the buildings insurance	0	0.00%
As far as I know the building was not insured	2	4.65%
Don't know	6	13.95%
Not Answered	3	6.98%

Of those who had building's insurance, the vast majority had organised it themselves. There were no leaseholders, but there were a significant number of people who either didn't know whether their home was insured or thought that the building was uninsured (18.6%).

Figure 4.14 - Question 8 - If you do have contents insurance, how was it organised?	There were 40
responses to this part of the question.	

Option	Total	Percent
I/we organised and paid for my/our own home contents insurance policy	30	69.77%
My landlord organised the contents insurance and it was included in the rent	0	0.00%
I didn't have any contents insurance	8	18.60%
Don't know	2	4.65%
Not Answered	3	6.98%

Figure 4.15 - Question 11 - Do you have any property other than your main home (for instance a garage or lock-up) which could be affected by flooding? There were 43 responses to this part of the question.

Option	Total	Percent
Yes	12	27.91%
No	31	72.09%
Not Answered	0	0.00%

This question was asked because the ownership or use of a building or asset such as a lock up, workshop or garage can sometimes generate unintended consequences. For example, there were instances of the main property being unaffected, but flooding leading to vehicles in garages being written off, which in turn led to difficulties in getting motor insurance.

Figure 4.16 - Question 12 - How easy do you find it to understand insurance? There were 43 responses to this part of the question.

Option	Total	Percent
1. Very easy	9	20.93%
2. Quite easy	20	46.51%
3. Not sure	8	18.60%
4. Quite difficult	2	4.65%
5. Very difficult	4	9.30%
Not Answered	0	0.00%

Most people who responded stated that they found insurance "Very easy" or "Quite easy" to understand. However, this left a significant minority who found it difficult and several people stated that they would like training and information on insurance, see Question 13 below.

Figure 4.17 - Question - 13 - Would you like training/ further info on insurance. There were 43 responses to this part of the question.

Option	Total	Percent
Yes	8	18.60%
No	35	81.40%
Not Answered	0	0.00%

Those who responded that they would like further information or training highlighted:

The best insurance for flooding

One of my complaints is that the watercourse near me often penalises my chances of insurance, but the source of the flooding affecting me is actually surface water from the hillside behind my property as the watercourse is much lower.

Understanding the small print.

Everything about house flood insurance.

Why do insurance companies have an excess policy? Why do they try to wriggle their way out from paying up using all the baffling small print and jargon?

What is available at a reasonable price for flood cover. Please note I have to get all 10 flats to agree to any potential quotes.

Figure 4.18 - Question 15 - Thinking about how you shop around for insurance and discussions with insurance companies, how straightforward have you found it to get the insurance that you feel meets your needs? There were 42 responses to this part of the question.

Option	Total	Percent
Very straightforward	5	11.63%
Quite straightforward	20	46.51%
Slightly difficult	2	4.65%
Very difficult	7	16.28%
I have not purchased insurance cover	8	18.60%
Not Answered	1	2.33%

Most people found it fairly straightforward to get insurance, but others didn't, apart from those without insurance cover. Question 16 below shows that the majority of people either used a price comparison website or searched online for specific companies. A smaller number phoned companies or used a broker. Given the small number of brokers left, the latter is not surprising.

Figure 4.19 - Question 16 - If you have insurance, how did you renew? There were 40 responses to this part of the question.

Option	Total	Percent
I searched online for specific companies	11	25.58%
I phoned specific companies	4	9.30%
I went to a broker	6	13.95%
I self-insure	1	2.33%
I used an insurance comparison site (e.g. money supermarket)	17	39.53%
I got help from a trusted third-party (e.g. a religious organisation or charity)	1	2.33%
Other	5	11.63%
Don't know	5	11.63%
Not Answered	3	6.98%

The Defra Review of affordability and availability of flood insurance noted that people did not typically shop around for their insurance. More than half of households in at risk areas renewed with their existing insurer.

Wiseman & Hughes, 2018a [Defra 2018] reported that amongst renters 34% of those in the at risk group were more likely to state that they did not have contents insurance vs 21% for the Control group, but that this has declined since 2015 where it was 41%. The Blanc Review stated that 45% of tenants confirmed they did not have contents insurance. Only 25% of tenants confirmed they had contents insurance that covered flood damage, with 50% saying they did not.

(Wiseman & Hughes, 2018b) [Defra, Availability of insurance for small businesses June 2018 https://sciencesearch.defra.gov.uk/ProjectDetails?ProjectID=19990&FromSearch=Y&Publisher=1&Searc hText=FD2705&SortString=ProjectCode&SortOrder=Asc&Paging=10] reported that 89% of respondents stated that they had arranged insurance cover for their premises, 77% arranging it for themselves. Ten percent did not have property insurance. There did not appear to be any significant differences between businesses in high/medium flood risk areas and those in low or very low risk areas. The Blanc Review reported that of 29 SMEs interviewed 72% had insurance for their premises, with a mixed experience for the remainder on their desire or ability to get insurance.

The impact of flooding on SMEs has recently been documented, alongside some work to identify practical interventions to improve financial resilience Sakai, P., et al. (2021) Bridging the knowledge gap to boost SMEs flood resilience. University of Leeds and University of York. <u>https://icasp.org.uk/wp-</u>

<u>content/uploads/sites/13/dlm_uploads/2021/06/SMEs-and-Flooding_Sakai_Report_vF.pdf</u> It describes the lack of information about SMEs in both local government and the insurance industry, as well as other stakeholders as a barrier to SME flood resilience in Yorkshire and Humber. In particular, the project supported local government to understand the "full economic costs of flooding on SMEs" and gathered from the insurance industry what information it needed to increase trust that SMEs had "engaged in self protection measures", thereby opening up insurance market opportunities. Two tools, TAEC (Tool to assess the economic cost of flooding in SMEs) and TAER (Tool to assess the effectiveness of resilience measures on SMEs) "to allow local government to make more informed decisions based on a wider understanding of SME risks were developed to provide a coherent methodology.

The project found that there were common information needs about SMEs:

- The economic costs of floods
- Their ability to recover and their business continuity needs
- An assessment of SME resilience

It also found that many SMEs that had undertaken measures to improve flood resilience felt that their efforts were not considered when it came to insurance. Similarly, SMEs may feel that they are resilient, but if no one is engaging with them and telling them otherwise, opportunities may be missed to improve flood self-protection. Feedback loops are needed to improve SME resilience, insurability and support from local government.

A methodology was developed to pilot this approach but this unfortunately coincided with a significant flood incident.

As indicated both by the survey work in Rochdale and in previous research including the Blanc Review of the Doncaster floods and various Defra funded surveys, the penetration of contents insurance for residential property insurance is severely limited in many places. This is particularly the case for social housing tenants. One insurer told us in an interview that in some housing providers the penetration of their insurance scheme was around just 5%. They added: *"95% are not insuring under a scheme such as ours."* They acknowledged that more people will undoubtedly be on what they referred to as *"more standard insurance schemes"*. Critically, however, in their opinion these 'open market' schemes were *"not as good value for money"*, either in terms of their comprehensiveness, or because the cover they provide was not as simple to access or to pay for (noting that most social housing tenants paid for their cover with their social rent payment). This challenge is also noted by the Chartered Insurance Institute who noted that insurance executives have expressed concern that the market has a structural focus on price, not value. This could result in a "'race to the bottom", with potentially serious consequences for the future of the industry" (Chartered Insurance Institute, n.d. 3).

Another insurance industry interviewee told us that they suspected 60-70% of people in social housing have no contents insurance at all, either with them as the primary provider or with any other (open

market) provider. A third interviewee (representing the social housing sector in Rochdale) concurred, estimating that *"well over half"* of tenants had no insurance at all. Acknowledging the broader challenging context of households in this situation, the interviewee added that in all likelihood, for these tenants they were *"pretty certain flooding won't be their only problem"*.

The affordability of adequate insurance cover is not the only challenge facing tenants (and therefore particularly contents insurance) take-up. One representative from the insurance industry referred to how it was a *"battle to get the message out there that this [tenant's contents insurance] is a good thing"*. A social housing manager concurred, stating: *"People with the least have the most to lose. This is really important."*

An interviewee working at the regional governance level in the North West said that colleagues, particularly those heavily involved with strategic planning and governance, were often surprised that people were unaware of their flood risk, or seemed to not take flood risk seriously. She admitted that policy makers were *"not in touch"* with the extent of the challenges that people at socio-economic disadvantage faced and that some might struggle to spare the money required to purchase adequate insurance cover. She said:

"I'm surprised that some colleagues don't understand how people live and what is real life. Or at least they have a very superficial understanding. People might know they are at flood risk – but if they're struggling to pay the bills, pay the rent, keep food on the table then they won't be thinking about the potential of flooding in a few years time no matter how much upset that will cause to their lives." (Interview, local government officer)

Interaction between insurers and (some) social housing providers was also identified as a challenge. One insurer interviewed reported that some of the schemes they had with social housing providers struggled to gain market penetration because *"the local authority or provider is just not engaged"*. One interviewee said:

"With some of them (local authority or social housing provider) you just can't get someone on the phone. Housing associations are going through a really tough time. Some are almost bankrupt...A guy we used to deal with [in an unspecified housing provider] is responsible for finance, for human resources, all sorts of things. Frankly, they are just trying to keep the wheels on and deal with the financial mess they're in...In that context, promoting a tenants' insurance scheme just is not a priority... "

The insurer reflected further on this insight, adding that a particular challenge was getting the attention of executives and senior leadership of local authorities and social housing providers:

"We get the sense they [account managers] just don't get much airtime with executives or senior leadership. Some will have a specific individual with responsibility for it. But it could just be Maureen in the accounts department. Other times it's maybe the head of procurement but think about everything else they deal with. It really is a mixed bag." Ideally, they concluded, they needed to ensure that insurance was integrated with the strategic priorities of providers. The insurer singled out Rochdale Boroughwide Housing as a leader in that regard:

"I get the sense that Rochdale [Boroughwide Housing] recognise the value of insurance and are all over it. It's really important for them at the moment."

Perceptions and perceived value of insurance

2022 questionnaire

Figure 4.20 - Question 17: If you do not have insurance, what were the main reasons why? Please select as many as apply. There were 13 responses to this part of the question.

Option	Total	Percent
I couldn't get a quote / was refused by everyone I approached	4	9.30%
The costs of premiums were too high	5	11.63%
The excesses were too high	4	9.30%
The risk wasn't high enough to justify the cost of taking out insurance	1	2.33%
I didn't get around to it	2	4.65%

Figure 4.21 – Question 18: If you do have insurance but found the process difficult, what were the difficulties in getting insurance? Please select as many as apply. 17 respondents provided multiple answers.

Option	Total	Percent
I couldn't get a quote / was refused by everyone I approached	7	15.91
It was not possible to find the right kind of insurance to meet my needs	6	13.64
The cost of the insurance was too high	10	22.73
The excesses were too high	6	13.64
It was too much hassle, or it was too confusing, to get insurance	3	6.82
The risk wasn't high enough to justify the cost of taking out insurance.	2	4.55
Not answered	27	61.36

In addition there were 2 additional comments:

Through my working career and in private life I have worked on many insurance claims. Dealing with Insurers and their loss adjusters has generally been anything other than a pleasant experience. No flood cover

The interviews gathered information on people's perceived value of insurance. They identified a series of key points to be considered when designing any insurance interventions including: awareness of the need for insurance; the responsibility for getting insurance; and the perceptions, and perceived value of, insurance.

The research demonstrated that awareness of the need and potential value of insurance, as well as the differentiated responsibility for obtaining insurance, (i.e. the distinction between tenant and landlord responsibilities) was a major consideration. It is perhaps also worth noting that in many cases insurance is an optional purchase, particularly for tenants and business owners. One interviewee reflected that having the confidence required to navigate the insurance purchase process depended somewhat on *"already knowing the system"* and that they have obtained insurance, or dealt with insurers, in the past. They went on to suggest that there were particular challenges for tenants and for sectors of the population that might be transient:

"If you are living in accommodation that is rented from a landlord and you are the tenant, the landlord might get information because they are the name on the lease, whereas the tenants of the property come and go. They may not have experienced the floods on Boxing Day [in 2015], so they will be thinking "how do I get an insurance quote or where do we need to go, or is it the landlord's duty or the tenant's duty."

The interviewee was asked to expand on this latter point:

Interviewer: So you are saying that tenants don't know the duties and don't know where to go to get insurance?

Interviewee: They will assume that the landlord is getting the rent, that it is their responsibility to get the insurance, but don't realise that personal possessions belong to them...So, if you are looking at building insurance or contents insurance, what do you have to do?

On a similar note, another interviewee (a resident) alluded to the criticality of insurance, but reflected that perhaps not everyone knew just how important it might be: *"You are not aware that you need [insurance] until you need it."* Another told us that he had to work hard to convince his elderly parents of the value of insurance:

"I said to my mum that we need it [insurance cover]. Bless my parents...I said I can't be having you running down stairs with buckets and seeping out water from there and getting rags and cloths and putting them on the wall, as if that is going to stop the water coming in.

Some interviewees agreed that awareness of flood risk within the sector of the population that rented their homes was particularly problematic. When asked if landlords know about flood risk and the possibility of tenants getting insurance, one said:

"I think that they choose to ignore it. They simply think that we have a tenant for 12 months. They have signed an agreement, they know they have them hook and crook... They may not release that information [about insurance] and tell them that you have to insure their belongings. Some people might assume that the landlord, he or she, is responsible."

These challenges would become all the more acute amongst certain demographics. When considering whose responsibility it is to get insurance, one interviewee said that some household would understand the differences better than others:

So those that know English will understand it perfectly well. Those that don't have a good command of English, and some of the asylum and refugee families that are living in some of these areas, they will just assume [this is the] landlords house, we pay him money, we don't need to pay him for buildings or contents insurance."

Another interviewee also referred to the problems when dealing with landlords after a flood, alluding to their lack of engagement in helping tenants. After a property was badly damaged a tenant was left with a kitchen in very poor condition: *"the landlord really wasn't interested – wasn't going to do anything without a push"*.

One member of the community that we interviewed looked with envy at a neighbouring household that did not have insurance but (apparently) were reinstated through charity payments and a grant:

"I've got a story of a neighbour that didn't have any insurance, but it worked out positive for them. They didn't have insurance but after the big flood they got a grant and ended up with new everything. I might sound a bit bitter about it – and I suppose I am. But it's kind of made me cynical. Don't get me wrong, I'm glad the grant was there. But they'll never bother with insurance again."

We suspect this referred to a grant that the interviewee wrongly perceived to be linked to insurance.

A recurring theme was a sense that some tenants did not acknowledge, or did not always accept, that they were responsible for property 'contents'. They cited an example of an occasion when, after a flood, a social landlord reinstated the building fabric of a property but the tenant was surprised to learn they were responsible for replacing the floor covering (that is, the carpets) at their own expense. An insurance industry representative stated that this demonstrated that financial education is required, something that they believed was *"especially important in a social housing environment"*. Noting that they had previously worked for some time in the social housing sector, they stated:

"There's a sense that it's their home right up until something goes wrong. But then it becomes the landlord's responsibility."

A colleague, interviewed at the same time, concurred:

"Yes, it's the landlord's house, but they're not responsible for **your** goods. Again, getting that message across is a big challenge."

Later, after reflecting on the "great value" of social housing contents insurance, an insurer admitted that there was a "massive battle to get the message out there that this [having contents insurance] was a good thing". Another insurer stressed the importance of "work[ing] in partnership to make sure all residents are aware of the scheme and how the set-up works".

Landlord and property owner engagement is also a challenge. However, a property manager who manages 1,500-1,800 rental properties said: *"Nobody asks about flooding"*. Another property manager with several hundred properties on their books stated that *"flooding and flood risk seldom comes up as an issue"*. He went on to suggest that although flood risk affects sale price, the impact on the rental market was effectively non-existent, and suggested this further undermined engagement with insurance. A landlord interviewed who had a *"few properties kicking about" said* that he essentially self-insured:

"I used to have insurance and now I don't. When did I sack it? I have been a bit off and on with it. There have been times in the past where I have used a property to secure a loan and there has been a necessity to have it, so from early doors of dropping insurance I have picked it up once or twice along the way. But, as you get towards retirement you don't need to use your property as security for anything because everything's paid for; it just doesn't matter. I sort of fell out with them quite some time ago. I have only had the insurance when necessary. It had become such a huge bill, for nothing, and if I got flooded tomorrow it might cost a few hundred quid."

Later, he added:

"It is so much money, it's tens of thousands of pounds that I haven't paid in premiums to keep somebody's nice oak desk in an office somewhere, it just doesn't matter."

When we suggested to an insurance broker that we knew some landlords were not insuring their properties, his response was scathing:

"Landlords who don't insure are stupid. Those with large portfolios who don't insure are even more stupid. They could have a house burn down and lose everything. Landlord policies all have cover for alternative accommodation, so landlords should be offering alternative accommodation through their insurers when properties are flooded."

Both insurance providers and social housing officers agreed that insurance was a relatively complex financial product. The insurer reported that they had taken a *"hard look"* at their policy documentation, stating that they needed to acknowledge that many people had quite a low reading and comprehension

age. There is, he continued, a booklet that accompanies policies that sets-out what is covered, what is not covered and how much it costs. But, the insurer continued, although they try to keep documentation and paperwork simple:

"...regulatory constraints mean that certain forms of language have to be used; we're limited in terms of just what we can cut out and what we need to keep in".

Another two insurers agreed that policies were complicated, and as far as possible needed to be simplified so that people can understand them. One added for emphasis: *"I'm an underwriter and I don't even read my own insurance documents!"* This was also referred to in an interview by a member of the community who said:

"People don't read policies. They just want the cheapest policy until they want to claim."

Concurring with this sentiment, a respondent from the community told us in an interview that "*Policies are too complicated. They need simplifying so that people can understand them.*" An insurer also recognised that the terms and conditions of insurance are not only complex, but can be off-putting for prospective customers:

"People tend not to trust insurance when they see exclusions and excesses. They think that, although it is not true, the companies are trying to avoid paying out claims."

Clarity regarding the status of any flood cover was vital. One insurer stated:

"We always state on the cover if flooding is not covered or if there is an excess."

An insurance provider admitted that their products, that were specifically designed for social housing tenants, were not well signposted online:

"What we don't have is a meaningful digital presence for the product. It's paper based and office based."

Interviewees were able to give an insight into some of the potential demographic differences in engagement with insurance. Several interviewees told us that older people were much more likely to have insurance than younger people. An insurer stated that the over 50s formed the bulk of their policyholders, *"even in areas where the demographic of the population is a lot lower"*. An insurance broker also told us that the majority of his customers tend to be older couples who have been repeat customers for "20 or 30 years". A representative of social housing providers told us that, in their experience, people aged 50 and older were more amenable to purchasing insurance. Younger people, he continued, were much less willing to do so, or required much more convincing regarding the potential benefits of insurance. He stated: *"under 30s are not seeing the value of insurance"*. They went on to suggest that, in their opinion, part of the problem is that children don't seem to receive much financial education in school or from parents, concluding *"and that's a big challenge for us all"*.

We asked interviewees about how ethnicity might frame perceptions and purchase of insurance. An insurer said that they had not looked at their data in significant depth in this regard. Anecdotally, however, he said that when he looked through his book "[I] don't see many ethnic names".

Two members of the community that were interviewed referred to a general sense of apathy amongst the local community regarding not just the challenge of obtaining and engaging with flood insurance, but of flood risk management more generally. Attention peaks during and immediately after a flood event, providing just a narrow window of interest that closes quickly thereafter:

Member of the community 1: "We get flooded and for five minutes everyone was interested...People are interested if they are getting something out of it. If you just want to get people in for information or for a discussion – no hope!"

Member of the community 2: "You couldn't drag them to a meeting. Just not bothered. Use any measure you want and they still wouldn't shift. I wouldn't even know how to broach them about it to be honest."

Member of the community 1: "Some people lack interest and take the view that 'it will never happen to me'...They said to us – you go to the meeting and tell us what 's happening...It's this community - they're just not interested"

One interviewee from the community expressed limited trust in the insurance industry:

"I have a pretty low opinion of them, I'm sad to say. Their business is that they have to make money and they are just like bookmakers. They fix the odds and you buy your ticket or you don't. That's what it's all about. That is exactly what they are and you are at serious risk. They usually have excesses and clauses; they plan to get out of the risks so that they can maintain their profits and keep their fancy offices. That's where I sit. I hate them...Its not the most pleasant business. They have to make money."

Some interviewees reported having a bad previous claims experience, tainting their opinion of insurers and of the insurance industry. Describing the process of making a claim as *"long and hard"* an interviewee suggested that they felt the loss adjuster assigned to their case tried to suggest damage was down to either 'wear and tear' or poor property maintenance, pointing to a slipped slate on the roof. This was despite the fact that it was well known the area had experienced flash flooding. The interviewee expanded on this point, telling us:

"They already have their criteria that they assume that it is the householder's responsibility. So, everything that they [do]; they will go down the route of not helping you. So, unless you can prove to them that it was due to natural causes they will assume that it is due to wear and tear. They are making assumptions based upon the criteria or state of the building, when you are saying that, hang on a minute, we have just had flash flooding. The kitchen is leaking because it has just rained heavily, not because we have put water down there or something. The slate has fallen off the roof because of wear and tear, yes, fair enough, but we have had windy weather."

Another interviewee, a property landlord, told us that he uses insurance to help conduct general maintenance on his properties:

"Why am I paying insurance?" "I'm paying £50 a month, well you come and repair it....the whole point of having insurance is to help get repair or provide a service to get these things because they are covered under your policy. If we can't get it done, why would we get it insured?..You are going to have 2-3 claims allowed every year."

Undoubtedly other interviewees were considerably less cynical. Several acknowledged that they 'needed' insurance to protect their properties and possessions. Another said *"I rang up [a broker] and got a quote and we are happy with it."*

The affordability challenge

Unsurprisingly, affordability of insurance emerged as a critical consideration, both as a major barrier in people's purchase of insurance cover, but also for insurers who were acutely aware that their offer had to be affordable for a section of society that was extremely price-sensitive. The affordability challenges have increased substantially, recently, given the intense pressures on households to balance their own budgets against a context of soaring inflation and a widely recognised cost of living crisis.

A survey by Defra (2022) identified that "overall, the majority of households (92%) agreed that their insurance premiums were affordable". In the 2021/22 survey, one individual was aware they lived in a high risk area, was signed up to flood alerts and was a member of the local flood group but did not have buildings insurance. They articulated the reason as:

"They want £1000 up front and I have not got this. I was on sick leave for a year so I am unable to afford this."

In the 2022/23 survey, two homeowners who self-identified as very concerned about the risk of flooding and who stated it was *"Very Important"* to insure their property had not done so. The first homeowner stated:

"I couldn't get a quote, was refused by everyone I approached."

The second homeowner stated:

"The costs of premiums were too high. The excesses were too high".

These examples demonstrate that there is a limit to the impact of education and awareness campaigns when it comes to getting individuals to take up insurance, particularly where price is an issue.

Defra (2022: 1) noted that for most households excess levels have not changed compared with previous policies and that the costs of household insurance are lower than in 2018. Nevertheless, *"households in at risk areas pay more on average than those in control areas." (p1)*

"Households in at risk areas without insurance stated that their reasons for not renewing their insurance were strongly related to pressure on finances. 38% of all those with no insurance believed that it was not needed." (P1)

Defra 2022 noted that amongst those who did have insurance, but with no flood cover, the main reasons given were:

- That it was deliberately excluded from the cover.
- The risk wasn't high enough to justify the cost of taking our extra flood insurance
- It just wasn't included in the cover.

The implications for people are significant. Reflecting on this one resident (property owner) stated that households in socially deprived areas faced rather stark choices when deciding how to allocate their weekly budgets. When we asked her about the affordability of insurance she said:

"Those that can afford it, if they think the quote is reasonable and they have not been affected will take up the insurance. Those that cannot afford they will not even bother because they will be thinking about their mortgage, food, children. Post-Covid, you know the cost of living now. It's on everyone's head. So, would you rather pay that instalment of £50 or £100 per month or would you rather pay £100 for shopping or to buy your child's school uniform?"

A member of the local community who had flooded in the past also spoke of the difficulties of gaining more affordable residential property insurance, reporting that they felt 'tied into' one insurer:

"I went on comparison websites and they were all expensive. So I stayed with my insurer. So, if I can move to a cheaper insurer, but still well covered, I'd do it. But I just think I can't be bothered going through all that again. It's gone up in price but still stuck with the same insurer."

There has also been a suspicion that poorer people are unable to pay an annual premium upfront. An interviewee that had worked with the community for a number of years said:

"If someone could pay a one-off annual fee, they would. By choosing to pay monthly probably means that they haven't got it in the bank. Paying monthly often incurs a surcharge. And the reason they are doing this is because they can't afford it and they end up paying far more in the long run."

Insurers themselves recognised the difficulties that households face regarding the affordability of insurance. Despite the seemingly low cost of social housing tenants insurance, and the value it offered to tenants, an insurer recognised that household budgets are tight for many prospective customers who have a constrained disposable income. Given the cost of living crisis, these budgets, she continued, will

be ever more constrained in the foreseeable future. Cutting insurance might help to *"shave that one or two pounds a week"* off household expenditure that could make the difference between heating or not heating the house, or providing a meal for the family.

Another insurer said that they *"worked very hard"* to ensure the cover (which, notably, was exclusively for social housing tenants) was provided at a *"very low cost"*, often starting from around 50 pence per week. This payment was usually folded into a tenant's rental payment, and often at a guaranteed price for a number of years. Unlike other products they offered, residents - they told us - it could be assured that the weekly rate that customers paid was guaranteed to be fixed across the term and was not dependent on previous claims history. The low cost of their insurance offer to social housing tenants was also ensured through a competitive tendering process required by social housing providers, typically undertaken every three years, but sometimes for longer:

"There have been 7 year schemes where the premiums stay the same for the whole period, though things have got tighter in recent years and schemes are generally shorter. Policies have no excesses on Section 1. Premiums don't change following a claim...It's about financial inclusion. We make sure they don't whack on big excess or exclusions. That product governance falls on us."

It is worth noting that such multi-year agreements are only available through contracts with social housing providers and other Responsible Providers (RPs). The vast majority (if not all) other residential property insurance policies are available only on an annual basis.

In addition, and beyond the tendering process undertaken by many social housing providers when seeking a social housing insurance, an insurance provider noted that diligence was undertaken through their own processes of ensuring that they had the best deals:

"Our aim is only ever to improve cover over time. The relationship with Aviva (who provide the insurance) is longstanding. The contract with Aviva goes out for competitive tender regularly to make sure that it is the best; that makes sure we have the insurer on their toes. And that gives us all some peace of mind".

This, the insurance provider said, provided much sought after certainty for customers. But critically it limited the profit they could expect to extract from the sector, a point returned to in the next section.

All four interviewees representing social housing insurance providers were keen to stress that the contents insurance on offer to social housing tenants was, in their opinion, not only cheap, but offered excellent value for their customers. One noted that their insurance extended beyond the "usual contents cover you'd get on the market". Cover for items such as hearing aids, wheelchairs, mobility scooters were either included in standard cover, or could be 'bolted-on' by customers "as their context and situation changes".

One of the insurance providers wondered why contents insurance is so expensive. 'Over-insurance' is something that several interviewees referred to, namely a representative of the insurance industry and social housing managers. Referring specifically to insurance for social housing tenants, an insurer stated:

"Cover offered on the market is often far too much for what people need. They're automatically getting £150,000 insured. Ours start at £4,000. That's more than enough to cover belongings. If people are pushed to the open market and they don't have options like that."

An insurer told us that the average claim on their contents insurance was around £300-£400, adding that he believed most clients "probably had savings of less than £400". Having insurance often meant that expensive household items or goods could be replaced without turning to short-term lenders and entering a "cycle of debt that could become really bad". They were keen to point out that tenants' insurance also had significant benefits for landlords as well: "it's good from a landlord's perspective". They elaborated saying that if a tenant broke a bathroom fixture, landlords often could not recover these costs themselves, but that such an incident could be covered by tenants insurance.

The implications also go beyond property insurance. One resident interviewed reported that after the 2015 flooding his main challenge lay with getting insurance cover for his car. After losing four cars in the flood his premiums went to £14,000 per year. On another occasion he travelled to Cornwall to pick up a classic car. Whilst there he phoned 14 insurance companies and ended up paying £700 premium for a year, without flood cover, just to be able to drive the car home. He said:

"Several insurers said that I should have moved the cars, but I didn't know that it was going to flood".

Accessing insurance

Interviewees were asked to consider the challenges and barriers to accessing insurance. An interviewee that lived on a street that was badly impacted by the December 2015 floods talked, albeit in rather generic terms, about the challenge of securing affordable insurance. After the December 2015 floods:

"...some of the insurers in the years after said that they refused to give them any insurance. Or due to the high level of flood risk our underwriters cannot insure you. Or they come back with ridiculous premiums so that you are thinking that this is a 5% deposit on a property, not an annual insurance policy."

One homeowner explained the predicament he was in. He lived in a house built in very close proximity to the river, but that was exempt from Flood Re given that it was constructed recently. He reported that he initially struggled to get insurance, but eventually did secure cover through a Manchester based broker. His premium increased annually, though incrementally, for seven years. Then, in 2022 a window was smashed at the rear of the property in an attempted burglary. After making an insurance claim for £1,000 to repair the window the insurance company wrote to him in December saying that his renewal was due, but that they would not reinsure him. Since then, he *"tried to get insurance everywhere, unsuccessfully"*. He reported that he used comparison websites, had approached brokers in Todmorden, Littleborough and Rochdale, had phoned the NFF for advice and had even contacted Flood Re. He eventually did secure insurance; however, flooding was, and continues to be, exempt from his cover.

The implications of this scenario, however, extended beyond the unsuccessful attempt to secure insurance cover. Planning a move to Anglesey in 2022 the same homeowner placed the property on the market for £249,000. Around a dozen prospective buyers visited the house, but none made an offer to purchase the property. A property purchasing company offered £225,000. He accepted the offer in principle, and placed a deposit on a house in Anglesey. However, the property company did a survey and due to flood risk reduced their offer by £65,000, which he was not willing to accept. He sought advice from a local estate agent who advised him that a purchaser would not be able to get a mortgage and suggested that he put the house up for auction for a cash sale. Again, he was very unwilling to do so. He summarised the predicament he now finds himself in as follows:

"Therefore, I am stuck. I can't move without a massive loss and I can't insure the property against flooding if I stay.

He now lives with anxiety that he will flood again saying he *"is worried every time there is a downpour and the river rises"*. During the winter he leaves the door barrier up permanently.

This case exemplifies the stark contrast between the needs and aspirations of private individuals and societal priorities, especially where adaptation policies (to flooding and climate change) seek to change individual behaviour and/or send market signals. The individual homeowner is unable to insure or for that matter adapt the property, and whatever happens to the property ownership, it will remain at significant flood risk.

Reframing the narrative, this issue is the property owner's responsibility. Under current policy the state tools *could* assist and support. In this instance, however, it is difficult to see how, unless the property is compulsorily purchased or has significant property resilience and resistance measures installed, alongside other water management measures, to a level that provides assurance to mortgage providers and insurers.

When asked about how residents approached the task of getting competitively priced insurance, one resident reflected on their experience, and how the challenges of obtaining insurance, despite easing, had limited the range of providers:

"...for a while it was difficult. There was a time that you'd ring up the insurers and they would say no – flood risk area and that would be it. Because of that I've stayed with the same provider for a long time. FloodRe has definitely helped. That made it easier. There are still some companies that won't insure you – but we know to stick to a few."

Another resident was also asked if people they knew had approached different insurers. They responded that yes, they did, but continued:

"I think people do know how to get insurance. The question is, can they be bothered? Ringing around different insurers and on the different price comparison websites, yes, but that's not a quick job. I assign a day when I have an hour or so free. Just some people can't be bothered. Really not a quick job. There's a fair bit of ringing around to do. I do think they know how to do it - or what they **should** do at least."

The same interviewee also noted that in the past many people were effectively ineligible for flood cover through their long-term insurer and that many other potential insurers declined them cover. That, she said, had left a significant legacy of disenchantment and cynicism regarding the insurance industry:

"Not being covered for flood would have put people off as well. Going to that effort to get insurance, but then not being covered for the flood risk...Going to websites, filling everything out, or phoning them up. It takes so much time. And then they might say no. That is really disheartening. But for years they'd just say no. It's just disheartening."

The interviewee said that she believed a lot of people *"were in denial; they don't want to say they live in a flood risk area"*. She continued:

"They don't want to admit it because they want cheaper insurance. But then they go through the whole process and it comes up at the end. I used to phone them up and say I live in a flood risk area right at the start of the call. Give them my postcode and ask will you insure me? Get that answer at the off."

Another interviewee also suggested that householders themselves were opting out of flood cover given because they were unable to afford, or unwilling to pay, up to £1,000 for cover:

"Lots of people ask for a quotation that excludes flood cover because of that, provided by certain insurers."

There are also practical challenges regarding accessing insurance that emerged in the interviews. Many people use price comparison websites as their first port of call when looking for insurance. But if people are declined cover (noting that these can sieve people at flood risk out very quickly) they have become so reliant on the internet, they often then do not know where to turn to. One interviewee stated that many people struggle to use the internet, whilst another noted that not everyone was aware of the many different ways that people can access insurance. An interviewee explained further:

Interviewer: Do you use the phone, or go online?

Interviewee: Bit of both. If online, as soon as you say near the water they ask to phone. So, I used both price comparison and went straight to insurers. We knew we had to get our properties insured. Not everyone does, though.

One interviewee noted that insurance companies *"made assumptions"* and lacked critical local knowledge that was preventing properties from getting insurance that were not at significant flood risk:

"...our flooding, because we are just a few metres from a watercourse, but that can never flood. It's so deep down, it can never flood."

Insurance brokerage

Most consumers get insurance online which is, the brokers that we spoke to told us, one of the reasons that their numbers had dwindled over the past number of years. High street and locally based brokers provide a crucial service for people who may not be online or that may not be as adept as using the internet to source and compare potential insurance providers. This well charted digital divide is suspected to align closely along other aspects of vulnerability and social and economic exclusion (Blank & Dutton, 2019)¹⁸.

Brokers told us that a residual section of the population (albeit one that continues to be declining) preferred face-to-face transactions and to pay for their insurance cover in cash. An insurance broker stated: *"We will always take on and try to get cover for high flood risk properties."* Brokers often have established 'go-to' relationships with insurers that they might prefer. We also noted that many of the smaller, more locally based brokers were gradually being bought-out by bigger companies, a scenario not unique to Rochdale but common across the UK. We are also aware that some of these larger brokers have subsequently closed their Rochdale based branches. These factors mean that the brokerage market has substantially narrowed in recent years, or even closed for some, limiting access for consumers.

The research entailed an assessment of the role that local insurance brokers covering residential property insurance play or could in the future play in supporting insurance uptake and therefore in supporting financial resilience. As with so many other places across the country, there has been a severe decline in the number of locally-based insurance brokers. A broker we interviewed told us that at one time, for instance, Pennine Insurance used to have 35 branches in the region, but has now downsized to just one branch.

Another broker, one of the few remaining with a visible presence (i.e. a premises) covering residential property insurance in the area told us that he believed he was the only remaining *"old fashioned proper insurance business covering all* risks" in the Wardleworth area. The few others are *"bit players; they don't do the full range of stuff"*. He told us that he is not a member of BIBA, the Broker Network or Cii stating *"they all require a subscription and there is little value"*. The broker did, however, tell us that they did avail of the free support provided, for instance, through Aviva's Training Academy¹⁹. He also noted that to operate legally they were registered with the Financial Conduct Authority.

We asked both brokers about their awareness of Flood Re. One had never heard of the scheme. Another had heard of the scheme, but knew little about what they did beyond being *"something to do with making insurance available to people"*. One interviewee suggested that 'people don't realise' what a broker does, adding:

¹⁸ See also:

https://www.insurancetimes.co.uk/news/increased-digitalisation-is-resulting-in-a-damaging-digitaldivide/1441132.article

¹⁹ <u>https://mydevelopment.zone/</u>

"People tend to use price comparison websites and when they can't get insurance through that don't know where to go. A broker tends to have older people who keep coming back."

The businesses and insurance brokers covering commercial insurance we spoke to reported that getting flood risk cover for commercial properties was very problematic, impossible in many instances, and in other circumstances only possible with complex restrictions. One interviewee stated:

"There is a very limited number of underwriters who are prepared to insure flood risk on commercial properties. They work with insurance companies, underwriters and managing agents to get insurance."

That said, the interviewee noted that 'no one' in their customer base asked about flood cover.

As part of the project we also spoke to a number of small business owners. One business owner used Whitfield Insurance Services Ltd., an insurance broker based in Bury, to get insurance in the past. He made a claim after floods on Boxing Day 2015 and has subsequently been unable to secure insurance. He has, however, only tried to secure insurance from the same insurance broker. After being unable to secure insurance, and noting that a Flood Guard barrier installed through a £5,000 grant scheme had previously failed because its seals 'were shot', he built a wall next to the river to protect his property. He has not flooded since the wall was constructed, claiming "it really works", but remains unable to get insurance that includes flood cover. He also suggested that he did everything he could to minimise his financial exposure. He said he had no liabilities, did not borrow for cash and had no loans. Another nearby business owner who has similarly struggled to get insurance added that he believed the £1,800 per year wastewater charge from United Utilities was "extortionate", assuming that there was a link between that and flooding.

More generally, several interviewees, including insurance brokers and local authority officers stated that it was impossible for SMEs in Rochdale town centre to get property insurance that included flood cover. Although demand for shops was "vibrant", flooding, and more generally the lack of flood insurance for businesses, remained a very significant risk. A local insurance broker told us that they believed that SMEs take property insurance excluding flood risks and are "happy to do so". He said that many SMEs believe that since the progression of the River Roach fluvial defence scheme they are not really at flood risk now. He was at pains to say that he did not agree with this view and that insurance was there to protect people against major events such as fire or flood.

Research from Defra (2022) noted that the proportion of SMEs having buildings insurance was only 13%. They also stated that "amongst those without flood cover for business property and business interruption, the lack of perceived indeed is the most frequently cited reason for not having flood cover."

An interviewee told us that the district covered 250 businesses within the ring road. He said that new developments in the town centre were doing well. Shop vacancies are low and demand is high. He was, however, concerned about the damage to confidence that a future flooding incident might bring.

Although the town centre is doing well, "beyond that, in Drake Street, Yorkshire Street, etc., and going up the hills there is a decline and need of regeneration".

The interviewee suggested that large businesses (such as flagship stores) insure their properties on a portfolio basis. However, he warned that the situation for small and medium sized enterprises is completely different:

"Most insure if they can, but if in a flood risk area will do so without flood cover. There is an existential risk to their businesses from flooding. It will happen again. Some still use their cellars for their business."

He added that most SMEs are preoccupied with *"the day to day trials and tribulations"* of keeping their businesses going. Takeaways in particular, lived a 'hand to mouth existence', and some of these were short-lived entities. Flood risk, he said, *"is not anywhere near the top of their agenda, until it floods"*. In any case, many did not believe managing flooding was, they believed, their responsibility:

"They [small and medium sized businesses] also believe that flooding is a council problem, not something that they have to worry about. They look to the council to compensate them for any losses and to put things right."

He again noted that getting engagement with SMEs on any topic is very difficult. *"In addition"*, he said, *"people do not like people looking in on their businesses"*.

We also spoke to larger businesses that were significantly impacted after the Boxing Day 2015 floods. With the business closed for two days, one employer had to continue to pay the wages of staff to the tune of £50-£60,000. They said they were only able to get one insurance quote this year, though mainly because of a late decision to renew. Normally they have access to Aviva and Alliance. The result is that they paid an additional premium of £10k and an excess increase of £15,000. They told us that they had lost hope that the building owner (their landlord) would be at all proactive in helping them to manage flood risk on the site, and instead were relying on the forthcoming EA capital scheme on adequately managing flood risk in the area. Elsewhere we were also told that landlords had refused a request to install solar panels on the roof of the building.

Another large business owner told us that their insurance broker (Bridge Insurance²⁰) discussed measures that they had taken to minimise the impacts of flooding. They reported that after the December 2015 flood, premiums and excesses rose so high that after two subsequent floods they did not make any flood claim at all. In the free text comments for a questionnaire, one business representative spoke of their concern regarding the impacts of flooding in the future, and also noted that they are subjected to a £10,000 excess:

²⁰ <u>https://www.bridgeinsurance.co.uk</u>

"So yes, this is a constant worry as £10,000 excess to a small company like ours is a big deal and as the weather is becoming more and more extreme and unpredictable, you can't help but worry."

Following the 2015 floods the interviewee said that the company "seriously considered leaving the site". They noted that damage to the building infrastructure such as the electrics would have had significant implications, including closing the business possibly for weeks. Since 2015 pumps have been installed which have speeded up emptying the factories of water. They ensured their stock was kept high and that there is a drain cleaning programme of works. The site's previous use meant that it had very extensive underground pipework. They spent a lot of effort and finances filling in underground drains. They have bought a floor cleaner that mops, cleans and disinfects. Stock is on pallets. At weekends, holidays and when there is bad weather, stock is put on double or treble pallets. There are no electronics on the floor that are mission critical. They have an emergency plan which has flooding in it, but do not have a specific flood plan.

Although this section examines the barriers and challenges of access to insurance it is important to note that there were also a number of very positive responses from residents seeking to purchase residential property insurance:

"I have to say that the insurance companies were excellent...Both the insurance companies paid up. No problem with replacing furniture and all the other things. I was out for 5 months. I got back in May and it was flooded again in 6 days. It was not as bad and I stayed in with all the drying equipment, but again, these two insurance companies were good. They paid out."

That said, the interviewee did have challenges in getting insurance cover that included flooding after this second flood. This was particularly the case with price comparison websites. He eventually did find cover with a company called Home Insurer. He added:

"I have always been able to speak to someone in person, and they said that they would be happy to insure, there would just be an excess for the flooding. And for the contents I have stuck with them because I have been so pleased with them."

What is the insurance offer? The insurers' perspective

We used the research to explore the insurance officer from the perspective of the insurers themselves. We wanted to explore their perspective on their role in the market, and the challenges they face in widening or improving their offer and their market activity.

A clear theme that emerged, and that is useful in explaining the motivations of insurers working in these markets, was how insurance was viewed by the four insurance companies we spoke to as a vital component of financial inclusion. Two insurers stated that the low cost of premiums and limited market penetration of within social housing tenants meant that their business was not a lucrative one. This, they suggested, meant that there was in fact a relatively limited number of providers willing to operate in the market at any one time. We were told that there are three main providers operating in this area,

though the schemes are "much the same, in truth in terms of wording and rates, we all take the same sort of approach".

Another two interviewees representing the insurance industry similarly said that the provision of contents insurance for people in social housing did not constitute a significant revenue stream for their company. Their activity in the market, they continued, was borne as much from a sense of *corporate social responsibility'* rather than an effort to maximise income or profit: *"nobody is making millions from offering this insurance"*.

One interviewee (again a representative of the insurance industry) traced their interest in providing insurance for social housing tenants back to the financial inclusion agenda of the Blair/ Brown Government in the late 1990s. They said:

"In the 90s it was, as you can imagine, very difficult for someone in social housing to get insurance. Reasons - it was expensive, bad credit rating, criminal record and so on. So the financial inclusion element was very important"

The insurers were keen to tell us how they tried to ensure their insurance offering was fair and inclusionary. One noted that, to meet their consumer duty obligations they asked *Fairer Finance* to conduct a review of their products and pricing. The same interviewee again referred to their engagement in the market as something of a 'financial inclusion project'; a key mission of which was to protect people from shocks and to build their financial resilience not just to significant events such as floods, but also to other more minor but also consequential household accidents such as breaking a ceramic sink.

Insurers also provided an insight into how they priced risk, and reflected on the implications of this for their insurance offer. One insurer told us that despite the low margins, their exposure to an event such as flood could be significant: *"A flood is not like someone knocking a tv off the wall. It's much bigger than that"*. However, and again in an effort to highlight the financial inclusion merits of their products, the same insurer noted that although flood risk is priced into the risk, there were *"not many"* occasions when households are turned down for cover on that basis. Underwriting insurers, they said, ran addresses and postcodes through their own computer systems every few years to amend or update with the latest flood risk maps. A fellow provider that was interviewed also said that they shared a stocklist of postcodes to their insurer partner as part of their bordereau reporting process. Generally, they offered full cover to 100% of the housing association stock, though added that this was in fact usually a condition of their contract with the housing provider. The same interviewee continued to state that it was a *"long time since we looked at a Housing Association and thought "no, not for us"*.

Overall, however, they suggested that they did not have too much flood exposure, spreading and mitigating their risk across their portfolios. Specifically, the insurer told us that their portfolio was *"stable and predictable in terms of under-writing"*. Although premiums were inexpensive, relatively low sums were insured and claims were *"short-tailed"*. This was, they said, primarily because the insurance was contents rather than buildings orientated. They did not charge any excesses on claims and had no barriers to access, and consequently got lots of small claims rather than large ones, making the business viable. A

large loss would be considered to be in the order of around £10k and most claims were in the order of £300 - £400. The largest they had ever dealt with was around £40k. In short, they considered their portfolio to be of 'limited risk' with potential underwriting liabilities curtailed.

Market barriers

We asked interviewees from the insurance industry about the challenges and barriers they faced regarding accessing and performing in the market, with a particular emphasis on how these factors influenced the uptake of insurance. It was noted that there are not many providers working with Responsible Providers such as Housing Associations across the country. Insurance companies are rated in terms of risk. In order to work in social housing all providers need to be 'A-rated', further limiting the range of providers able to operate in the market.

Representatives from one insurer were critical regarding the tendering process for social housing contracts, the appraisal of which they believed favoured price at the expense of the quality of cover provided. They said:

"Please don't think we don't know that customers are hard pressed. Every penny counts. Price is really important. But I'm not always convinced that quality of product, details of cover, details of the claims process are given enough attention or are what they should be...

The same interviewee added: *"Other cheaper policies may be available, but they won't offer the same cover."* A further particular issue is that many housing providers tendered on perhaps a three or five year cycle and often insisted that premiums could not be altered in that time:

"The rate or premium is guaranteed for three years, maybe even with the option to extend to four or five years. I understand why that is and why they ask for it. But actually that is bad for customers in the long-term. I look at other schemes and underwriting performance. Some operate well, with a good loss ratio. But others don't. If a contract goes a bit toxic after a year or so we are contractually locked in. Then, after three years, customers would see a larger price hike than would otherwise be the case, otherwise it would just not be sustainable. There are a couple of cases where there has been a 25% uplift in policy pricing after a few years, whereas this would have been a lot less if annual increases had been allowed."

Notably, another insurer advocated multi-year agreements because it provides a much greater "potential to incentivise doing things". They continued:

"From our perspective we want them signed in as long as possible. Hard to squeeze more than two or three years out. In the past had seven year agreement but that has fallen to the wayside."

One insurer told us that he and colleagues were keen to offer the social housing insurance scheme to other types of tenants and residents. They did, however, raise questions both regarding who or what would fulfil the role as distributor in the future, and noted that 'systems might be a challenge'. When

asked to expand he noted that the insurance industry is heavily regulated and has 'a lot of red tape'. He also noted that any movement on this would require potentially significant investment in IT platforms.

One interviewee stated:

"We really want to put this to the wider rental market so others can get the benefit from it."

We asked one group of insurance providers if the market was expanded, perhaps to private sector renters, if they would be willing to participate. They said they would, and had in the past thought that this would be a way of developing the market. It has been suggested that new legislation passing through Parliament would allow specialist social housing insurance to be made available to people who are eligible for social housing (and that may be on housing waiting lists) but who are in the private rented sector. There are, he said: *"Huge numbers of social housing waiting list... it seems unfair they are not offered schemes"*. He did acknowledge, however, that it would be a *"huge undertaking from a regulatory perspective"*.

The insurance providers did, however, note that without a central housing provider to deal with (i.e. a local authority or social housing provider), careful consideration would need to be given to who could be contracted to collect premiums. This brings not inconsiderable challenges given that acting as the agent brings administrative and bureaucratic responsibilities beyond those of needing to have a presence and infrastructure to collect payments. Social Housing providers provide regular updates on properties covered. This is passed to the broker and then back to the insurer for bordereau reporting. This has a cost in terms of time to collect and manage the data, to pass on and then to report.

Possible solutions and opportunities

We asked interviewees and other contacts we engaged with to consider opportunities and to make proposals for the development and promotion of insurance. These are summarised below:

Raising awareness of social housing schemes

A representative from the insurance industry said that key to further market penetration nationally is first ensuring all registered social housing landlords had access to a scheme and that the "*people at the top [of local authorities and RSLs] need to know the benefits*". He added that integral to this is highlighting how schemes are important from a social inclusion perspective and demonstrating that it "*hits the financial inclusion tick box for senior staff*". Secondly, he continued, there was a need to ensure there was adequate awareness of the scheme and training on its details and operation by staff. Specifically this might include 'Key Facts' information sheet (such as those produced for other financial products), training and informational videos for staff. This latter point was also noted by a volunteer coordinator who said that many volunteers lacked knowledge and skills, particularly around money and debt management, stating: "Staff need to be aware, staff need to be trained up, so that is what we do." Another interviewee suggested that there is scope for better engagement with potential customers of insurance for social housing tenants. They suggested that literature and material should not just highlight the benefits of cover but should *"highlight instances and how people have suffered through not having any cover in place"*. Another interviewee suggested that infographics could be particularly effective.

Landlord obligations

An interviewee called for a landlord licensing scheme as a precursor for increasing the obligations on them as a key actor:

"I think that in itself is one of the biggest problems we have in this country. If you rent your property you should have to declare that interest somewhere..."

However, another interviewee whilst broadly welcoming the idea of such a scheme suggested that unless it was compulsory, and was rigorously enforced and funded, that only the *"good landlords"* would participate in any such scheme.

Networks and advocacy organisations

We spoke to key community infrastructure and advocacy organisations as well as networks that supported the local community particularly in terms of their financial stability and financial resilience. Organisations such as credit unions, Citizens Advice and community foundations were seen by many of the interviewees as being independent, credible, accountable and trusted. They often have a physical presence in the town, an important factor when dealing with financial exclusion. People want to talk to somebody they feel that they can trust.

All of the advocacy and non-governmental organisations that we spoke to were open to working with us to boost financial resilience for the target communities. One interviewee suggested that we could connect to existing volunteers through existing organisations and could cover financial, post flood, pre flood, household SuDS, NFM and biodiversity issues.

One representative reiterated the importance of working with already established networks in the community, particularly if they are not already engaged in flooding issues. He talked about how he identified potential leaders amongst young people he worked with and steered them toward courses with the local authority or Our Trust CSLA (Community Service Leaders Award). Referring specifically to a local food charity they said that discussion between service users and volunteers can often go far beyond the immediate remit of the service itself:

"We have identified the senior volunteers that are doing more than a feeding role, they are doing a listening role as well, so they need to understand that when someone comes and says that they can't afford my payment this week, I am falling in to debt, I have problems at home, so, all these issues are brought to the table and discussed. Staff need to be aware, staff need to be trained up, so that is what we do. One such example is the Lighthouse Project based in Middleton²¹. They have a well defined presence in the community, with a 'Pantry' food club and also have 4-5 debt advisors that are authorised by the FCA. They also have 2 benefits advisors who generally help people to fill in forms and in the future want to do budgeting courses with people. Generally, an interviewee from the organisation told us, people do not have any insurance. Post-Covid, they noted, services have been slow to get going again.

The Cltizens Advice Bureau is very active in Rochdale providing drop-in advice sessions through a mixture of paid staff and volunteers. Staff and volunteers triage issues either helping people there and then; drawing in wider support from specialist staff; and/ or signposting 'out' to other organisations that can provide further advice and support. This might include the National Flood Forum, the interviewee said, with whom he would like to build a closer relationship.

The local CAB co-ordinator acknowledged they had limited expertise in working with individuals and communities at flood risk, beyond helping people who had flooded deal with damaged contents. However, clients on low incomes and benefits are often struggling financially, and sought CAB advice on debt, budgeting and accessing grants and benefits. CAB staff and volunteers routinely examined people's finances, helping them budget, reviewing incomes and expenditures. This included a look at insurance, in particular advising people without cover to consider purchasing insurance, or to upgrade their existing provision. Although the co-ordinator acknowledged that the advice they could provide people was limited, he suggested he would welcome staff and volunteers receiving further training on insurance, and could provide an avenue to disseminate any engagement or outreach materials developed in this project and beyond. He suggested that targeted engagement could take place with the CAB energy team already offering financial inclusion and money management advice to clients on a daily basis. This might include, for instance, supporting people with applications for insurance. In terms of training, the interviewee said that staff and volunteers liked both simple step-by-step guides and face to face contact both with their training and offering advice. The training, he suggested, should be recorded to aid accessibility and to provide a resource that can be referred to at a later date. There might, he suggested, be an opportunity to develop a pilot project that might be helpful for CAB at a national scale.

A representative from a Credit Union stated that in the longer term, the Credit Union could act as an agent for insurance for tenants.

"We're a community deposit taker so this is our role. If people want to deposit then we are happy to fulfil that role."

Some credit unions are also seeking to enter the lending market for property retrofitting, which offers a further possible line of engagement. More generally, there are possible future changes to legislation and regulatory arrangements for credit unions to enable them to offer insurance in the future. Such changes have already been implemented in Ireland where a provider has been established²². The representative from a credit union that we spoke to suggested that such a scheme could be transferred relatively easily

²¹ <u>https://www.lighthouseproject.org.uk</u>

²² https://www.peopl.ie

into the UK but would require potentially significant investment. A conversation would need to take place within the governance arrangements of credit unions and with individual credit unions to decide if they would be providing insurance or advice²³.

Finally, we also spoke to *Fair 4 All Finance* which has an insurance strand. They expressed an interest in being involved in a pilot approach, but were themselves developing their own strategy at the time.

Support for local brokers

Brokers were keen to promote their services to local communities and businesses, and suggested they could play a bigger role in helping people secure affordable insurance. One said: "*people need to realise that there are brokers out there*". Awareness, he continued, needs to centre on four key issues, all of which a broker can help with, namely: what is insurance; why insurance is needed; how insurance can be obtained; and what to look for in a policy.

Brokers lacked knowledge on local flood risk, and on developments in the insurance offer such as the role of FloodRe. One broker we interviewed asked for further information on local flood risk, including flood risk maps. He was interested in the concept of a report of the flood risks of an area and any flood risk management measures being undertaken. He expressed further interest in gaining specific information on the flood risk of a property and assessments of the resilience of a business that could be useful to submit to an underwriter.

Suggestions from social housing insurance providers

One of the social housing insurance brokers that we spoke to said there should be a compulsion for all registered social landlords to offer a scheme. However, some local authorities have recently opted out of the scheme, either because they want to reduce costs or because they have a concern that the scheme is too commercial. He suggested three ways that scheme could be improved, (though acknowledged these would bring potentially significant regulatory concerns):

- 1) Government should make it mandatory that *all* landlords offer a scheme to tenants.
- 2) Have the ability to offer contents insurance to other renters not in social housing. He noted that there are lots of people that qualify for social housing, yet demand greatly exceeds supply. Why, he asked, should these people be unable to access a scheme that could offer them financial resilience?
- 3) Make schemes are 'opt-out' rather than 'opt-in' for landlords. He noted that tenants insurance got *"caught up"* in the opt-out regulations brought in a number of years ago. It was now time, he said, to review this decision.

²³ Note: not all credit unions belong to UK Credit Unions Ltd, the UK Credit Union trading body.

In the meantime, a provider of insurance for social housing tenants suggested a number of ways that current schemes could be promoted. The *"key thing"* he said, *"is education"* and made four practical suggestions:

- 1. All registered social housing landlords should first make sure they have a scheme.
- 2. There needs to be training and awareness of the scheme for all registered social housing staff, particularly those that are public facing. This could, he suggested, include 'key facts' (such as those provided for other financial products), further information and a video for staff. He said his colleagues were already intending to create a video to distribute to all staff *"just to raise their awareness and to help them to advise tenants on the end of the phone"*.
- 3. That staff, and in particular senior staff and executives in the social housing provider and the local authority, know that schemes *"hit the financial inclusion and social inclusion tick-box"*.
- 4. And finally that the "people at the top" *know the wider benefits*" of schemes for increasing resilience for their communities.

The social housing providers told us the provision and uptake of insurance should be integrated with sustainability indicators. One interviewee representing social housing insurance providers elaborated:

"A lot of social landlords see it as a financial exclusion tick box – tick, done. A lot of organisations are looking at it as a social value. When abandoned in the past – instruction comes from quite high up. One of my clients has come under scrutiny recently – saying it's too commercial. In conversations, this can prove we're really not. More than a tick box and not just a pile of leaflets in the corner. Needs to be at the heart of protecting people from shocks."

Reflecting on the challenges of bordereau reporting, it was suggested that FloodRe could fulfil or support this role.

Engaging with businesses

The business improvement district manager said that he found Whatsapp groups to be one of the most useful mediums of communication. He also suggested that: *"It is far better to go to a business for a few minutes than to expect them to come to a meeting or a drop in centre."* Independent pubs and bars may be more willing to engage, citing that there already was an active Pub Watch and a Shop Watch operating. He added that events in the town centre are very effective at bringing people into the town. These are usually free and centred on a particular theme, such as Lego. Another interviewee suggested that it might be possible for *"somebody like a broker to visit individual businesses and talk insurance for 20 minutes"*. It would, however, be important that *"the business will get something specific out of it"*.

Community engagement

One interviewee suggested that community meetings might get a better attendance if they are held in someone's house, someone that was *"local to the community – trusted"*. They expanded, noting:

"You are speaking to them in the households where the problem is, rather than [saying] "We are organising a meeting in a local community centre, tea and biscuits are in the local community centre. Please drop by for free." That's just like a generic message. It's not going to make any difference. It's not going to have any impact. Find a resident that's active and he or she can say "I'll offer my front room, you provide the tea and biscuits, let's have a chat in my house and let's show you the problems we have got. Let's see what the problems are and how they can be tackled and how we can move forward."

When we suggested this to a member of a different community, they said this was a *"really good idea"* but that a critical question is, *"whose house do we go to"*. Referring to the cultural composition of the neighbourhood, she noted that it might be difficult if a meeting was to be held in a woman's house. She was also concerned that she would not necessarily want to attend a meeting in a neighbour's house:

"I don't really want to interact with my neighbours to be honest! But if it's someone they know they might be more inclined to turn up."

Another interviewee suggested that more innovative engagement could take place through events, festivals, and theatre. Other possibilities could include the creation of a community flood hub where financial resilience issues could be discussed as part of an integrated flooding approach.

Managing Agents, estate agents, letting agents

Interviewees made a range of suggestions regarding how key stakeholders in the property sector, and particularly in the private rental and social housing sector, could support the promotion of insurance schemes and to boost flood and risk literacy. A property manager that we spoke to reflected on the perception that although there is a lot of bureaucracy (such as the production of letting certificates) that further guidance - in his words, a 'crash course' - should be provided on this. He also called for courses on issues such as condensation, damp and mould. This could, he suggested, include flooding. Another interviewee suggested that there needs to be greater regulation of managing agents. Encouraged to expand further, they stated whilst there is a redress scheme for tenants, there is no "quality check" on staff or "need for any qualifications". What is needed, the interviewee stated, are "quality operating management agents who are very keen to have their staff educated and trained" in the various legislative and regulatory obligations. The same interviewee stated that there should be "a declaration [of a potential hazard or risk] when somebody is renting or buying that that is made known to them...like the Energy Performance Certificates." Finally, a property managing agent told us "a landlord's charter would be a good idea". This is an interesting insight because there are several such landlords charters and schemes but the interviewee is unaware of them.

Recommendations

Enhance financial resilience through improved availability of - and access to - appropriate and affordable contents insurance for all residential tenants (i.e. both those in social and private rental sector).				
WE WILL	ВҮ			
Raise awareness through the Resilient Roch project:				
Raise awareness of the importance of financial resilience and the value of property insurance by working in partnership with RPs and insurers to reach social housing tenants. E.G. through the distribution of literature and e-training	 Developing engagement materials. Working with stakeholders to provide support to their existing networks that will enable people to become more financially resilient. Working with stakeholders to put on events in the town centre and input to other events. Working with stakeholders to hold one or more climate change festivals. Utilising community hubs to involve people in discussions about financial resilience and property insurance. 			
Promote the existing insurance offe	er through the Resilient Roch project			
Promote existing schemes (and demonstrate why property insurance cover is important) through enhanced engagement with social housing tenants that have either never purchased insurance, or have allowed their insurance cover to lapse.	 Review current engagement with tenants both in terms of content and communication and engagement strategy. Identify opportunities to develop and refine engagement materials (e.g. electronic communication, leaflets, flyers and infographics) and activities (outreach events, media). Engage (through existing networks and systems) to promote uptake of insurance and other financial resilience measures. 			
Provide a variety of routes for people to learn about and access insurance, particularly for those on low incomes, who have limited digital access, where English is not a first language, or people who feel more confident with face to face contact.	 Develop bespoke materials and activities to engage with communities/ individuals that have lower insurance uptake. Work with already existing organisations and networks to promote insurance. 			
Promote financial resilience against the impacts of flooding through engagement with local, trusted organisations already in existence in the area (e.g. Citizens Advice Bureau, local religious	 Network and partner with organisations and networks. Identify shared values and priorities, particularly around financial and community resilience mitigating the impacts of flooding. 			

organisations, housing associations, local food banks and other charities).				
Expanding the current insurance offer through the Resilient Roch project				
Explore opportunities to expand the current insurance scheme offered to RBH tenants to tenants in the private housing sector, and those eligible for social housing and on social housing waiting lists.	 Work with stakeholders (including insurers brokers and the local authority) to identify how the existing insurance offer can be expanded. 			
	 Promote the review of Flood Re premiums for lower bands of council tenants (as per Blanc Review- recommendation 10 - for all those eligible for social housing Consider (with the insurance industry) better models of buildings and contents insurance for low income households. Consider developing savings schemes as an alternative/addition to property insurance. Consider promoting appropriate group schemes for private sector tenants & neighbours 			
affordable residential property insurance for he				
saving s Raising awareness of, and promoting, the value of	meowners, support and advice and alternative chemes. financial resilience and property insurance to cope			
saving s	meowners, support and advice and alternative chemes. financial resilience and property insurance to cope			
saving s Raising awareness of, and promoting, the value of	meowners, support and advice and alternative chemes. financial resilience and property insurance to cope			

Work with the insurance industry to improve access to residential property insurance.	 Identifying how the insurance industry can work with stakeholders to improve understanding of the value of property insurance and insurance uptake. Exploring (with the insurance industry) whether insurance products that are most appropriate for low income households can be marketed in different ways. Exploring (with the insurance industry) whether there are opportunities to improve property insurance products for low income households
---------------------------------------------------------------------------------------	----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

Engagement and training for landlords (social and private sector) to help promote insurance uptake and/ or to engage in savings schemes.					
Promotion of existing financial resilience schemes amongst stakeholders through the Resilient Roch Project					
WE WILL	ВҮ				
Develop a multi-agency/ multi-sectoral approach to promote increased uptake of insurance and/ or savings.	 Developing tools, programmes, materials and information to support action taken by stakeholders. Conducting a comprehensive stakeholder analysis and evaluation of opportunities for engagement. Identify already existing networks/ opportunities through which engagement can occur. 				
Promote schemes (and their importance both to flood resilience and to community resilience more generally) within the local authority and social housing providers.	 Reviewing any current materials and activities for landlord and property maintenance engagement. Developing materials and information for dissemination, where possible in liaison with stakeholders. Develop a dissemination programme through stakeholders. 				
Development of training and possible accre	editation through the Resilient Roch project				
Develop training on the Housing Act 2004 and financial resilience that is open to all housing	 Promoting existing schemes emphasising why insurance is important for financial and community resilience. 				

professionals, including managing agents, letting agents, RSLs, all property holders. (n.b. to be offered at Executive, policy and operational tiers of the organisation, and potential contractors)	 Through the Resilient Roch project: Integrating with already existing training and information initiatives.
Assessing how accreditation for landlords could be improved to deliver significant benefits to tenants at flood risk (particularly through already existing landlord schemes).	 Appraising how landlord schemes operate elsewhere (e.g. Birmingham landlord licensing scheme). Engaging with GM/ Rochdale landlord schemes to identity how they can be developed to take account of flood risk, insurance and adaptation.
Contribute to raising landlord and managing agent standards as a means of increasing tenant resilience to the impacts of flooding.	 Promoting to tenants the two redress schemes that landlords and managing agents are required to register. Encouraging local authorities and the public to check that letting and managing agents have registered with a redress scheme, Promote training and accreditation of landlords, letting agents and managing agents to deliver the Housing Act (2004)
Assessment of possible regulatory changes that would improve the resilience of tenants to the impacts of flooding.	 Assessing feasibility of making it a requirement for landlords to have insurance that includes flooding and the provision of alternative accommodation following a flood event. Assessing the possibility of making it mandatory for landlords to provide alternative accommodation if the property is uninhabitable, whether they have insurance or not. Exploring the feasibility of making Flood Safety Certificates mandatory under the Housing Act 2004. This would enable local authorities to take enforcement action, if needed.

Development of financial resilience schemes that can complement traditional insurance throug Resilient Roch project			
Explore and develop simple savings schemes to build financial resilience	• Through the Resilient Roch project:		

national stakeholders to develop pilots, learning from the Calderdale experience.
learning from the Calderdale experience.

Engagement and training for businesses to help promote insurance uptake and/ or to engage in savings schemes.				
Promotion of existing financial resilience schemes amongst small businesses through the Resilient Roch Project				
WE WILL	ВҮ			
Promote the value of insurance to small businesses	 Working through existing stakeholder to promote insurance and saving schemes that include flood risk to small businesses. Considering developing group insurance schemes. 			
Consider whether a formalised way of gathering information about small businesses would be beneficial in understanding and addressing flood risk issues with small businesses.	Evaluating the benefits and practicalities of introducing a methodology (such as used in Yorkshire and Humber) to the local authority and to small businesses.			

5 Property Flood Resilience (PfR)

Key findings

- 1. The health check demonstrated that the use of a local contractor provided a different approach to PfR maintenance. This indicates an opportunity to upskill people and channel funds into the local economy.
- 2. The majority of properties with PfR required maintenance that would not be available through traditional routes, i.e. through maintenance agreements. There are associated social justice issues.
- 3. There is a need to improve working arrangements with landlords and Responsible Providers (RPs) in relation to PfR inspection and maintenance and future property refurbishment and improvement.
- 4. The health check identified a need to improve specific points in the British Standard for Flood Protection Products (BS851188).
- 5. The health check identified opportunities to improve national policy and some simple steps home or business owners can take to keep their PfR working well?

Introduction

PfR is a relatively recent technology that has grown this century to have an annual value of around £20 - £25 million, consisting of £13 - £16 million for the residential market and £7 - £9 million for commercial and institutional properties. This equates to 2,044 treated residential properties between October 2018 and February 2023, delivered through 109 schemes, predominantly by local authorities and publicly funded²⁴.

The erratic nature of flooding has constrained market development and resulted, particularly in the early days, in new entrants to the market after each major flood, often installing poor quality products badly in properties where people were frequently traumatised from flooding and in no position to evaluate what was being done to their homes. The industry had, and to some extent still has, a poor reputation.

Institutional infrastructure has developed from being non-existent in the early days and is still evolving. It has been supported by policy initiatives (the Flood and Water Management Act 2010, the Defra Policy Statement Flood and coastal erosion risk management policy statement: progress update 2021²⁵ and the

²⁴ Property Flood Resilience Market Study 2023

https://www.floodre.co.uk/wp-content/uploads/20759_Flood_Re_PFR-Report_2023.pdf

²⁵ <u>https://www.gov.uk/government/publications/flood-and-coastal-erosion-risk-management-policy-statement-progress-updates/flood-and-coastal-erosion-risk-management-policy-statement-progress-update-2021</u>

England Flood and Coastal Erosion Risk Management Strategy 2021²⁶. A number of policy initiatives have helped to drive installations and institutional capability:

- Defra grants from 2011 PfR measures of £5000 per property, delivered by local authorities.
- The Flood Risk Community Pathfinder projects 2013 2015.
- The Property Flood Resilience Defra Pathfinder Scheme.
- PfR Round Table, set up in 2015 and led by the insurance industry.
- Flood Re led Build Back Better.
- PfR Code of Practice.
- Kitemark PAS1188 and BS851188.
- CIWEM led Foundation training course.

Additionally, several initiatives are in development:

- CIWEM-led ongoing development of a training programme.
- An accreditation scheme.
- Flood Performance Certificates.

Local PFR context

Rochdale was fortunate to participate in the Defra Flood Risk Communities' Pathfinder between 2013 and 2015. This established good community working practices and a trusted role for the National Flood Forum as an 'honest broker' working with all stakeholders. It highlighted some of the challenges and ways forward for working with a range of different types of community.

After the Pathfinder scheme finished the role of the National Flood Forum was extended with Rochdale Borough Council. The Flood Resilience officer went on to help contribute to various other schemes. This included a successful Natural Flood Management (NFM) pilot project that was conducted as part of the development of the approach to NFM. From this good relationships were established with landowners and managers, together with a thorough understanding of the challenges and practical solutions. The scheme eventually installed various measures and tree planting that equated to 12,000m3 of water being stored/slowed in the upper Irwell Catchment.

Rochdale Borough Council had previously helped households in flood risk areas to install property flood resilience measures. 17 properties, from three different streets in the Heywood area of the Borough were provided with flood doors, air brick covers and, where needed, pumps for floor void areas. These areas suffered from surface water flooding and the measures were completed in 2012. One of these areas has not reported any flooding issues since a modification to intercept surface water near a local school was completed.

²⁶ <u>https://www.gov.uk/government/publications/national-flood-and-coastal-erosion-risk-management-</u> <u>strategy-for-england--2</u>

In the same year, 20 properties that bordered Calder Avenue in Littleborough flooded. The properties are close to an ordinary watercourse that runs into Town House Brook and then into the River Roch. The properties' PfR measures suffered a high failure rate in subsequent flood events and there was a dispute between the contractor/ supplier and Rochdale Borough Council on the quality of the work and installations. This contractor was not used again by Council. Further work by the Council was then completed in the area to create two flood basins to hold and throttle the amount of water passing these properties. This work was completed in 2015 and the properties were not affected by Storm Eva.

Following the Storm Eva flooding in 2015/16 a household retrofit programme consisting of combined energy efficiency and household flood protection measures, including PfR, was delivered. The Defra PfR grant scheme of up to £5000 per property was an essential element of this. Participation rates exceeded 90%. The learning from this has helped to shape this project, providing:

- data on issues such as insurance uptake in 2015/16 and now;
- an opportunity to revisit properties that had PfR measures installed to establish if they are still fit for purpose and to test maintenance options.

303 residential properties and 85 businesses were reported to have flooded internally across the Borough during the Storm Eva event. Numerous other properties and areas were externally flooded. The properties were contacted via a letter and asked to complete an Expression of Interest form to apply for the resilience grant. 291 residential properties and 84 businesses responded. The majority of these properties are within the central areas of Rochdale and Littleborough.

During the course of the required flood assessment, surveys were carried out by JBA Consulting. Some properties decided that they didn't want the PfR works or only partial works were agreed to or completed. Reasons ranged from not wanting contractors entering their premises or disagreements between landlord and tenants. This was a fairly low number in the scheme overall.

Most properties benefitted from flood doors being installed, either one door or both front and back doors. Some properties had barriers installed (mainly back door entrances) instead of both entrances having flood doors. The reasons ranged from deciding there was less chance of flooding from an entrance, residents' preferences, or to keep the cost of the property works within the £5,000 grant limit.

Depending on the style of property, some properties benefitted from French door style patio doors, or had more than two entrances. There are a number of buildings within the Borough where two neighbouring properties are owned by the same family.

As well as flood doors and / or barriers, air bricks were replaced with flood resilient varieties, and a silicone wash was used on the external area of the main properties to a minimum of 0.6m high. The silicone wash is recommended to be re-applied approximately every five years. Some small pumps were given to properties that were able to pump out flood water from cellar areas. Some properties also benefited from non-return valves, especially if they had downstairs. toilets or bathrooms.

Most terraced streets benefited from street scene works that covered cellar sky lights to minimise the effect of overland flows entering cellars or under properties. This involved covering the sky light but allowing air to flow through 'snorkel' vents. Groundwater issues affecting properties were not treated.

Businesses were harder to treat as suggestions from the flood surveys often were more expensive than the £5,000 grant. Some smaller businesses that rented their premises were often reluctant to contribute and as were some landlords as they believed they could easily re-let units with the level of weekly rents and low deposits. Some small businesses have little choice in moving to other premises easily.

Questionnaire results

The questionnaires undertaken in 2021/22 and 2022/23 were primarily an engagement exercise with households in properties that had already had some interaction with the local authority on flood matters, whether in the aftermath of the 2015 Boxing Day floods or as part of an ongoing relationship through flood groups and other communications.

The 2021/22 Survey results show the distribution of PfR measures at around five years after the installation programme. Among the sixty respondents, the reported distribution of PFR measures is in Figure 5.2, with Tenure type cross referenced with knowledge of flood risk area in Figure 5.3.



Figure 5.1 - Surveying properties

Figure 5.2 - PFR installations

PfR measure	Number of respondents saying measure was installed	Percentage of overall respondents	
Flood Doors	37	61.67%	
Flood Barriers	20	33.33%	
Flood Gates	9	15.00%	
Airbrick Protection	12	20.00%	
Air Vent Protection	8	13.33%	
Sump Pump	3	5.00%	
Portable Pump	3	5.00%	
Non-Return Valve (Domestic waste pipes)	18	30.00%	
Non-Return Valve (Foul Sewer)	5	8.33%	
Silicone Sealing (Around wastepipes and utilities)	5	8.33%	
Rendering or repointing Walls	4	6.67%	
Waterproof Spray (On external walls)	6	10.00%	
Toilet bung or pan seal	1	1.67%	

Out of 60 respondents, 51 reported that they had been at the property for over 3 years at the time of the questionnaire. 60% said that they had been present at the property when the measures were installed. 28 properties had flooded internally. 32 had had a cellar or basement flood. Around half of respondents therefore had had a flood within their property itself. 36 were signed up to the EA Flood Alerts.

Figure 5.3 - Tenure type cross referenced with knowledge of flood	risk area

Tenure Type	Yes	No	Unsure	Total
Own outright or with mortgage	34	5	1	40
Rent (social or council)	5	1	0	6
Rent (Private)	4	1	1	6

Tenure Type	Yes	No	Unanswered	Total
Own outright or with mortgage	29	9	2	40
Rent (social or council)	1	5	0	6
Rent (Private)	6	0	0	6

Figure 5.4 - Tenure type cross referenced with sign-ups to Environment Agency Flood alerts

Respondents are, broadly, long term residents who have had direct experience of the threat or the actuality of flooding and have had ongoing engagement with the council through installation and up to responding to our questionnaires, Figure 5.3. This, however, has not always translate into action. Only 23% of respondents said they had been shown how to use their PFR measures when those measures were installed. More worryingly, only 17% of respondents said they had done any maintenance on measures, and only 43% believed their measures were definitely working properly. Of the 19 respondents who said they had used their measures during a flood event, the majority, 11 respondents compared to 8, said the measures had not worked. Figure 5.4 highlights Tenure type cross referenced with sign-ups to Environment Agency Flood alerts.

These challenges overlap with issues of confidence. Of the 12 respondents who had no confidence in their PFR measures, 11 unsurprisingly said the measures had not reduced their anxiety, and these people were less likely to know how to operate their PFR measures. There were exceptions in the data however. In two cases, for instance, respondents had little confidence in their own abilities but were confident the measures would work. It is worth noting these were both social housing tenants, and therefore this confidence *may* be linked to tenancy security.

The evidence therefore is that there is a serious piece of work on engagement that must go along with PFR measures if they are to be effective, particularly for those outside the social rented sector. This must start by demonstrating to households how to use their measures, how and when to maintain them, and identifying the causes of their anxiety. These figures, though a small sample, are concerning within a self-selecting cohort of the most engaged individuals at risk of flooding. That around a fifth of respondents even in this highly engaged group who have had action taken by the local authority to protect them still feel highly anxious is an issue that needs to be addressed.

Maintenance issues

With the development of PfR, it has become clear in the last few years that resistance measures installed all require maintenance. The assumption, often written into grant applications, is that the homeowner will be responsible for this, as well as replacement in the longer term. Increasingly, maintenance of PfR forms part of grant contracts and both the CIRIA Code of Practice and Guidance for PfR (Kelly et al. 2020) and CIWEM's training programme incorporate maintenance. The introduction of "Build Back Better"

support for homeowners to build resilience into their properties following a flood²⁷ also presents long term maintenance issues. Similarly, the potential for Flood Performance Certificates (FPCs) to influence the availability and/or price of residential property insurance also raise maintenance questions.

The PfR Pathfinder Programme considered maintenance issues in previously installed PfR schemes. The current workforce skilled to undertake this work is not yet developed, Property Flood Resilience Market Study 2023²⁸ and is primarily concentrated in a few companies, often focussing on their own products. If PfR is to be successful, the infrastructure necessary to support maintenance programmes will be needed. In addition, there are questions of affordability and who pays for maintenance. The current assumption is that homeowners will pay for maintenance, whether under Build Back Better, grant schemes and privately funded schemes. However, there are homeowners for whom affordability is a significant issue. This in turn introduces social justice issues. Those who can least afford to maintain their PfR are potentially penalised through increased flood risk, reduced resilience, higher residential property insurance premiums (or reduced access) and lower sale prices for their homes (or reduced opportunity to sell successfully). Some strategic approaches are needed to address this.

There are opportunities to explore how PfR maintenance may be done differently in more deprived communities where affordability is a real issue. Training local trades people, who already have a majority of the skills needed to inspect installations, evaluate performance and undertake maintenance is one approach that could result in better maintenance and generate local economic activity, especially given the current lack of a skilled workforce.

In order to trial this approach a UPVC door specialist was employed to undertake a pilot study.

UPVC door specialist - health checks

A local UPVC specialist was contracted to conduct 'health checks' on the flood doors installed as part of the Storm Eva grant following flooding in December 2015 in both Wardleworth and Littleborough. Initially residential properties that Rochdale Borough Council had details for from the original grant were contacted by telephone, email and/or a letter posted and/or hand delivered to advise people about the health checks. This was to help organise visits, to help make the specialist contractor's visits more productive and efficient, and also to promote the free health check and the benefits of having the property checked. It was advised that any issues would be reported, and where possible, repaired during the health check. The communications reassured people that this service was organised by Rochdale Borough Council and that the contractor was working on behalf of and under the auspices of the Council. A project officer's contact details were used on the letters encouraging people to ring to organise a visit.

The health checks were also advertised on the Council website and promoted by prominent local community leaders. The Council's Townships officers were also asked to cascade the information to their local contacts, including the Rochdale Council of Mosques. Alongside this local social media forums were

²⁷ https://www.floodre.co.uk/wp-content/uploads/Press-Release-BBB-Flood-Re-FINAL.pdf

²⁸ https://www.floodre.co.uk/wp-content/uploads/20759 Flood Re PFR-Report 2023.pdf

used and the Council Trading Standards team and the Council Contact Centre was notified in case of any concerned calls. A local social housing provider was also contacted and assisted with trying to organise checks for a number of their properties.

An authorisation letter was produced detailing the UPVC Specialist's company and personal name and his remit on behalf of the Council to door knock and make arrangements directly with residents whilst they were visiting an area. This worked fairly successfully in allowing residents who may have talked with neighbours who had received the health check already to arrange a suitable time for them, especially as the contractor was happy to work evenings if this helped gain access to properties.

The UPVC Specialist visited 183 properties over the period of several weeks (Figure 5.5). These were properties where the council had already made an intervention following the 2015 floods, whether that was providing flood doors, flood barriers or other means of making the property more resilient. This represents around half of all the properties where a 2015 intervention was made and so can be judged to be a realistic assessment of their efficacy some seven years later.

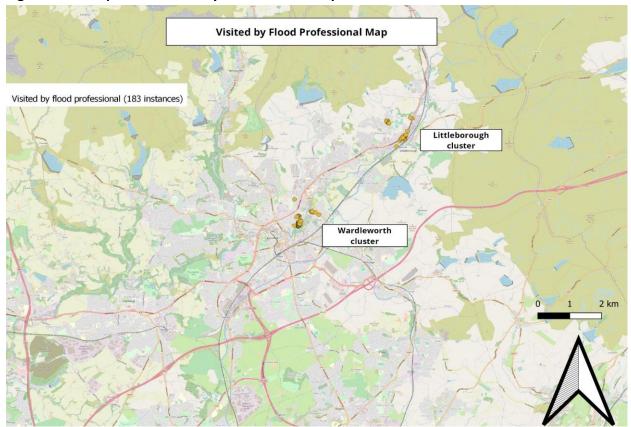
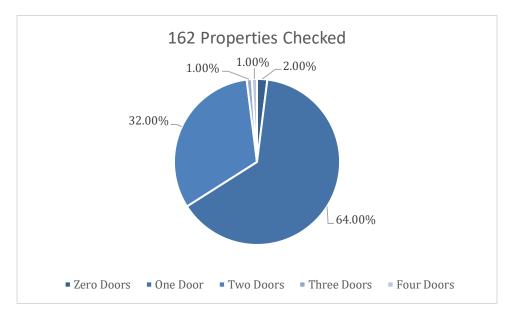


Figure 5.5 - Properties visited by the UPVC door specialist.

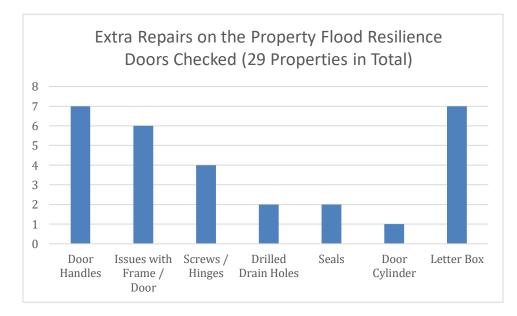
In total 183 properties were contacted and 162 properties had a health check on their installed flood doors. The remaining 19 declined or were unavailable. 216 doors were checked. A breakdown of doors per property can be seen at Figure 5.6.





29 repairs were also conducted. A breakdown of this can be seen in Figure 5.7. Although not always an immediate risk, seven 7 letter boxes were also refitted or replaced.

Table 5.7 - Extra repairs on the Property Flood Resilience doors checked



The UPVC Specialist reported that nearly all of the doors needed some realigning. Extra work was required on the doorframe or door of six properties to allow the doors to close and lock properly. When a door is out of alignment, this can put extra pressure on the door handles and locking cylinder as people use the door with more force to lock it. Eight properties needed door handles or locking cylinders repairing and this was the most probable cause. The UPVC Specialist also found that two (2) of the one hundred and sixty two (162) properties visited had flood doors that had had "drain holes" purposely drilled into the doors. Both these properties were rented, one through a housing provider and the other privately. Both sets of residents stated that contractors organised by the landlords had done the work after they reported condensation. The holes were filled and repaired and the importance of noting that the door was a flood door was reiterated by the UPVC Specialist to the tenants. They were also advised to inform their landlords of this.

If a barrier was recorded as being at the property, the contractor asked if this was still present and if they knew how to use it. The contractor also noted if there was anything they thought would compromise any of the installed measures.

There were also some instances of residents advising RBC or the UVPC Specialist that they did not want a health check. Residents at eight properties either spoke directly to the UPVC Specialist or contacted the council to advise they did not want the service.

UPVC door specialist feedback

Despite the effort made to encourage people to accept a PfR door health check, detailed in the previous section, contacting people in Wardleworth in particular was challenging. Tenants were often very reluctant to give information, particularly where English was not their first language. Alternative approaches involved visiting streets early in the morning or at 3pm to coincide with the school run, or between 6.30 and 7.00pm when people are returning from work. Other techniques involved the contractor parking his van on the street as near to the properties as possible to advertise his presence.

One of the most effective techniques was word of mouth; if one person in a street responded to a knock on the door, that would lead to others responding too. Some people were reluctant to engage:

"I don't live here but can give you every single detail you need." Getting up to date contact details was really difficult. People don't like to provide them and there were lots of excuses. The most successful technique was to say that providing contact details might give opportunities for future flood grants.

Liaising with Rochdale Boroughwide Housing (a social housing provider) helped gain access to properties. "Ring" doorbells were also useful as people at work answered and it was then possible to make an appointment.

There were noticeable differences in how products were cared for in different areas, with some areas noticeably worse than others.

Some people just don't look after things. Door panels were cracked (were still technically functional) and could have been damaged for example by furniture being brought in. The bottom of doors were full of rubbish, soil, etc.). These had to be cleared and every resident was advised to do this. Children and other high traffic premises are a big factor on doors.

There were differences in the quality of the products that seemed to correlate between those that were fitted immediately following the December 2015 floods and those that were fitted later, when manufacturers were struggling to supply stock. Materials such as silicone sealants varied in quality. Better sealants were used in Littleborough. In Wardleworth the sealants were not adhering and were pulling off, potentially allowing water ingress. Low quality silicone sealants are indistinguishable at fitting and only show problems 2-3 years down the line when uPVC expands and contracts. There was also variability in factory manufacturing. For example, it was noted that some of the door hinges were not put on properly and cheap screws were used that sheared over time.

Maintenance was carried out on most doors i.e. cleaning sills, adjusting the locking rod, doors dropping, adjusting door closure so that the seals worked properly. The tension on locking mechanisms on some doors were adjusted, for instance, making the door easier to use for someone with arthritis.

In summary, as well as reporting issues contacting people and gaining access, the UPVC specialist reported significant issues around product manufacture and installation, the need for maintenance on almost every PfR door and significant variability in the level of traffic using the door (and consequently wear and tear) and the level of care of PfR measures in different properties.

Explore and test options for establishing a local resilient repair network and strengthening engagement with landlords and housing managers around good practice and a landlords' charter.		
WE WILL	ВҮ	
Develop a local resilient repair network through the Resilient Roch Project		
Explore the factors needed to set up a local resilient repair network.	 Considering options for managing assets and prolonging the life of PfR. Investigating capability, standards, capacity, training requirements, depth of interest, the market opportunity, responsibilities, asset management, funding and liabilities associated with possible resilient repair networks. Investigating operational practicalities, including quality control and coordination with the local authority. Piloting different approaches. Providing training for service providers, and housing professionals. 	

Recommendations

Strengthen engagement with landlords and housing managers		
Improve engagement with landlords, estate and letting agents and managing agents.	 Working with Rochdale's Private Sector Landlord Team to reach landlords, letting agents and managing agents to raise awareness of PfR and ensure that it is managed and maintained. Engaging with estate agents to help them become aware of PfR, understand what it is and to ensure that new homeowners are fully briefed. Working with organisations to ensure that they are able to incorporate PfR maintenance issues into complex asset maintenance programmes. Working with social housing managers to identify properties with PfR and their maintenance needs. Providing guidance to landlords and managing agents for subcontractors involved in general maintenance of properties with PfR. Providing training and demonstrations to support the practical improvement of managing PfR, including through the Community Hubs. Working with home and business owners, landlords and other property professionals and develop targeted case study and demonstration/training actions in respect of property flood resilience and associated property management. 	

Influence national PfR approaches through the Resilient Roch Project		
PfR delivery takes account of lessons learned in Rochdale.		
WE WILL	ВҮ	
Influence PfR guidance and standards	 Sharing findings and recommendations through FCRIP and the Resilience Innovation programme. Seeking improvements to BSI Standard for Flood Protection products (BS851188) to take account of the UPVC specialist findings. 	

	 Improving the PfR Code of Practice as it is reviewed. Improving CIWEM's PfR training. 	
Consider ways to implement UPVC health check specific recommendations.	 Working for the following changes: At manufacture - All manufacturers should have a metal plate on the bottom of the door to prevent damage to seals from wheelchairs and prams. All hinges should use threadlock screws. At fitting - The fitter should check that everything is properly in place from the factory. The hinges and the alignment of the door to the frame need to be checked. Ensure only good quality sealants need to be used. Accreditation - work to ensure installers are FENSA (or one of the equivalents) accredited, that this is clear to customers and that they can easily check on this prior to commissioning. 	
Planning and building control opportunities maximise the PfR and wider building resilience benefits, including energy efficiency and		
Explore building control and planning implications of installation and maintenance of PfR and related building assets.	 Considering the provision of training and guidance to building control inspectors and planners. Ensure that the Resilient Innovation Blueprint can be useful to building control planners and householders (homeowners and tenants). 	

6 Increasing Flood Literacy

Key findings

- 1. The research identified a need, and some broad opportunities, to improve flood literacy for homeowners, landlords and tenants, businesses, local construction trades and property management professionals, amongst others.
- 2. Improving literacy extends beyond the understanding of flooding and flood risk. Linkages can be drawn to the river, issues around water supply and drainage, broader engagement with the environment and to climate change mitigation and adaptation more generally.
- 3. It would be helpful for every person and organisation with a role in the community to understand how climate change and the water cycle affects them, those at significant flood risk require a different understanding. These need to be shaped by the different places, communities and proximity to the River Roch and take account of a variety of ways of engaging.
- 4. Active participation by residents, businesses, risk management agencies and others with a role in the community are required in some places where flood risk is high. But this can relate to many dimensions, including PfR, financial resilience and community action.
- 5. There is an opportunity to deliver joined up climate and flood literacy through the Rochdale Climate Change Action Plan. The plan has a programme of work designed to support carbon literacy ('Carbon literacy for all' CC43) and a further objective to 'improve flood literacy so that residents and businesses understand their flood risks and how they can be more flood resilient' (CC2).
- 6. Communities in the areas are complex, with many micro communities each of which would need a separate engagement approach to build relationships.
- 7. There are many existing networks that engage with micro communities.
- 8. There are opportunities to use existing networks to engage with the many micro communities to promote and animate community action, including street champions, citizen science. There are also significant difficulties in setting up bespoke engagement with all of the communities.

Introduction

The concept of flood literacy refers to the understanding of flooding and flood risk. This includes knowledge of the causes and drivers of flooding, its impacts and consequences, and possible responses. Flood literacy has been identified as a vital prerequisite for effective participatory flood resilience at community scales (Rollason et al., 2018; Maskrey et al., 2019). Flood literacy refers to many different aspects of knowledge. It can range from, relatively simply, knowing about the extent of flood risk to a community or in an area, and beyond to understanding the implications of that knowledge, and having an understanding of what actions are required and by whom. In this regard, flood literacy is integral to becoming an active participant in responding to flood risk.

The importance of flood literacy is also increasingly recognised by policy makers and practitioners. For instance, the Flood and Coastal Erosion Strategy for England promotes flood literacy as a core strand of improving flood risk management and resilience (Environment Agency, 2020). Defra's *Flood Resilience Community* Pathfinder *Evaluation Rapid Evidence Assessment* (Twigger-Ross et al, 2014) stated that flood risk management interventions have taken a 'social turn' (citing a term by Nye et al. 2011: 292) "based on community engagement, dialogue and learning seem to provide most promise in terms of improving resilience to flood risk at the community level" (8).

In their 2019 document, *Working together to adapt to a changing climate: flood and coast*, the Environment Agency has identified five challenges that risk management authorities need to overcome when working with communities (see Figure 6.1).

Figure 6.1 - Five challenges of working with communities

Readiness: many communities and risk management authorities are not yet prepared to engage in planning and adapting to future flooding and coastal change especially where climate change is a contributory factor. Engagement methods need to recognise and manage peoples' emotional responses to change, as well as their capacity to engage in deliberations over complex future choices for their places.

Framing information: the way information is presented tends to reflect the interests and assumptions of those producing it. Specific words may mean different things to different people, creating the potential for misunderstanding. The technical terminology used by risk management authorities to talk about flooding and coastal change can sometimes affect community understanding and limit engagement.

Climate change, emotions and mental health: fears and anxieties about climate change can shape peoples' engagement with adaptation planning and generate complacency and a sense of helplessness. Collaboration in decision making has the potential to positively affect mental health, build community resilience and reassure people that they have a voice.

Place attachment, culture and identity: peoples' emotional connections to the places where they live and work can shape their willingness to take part in adaptation planning. Engagement methods need to be sensitive to the meanings and emotions associated with particular places.

Power and politics: some adaptation discussions and decisions about managing future flooding and coastal change will be inherently political and contentious. Careful attention needs to be paid to developing engagement methods that consider both representation (of community groups and interests) and the representativeness (the extent to which participants represent the wider community).

Source: Environment Agency (2019b; cited in Environment Agency, 2020: 98)

Beyond flood literacy, wider understandings of the water cycle and the dynamics of a water catchment can provide a further dimension to the holistic understanding of water management.

The Flood Literacy challenge

Climate change and the need for adaptation has direct implications for individuals and the community and is an important part of the wider context of flood literacy. Understanding how climate change can impact peoples' lives can be a difficult concept to understand, but is a precursor to both recognising the need for adaptation, and for taking adaptive action (Maskrey et al., 2019). However, a report from Defra (2022) noted that only a third of households in at risk areas are certain or think that they live in an area at risk of flooding and that the perception of flood risk amongst those in an at risk area tends to be the result of experience, or otherwise, of flooding. 52% of those certain that they are at risk of flooding locally.

As outlined in Chapter 2 climate change and, with specific respect for this project, flood risk, has significant social and environmental justice implications. This extends beyond the distribution of risk across certain sectors of society, to include the vulnerability of certain individuals, households, businesses and communities, and their capacity to respond to flooding when it occurs. Different types and levels of literacy will be necessary according to different levels of flood risk, enabling and informing more active engagement in flood risk adaptation. Ideally, those at the highest flood risk should be in a position to know and understand what their flood risk is and what they should do when they become aware of a flood alert. They should know about the PfR fitted in their home or business and how to operate and maintain it. They should also understand the potential value of insurance and, if they can afford it, seek to invest in it every year. Ideally, they should be building a relationship with water in the Roch Valley to understand how they as an individual and as part of their community of interest or place can contribute to building that relationship and making their community more resilient.

It is generally recognised that the greatest community awareness and participation, both at individual and collective scales, is derived from communities with higher social and economic capital. People living in precarity are likely to have more immediate and urgent priorities to consider than flood risk. Flooding - devastating though it might be - might not ever occur or occur very infrequently in some areas. Even if flooding does occur it may be perceived as the responsibility of the state to both work to prevent it and to deal with the consequences.

Moreover, it has been asserted that people with limited social networks can be less likely to receive information or support during a flood. In contrast, those with networks are more likely to receive help possibly because of networks rather than need alone (Tunstall et al., 2007, cited in Twigger-Ross et al., 2014). SMEs in deprived areas can similarly be distracted from flood risk, focused on survival and on the day-to-day running of their businesses. Consequently, engaging people to improve flood literacy *can* be fraught with many more difficulties in deprived localities compared to wealthier areas. Collective literacy, such as at a street scale, through flood action groups, social clubs and societies and community centres, etc., occurs where people understand risk and when "neighbours" change this isn't lost. They may also understand when and how to help each other and the value of collective action.

The precise nature of any engagement activity - including a programme of flood literacy - must be tailored to account for the characteristics of the targeted communities The 2012 Defra Flood Resilience Community Pathfinder Prospectus stated that:

"Factors to consider when deciding how best to engage with local communities include financial deprivation, age, community cohesion and existence of social networks ..." (Defra, 2012: 4) page 4

There is a whole spectrum of engagement (or gradients of active citizenship). This ranges from people understanding the challenges of flooding and climate change, to recognising that they might have a role participating in the management of flood risk, to taking a very active role in adapting their lives or properties.

Responsibilities in and around managing flood risk are both interlocking and complex (Figure 6.2). Responsibility is neither always clear or recognised or, perhaps more fundamentally, may not be entirely accepted by various parties. In addition, there are further layers of complexity when considering the role of utility providers, for example, or when we consider property insurance for residential property, social tenants, small businesses and the commercial sector. This complexity, with messages and demands coming from different sources, makes communicating clear lines of responsibilities more difficult. Many Lead Local Authority websites provide guidance, as do a number of publications such as ABI's 2019 document: *Responding to Floods What You Need To Know*.²⁹

Figure 6.2 - Flood risk management responsibilities in England (derived from National Flood Forum website³⁰)

Flood Risk Management Authorities Flood and Coastal Erosion Risk Management in England involves a number of organisations. The basic responsibilities are:		
Government: Responsible for setting flood risk management policy	Chairs of Regional Flood and Coastal Committees advise ministers	
Environment Agency Provides strategic overview of all sources of flooding and coastal erosion. It is responsible for regulating reservoir safety, and working in partnership with the Met Office to provide flood forecasts and warnings		
Environment Agency Responsible for flood and coastal erosion risk management activities on main rivers and the coast. It provides advice and guidance to local authorities and planning authorities	12 Regional Flood and Coastal Committees Guide flood and coastal risk management (FCRM) activities within catchments and along the coast and taking into account the likely future impacts of climate change, advise on and give consent to programmes of work for their areas and investment programmes.	
Lead Local Flood Authorities (County councils and Unitary local authorities): Lead in managing local flood risks (i.e., risks of flooding from surface water, ground water and ordinary (smaller) watercourses). This includes ensuring co-operation between the Risk Management Authorities in their area.	District, Borough and Unitary Councils Responsible for carrying out flood risk management works on minor watercourses (outside of IDB areas). They work with LLFAs and other Risk Management Authorities to ensure risks are managed effectively. Through Planning Committees they take decisions on development in their area.	
Internal Drainage Boards (IDBs) Are independent public bodies responsible for managing water levels in low-lying areas. They are the land drainage authority within their districts and their functions include supervising land drainage and flood defence works on ordinary watercourses.	Water and Sewerage companies Responsible for managing the risks of flooding from surface water drains and foul or combined sewer systems and for preventing flooding to water supply and sewerage treatment works.	
Highways Authority (the Highways Agency and unitary/county councils) Have the lead responsibility for providing and managing highway drainage and roadside ditches	Property owners and individuals Responsible for managing their own flood risk and protecting themselves, their family, property or business.	

²⁹<u>https://www.abi.org.uk/globalassets/files/publications/public/flooding/abi-responding-to-floods-guide---</u> national-flood-forum.pdf

³⁰ https://nationalfloodforum.org.uk/about-flooding/flood-facts/whos-responsible-for-what/

Awareness and literacy, or the lack thereof, can extend to flood insurance, a particular issue for those that rent their homes. The 2020 Blanc Review (*Independent Review of Flood Insurance in Doncaster*) reported that almost two in five of those who rented (both from private and social providers) were unaware whether their property had buildings insurance. A further 35% of council tenants believed their building to be uninsured, with only 27% of this group feeling confident that they had buildings insurance. 17% of private tenants believed their building to be uninsured their building to be uninsured. 46% felt confident that they were insured. This compares to the 97% of homeowners who reported having building insurance. This lack of clarity led to *Recommendation 7 in the Blanc Review:*

Landlords of properties in high flood risk areas should provide their tenants with details of the buildings insurance cover in place, including the support that would be provided by the insurer to the tenant in the event of a flood. Government should explore how to use its existing powers to ensure social sector landlords do so and consider the case for legislating to compel private sector landlords to comply. (page 9)

The Rochdale context

The Flood Risk Community Pathfinder 2013-15 established a programme to build relationships with communities in Rochdale with a view to increasing their awareness of flood risk and to support flood action. This programme of work has continued since then through a number of projects across Natural Flood Risk Management and property flood resilience. It has involved building intense, long-term relationships through the deployment of a dedicated member of staff employed by the National Flood Forum to work across the communities throughout that period. In parallel to this, the Strategic Housing Programme has worked with communities through a number of projects. Combined, this work provided a contextual base for further work on flood (and, more broadly, climate) literacy. Insights regarding levels of awareness of flooding and insurance, and people's attitudes and perceptions, was gathered from the questionnaire, surveys and interviews for the purposes of this research report.

Rochdale is not unique; many places in England have combinations of similar issues namely intersections between high flood risk, poverty and disadvantage, poor quality housing, low incomes, etc. In North West England, textile industries were located where water could drive machinery and populations therefore developed where water was available; in other words, in rapid response catchments. Consequently, Rochdale's characteristics offer insights with a much wider resonance regarding how the historical development of certain places has fostered current climate and flood risk. Across Rochdale, people live and work in places with different levels of flood risk. The frequency and severity of flooding varies with flooding being fluvial, pluvial, or a combination of both in origin.

Opening up culverts provides the opportunity to help people to better understand how and where water integrates into their lives and to build a positive relationship with their river and with water. Recent work has exposed parts of the River Roch in Rochdale town centre for the first time in decades as part of the Revealing the Roch Project. This is set in a historical context of culverting watercourses across the UK, losing the visible link between people and the rivers that were integral to their town's historical development. Often the only time that people came into contact with the river was when flooded streets, business and homes.

There are many tools that project officers can use to inform, consult, involve, collaborate and empower people to participate. However, their success depends on a foundation of relationships, trust and accountability, together with a shared understanding of data and evidence and a belief that their contribution is valued and worthwhile (see Barth et al. 2023).

Assessing flood literacy in Rochdale

Perceptions of flood risk reported during interviews, questionnaires and surveys were varied. Some of those who have been flooded have been permanently affected, speaking of their permanent vigilance:

"During the winter I leave the door barriers up all the time and take them down in the summer. I am worried every time there is a downpour and the river rises."

Other individuals said that they had learnt from the Boxing Day floods what some of the elements of "being ready" means; that is that they should be able to respond when the weather changes "*at the click of a finger*" with sandbags, door defences, emergency contact numbers to hand. Some respondents to the questionnaire told us that they monitored the weather and flood warnings very carefully:

"We keep an eye on the weather at all times because we want to be better prepared next time."

However, others suggested that heightened awareness had turned to anxiety and fear for some. Free text responses to the questionnaires were used by several respondents to report how flooding could be the source of great anxiety for many households. One said:

"As this is a regular occurrence [water entering the cellar and threatening his services] my mother is scared to be in her home especially when I'm at work or not at home. This has been ongoing as far as I can remember and it has got worse as it happens to flood more."

Another questionnaire respondent referred to how they experience *"panic when I get a flood warning."* Reflecting on the emotional and financial impact of flooding, one respondent said:

"Mentally I was badly affected as I lost things I can't afford to replace, had most of my downstairs stuff upstairs meaning I was unable to get to my craft supplies which I use to keep me sane when I can't get out."

At the other extreme some people at significant flood risk, albeit perhaps a minority, are considerably less engaged. As one resident put it, many people are *"in denial; they don't want to say they live in a flood risk area"*, particularly when they are shopping around for insurance.

In other interviews, most respondents (residents) recognised that people need to be more aware of flood risk and its effects on their lives, house prices and insurance availability. However, one resident had a rather different view, stating that flood risks are well understood. They said, *"it is all predictable"* and that once people are told about them it is up to them to decide whether to get insurance, adding: *"... but they should be fully aware of the risks and then it is their risk."*

The same interviewee was also cynical about climate change being a drive of flood risk: "No climate change, no global warming necessary, its stuff [flooding] that has always gone on. I am very cynical about this.". This was, however, a minority viewpoint. In most conversations climate change was accepted and linked to flooding, even if people had little idea how it would affect their lives specifically.

Diverse communities

Research reports often typically talk about the community as if it is a single entity that can be engaged collectively, e.g. (Barth et al, 2023). In Rochdale, however (as elsewhere), there are many different sectoral interests (see the Stakeholder mapping section), each with a distinct relationship to water and flooding. These varied stakeholders include householders (tenants, homeowners, landlords), construction professionals, businesses, schools, property managers, NGOs, local government, agencies and many more. Sometimes there is little or no link made to flooding (as with many of the NGOs and advisory organisations already working in the community). Other relationships to water may be mediated through the availability of insurance, the availability, price and condition of properties to rent or to aspects of flood risk or flooding, such as fluvial or surface water flooding. All of these forces - and others - shape peoples' relationships with water and flooding. There is also the potential for many of these stakeholders to act as trusted intermediaries, and a source of information and support for the local community. However, these intermediaries themselves may require input to enhance their own flood literacy before they fulfil this role with confidence.

Several residents raised the issue of people who are "hidden", but who may be the most vulnerable. Their voices are often not heard, let alone listened to. Equally, it is harder for services to identify and listen to these groups, and to deliver to them. One interviewee was particularly keen that we noted this point, asking *"what about the people without a voice?"* Categories of *"people without a voice"* noted in interviews included the elderly, people with health conditions, those for whom English is not a first language and those who do not have access to the internet or who are less digitally confident.

A number of interviewees commented on the levels of literacy required to engage effectively in flood risk, to read and understand insurance policies and rental agreements and how these were not appropriate, even where English was a first language. Where English is a second language there may be further difficulties.

There is no such thing as a single, unified or homogenous 'public' or community. It is much more accurate to think of a plurality of 'publics' (O'Hare, 2021: 99). Rochdale is no exception, consisting of a plurality of complex micro-communities. Interviews with several stakeholders and community groups reported micro-communities in the two areas that distinguished themselves by place, religion, gender, language and/or culture. The 2021 Census shows LSOAs in Wardleworth with an Asian or Asian British identity at times at 92% (E00172365). However, this combines a broad number of identities; Bangladeshi, Pakistani and others which may be quite distinct and have their own community institutions even where physically they live close together. Interviewees also suggested to us that there is often a lack of interaction between different religious, cultural, socio-economic and spatial (geographical) micro-communities.

One community group described the extreme difficulty of bringing people together for a meeting to discuss a flooding issue and how putting on an event in one community could automatically exclude

others. Another member of the community reflected on the complex characteristics of the community. She said most of the general community venues had closed down, but that there remained *"three or four mosques in the area"*. She continued to state that Friday prayers offered an opportunity to engage with the wider community, but *"you're only then getting the men and they're useless!"* The same interviewee suggested that meetings with Muslim women might also need careful negotiation. She suggested a female only session at the swimming baths would work, but posed the question: *"would their husbands let them participate?"*

Given the complex characteristics of the community, a fellow interviewee stressed the need for any engagement to be mediated by *"someone local to the community; someone trusted"*. She suggested that meetings could take place in someone's living room, in the streets where people live and interact rather than at a remote council or other community venue. She added: *"If [hosted by] someone they know they might be more inclined to turn up"*.

The consequence of there being many micro-communities was mentioned in several interviews, restricting wider interactions between groups and the wider society. It was also reported that post-Covid people were not networking as much or using community centres. One resident reported that the combination of language barriers and micro-communities creates isolated groups *"Language is definitely a barrier. We have Bengalis and Asians here."* Language may also be a generational issue where family members have different first languages, creating further barriers. In the Wardleworth area one in three households had a different main language spoken by different residents, according to the 2021 Census.

Careful consideration is needed regarding the implications of working with many microcommunities in fostering flood literacy and public engagement. A public event, such as a meeting, may result in some groups participating, but not others, who may feel excluded. This shapes what is possible through standard engagement approaches. However, pragmatic issues and resource considerations would make it impossible to resource bespoke engagement activities with each micro-community.

In Littleborough, which according to the 2021 Census is 97% White, the challenges relate to reaching older residents. There, over 20% of the population are over 65, compared to 16.5% in the borough of Rochdale as a whole. Activities that recognise the potential preference of older communities for face-to-face interaction over online and digital engagement are likely to be more successful.

Figure 6.3 - Challenges in community outreach

Challenges in community outreach in diverse, multicultural communities (drawn from the interviews with community members, housing officers and development workers)

- 1. People would come to meetings only if organised by someone from, or recognised by, 'their' community.
- 2. People might only attend meetings if there is a clear, substantial and immediate benefit to them personally.
- 3. Women may be prevented from participating in different types of meetings by their husbands.
- 4. Where English is not the first language, ideally tailored meetings need to be set up for each language.
- 5. Identifying adequate venues that are either accessible for all, or are connected across communities will be challenging. The situation is made more difficult by the rapid decline in the number of local community centres.
- 6. There is a need to remain critical regarding the democratic claims of some groups. Some may have limited or superficial engagement with their constituencies of interest, being better considered 'grass tips' rather than 'grassroots' organisations (using a term from O'Hare, 2021).
- 7. Some leaders/ elders held up progress on issues by not encouraging discussion. There is a sense, however, that this might be changing in light of demographic change and the ascendance of younger leaders.

Community dislocation

A volunteer coordinator commented that community centres are no longer trusted. During the Covid pandemic and associated lockdowns only very small voluntary groups could hold physical meetings. Generally, people were not allowed to enter a building and had to have covid tests and risk assessments. Communities became disconnected because people had been left alone for 2 years. It was reported that, as a direct consequence of this, isolation has increased, as has loneliness. This has created, continued the volunteer, a two tier system where those who use social media are in contact with what is going on. They usually get messages on *Instagram, emails* or on their phones. That *"one-to-one connection works but it's the same people getting the same information every year"*. The respondent stated that *community groups are all stagnant, don't use community centres and have people sitting at home, not knowing what information they need, where it is or how to get it.*

Another interviewee in Littleborough touched on themes relating to place identity and place connection that are unique to that area. Noting that Littleborough feels quite rural compared to other parts of Rochdale, he commented that they see themselves as looking towards Calderdale rather than Rochdale. Other residents referred to being in Lancashire, rather than in Rochdale, the Metropolitan Borough of Rochdale or Greater Manchester. The same volunteer coordinator commented on the challenges of engaging with the wider community. She said that for *"the people that are not on social media, you now have to go one-to-one, knock on their doors and ask whether they know what is going on in your area if there is a flood, who to contact and what to do."* People will phone their very local, known volunteer groups, but these, she was anxious to point out, are *"not the fourth emergency service"*. People, she said, need to know who to ring to solve problems such as water coming into their home. *"Everyone's needs"*, she concluded *"are different"*.

From these insights it is clear that it is now even more important to use the networks and intermediaries already in existence and working in communities rather than relying solely on putting on events and expecting people to turn up. There are, however, likely to be challenges in engaging with community and voluntary organisations. It was acknowledged by one interviewee that *"volunteers change over the years"*. This was particularly the case during and after the Covid pandemic, with the interviewee saying that there was a churn in volunteers, adding *"I don't know the newer set of people"*. It is quite likely that there will also be challenges in engaging with community, voluntary and advocacy organisations and groups that might already be overstretched, or might not see flood risk as their remit.

Business engagement

A recurring theme from the empirical research was that most SMEs (including letting agents, insurance brokers and other professional organisations) are focussed on the day-to-day challenges of running their businesses. Getting any interaction with SME businesses on any topic is difficult. Flood risk is not near the top of their agenda, until there is a flood. In an interview we were told *"Some people lack interest and take the view that "it will never happen to me."*

An insurance broker commented that in flood risk areas such as central Rochdale, SMEs take property insurance excluding flood risks and are happy to do so. They believe, he said, that they are not really at flood risk now. He was at pains to say that he did not agree with this view and that insurance was there to protect people against major events such as fire or flood.

In contrast, there were examples of SMEs who had flooded who were unable to get flood risk cover and had gone to considerable lengths to better protect their property because they recognised the risk. This included the expenditure of significant resources to physically divert water away from areas where it could cause damage. One business planted trees and deliberately left the grass uncut to encourage evapotranspiration and reduce flooding, but the land stays wet for longer. They would like to plant more trees, providing an insight into possible engagement opportunities in the future.

Perceptions of roles, responsibility and accountability

There was a perception from many participants that dealing with flood risk and resilience was the responsibility of other people, rather than themselves. One resident said people assumed that the local authority was there to sort out the problems and were annoyed when responders and service providers did not turn up immediately. He said: *"The community - us guys - "* he said, *"rallied around faster than the local authorities responded."* Before the 2015 flood event, he had no idea regarding the complex range of organisations involved in flood response and flood risk management: *"we never knew about these groups that existed or anything about flood resilience"*. He continued:

"When the problem arises, then you find that people from different departments, environmental department, flood resilience, engagement teams, energy providers, insurance providers. A whole host of people in that service industry. But the people like us, we are at the bottom of the ground...We are the guys at the bottom because we are the ones with the issues."

Similar attitudes were reported by social housing managers who stated that there is an expectation by tenants that they will be helped if they are not insured. Whilst a certain amount would get done by the social housing provider, such as the repair of a ceiling and wall, they would not put up wallpaper. A chargeable repair, such as for repairing a hole in a pipe caused by someone hammering in a nail, would get done, but charged for, but the social housing provider would not replace a carpet or bedding. There was a perception from several different quarters that 'other' communities were being looked after in preference to them:

"[A] problem in Rochdale is that one area has been identified with remedial works, with £10 million funds, or whatever, for Littleborough. Whereas, where we live it was like you lot have had the repairs done so you are not part of the scheme. That will then infuriate the locals, and [people] say why are we different to them. Just because their problem is on their doorstep, we are still flooding, we have had the experiences but we are classed at a lower level. There's disparity between the two. Their needs might be greater, or our needs might be greater, but how do you make that judgement? How do you keep everyone happy on one page, which is impossible?"

Two respondents to the questionnaire (in the free text responses) told us they lacked trust in the work of flood risk managers. One, said:

"A hump was formed to divert the water back into the stream towards our building to save the buildings further down the road, in other words, we became the sacrificial lamb."

SMEs in the town centre reported they believed that flooding is a council problem, not something that they have to worry about. They look to the council to compensate them for any losses and to put things right. Another business owner, whilst acknowledging the huge amount of work undertaken in the locality by agencies, said:

"We also have a side entrance that didn't have barriers installed as the Environment Agency insisted that their 'modelling' had shown that water would never reach this area - but it did!! Since the flood in 2015 we have had the existing flood barriers replaced with higher ones and also barriers fitted to the side entrance."

One particular resident was keen to emphasise the responsibilities and poor performance of a wide range of organisations. He gave examples of what he believed were poor planning decisions that put people at risk and of the opportunities being missed to prevent flood risk in Rochdale town centre through managing reservoir levels. He also believed that some of his flood risk problems were being created by raising bank levels, blocking the flood plain and diverting motorway runoff. He believes that:

"It's all evident, it's plain to see. Everybody's ignoring everything, it's an absolute joke. So this problem has been manufactured by Highways Agency, Environment Agency, who are responsible

for the river from the motorway downwards, and of course the rugby club and various other bodies. And they are trying to protect their own thing...I have a little bit of sympathy for them."

A common theme reported by residents was that flooding issues on a recently constructed site were well known and were ignored by the planning system:

"I told them when they started building there, I told them it would flood. They wouldn't listen."

His belief was that where people were living in flood risk areas because they could not afford to live elsewhere, they should be made aware of the flood risks, and its effects on house prices. Whether they insured their properties or not should, he said, be up to them but they needed to own their risk. Society, he said, should not support people who do not insure:

"So, do we set up a scheme that says if they get flooded everybody else pays. No, I'm sorry I don't go with that one at all."

Several interviewees talked about apathy and the difficulties of getting people involved in any issue. One resident stated that the only way to get people to a meeting is if there is a direct and immediate benefit to them. Even if there is an interest the usual response is to ask one person to attend and report back. People - we were told - are interested if they are getting something specific out of it or talking about specific interventions or benefits for householders. However, if the meeting is to provide information or generate a discussion then they will not attend. They continued:

"This area is just terrible. That makes me sound cynical again. You couldn't drag them to a meeting. Just not bothered. Any measure you want and they still wouldn't shift. I wouldn't even know how to broach them about it to be honest."

Another interviewee expressed concern that stakeholders were aloof, and had taken decisions that had exacerbated his flood risk:

"I need serious help from the two people who don't have phone numbers...and that's the Environment Agency and the Highways Agency. You cannot talk to these people. You cannot say, "Come around here, watch my videos, look at what you are doing. Sort it out please." They don't do it."

There was a perception amongst letting and managing agents that flooding and flood risk seldom comes up as an issue. Against a context of a huge shortage of houses to rent, and a market in which landlords are not buying new properties, tenants are, several told us, just happy to have accommodation. Almost all of the agents and insurance brokers interviewed believed that anyone reads tenancy agreements or insurance policies, whether they are landlords or tenants. An insurance broker stated that people don't pay any attention to policy details until they need to claim; they want the cheapest policy. Another insurance broker said that landlords are interested in what is in the policy, including flood cover, but for some it is too expensive. Rochdale's Public Sector Landlord Team's said landlords only did what

was in their interest, adding: "A good landlord will. They are the rare ones. But we do have some good ones."

Stakeholder analysis

A stakeholder analysis was undertaken by Juliet de Little, University of Sheffield, to establish the number and range of stakeholder organisations relevant to the project (Figure 6.4). A desktop study was created checking the GIS locations of community infrastructure including the addresses of schools, libraries, sports facilities and faith groups. Trawls of social media, websites, adverts and promotions were undertaken to identify community groups and their meeting places. Some well-known buildings host various community groups or may be hired for functions. Local knowledge of community groups and leaders in the area was also utilised. The Township Officers connections were also used to promote the project.

	Wardleworth	Littleborough
Business	165	283
Community centres	6	10
Schools	10	21
Sports and leisure	7	18
Libraries	3	2
Places of worship	13	18
Community groups	16	7
Retirement homes	4	23
Children and family	8	9
Health	7	11
Emergency	1	1
Young Peoples' homes	1	1
Allotments and open spaces	2	2

There are a variety of stakeholders within the project target areas that Rochdale Borough Council work with. Flooding focussed stakeholders include the Environment Agency, United Utilities, Greater

Manchester Combined Authorities and the National Flood Forum. Rochdale Borough Council is a member of the Irwell Catchment Partnership, hosted by Groundwork and consisting of organisations and environmental groups concerned with flood risk, water quality and biodiversity of the Irwell catchment.

A large number of organisations and individuals were interviewed as part of the project, with follow up meetings arranged in several cases. A list can be found at Appendix 7. Some were already known to the project's team from previous engagement or collaboration. Others were suggested or introduced by other contacts, for example the insurance provider for one of the social housing providers.

There were limitations to the stakeholder survey. Places are named, but groups may meet or are headquartered elsewhere. There are lots of informal groups, many of whom are unlikely to have been picked up by the survey. The work was done, before, during and after Covid. Consequently, the map is a rapidly changing picture. Lots of businesses have closed e.g. Purple Finance and Coversure Insurance Brokers. Nevertheless, there is a vibrant town centre.

Despite the points above, the stakeholder survey shows the diversity of communities and stakeholders, and the possibility of making connections.

Engaging with local civil society and other local networks

Using volunteers can be an extremely effective way of reaching people that mainstream services struggle to engage. Volunteers can, for instance, be used to deliver campaigns, recruit and train people or even to provide some support services. But recruiting, training and running teams of volunteers can be labour intensive and may not be efficient with time limited projects. *Time Well Spent* is NCVO's research programme focusing on volunteers and their experience (Kanemura et al. 2023). NCVO's data saw a drop in some key volunteering activities, reflecting the impact of the pandemic. Most people said that having less time due to changes in circumstances is the main reason they're stopping. This data suggests we need more focus on retaining volunteers, as well as recruiting them. The research also suggests that equity, diversity and inclusion continue to be a challenge in volunteering.

Several organisations in Rochdale use volunteers to work in different sectors or with people who are vulnerable or disadvantaged. These include Citizens Advice, Action Together and The Army Of Kindness Supporting Homelessness In Rochdale. They all indicated they would like to know more about flooding, the issues that it creates and the services available to support people. They also indicated they would welcome further involvement in the Resilient Roch project.

Given the difficulties of working in disparate communities mentioned previously, these networks provide an opportunity to work with people in a different way. The networks are able to reach people who would otherwise be difficult to engage with, but will also help the project area, to capitalise on the already quite vibrant community and voluntary sector in existence across the two case study areas. The networks already have trusted relationships with their chosen communities. Some have access to volunteers and all of them have skills and knowledge specific to their sector. The challenge is therefore to learn to work through these networks to deliver project objectives.

One local volunteer reported that living locally gave him knowledge of his surroundings. He believed in being a social activist, helping and supporting others, especially those who are extremely vulnerable and in need of support and guidance, including supporting people following a flood. He said that living locally meant that he knew where there were problems. He had direct contact with people,

was trusted in the area and could react very quickly to new situations, much quicker than the local authority officers who had to follow procedures and get authorisations. He also advised growing your own volunteers, providing them with benefits, such as leisure opportunities and training with qualifications.

The Rochdale Flood Poverty project worked with a range of stakeholders who do not usually engage with flood risk management. Increasing flood literacy is an issue for some of them, as much as it is for wider communities. This is particularly the case for private sectors such as letting and management agents and landlords, as well as social housing providers where respondents reported no, or very little, consideration of flood risk or how their work could lead to better outcomes.

Given the difficulties of working in disparate communities mentioned previously, these networks provide an opportunity to work with people in a different way. The networks are able to reach people who would otherwise be difficult to engage with, but will also help the project area, to capitalise on the already quite vibrant community and voluntary sector in existence across the two case study areas. The networks already have trusted relationships with their chosen communities. Some have access to volunteers and all of them have skills and knowledge specific to their sector. The challenge is therefore to learn to work through these networks to deliver project objectives.

In practice this means:

- 1. Identifying which networks are most relevant to each objective.
- 2. Building trusting relationships with key members of staff across both our project team and in the networks/ organisations. This could include secondments and/ or placements.
- 3. Co-producing shared objectives that are tailored to the wider project as well as being specific and useful to the goals and activities of the networks/ organisations.
- 4. Designing specific interventions to deliver the objectives, including information packages and training sessions.
- 5. Putting appropriate governance arrangements in place, including reviews, monitoring and evaluation
- 6. Implementing practical initiatives and building their legacy and reach.

We have identified a number of networks and organisations across stakeholders. Several were interviewed during the course of the research. All expressed an interest in engaging with the project in various ways. A summary of the organisations is provided in Figure 6.5.

Figure 6.5 - Networking organisations

Rochdale Town Centre Business Improvement District (RTCBID) tend to have face-to-face meetings lasting for just a few minutes on the business premises, rather than expecting them to come to a meeting. RTCBID support town centre businesses by putting on events in partnership with other organisations. These increase footfall and spend. They use a number of WhatsApp groups, such as Pub Watch and Shop Watch to communicate with businesses. This is their preferred mode of engagement and interaction. Many of the smaller businesses, in particular, do not like scrutiny. They are often

extremely reluctant to engage. We were told it is unlikely that a project would make headway by engaging with them directly.

Littleborough Boxing Club is a local independent business with close community links. It gets between 1,500 and 1,700 repeat footfall per month and has around 30 unique events per week. It caters for all age groups, including pregnancy classes and those for the over 70s, yoga, U3A meetings, Art Groups, etc. They see themselves as a community space, run as a business, with boxing as just one of the activities. The boxing club is therefore a gateway and venue to work with a range of different communities in Littleborough. The Club also owns Whittles sport pitches and there are links to the Rugby Union Club, which has around 25 teams (many junior). In addition, there are opportunities to link to events, including: Littleborough Food Festival; Rushbearing Food Festival; and Wardle Xmas. The Club was flooded in 2015. Consequently, and because it sees itself as being a community asset, it is keen to get involved in the project and is happy to discuss opportunities to either hold specific events, promote the project or specific issues or to use its links to networks.

Action Together is an NGO member networking organisation. Members are mostly micro-organisations and groups (71%) and registered charities. Action Together helps member organisations find volunteers and supports their governance and training and administers grant pots. Action Together sees itself as very agile, so there is an opportunity to work through their networks of organisations to target specific groups on particular issues, recruit volunteers or deliver programmes of work. For example, they could connect to volunteers through existing organisations and could cover financial, post flood, pre flood, household SuDS, NFM and biodiversity issues.

Rochdale Boroughwide Housing (RBH) is a social housing provider set up in 2012 to receive the housing stock from RBC. It is tenant and employee owned with over 12,000 properties. RBH offers the opportunity to raise employee and tenant awareness of specific flood risk issues, properties with PfR that require regular maintenance and promote financial resilience measures, such as social housing residential property insurance. RBC's Private Sector Landlord (PSL) team is responsible for enforcing housing legislation in Rochdale. It partly does this through its network of landlords and letting and managing agents, using newsletters, briefings and workshops. This provides opportunities to promote issues such as landlord responsibilities post-flood, property insurance, flood risk management, PfR, household SUDs, etc.

Metro Moneywise is a Rochdale based credit union, focusing on public sector payroll contributions to savings and member loans. As well as providing opportunities to promote flood literacy and novel savings schemes, new legislation may enable credit unions to offer insurance in the near future. IThis could offer a route to promote residential property insurance to replace the loss of insurance brokers.

Citizens Advice Rochdale provides support services for its clients. Their client base is less well off, on benefits and low incomes. Lots of people live in private rented and social housing. Many are struggling financially. Citizens Advice looks at their finances, helps people budget and talks about insurance. Citizens Advice doesn't offer insurance advice, but it can support people online with applications for

insurance, i.e. helping people to fill in forms. A significant part of their role is listening and signposting to organisations such as Credit Unions. Information sessions to those delivering services would be welcomed. This could include training to volunteers, paid staff and the energy team about flooding and its impacts as well as insurance, the FCRIP project and the areas of flood risk. The provision of supporting information, such as in infographics would help them deliver their services.

The **Army Of Kindness** supports the homeless in Rochdale. The network started off as a soup kitchen to support the vulnerable in society run by volunteers. What started off as a Christmas meal has ended up as eight years of providing soup kitchens of weekly hot food to those that are struggling, vulnerable, homeless or with illness. Their networks of clients are often missed by other services. This offers an opportunity to train the volunteers in flood literacy and the range of flood projects and services available to help them when working with clients.

Perceptions of flood risk - insights from the questionnaires

First questionnaire (conducted in late 2021/ early 2022)

The questionnaire survey conducted in late 2021/ early 2022 had a return rate of 18% (60 responses). There was a higher return from owner-occupiers and longer-term residents. 7/10 respondents either owned their property outright or with a mortgage, and 85% have lived at the property longer than 3 years. The questionnaire asked people across the community about flood literacy, including about their knowledge of flood risk, (Figure 6.6) flood alerts (Figure 6.7) and awareness of and engagement with flood action groups (Figure 6.8).

1. Did you know your property is in a flood risk area?		
Option	Total	Percent
Yes	50	83.33%
No	8	13.33%
Unsure	2	3.33%
Not Answered	0	0.00%

2. Are you signed up to Environment Agency Flood Alerts?		
Option	Total	Percent
Yes	38	63.33%
No	20	33.33%
Not Answered	2	3.33%

Figure 6.7 – Question 2 - Subscription to Environment Agency alerts

The questionnaire asked people "did you know your property is in a flood risk area?" Of the 60 responses, 50 (83%) said that they were, 8 (13%) said that they were not and 2 (3%) were unsure. When asked "are you signed up to Environment Agency flood alerts, of the 58 responses 38 (63%) had signed up to Environment Agency Flood Alerts and 20 (33%) had not.

Figure 6.8 – Question 3 - Awareness of flood action groups

3. There is a Flood Group in your local area. Were you aware of this?		
Option	Total	Percent
Yes, I am a member	5	8.33%
Yes, but I am not a member	17	28.33%
No	38	63.33%

When asked about flood groups in the locality, out of the 60 people that responded, almost 38 (63%) were not. Of the 22 that were aware of a flood action group, five were members, whilst 17 were aware of groups but were not members.

People were asked which parts of their property were impacted by flooding. There were 93 comments, with people responding to several of the statements (Figure 6.9). Only 3 people (5%) had never flooded at all; 28 (46.67%) had flooded internally; 7 (11.67%) had their garage or outbuildings flooded, 20 (33.33%) had their garden or driveway flooded, 32 (53.33%) had flooding in their suspended floor or in their cellar/basement.

Figure 6.9 – Question 4 - Extent of flooding

4. When flooding has occurred in the past, what areas of your property were impacted? (Please select all that apply)		
Option	Total	Percent
My property has never flooded internally or externally	3	5.00%
My main property flooded internally	28	46.67%
My garage and/or outbuildings flooded	7	11.67%
My garden and/or driveway flooded	20	33.33%
Flooding occurred in the suspended floor and/or cellar/basement	32	53.33%
Other, please state.	3	5.00%
Not Answered	0	0.00%

Three quarters of respondents confirmed that previous flood mitigation measures (such as property flood resistance measures) were still present on their property. However, only one-fifth of respondents were confident or very confident in their ability to use these. Just over half of respondents had insurance, and around half of respondents said they had found the process of finding and procuring insurance difficult. The main issues cited around insurance were cost (both in absolute terms and relative to income) and the difficulty of finding flood cover.

Second questionnaire (conducted in late 2022/ early 2023)

The second questionnaire survey conducted in late 2022/ early 2023 had 43 returns, a decrease on the first questionnaire (from 60). There was, again, a higher return from owner occupiers. 34 respondents were either homeowners with a mortgage (15 - 35%), or owned their home outright (19 - 44%). 2 (4.65%) rented their home from the local authority. 1 (2.33%) rented from a housing association, housing cooperative, charitable trust or registered social landlord. 1 (2.33%) rented from a private landlord or letting agency.

Figure 6.10 illustrates that of the 43 responses, 20 (46.5%) were very concerned about flooding affecting their property, 10 (23.3%) were concerned, 11(25.5%) were a little concerned, 1 (2.33%) was slightly concerned and 1 (2.33%) was not at all concerned. When asked about the importance of insurance, (Figure 6.11) 36 out of the 43 responses said it was either extremely important (31) or very important (5). Four people said that insurance was either only slightly or not at all important.

Figure 6.10 – Question 5 - Concern about flooding

On a scale of 1 to 5, how concerned are you about flooding affecting your property?		
Option	Total	Percent
1. Very concerned	20	46.51%
2. Concerned	10	23.26%
3. A little concerned	11	25.58%
4. Slightly concerned	1	2.33%
5. Not at all concerned	1	2.33%
Not Answered	0	0.00%

Figure 6.11 – Question 6 - Importance of insurance

On a scale of 1 to 5, how important do you think it is to insure your home?		
Option	Total	Percent
1. Extremely important	31	72.09%
2. Very important	5	11.63%
3. Moderately important	3	6.98%
4. Slightly important	2	4.65%
5. Not at all important	2	4.65%
Not Answered	0	0.00%

Despite this level of concern, seven (all forms of householder) out of the 43 respondents reported that they did not have buildings insurance, and a further three did not know. Of those who had insurance, respondents tended to find the process quite easy and reported that they mainly used online services. A majority did not want more training although around 1 in 5 thought it would be useful. Those that gave free-text comments were evenly split on their choice of insurer between pure cost and suitability (for instance, that the insurer specifically covered flooding). The key barriers were financial (either in premiums or through a very high excess) and a concern/ fear that no one would cover them. Those respondents that had insurance had a wide array of behaviours when it came to renewal.

Figure 6.12 shows a more detailed breakdown of home tenure.

Figure 6.12 – Question 7 - Summary of home ownership

Which of the following best applies to you?		
Option	Total	Percent
I own my home with a mortgage	15	34.88%
I own my home outright	19	44.19%
I own my home through a shared ownership scheme	0	0.00%
I rent my home from a Council (Local Authority)	2	4.65%
I rent my home from a housing association, housing co-operative, charitable trust or registered social landlord	1	2.33%
I rent my home from a private landlord or letting agency	4	9.30%
I rent my home from my relative or friend or the relative or friend of another household member	0	0.00%
Other	2	4.65%
Don't know	0	0.00%
Not Answered	0	0.00%

By comparison, research in 2022 (Defra) noted that a quarter of renters are sure that they have contents insurance with flood cover (25% private renters, 28% council tenants).

Summary

At the heart of many of the issues surrounding flood literacy are questions of trust. The 2020 Blanc review reported a notable lack of trust and confidence in insurers. Similarly, it was reported by several residents that they felt others were benefiting at their expense. For instance, community centres were no longer seen by some as somewhere that people could meet because they got out of the habit of using these spaces during Covid.

Figure 6.13 - Key points

As outlined in this section, and elsewhere earlier in the report, there are several factors that will shape a flood literacy programme in flood risk communities in Rochdale.

- Working in diverse communities brings challenges and opportunities for engagement and literacy. Communities can be isolated from and unfamiliar with each other. There are, however, a number of stakeholders and associated organisations we can work with.
- There is a need to be aware of the plurality communities (particularly in terms of social, ethnic and cultural plurality) in the target areas, and plan accordingly with sensitivity, acknowledging diversity, or its absence, through engagement with stakeholders.
- Care needs to be taken to ensure that outreach events are as inclusive as they can be, taking particular account of venues, agendas, invited speakers and agendas. Where necessary, bespoke engagement activities should be planned for sub-communities.
- The Covid pandemic and associated lockdowns have reportedly resulted in some being reluctant to go to community venues where there is a lot of social mixing. People, we have been told, are now much more reliant on local networks. This provides both challenges and opportunities for potential engagement activities that promote collective literacy across local networks.
- Many interviewees particularly residents and small business owners report a lack of trust in authorities and flood risk managers. People report they are much more likely to trust very local, existing organisations and individuals in their community.
- Many people in the community remain reticent to acknowledge that there is a flood risk challenge in their area. Others are reluctant to take responsibility for mitigating and adapting to flood risk, believing that flooding, flood risk and recovery is somebody else's responsibility. Others still might be aware of the risk but are apathetic or feel disempowered.
- Traditional engagement techniques, while remaining important, will be less effective than perhaps hoped for.
- A significant proportion of people only want to engage when there is a clear and immediate benefit to them.
- Flood literacy is an issue for professional and other stakeholders (such as housing officers and local community and voluntary society groups) as well as communities.

- Different levels of flood literacy are required for different areas, depending on the level of flood risk and the very local interventions that are required in each place.
- The lack of social capital in more deprived and vulnerable communities creates additional challenges for working with communities and individuals.
- We have been told that those who are active on social media and internet users may be much more aware of issues, information and events than those who are not.
- Flood literacy is one part of climate literacy and needs to be seen in the context of the declared Climate Emergency in Rochdale and the Climate Strategy.

Interventions must be specifically designed and targeted to engage with the many different communities. Successes will vary between communities, involve a variety of intermediaries and have different consequences, depending upon the particularities and needs of each place.

Recommendations

A plan for flood literacy is set within the context of specific flood risks in particular areas and plans to address this and a wider water cycle approach. In particular, there is a wider context, climate change issues and more specifically within the climate change emergency declared by Rochdale and the carbon literacy roll out as part of Rochdale's Climate Strategy³¹. The plan seeks to improve the understanding and capability to respond for homeowners, landlords and tenants, businesses, local construction trades and property management professionals and schools.

Deliver enhanced resilience to flooding and the impacts of climate change through a programme of activity that supports each of the strands of work in the Resilient Roch project.			
WE WILL	ВҮ		
Use existing networks and partnerships to support activities, only establishing new ones where it is deemed absolutely necessary.			
Follow a series of good practice principles:	 Using pre-existing networks (rather than using a flood advisor). Commissioning services through pre- existing providers. Providing training, information and support first <i>with</i> and then <i>through</i> key stakeholders and networks. Using community hubs. Deploying cross sectoral approaches. 		

³¹ https://www.rochdale.gov.uk/directory-record/1003/climate-change-strategies

	1
	Understanding and working with diversity.
Build on existing relationships with stakeholders and networks to engage on flood resilience issues.	 Developing projects and programmes of work with specific networks and partners already engaged in the communities. Identifying cross-sectoral opportunities and initiatives. Commissioning services, training information and support through pre- existing networks. Taking care to ensure any initiatives and engagement activities are inclusive and take account of the diversity of communities we are targeting.
Work with Rochdale Boroughwide Housing to extend organisational and staff flood literacy and to support their work within flood risk communities.	 Raising awareness of flood risk and flood resilience of RBH staff and tenants (e.g. through Money Advice programme to promote savings and insurance). Providing practical and online training on flood risk and future plans for RBH staff. Working with RBH to encourage maintenance teams to brief contractors on flooding to ensure that no damage is done to flood resilience features and technology. Identify if there is a database of flood risk properties, or properties with flood resilience installed. Encouraging officers to explain flood risk to new tenants. Exploring the possibility of a flood pack for tenants. Identifying how RBH sustainability assessment (and other reporting procedures and/ or targets) can have flood risk and flood resilience integrated. Explore how systems can be sustained as part of a culture
Work with key stakeholders (including professionals, elected representatives, officers and the community and voluntary sector) to support flood, climate and water literacy and understanding.	 Convening workshops, one-to-one or small group meetings and information for elected members and Rochdale Borough Council officers. Building long-term relationships with the voluntary sector through workshops,

	 meetings and agreements with NGOs to support them in conveying helpful messaging through their networks. 3. Developing factsheets, infographics, flood risk maps and associated information for contractors, brokers, residents and professionals – undertaking works in residential properties with PfR, letting, managing and selling properties, or other activity. 4. Providing training, meetings and information for landlords and property professionals, including how to handle when tenants and owners change and flood risk.
Promote collective literacy in communities of place or interest, for example at a street scale where people understand risk and when neighbours change it isn't lost and also they understand when and how to help each other and the value of collective action.	 Promote and support "street champions", members of community groups, social clubs and societies, community centre users, etc., to understand, get involved with and promote flood resilience with their communities.
Work with communities at significant risk of flooding to support their flood, climate and water literacy and understanding.	 Helping people understand the need for resilience, including financial resilience (such as property insurance) and what they can do to limit the impacts of flooding. Develop training and support material to help people understand how property level resilience measures work in the home and how to maintain them. Developing factsheets, infographics, maps and other information for residents and voluntary networks. Using flood hubs to share information, run events and hold meetings. Developing physical measures and events: Create Flood Hubs as places where people can see what is possible, as learning centres and as a place to hold events Develop a festival to celebrate the relationship of people to water in the Roch Valley, focussing on flooding, water and climate change

	 Run events in the town centre with the Business Improvement District to promote flood literacy.
Work with the wider community (including those at limited risk of flooding) to support their flood, climate and water literacy and understanding.	 Developing: Climate change festivals Information, messaging and branding through everyday Rochdale Council, NFF, networks and project activities Wider activities within a climate change, water cycle, drought and flood, River Roch context Workshops, meetings and information for elected members and Rochdale Borough Council officers Training programmes

7 Findings on flooding and deprivation

Key findings

- 1. Flood risk is a significant and increasing threat. Climate change and urbanisation have altered precipitation patterns and the behaviour of water catchments placing more people and places at flood
- 2. risk. In urban areas some causes of flooding can be at the microscale and driven by surface water.
- 3. The notion of disadvantage draws attention toward wider perspectives and the complex social factors compound inequalities and injustices. In particular, flood disadvantage recognises differences in exposure and vulnerability of people to flood risk and the divergent capacity of citizens to cope with, and to recover from, flooding. Flood Poverty recognises the economic barriers and challenges and is an element of disadvantage. It translates to location poverty and therefore issues of health and environment, for example.
- 4. Resilience refers to the ability of individuals, communities, businesses, and the environment to withstand, adapt to, and recover from the impacts of natural disasters, climate change, and other hazards. It encompasses the capacity to anticipate, prepare for, respond to, and recover from disruptions, while also taking measures to reduce vulnerabilities and to enhance long-term sustainability.
- 5. Flood insurance and property flood resilience are vital elements of contemporary flood resilience. However, they are not without critique nor are they without practical challenges.

Introduction

This section provides a summary of recent policy developments and key research literature on a series of themes that are pertinent to the project. In particular, we:

- Introduce the concepts of flood disadvantage and flood poverty;
- Outline the context for contemporary flood risk management in the UK;
- Identify how individuals, householders and property owners and managers are increasingly held responsible for installing their own flood resilience measures and plans;
- Detail the role of insurance as an element of flood resilience and some of its drawbacks and challenges

- Discuss the contribution that property flood resilience measures may make in realising increased flood resilience at the neighbourhood scale.

Flood risk management funding is increasingly multi-faceted and includes a range of budget sources, often utilised in funding blends and partnerships (Figure 7.1). Government funding is primarily directed through Flood Defence Grant in Aid (FDGiA) where eligible projects (Environment Agency or local authority led) to protect homes can be allocated a percentage partnership funding contribution through the Environment Agency's six year investment plans that often requires matching or topping up from other sources. In addition, historically and going forward discrete, often competitive or time limited programmes and initiatives are occasionally targeted at specific types of intervention such as natural flood management, property flood resilience or more innovative approaches and measures such as the various Flood Pathfinder programmes and FCRIP. Government funds are also made available after certain flood events when its scale and significance is deemed to be of national importance, to support local authorities and homes and businesses to deliver flood recovery measures. The Environment Agency also carries out maintenance and inspection programmes to reduce flood risks from Main Rivers.

The Regional Flood and Coastal Committees manage significant regional budgets generated through the Local Levy charged to local authorities. Local Levy funding can support new projects, existing projects which need additional funding to proceed and smaller scale local projects which would struggle to attract funding from other sources but deliver local and often wider benefits. A Local Levy Strategy identifies the objectives and targeting for annual and longer term work programmes which include discrete programmes to deliver for example community engagement and better communication of flood risk, gathering and production of evidence to support and better understand flood risk challenges and opportunities and the development and piloting of new and innovative approaches to flood risk management.

Local authorities through their Lead Local Flood Authority function where appropriate and also other services such as housing, highways, estate and countryside management and planning have a diverse role in managing flood risk through their capital and maintenance programmes and through the delivery of planning policy for investment in sustainable drainage, flood risk mitigation measures and directing development away from vulnerable locations if it cannot be safely built or operated thereafter or where it would increase risk elsewhere. Local authority schemes are mainly focused on surface water and Ordinary Watercourses in line with statutory responsibilities but can extend to property level resilience and helping to better manage residual risks from surface water and rivers working in partnership with other risk management authorities. Each local authority produces a flood risk management strategy setting out its key risks and how it proposes to deal with them.

Stakeholder	Roles and Responsibilities
Environment Agency	The Environment Agency has strategic overview in management of all sources of flooding. It is responsible for managing the risk of flooding from main rivers, reservoirs, estuaries, and the sea. It issues flood warnings in partnership with the Met Office and it provides information on areas at risk of river coastal, surface water, and reservoir flooding through its 'check your long term flood risk' service, and on river and coastal flooding through its 'flood map for planning' service.
Lead Local Flood Authorities	Lead Local Flood Authorities (LLFAs) are Unitary Authorities, County Councils, London Borough Councils, and Metropolitan Borough Councils that are responsible for coordinating flood risk management in their area. They are responsible for managing the risk of flooding from surface water, groundwater and ordinary watercourses. They should also maintain a register of flood risk assets and surface water risk areas and have plans in place to respond to emergencies.
Local Planning Authorities	Local Planning Authorities (LPAs) are usually borough or district councils. They are responsible for developing local plans and setting out how areas will develop in the future. They grant planning applications for new development in accordance with national planning policy. National Park authorities and the Broads Authority are also planning authorities.
Internal Drainage Boards	Internal Drainage Boards are independent public bodies, responsible for water level management in low lying areas (approximately 10% of England).
Water and Sewerage Companies	Water and sewerage companies are responsible for managing the risk of flooding from water supply pipes and foul/combined sewer systems that provide drainage from buildings.
Highway Authorities	Highway authorities are responsible for managing highway drainage and roadside ditches, and ensuring that new road infrastructure projects do not increase flood risk.
Riparian Owners	Owners of land or property next to a river, stream, or ditch are responsible for maintaining these waterways.
Property Owners	Owners are responsible for their own property and the drainage and pipework within the ownership boundary.

Figure 7.1 - Flood Risk Management Authorities - Roles and Responsibilities³²

³²Adapted from: 'Who's responsible for what?' National Flood Forum, online www.nationalfloodforum.org.uk/about-flooding/flood-facts/whos-responsible-for-what/ And in Policy Connect - *Bricks and Water: Managing flood risk and accelerating adaptation in a climate emergency* https://www.policyconnect.org.uk/research/bricks-and-water-managing-flood-risk-and-accelerating-adaptationclimate-emergency launched on 14th June 2023

Other risk management agencies include the principal utilities companies for water and power supply and infrastructure, National Highways, Network Rail and the Canal and Rivers Trust who each have investment programmes to protect and reduce flood risk to their assets, operation and customers. United Utilities as the water supply and wastewater management provider for the North West for example has a range of investment programmes including its 5 Year Asset Management Plans, catchment management programmes and specific programmes e.g. Green Recovery where it works as a company or in partnership to secure water management with multiple benefits including flood risk management.

The flood risk challenge

The scale of the threat posed by flooding is already a significant concern for many parts of the UK (Committee on Climate Change, 2021; 2023). Changing weather due to climate change, and ever more intensive urbanisation have altered precipitation patterns and the behaviour of water catchments (Miller & Hutchins, 2017; Sayers et. al. 2020), placing more people and places at flood risk.

These trends seem likely to continue unabated with potentially significant - if not fully understood - implications. There is, for instance, a scientific consensus that the globe will continue to warm, and the climate will continue to change even under the most optimistic climate mitigation scenarios. Specifically, the most recent assessment of the impact of climate change on the UK suggest that the frequency of damaging UK weather patterns increase due to global climate change:

"Evidence from new modelling produced for the latest UK climate projections indicates future UK winter weather may be dominated more often by weather patterns associated with wetter, wilder and windier winter weather, particularly over western parts of the UK." (Committee on Climate Change, 2021: 47)

The same assessment predicts that across the UK there will be increases in intense summer rainfall exacerbating the threat of summer flash-flooding.

The drivers of flooding extend beyond climate change. An ageing and under-invested urban infrastructure, including drainage and sewerage networks, as well as ever more pressure to allocate land for construction of housing and infrastructure, will further contribute to the urban flooding challenge.

These challenges will be most pronounced in towns and cities. The majority of the 2.7 million properties currently at risk of flooding from rivers and the sea are in urban areas (Environment Agency, Chief Scientist's Group, 2021). Similarly, surface water flooding is now widely acknowledged to be the most serious threat of all, with some 3 million properties believed to be at risk (Bevan, 2018). Another report suggests that today some 6.4 million people live in flood prone areas, with around 1.5 million of these people living in vulnerable neighbourhoods which include people on low incomes, with poor health and other factors that means floods are likely to have more negative impacts on people (Sayers et al., 2017).

The UK, like many other countries, is pursuing a dual strategy of first attempting to mitigate climate change by driving down greenhouse gas emissions, and secondly by adapting to the now inevitable consequences of climate change. However, there is concern that we are falling short on both of these objectives (Committee on Climate Change, 2022; 2023). The need for adaptation is strongly correlated to

climate change and climate change mitigation. For every **fractional increase in global mean temperature**, **the scale of the challenge and the urgency for adaptation becomes ever more acute**. Indeed, it is somewhat ironic that even some elements of climate mitigation policy, such as the densification of urban living to reduce transportation energy use, whilst seemingly logical, may themselves further intensify flood risk (Ürge-Vorsatz et al. 2018).

Climate change and, more specifically for this project, flood risk has **significant social and environmental justice implications**. This extends beyond not just the distribution of risk across certain sectors of society, but also in terms of the vulnerability of certain individuals, households and communities, and their capacity to respond to flooding when it occurs (Sayers et al, 2020). In particular, deprived communities are acknowledged to face higher flood risk from (Environment Agency, Chief Scientist's Group, 2021; Hall & Bailey, 2022). However, socio-economic status and/ or deprivation is not the only factor that both drive and exacerbate these disparities. Race, ethnicity, health, tenancy, employment status, and even the extent of family and friendship network all act as determinants of the extent and intensity of flood risk. Consequently, a comprehensive analysis of risk must extend far beyond the rather simplistic analysis of proximity to hazards.

Against this context, the concept of 'flood disadvantage' (Lindley et al. 2011) captures the nuances of risk across multiple intersecting geographies. The concept is particularly useful given that it acknowledges flood risk as being "highly uneven, contextual and intertwined with other social disadvantages" (O'Hare & White, 2018: 386).

Flood disadvantage & flood poverty

"Climate change is likely to widen existing inequalities through its disproportionate effects on socially and economically disadvantaged groups."

Committee on Climate Change, 2021: 25

There is, as has been elaborated elsewhere, 'no such thing as a natural disaster' (Smith, 2005; also O'Keefe et al. 1976 and Weichselgartner, 2001). Disasters, and more particularly, vulnerability to disasters, are socially constructed (c.f. Thrush et al. 2005) and are therefore profoundly contingent on a multitude of different attributes and factors. More particularly, vulnerability refers to the extent to which environmental conditions or threats (such as flooding of heatwaves) and a population's socio-economic and adaptive capacities interact (Adger, 2006; also Tapsell, et al. 2002). However, conventional assessments of vulnerability are limited given how they are so often assessed to be outside place, outside time and independent of broader social and economic trends (Buckle et al., 2000). There is, therefore, a need for a more nuanced explanatory framework that accounts for the multiple dimensions of social life.

In recent years, some have used the notion of *disadvantage* to draw attention toward wider perspectives and the complex social factors compound inequalities and injustices. In particular, the concept of **flood disadvantage** recognises differences in exposure and vulnerability of people to flood risk and the divergent capacity of citizens to cope with, and to recover from, flooding. A better understanding

of flood disadvantage is vital as a "prerequisite to delivering a socially just (i.e. fair) approach to prioritising flood risk management efforts" (Sayers, 2017: i), and to realising more just climate adaptation more generally. For instance, work published by the Joseph Rowntree Foundation (Brisley *et al.*, 2012) amongst others differentiates between distributive and procedural justice:

- **Distributive justice**: the distribution of income, assets and opportunity, and in particular the distribution of benefits and costs of adaptive actions.
- **Procedural justice** how to empower communities to overcome lack of social capital and institutional barriers in order to be involved in decision making.

Rather perniciously not only is it the poor, powerless and disadvantaged that possess a reduced capacity to respond both to generic flood risk and specific flood events, but these same populations have contributed the least the generation of the greenhouse gases accelerating global climate change; what has been referred to as 'triple injustice' (Walker and Burningham 2011). It is also, some have proposed, these very same populations that should have (Rawlsian) preferential, targeted risk reduction interventions, rather than prioritisation based upon utilitarian or purely egalitarian principles (Sayers et al. 2017; 2018).

Social vulnerability in the context of floods refers to how flooding impacts on social wellbeing (Sayers et al., 2017). Delivering socially just flood risk management thus requires two central issues to be addressed. The first relates to addressing geographic flood disadvantage (places where many socially vulnerable people are exposed to flooding) and requires an understanding of where the most socially vulnerable communities are located and their exposure to flooding. The second relates to addressing systemic flood disadvantage, that is, the degree to which the most vulnerable communities are disproportionately affected by flooding and requires an understanding of the degree to which flood risk management policy (and its implementation in practice) successfully delivers socially just outcomes (Sayers et al., 2017).

Dimensions of climate and flood disadvantage

As suggested, distributional analysis of environmental risk takes place across an array of intricate intersecting social, demographic and economic variables, including spatial and temporal dimensions:

"...vulnerability to environmental hazards means the potential for loss. Since losses vary geographically, over time, and among different social groups, vulnerability also varies over time and space." (Cutter, et al, 2003: 242; for a further discussion see also Cutter et al, 2000)

These circumstances have increasingly become central to understanding climate risk in recent years. For instance, a 2021 report by the Climate Change Committee noted how low income and limited assets result in households and businesses with insufficient insurance and limited resources for recovery, undermining adaptive capacity (Committee on Climate Change, 2021). A recent report from the Environment Agency similarly established the link between social deprivation and the likelihood of flooding:

"There is an inequality in terms of social deprivation and flood risk exposure from all sources of flooding. In other words, people from areas classed as more deprived disproportionately face more flood risk than those living in less deprived areas. This is the case when taking into account nearby flood defences." (Hall & Bailey, 2022: iv)

Similarly, demographic factors such as age, gender, and people with underlying poor health could increase vulnerability to individual risks. These attributes can interact.

"...these distributional effects can overlap and reinforce each other, with location related to income inequality, in turn related to social and demographic inequalities." (Committee on Climate Change, 2021: 99)

The Committee on Climate Change drew particular attention to the intersection between low incomes and poor mental health, and how these interact and compound:

"...after the 2007 floods, those on the lowest incomes were eight times more likely to report severe mental health deterioration than those on the highest incomes, thus leading to poor health and compounding their existing inequalities". (Committee on Climate Change, 2021: 99)

The UK Health Security Agency (2022) has similarly noted the public health consequences of flooding, particularly emphasising the implications for mental health. The stress of the flood and future worry about flooding were felt far more severely by low income households (Werrity et al. 2007).

As alluded to earlier, the temporal dimensions to understanding this are critical, not least those that unfold over many decades. For instance, the Committee on Climate Change identifies intergenerational implications of risk: "future generations [will experience] greater impacts and [suffer] compounded inequalities compared to current generations" (Committee on Climate Change, 2021: 99).

This socio-spatial vulnerability to the impacts of climate change has been explained further by, amongst others, Lindley et al (2011) who have developed a framework to understand climate disadvantage and climate injustice. They have identified five intersecting dimensions of socio-spatial vulnerability to climate change across sensitivity, (enhanced) exposure, the ability to prepare, the ability to respond, and the ability to recover to events (see Figure 7.2 for a summary of these, and Figure 7.3 for an insight into how these dimensions interact).

Figure 7.2 - Framework for understanding climate disadvantage

Sensitivity – personal biophysical characteristics such as age and health which affect the likelihood that a heatwave or flood event will have negative welfare impacts.

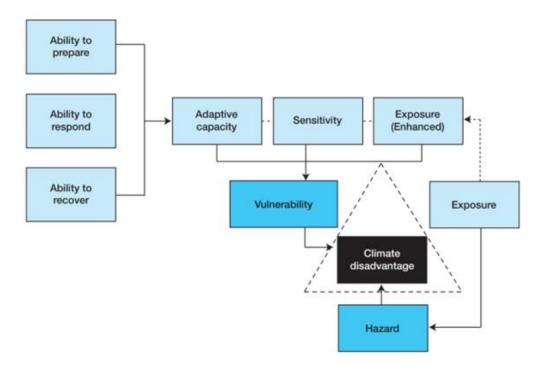
Enhanced exposure – the aspects of the physical environment, such as the availability of green space or housing characteristics, which tend to accentuate or mitigate the severity of heatwave or flood event.

Ability to prepare – the personal and social factors that enable an individual or community to prepare for heatwaves or floods, such as insurance, income and knowledge.

Ability to respond – the personal, environmental and social factors that enable individuals and communities to immediately respond to heatwaves and flood events, such as income, insurance, personal mobility, fear of crime, community networks, availability of public spaces, local knowledge and personal autonomy.

Ability to recover – the personal, environmental and social factors that enable individuals and communities to recover from heatwaves and flood events, such as income, insurance, housing mobility, social networks, knowledge, availability of hospital and GP services.

Fig: 7.3 - Conceptual framework for assessing socio-spatial vulnerability and climate disadvantage (Lindley et al., 2011)



These social and contextual factors of flood vulnerability and sensitivity to flooding are often overlooked in conventional distributional analyses that treat those exposed to flooding as homogeneous entities; aggregations that fail to account for the complex variations in 'at risk' populations. But that is

not to say they have been completely ignored by flood risk management agencies. In 2006, for example, research commissioned by the Environment Agency detailed the varying social impacts of flooding (see Figure 7.4 below) and the differential effects of these in framing flood vulnerability.

Social impacts	Evidence of differential effect depending on individual, household or neighbourhood characteristics	
Economic impacts	Ethnicity, age, income and property type all have a bearing on the experience of economic impacts.	
Non-economic losses	Age and property type inform the perception of, and extent of, this impact.	
Physical health	Pre-existing health status, age and gender all have a bearing on the experience of health impacts.	
Psychological health	Gender, age, social class and household composition all have a bearing on the experience of psychological health impacts.	
Evacuation and temporary accommodation	Age, gender and income are relevant to understanding how this phase affects people. Levels of social capital are likely to be important in understanding community response and resilience.	
Household disruption	Gender, ethnicity, age, property type and tenure type all influence how individuals and households are affected.	
Community and neighbourhood changes	No research evidence, but suggestion that deprived neighbourhoods and those with low levels of social capital will be particularly hard hit.	

Figure 7.4: Differential experience of the social impacts of floods (Walker et al. 2006: 45)

Elsewhere, others have similarly considered the differential impacts of flooding across socioeconomic, cultural and other characteristics. Work, for example, by Samwinga, et al. (2004) charts homeowners' experiences during flood damage to their property across a series of themes and subthemes. These include economic aspects, emotional and psychological considerations, the impact on and response of service providers, social considerations and what they call 'physical' dimensions of the flood event itself (see Figure 7.5).

Researchers have also explored the detailed socio-economic elements of flood disadvantage. They include the varying abilities of different households to afford adequate insurance to assist with recovery and reinstatement efforts, to being able to purchase flood protection or flood resilience measures. They also include the capacity of households to draw upon savings or investments to pay for flood recovery (sometimes referred to as self-insurance). Notably for this project, differential experience of the social impacts of floods may depend on housing and living conditions. For example, housing tenure and the quality of the physical construction and state of repair of properties can have a significant influence on an inhabitant's sensitivity to flooding (Kazmierczak & Cavan 2011; Houston et al. 2011). Elsewhere, perceptions of risk has also been identified as vital to understanding vulnerability (c.f. Tunstall & Parker, 1999; Buckle et al. 2000; Lujala et al. 2015). Perception of risk is often strongly correlated to a sense of attachment to a place of residence (Devine-Wright & Quinn, 2023). Moreover, as noted earlier,

there are temporal dimensions that are also critical to understanding the dynamic nature of flood risk vulnerability. In particular, individuals and households will be at greater or less vulnerability as their circumstances alter (Buckle et al. 2000; O'Hare & White, 2018).

Economic Aspects	 Financial – expenses associated with living in temporary accommodation. Insurance Cover Fears – fear of potential premium rises and/or refusal by insurers to extend cover. Property Value – fear of potential reduction in property value and/or demand. Loss of Property – some of which may not be replaceable. Loss of Earnings – associated with staying off work to oversee repair work.
Emotional Issues	Fear of flooding – in the aftermath of a flood event. Leaving home – upheaval associated with leaving in alternative accommodation. Loss of Memorabilia – things which may be of sentimental value and irreplaceable. Fatigue – associated with cleaning up and repair work. Reaction to flooding – included Disbelief, Shock, Surprise, Devastating, Stressful, Worried, 'Get on with Life'.
Service Related	How their service providers dealt them with and how well their needs have been met. Communication – consistent, timely and information and/or advice. Loss of Control – while the repairs are being carried out Temporary Accommodation – proximity to home, comparability. Speed of Return to Property. Confidence in service providers – makes it easy for homeowners' to get on with other aspects of life while repairs are ongoing. Fairness – how fair the homeowner perceives the settlement to have been.
Social Aspects	 Family support network – helps to cushion the impact of the catastrophe. Children – families with children experienced more difficulties in day to day running of the household. Friends support network – another source of help for flood victims Community Spirit – may be fostered when a neighbourhood empathises Situational Issues – other personal circumstances such as family tragedies can compound the stress felt by flood victims. Homeowners' Characteristics - Individual characteristics may have a bearing on coping with the flood and its aftermath. Experience of Flooding – previously flooded homeowners find it easier to cope next time Personality – each homeowner is different and will cope differently in crisis Vulnerable Groups such as the Infirm, Elderly people – had unique requirements and some found it difficult to cope with the resulting upheaval
Physical Aspects	Flood characteristics – e.g. floodwater depth, contamination, amount of floodwater, and duration of flooding, define the nature of the flood event. Extent of damage – extent of property damage and whether or not its insured. Flood warning – how much warning homeowners had before the flood. Flood Timing or Season – holiday time can be particularly distressing.

Figure 7.5 - Homeowners' experiences during flood damage to their property (Samwinga, et al., 2004)

Recurring flooding, whereby the same people and places are seemingly trapped in 'cycles' of flooding, further reveals wider challenges that transcend mere proximity to hazards (O'Hare et al. 2016).

There also is an interplay with other aspects of climate policy including climate mitigation and adaptation. Of particular concern here is the challenge of maladaptation. For instance, some aspects of flood protection might encourage development into areas highly exposed to the impacts of future climates, whilst insurance itself might encourage rebuilding in dangerous locations and promote a false sense of security (Breil et al, 2021).

Beyond charting the attributes and characteristics of disadvantage, any detailed analysis also requires a recognition of the longer term stresses and possible shocks that foster socio-economic vulnerability and precarity, and that by extension compose the broader socio-economic, cultural and political landscape against which flooding takes place. These stresses and shocks might include economic conditions and wealth distribution and disparity, economic recessions, inflationary pressures, unemployment and ill-health. For example, 'place inequalities', including economic vitality and growth, provides one such frame of reference for understanding social vulnerability, nested within a landscape of social and economic conditions (c.f. Cutter et al, 2003). Cities in relative economic decline experience levels of flood disadvantage above the UK average, suggesting floods could undermine economic growth in areas that need it most and lead to a spiral of decline if repeated floods occur (Sayers et al., 2017). What is called 'the situational variability of social vulnerability drivers' is, therefore, key to understanding climate disadvantage (Rufat et al. 2015).

Importantly, given this broader context, we must be cognisant that some conditions and attributes are influenced by public policy initiatives that are themselves much broader than flood risk management. In particular, recognising that low income and poor health are important drivers of flood vulnerability, it has been noted that they are often "more influenced by broader planning and welfare policy than flood risk management policy" (Sayers et al., 2017: i). Elsewhere it has similarly been argued that to fully address flood disadvantage (and to work towards greater justice in this respect), there must be engagement with policy and practice across the wide range of public policy:

"The pursuit of more 'just' flood risk management can usefully, therefore, be linked to social and economic policies that offer the hope to alleviate disadvantage in a broader sense." (O'Hare & White, 2018: 392)

Many such broader 'disadvantages' have been described as 'corrosive' (Wolff & de Shalit, 2007); those disadvantages that serve to cause further disadvantages. On a related point, it is worth noting that flooding and flood risk often exacerbates these other aspects of disadvantage in a broader sense, for instance by pushing vulnerable communities into greater precarity in other aspects of their lives (O'Hare & White, 2018: 389) or by further undermining socio-economic vitality of neighbourhoods and communities. That being said, despite these relationships it has been proposed that wider notions of vulnerability are overlooked precisely because they open debates beyond technical considerations of flood risk management.

Essentially, these are political. Such considerations ask awkward questions about the wider vulnerabilities of citizens and communities, or stray too far into the remit of other policy fields." (O'Hare & White, 2018: 393)

Recent work commissioned by the Environment Agency identifies (and recommends the adoption of) a series of disaster resilience indicators that will be used to identify how places and sub-populations have various levels of vulnerability and resilience and diverse capacities to respond to flood risk and to build resilience (Ngai et al. 2022)³³. The indicators are aligned against five areas of societal resilience: social, economic, institutional and infrastructure and another group of indicators for community capital.

There are, of course, many challenges in using indicators for social resilience, reflecting not just the complexity of the dynamic phenomenon under analysis, but the challenges in measuring, monitoring and evaluating social resilience (see Hutter & Bailey, 2022):

"The diverse range of characteristics that constitute the flood risk profiles of communities, households and individuals creates a complicated milieu. These characteristics frequently intersect, with some individuals rendered disadvantaged due to several distinct, though simultaneously related elements of their circumstances..."

Care must also be taken not to assume that particular demographic, cultural attribute, or particular circumstance, or a combination of these necessarily means that particular individuals or communities are inherently vulnerable. They are, rather, *indicators* of potential flood disadvantage. For instance, in and of itself chronological age does not engender vulnerability. It does, however, interact with other factors, for instance pre-existing health and fitness; mobility; income; and family support (Thrush et al. 2005). Moreover, we must also be aware that climate disadvantage mapping relies on aggregations. Communities that might, as an aggregate, appear to be well placed to avoid the worst impacts of climate change may have individuals or households that are extremely exposed to one or multiple hazards given their personal or household characteristics or circumstances (O'Hare & White, 2018). Understanding nuance within at risk' and vulnerable communities is, therefore, absolutely vital:

"There is a particular need to detect the most vulnerable sub-groups amongst the target populations already identified and to develop an understanding of the subtleties that surround vulnerability in relation to flood warning and flood event." (Thrush et al. 2005: 14)

Vulnerability to flooding can only be fully understood by examining how societal risk is framed by circumstances extending beyond exposure and proximity to a hazard. Analysis suggests that recent investment has been relatively successful in addressing social deprivation and flood risk exposure inequality (Hall & Bailey, 2022). Particular individuals, households and communities are at greater risk, perhaps because of wider systemic challenges or given their personal characteristics or attributes. Consequently, efforts to increase resilience to a threat, even a (seemingly) relatively discrete one such as flood risk, ideally should engage with a broad spectrum of public policy and social, cultural, economic and political factors, forces and interventions.

³³ Appendix 2 of that document contains a full list of sociodemographic indicators

Flood risk management

The escalating impacts of flooding, combined with an ever-greater appreciation of the wider socio-technical contexts of floodscapes have catalysed a discernible shift in the response to flood risk. Academics have characterised this as an evolution, over many years, from 'flood defence' to 'flood risk management' (Butler and Pidgeon 2011; Johnson & Priest, 2008).

Contemporary flood risk management is a complex, multifaceted concept. It emerges partly from an acceptance that, given the uncertainty and complexity surrounding flood risk, achieving full protection against flooding is an almost unattainable goal. Demonstrating this, in 2021 the Environment Agency presented five climate reality checks, the first one of which was: "We cannot protect everyone from increasing flood and coastal risks" (2021: 28). As one author has stated, if we accept that complete prevention is ultimately unattainable, we must reconsider disaster management as a policy of long-term loss reduction (Weichselgartner, 2001).

Moreover, large scale, civil engineering projects such as levees and embankments are carbonintensive, are expensive, are disruptive, and maybe even offer a misplaced sense of security for populations that then place too much faith in those defences. Even where such schemes are established or programmed for the future, residual risks (e.g. from surface water or the standard of protection afforded by a fluvial scheme) can be significant and need active management at the individual and neighbourhood scale. Instead, it has been suggested that at risk communities should learn to 'live with water' (c.f. House of Commons, 2015). As noted, flood disadvantage not only exposes differing vulnerabilities and sensitivities to flooding, but also uneven abilities across and within populations and communities to engage with risk agendas (O'Hare and White, 2018: 385). Specifically, the 2020 National Flood and Coastal Erosion Risk Management Strategy for England presents an explicit shift in approach from flood protection to flood resilience, a systemic approach to reduce and live with increasing risk (Environment Agency, 2020).

Resilience

Resilience refers to the ability of individuals, communities, businesses, and the environment to withstand, adapt to, and recover from the impacts of natural disasters, climate change, and other hazards. It encompasses the capacity to anticipate, respond to, and bounce back from disruptions, while also taking measures to reduce vulnerabilities and to enhance long-term sustainability.

The National Flood and Coastal Erosion Risk Management Strategy outlines the components of resilience across four related themes (Figures 7.6 and 7.7):

- Improve place making: Making the best land use and development choices for managing flooding and coastal change.
- Better protect: Building and maintaining defences and managing the flow of water in a catchment or a place.
- Ready to respond: Planning for and responding effectively to incidents.
- Recover quickly: Getting back to normal and building back better.

Figure 7.6 - Components of resilience, National Flood and Coastal Erosion Risk Management Strategy for England



Figure 7.7 - Resilience - approaches and actions

The <i>National Flood and Coastal Erosion Risk Management Strategy</i> details the wide range of actions that local places can use to improve resilience to flooding and coastal change (abridged)	
RESILIENCE APPROACH	RESILIENCE ACTION
Improve place making	Making decisions on land use that reflect current and future flooding and coastal change
Improve place making	Designing places, buildings and infrastructure more effectively
Better protect	Investing in building and maintaining flood and coastal defences
Better protect	Reducing flood risk through river channel maintenance
Better protect	Managing the flow of water through the environment
Ready to respond	Enhancing community resilience
Ready to respond	Responding quickly and effectively to flood and coastal erosion events
Recover quickly	Helping people and local economies recover more quickly
Recover quickly	Enabling people and businesses to build back better after flooding

There is a vibrant academic and professional debate regarding definitions and interpretations of resilience, and more recently an emergent critique of the concept. This document will not explore these debates in great detail though it is worth briefly exploring the key distinction between engineering and ecological resilience.

Both engineering and ecological resilience share fundamental traits, they operate in different contexts and have distinct focuses (Holling, 1973). Engineering resilience refers to the capacity of a system, structure, or infrastructure to absorb disturbances, adapt to changing conditions, and maintain or rapidly recover its functionality and performance. Engineering resilience aims to design and construct systems that can withstand stressors, shocks, or failures and quickly restore their intended function. In contrast ecological resilience refers to the capacity of an ecosystem to absorb and recover from disturbances while maintaining its structure, function, and ability to provide essential services. Key characteristics of ecological resilience is its adaptability and self-organisation.

While engineering resilience often focuses on optimising a system's performance and minimising disruptions, ecological resilience emphasises the ability of natural systems to persist, adapt, and sustain themselves in the face of changing conditions and disturbances. The distinction is often referred to as being the ability to 'bounce back' or to 'bounce-forward' (O'Hare, *et al.* 2016).

Community resilience

In terms of its practical delivery, flood risk management entails a rescaling and rescoping of flood risk management obligations (O'Hare et al. 2016; see also Environment Agency, 2016; 2020; 2021). There is, for instance, much greater emphasis on the inter-scalar dimensions of flood risk management (Thaler & Levin-Keitel, 2016), including much greater emphasis on engaging local people with no professional responsibility for managing flooding (Bracken et al. 2016).

Community resilience can be complex. A working definition has been provided in 2011 research commissioned by the UK cabinet Office, which noted:

"Communities (social, spatial, cognitive) working with local resources (information, social capital, economic development, and community competence) alongside local expertise (e.g. local emergency planners, voluntary sector, local responders) to help themselves and others to prepare and respond to, and to recover from emergencies, in ways that sustain an acceptable level of community functioning." (Twigger-Ross et al., 2011: 11).

On this point, there have been significant alterations in the roles and activities envisaged for citizens and communities with initiatives 'responsibilising' citizens and communities who have assumed, or at least have been charged with assuming, enhanced roles in the management of their own flood risk (Johnson and Priest 2008; Thaler & Priest 2014). Theoretically, at least, flood risk management has thus become a much more democratic and collaborative effort than it had been previously (Thaler and Levin-Keitel 2016).

Reflecting the shift from flood defence to flood risk management in recent years, it has been suggested that there is significantly greater recognition of the value of social aspects of flooding. This is often framed against the context of resilience. Referring to this as a 'social turn' in flood risk management, and referring to the notion of flood risk citizenship, Nye notes a move:

"...away from an emphasis almost solely on structural flood defence measures and towards an understanding that social and institutional processes including community engagement, and community-level responsibility have an important, non-structural role in helping people to live with flooding and to make communities more resilient to the impacts of flooding when it occurs." (Nye et al., 2011: 292).

By consequence of these changes, those exposed to hazards have been rearticulated not as merely vulnerable or as potential victims, but as agents of flood risk management (O'Hare et al. 2016). For example, at-risk communities are increasingly considered to be self-reliant; themselves responsible for adapting to 'live with risk', or in other words, to 'become resilient'. This is particularly the case when it comes to the management of what is referred to as 'residual risk'; that is, the risk that remains after a major infrastructure scheme has been completed. Legally, property owners are responsible for managing flood risk on their property, though, must be careful not to take any action that might cause or exacerbate flood risk elsewhere. Insurance and property flood resilience have emerged as essential to this self-reliance on the part of householders and businesses and therefore as integral to the broader mission of enhancing societal resilience to flooding.

Community engagement has been identified as integral to broader partnership infused flood risk management:

"Communities (social, spatial, cognitive) working with local resources (information, social capital, economic development, and community competence) alongside local expertise (e.g. local emergency planners, voluntary sector, local responders) to help themselves and others to prepare and respond to, and to recover from emergencies, in ways that sustain an acceptable level of community functioning." (Twigger-Ross et al., 2011: 11).

Crucially, however, the aforementioned concern regarding divergent vulnerabilities and capacities to respond to flood risk against contexts of flood disadvantage becomes all the more pertinent given how citizens are charged with greater responsibility for managing their own flood risk management initiatives. This challenge is particularly acute given how the transfer of elements of 'libertarian flood risk management' entails a greater role for market forces and the gradual privatisation of flood risk response: "Libertarianism promotes non-governmental activities in adaptation instead of public flood risk management." (Thaler & Hartmann, 2016: 132).

In particular, there is significant doubt regarding the readiness and ability, commonly referred to as the adaptive capacity, of individuals and communities in rising to this challenge. For example, some may lack the resources required to purchase or maintain effective property flood protection and resilience measures (Bichard & Kazmierczak 2012) or to participate in insurance schemes (Priest et al. 2005; O'Neill and O'Neill 2012; O'Hare et al. 2016). Others may simply be less aware of their exposure and vulnerability to flood risk (Fielding, 2012). Additionally, a lack of clarity and certainty regarding roles and responsibilities has been identified by other analyses of flood risk management, and possibly undermines the engagement of hazard-exposed publics in managing their own flood risk (Deeming et al. 2012 cited in Twigger-Ross et al. 2014).

There is, then, to ensure that the shift of responsibilities toward the public must be accompanied by governmental support to ensure citizens are able to assume responsibility and does not create disproportional inequalities.

Insurance

Insurance as a form of resilience

The possession of adequate insurance cover has the potential to be a vital component of climate adaptation:

"Risk insurance can be a feasible tool to adapt to transfer climate risks and support sustainable development. They can reduce both vulnerability and exposure, support post-disaster recovery and reduce financial burden on governments, households and business." (Pörtner et al., 2022: 99)

Insurance is, essentially, a contract between an individual or other entity (such as a business) and an insurance company, in which the individual or entity pays a predetermined premium in exchange for reimbursement for potential financial losses or liabilities. The precise types and efficacy of insurance varies greatly across different policies and insurers, between different hazards and, often most significantly, in terms of the level of cover provided. Fundamentally, however, all forms of insurance is a method of managing uncertainty, mitigating the potentially catastrophic impacts of a risk through the purchase of a predetermined, *usually* rather modest, premium.

With particular respect to this research, it has been asserted that in the past the close association between the provision of formal flood defences by the Government and the wide provision of commercially available insurance is a vital element of the flood risk management system in England (Green and Penning-Rowsell, 2004). Access to affordable, comprehensive insurance is, therefore, viewed as critical to contemporary flood risk management, and is a particular prerequisite for "quick and effective recovery from flooding events." (Climate Change Committee, 2023: 236). In this respect:

"...insurance is assumed to provide a price signal and thus is seen as the effective motivator for individuals mitigating their own risk exposure" (Booth & Tranter, 2018: 3135).

The process of risk transfer entailed through insurance has significant benefits for citizens and businesses. It provides a buffer against the impact of hazards and guarantees support at a time of great trauma and need. As has been noted by the OECD:

"Insurance and other risk transfer tools can make an important contribution to the financial management of flood risk by spreading the risk across domestic and international (re)insurance and capital markets and reducing the share of losses absorbed by households, businesses and governments." (2016: 9)

In practical terms, insurance can provide certainty, or an ability to continue with lives and business 'as usual'. With regard to hazards such as flooding, depending upon the quality of the cover provided, insurers are responsible for immediate assistance, often providing temporary accommodation, meeting

the costs of repair, paying for the replacement of possessions and in the case of commercial clients compensating for lost revenue and/or business continuity (O'Hare et al. 2016). Beyond providing financial support, insurers of residential property also often become responsible for helping organise recovery and rebuilding, for example, by arranging for contractors to commence reconstruction. Note however, that commercial insurance operates through loss assessors where the customer drives the process rather than the insurance company. Importantly, insurance can also provide a more intangible 'peace of mind' to those whose lives or livelihoods are vulnerable to threats (O'Hare et al, 2016). The offer of these very such services are used to promote services in a marketplace that is the UK is marked by fierce competitiveness.

Critiques of the insurance industry

Insurers are, therefore, vital actors in the flood recovery process, integral to the discharge of adaptation policy more broadly, and particularly at the scale of an individual property, household and/ or business. That is not to say that insurance and insurers are not without critique, with one analysis concluding that the effects of insurance can be rather contested:

"Insurance can be an aspect of resilience, a barrier to resilience or a factor promoting resilience." (Twigger-Ross, 2014: 5)

Some have described UK wide flood insurance arrangements as 'opaque' and even more regressively as a mechanism of damage compensation, rather than a vehicle to promote behavioural change for sustainable flood risk management (Penning-Rowsell, 2015). Moreover, there is a concern that the main beneficiaries from public investment in flood risk management are insurance company share-holders given that insurance premiums for flooding are usually not reduced when flood risk management measures are introduced (*ibid*.). Flood insurance has similarly been described as clearly utilitarian, fundamentally existing to provide returns to shareholders by managing risk portfolios to ensure profitability (Green and Penning-Rowsell 2004). There are, of course, flood disadvantage dimensions to insurance.

"...people on lower incomes are less likely to have insurance, so reducing their access to safety nets at a point of crisis, while also having fewer resources to deal with the loss of possessions after floods or to take precautions in advance." (England & Knox, 2015: 21)

On the note of justice, there is also a need to consider issues of justice and fairness in the offer and uptake of flood insurance (O'Neill & O'Neill, 2012). In particular, the extent to which risk pooling and subsidisation occurs has led to insurance regimes falling within one of the two broad categorisations of risk management:

- 1) Individualist or risk-sensitive insurance, which is provided through highly competitive markets in which individuals' payments are broadly proportional to their level of risk.
- 2) Solidaristic insurance regimes that have been described as 'risk insensitive' modes of insurance, whereby those at lower risk subsidise those at higher risk

O'Neill & O'Neill conclude:

"Any just policy must find some place for social solidarity in the design of insurance arrangements for flood. The alternative is to create a situation in which we would be predictably causing not only a sizeable swathe of blighted properties, but also very many blighted lives." (ibid. 16).

At the same time, there is an emerging concern that insurance is a financial tool that is itself under increasing pressure from a changing climate, with growing concerns around affordability and availability (Dodman et al, 2022: 945). Climate change will, it has been suggested, pose a threat to the provision of insurance in the future:

"...failure to recognise the potential for climate change to invalidate existing systems carries a fearful potential burden of future unprotected damage." (Lamond & Penning-Rowsell, 2014: 8)

More recently, the results of the 2021 Climate Biennial Exploratory Scenario (CBES) project a drag on profits of banks and insurers based on current portfolios if physical climate risks are not effectively managed (Bank of England, 2022). Against these contexts, concern has been raised that the insurance industry could, in the future, witness splintering protectionism: "a patchwork of high risk, high reward areas where insurance is available only to those with the ability to pay rising premiums, leaving the state to manage the retreat and relocation of less remunerative properties and populations" (Johnson, 2015: 2503). At the same time, it is worth noting that others are more optimistic in this regard. A report in 2021 by the Committee on Climate Change suggested that climate change is likely to bring opportunities to business and trade from adaptation services including new insurance products (Committee on Climate Change, 2021: 79). Elsewhere it has been suggested that insurance can insulate many from the true costs of risky behaviour (such as purchasing a property at high flood risk), and may in itself drive risky behaviour (c.f. Peltzman, 1975). Insurance products rarely have clear conditions, requirements, or incentives for policyholders to adapt to the potential risks (Climate Change Committee, 2023), a point returned to later in the report. In this respect, although underinsurance reduces individual and household capacity to recover from adverse events, over-reliance on private insurance undermines collective disaster recovery efforts (Lucas & Booth, 2020). Insurers have also been critiqued for controlling the property reinstatement process at the expense of home owner autonomy and for failing to adequately adapt properties for future flood risk through their 'no betterment' principle (O'Hare et al, 2016). This, it has been suggested, locks households into cycles of maladaptation (*ibid.*); actions (or inaction) that may provide short-term benefits, but ultimately increases vulnerability to future change (see Barnett and O'Neill, 2010; IPCC, 2014). There is, however, a hope that FloodRe has an element of betterment through its 'build back better' scheme.

The affordability challenge

These critiques notwithstanding, flood insurance is viewed by many as a vital piece of the mosaic of contemporary flood risk management with significant effort expended to try to encourage people to take out insurance policies. However, the purchase of insurance is, for many, a voluntary activity, though it is often a condition of mortgage agreements. Moreover, 'Uninsurance' has been identified as a problem in the UK for some time now (Priest et al. 2005), and as such insurance rarely fits the equality or vulnerability criteria of decision fairness (Johnson et al., 2007).

There is a dual challenge to uninsurance: first those who have traditionally been excluded from insurance cover due to price or other factors such as credit rating and second those who live in high-risk areas who may become cost-prohibited through the introduction of risk-related premiums (Priest et al. 2005). Unsurprisingly, the most socially vulnerable are the least likely to be insured, with under-insurance having the capacity to entrench socio-economic polarisation (Booth & Tranter, 2018). Of particular concern is how the insurance market operates after a flood event, or when an area has been deemed to be at particular or extensive flood risk:

"In the present market, insurers tend to respond to a flood either by increasing a customer's premiums or excess level which could render insurance unaffordable and encourage some householders to opt out of flood insurance altogether." (Twigger-Ross, 2014: 5)

Again, it is worth noting that FlodRe has subsequently been introduced. The Blanc Review suggested that contents insurance is particularly beneficial for tenants who are at risk of becoming homeless due to their property being uninhabitable:

"For tenants with a heightened risk – such as those living in areas with a high flood risk – contents insurance is therefore particularly valuable". (2020: 9)

The Blanc Review (Figure 7.8 highlights the Blanc Review objectives) reported anecdotal evidence of residents facing very high premiums and/or very high excesses for flood cover. But again, in particular, social housing tenants and private renters are considered to be particularly isolated from the purchase of insurance. One piece of research observed that in recent years a rise in renting in countries such as the UK is resulting in an increase in underinsurance, with renters less likely to insure their assets, in some instances even disavowing insurance uptake (Booth et al., 2022). Elsewhere it has been contended that a notable exception to this situation are efforts to reduce insurance premiums for those in social housing under 'pay-with-rent' schemes (Johnson et al., 2007).

Figure 7.8 The Blanc Review of flood insurance - objectives

The Doncaster (Blanc) Review of flood insurance

After significant flooding in South Yorkshire in December 2019, Amanda Blanc led an independent review into the extent to which residents and businesses at flood risk in Doncaster had adequate insurance cover (Blanc, 2020). Over 500 residents, a mixture of owner-occupiers, private and social renters and 29 businesses participated in the study.

'Deep dive' objectives of the Blanc Review

- - To determine current knowledge of insurance;
- - To examine the key issues around flood insurance accessibility, availability and affordability;
- To understand perceptions of different issues around insuring and claiming for businesses and homes;
- - To identify any input to the insurance review.

The Doncaster Review noted that the affordability of insurance again emerges as a potentially significant barrier for many that interview respondents believed that in some of the more disadvantaged parts of the area viewed insurance not as a priority, but as a 'nice to have' (2020: 39). The Blanc Review noted that:

"...people living with a high risk of flooding often need to be much more persistent in their efforts to find affordable insurance and the implications of being uninsured can be much more profound, making these factors doubly important." (page 10)

That said, the Review also suggested that there was a contrasting view (at least from Flood Re and the reviewers) that low cover is not primarily due to affordability per se, but rather stems from a lack of clarity of how to access affordable insurance for properties at risk of flooding. The report stated: "There was also a view that perception of inaccessibility or unaffordability may be a bigger barrier than accessibility itself" (page 39).

Accessing appropriate insurance

There are different types of underinsurance, including instances of high flood excesses or where flooding is identified as a specific exclusion. In the Blanc Review, exclusions were distilled into two reasons (2020: 40):

- The customer believed they were covered, but given a lack of clarity within their insurance documentation, were not;
- The customer may have had flood insurance, but their insurer had amended the clause without communicating this clearly and concisely.

Concerns have been raised regarding the comprehensiveness of insurance. The Blanc Review stated that "a worrying proportion of insurance policies held by Doncaster residents did not cover floods" (page 5). Six percent of buildings insurance and 6.5% of contents insurance did not cover flooding. A further 21% of owner-occupiers did not know whether their buildings insurance covered them for flooding (perhaps surprising in itself given that these responses are from residents in an area that had so recently flooded).

The Blanc Review found marked differences between owner-occupiers and tenants in terms of insurance cover. The vast majority of owner-occupiers had buildings and contents insurance, but the majority of tenants were poorly protected. In particular, 97% of owner-occupiers had at least one of buildings or contents insurance with 95% having both. However, only 36% of tenants confirmed that buildings insurance was in place, but a further 37% did not know (though it is worth noting that landlords rather than tenants are responsible for buildings insurance. Forty five percent of tenants confirmed they did not have contents insurance, an issue that the report noted was of great concern. Knowledge of flood cover among those who organised their own insurance also shows significant differences between owners and tenants. Seventy two percent of owners confirmed that they have either buildings (71%) or contents (68%) insurance that covered flood damage. Only 25% of tenants confirmed they had contents insurance that covered flood damage, with 50% saying they did not.

In one of their quarterly Housing updates the Resolution Foundation has stated that expected increases in the frequency and severity of flood events will hit poorer families hardest due to their lack of insurance cover (Judge & Marshall, 2022). Specifically, the Foundation noted that neighbourhoods with 'middling levels of deprivation' have the highest chance of flooding (the poorest neighbourhoods are often found in cities, currently less exposed to significant risk of flooding than other types of settlements). Although the poorest places are not necessarily at highest exposure to flooding, lower-income households are most exposed to the financial consequences of a flood when it occurs. Despite the importance of insurance, just one-in-three (33 per cent) of the poorest households currently have contents insurance. A further one-in-three (36 per cent) say that they would like to have contents insurance but are unable to afford it, compared to just 1 per cent of those on the highest incomes. Helping low income families afford contents insurance is, according to the Resolution Foundation, vital. Jonathan Marshall, Senior Economist at the Resolution Foundation, said:

"Improving households' financial resilience so that those already living with the risk of flooding are better able to afford appropriate levels of contents insurance in case the worst should occur must also be a priority." ³⁴

It has been observed, for instance, that the digitalisation of access to insurance, whist supporting superficial access in many respects, undermined potentially more in-depth engagement:

"Digital distribution of insurance cover could limit the interaction with a knowledgeable intermediary that can provide information on risk and risk reduction options" (OECD, 2023: 13, drawing on EIOPA, 2021)

Other insurance related issues

The Blanc Review identified some broader barriers to informed decision-making by consumers. These included difficulty understanding insurance terms and conditions; low understanding of the value of insurance or of the risks of being uninsured; mistrust of insurers and the relatively low level of engagement with insurance. The Report goes on to state:

"...people living with a high risk of flooding often need to be much more persistent in their efforts to find affordable insurance and the implications of being uninsured can be much more profound..." (ibid. age 10)

Flood literacy was also identified as vital. In particular, the Report notes that people living with high flood risk need to know:

• how they can protect themselves so they can make properly informed decisions;

³⁴<u>https://www.resolutionfoundation.org/press-releases/englands-poorest-families-are-most-exposed-to-the-financial-consequences-of-flood-</u>

<u>events/#:~:text=Expected%20increases%20in%20the%20frequency,Saturday</u>)%20by%20the%20Resolution%20Foundation

- their flood risk and their insurance requirements;
- how to access insurance that covers those needs (including subsidised Flood Re supported insurance where this is available).
- how to understand the insurance cover they (or their landlord) has bought.

Key findings of the Blanc Review are set out I Figure 7.9.

Figure 7.9 - Key findings of the Blanc Review

Key findings of the Blanc Review

- - Knowledge of flood cover among those who organised their own insurance also shows significant differences between owners and tenants.
- The majority of owner occupiers in Doncaster possessed both buildings and contents insurance. 97% of owner-occupiers had at least one of buildings or contents insurance with 95% having both. But this left a significant proportion of people without insurance
- - The majority of tenants were poorly protected. 36% of tenants reported they had buildings insurance in place. A further 37% did not know. 45% of tenants confirmed they did not have contents insurance.
- - In places where there is a large proportion of younger people on lower incomes living in rented accommodation, insurance uptake was notably lower.
- 72% of owners confirmed that they have either buildings (71%) or contents (68%) insurance that covered flood. Only 25% of tenants confirmed they had contents insurance that covered flood damage, with 50% saying they did not.
- Some owner-occupiers confirmed they had flood exclusions applied to their insurance with 6% of buildings insurance and 6.5% of contents insurance did not cover flooding. A further 21% of owner-occupiers did not know whether their buildings insurance covered them for flooding.

In terms of systemic challenges, the Blanc Review noted that 'mistrust and misunderstanding' (page 41) of insurance was a commonly cited barrier. Research from elsewhere has similarly found that low levels of trust in insurers disincentivises the uptake of insurance (Roder et al., 2019). The industry itself has said the trust in insurers is illusive with one executive saying:

"Insurers see an obvious dividend to be gained from building trust with their customers and creation of any uplift in consumer trust in the industry as a whole as a 'good thing'. However, they differ as to how that should, or even if it could, be achieved." (Chartered Insurance Institute, n.d.: 3)

Beyond this, the Blanc Review also stated that people must have confidence that their insurer will provide that cover in the event of a claim. Some have reported that the challenges of dealing with loss

adjusters and insurers can be as stressful as the flood event itself (Whittle et al, 2010; Carroll et al. 2009; Greene et al, 2015). Elsewhere, research identified divisions between the insured and the uninsured as residents with insurance felt that those without had been rewarded for non-payment of premiums by free handouts and assistance (Whittle et al. 2010).

Flood Re

Flood Re consists of two elements, a reinsurance scheme and a Transitions plan. The reinsurance scheme makes flood cover more widely available and affordable as part of home insurance policies. The Scheme involves a levy on all insurers. These inputs are allocated into a pool system (a £180m annual central fund) enabling the continuation of insurance cover to homes at a significant risk of flooding (that is a 1.3% or higher annual risk of flooding). Householders are not usually aware that they are accessing cover through the Flood Re scheme.

Flood Re is designed to operate behind the scenes, without the need for policyholders to be aware of its existence. Policy holders are rarely informed that their insurer has obtained reinsurance from Flood Re. In itself, this might undermine the development of understanding or flood literacy.

Flood Re's own analysis (2018) suggests that prior to the establishment of the initiative, only 9% of households who had made previous flood claims could get quotes from two or more insurers. With Flood Re, this is now 100% of households. Additionally, four out of five eligible households saw a greater than 50% premium reduction in their home insurance.

Flood Re will run for 25 years up until 2038, at which point, Flood Re states, insurers should be offering policies based on actual risk to property (<u>https://www.floodre.co.uk/about-us/</u>).

Flood Re's statutorily required Transition Plan has the overall intention of creating the space to develop permanent solutions to the UK's underlying flood risk so that the home insurance market can transition to affordable risk-reflective pricing by 2039. Whilst much of this lies outside of the remit of the insurance industry, Flood Re is actively developing projects such as Build Back Better following a flood, Flood Risk Certification and promoting the installation of Property Flood Resilience measures.

Defra has consulted on possible changes to Flood Re to improve the efficiency and effectiveness of the scheme and to support Flood Re's purpose to manage transition to a risk-reflective flood insurance market by 2039 (Defra, 2021; Defra, 2023).

Both aspects of Flood Re are managed through quinquennial reviews, consultation and approval by government

"...Flood Re favours the affluent at risk rather than the uninsured poor" (Penning-Rowsell & Priest, 2015:1006)

Flood Re is statutorily required to produce a Transition Plan every five years through a Quinquennial review. The aim is that this, alongside state policy and investment will lead to risk reflective and "affordable" residential property insurance by the time that Flood Re comes to an end in 2038.

Flood Re's most recent Transition Plan (2023) calls for comprehensive climate adaptation measures to be taken to safeguard against floods by 2039 when Flood Re is set to exit the market. The Plan outlines recommendations to work with partners to create a scoring methodology for property flood resilience(PFR) adaptations. This would help the insurance market to assess how the risk and damage of flooding is mitigated by adaptations, and in the future allowing premiums to reflect improved resilience. This would include Flood Performance Certificates so current and future homeowners can, potentially, see the benefit of adaptations in house prices.

Elsewhere Defra has funded more general studies of the performance of flood insurance. The third set in the series of reports published in 2018 assessed the current affordability and availability of flood insurance for households and small businesses at risk of flooding compared to those at low/no risk; and secondly analysed trends in affordability and availability of flood insurance following the introduction of Flood Re.

The 2018 householder report (Wiseman & Hughes, 2018a) found that amongst renters, those in the 'at risk' group are significantly more likely to state that they do not have contents insurance than owner occupiers (34% rather than 88%). Those stating they do not have insurance reported issues around affordability with 18% of those in the 'at risk' group stating the costs of the premium are too high, though the report noted that this was a significant decline from earlier surveys. A further 16% of the At risk group state it is too much hassle getting insurance. Around one in six (16%) of those in the At risk group stated they have a separate excess for flood damage. More than half (57%; 53% in 2015) of the At risk group state that they renewed with their existing provider whilst around a third (34%; 36% in 2015) chose to switch. For those with home insurance, using a comparison site is the most commonly expressed method for deciding which insurance company to choose, followed by prior engagement with an insurer.

Businesses and insurance

Turning to the implications for businesses, the Blanc review stated that some found it difficult to secure the insurance cover they want for their specific needs at an affordable price. Others reported poor experience with the post-flood claim process. Although the Review acknowledges that it was only able to draw on a limited size, "nothing has emerged from this small sample to suggest systemic issues with accessibility, availability, or affordability" (*ibid.* 10). The Review also found evidence of a lack of confidence in insurance as the best way to protect residents or businesses.

Businesses are excluded from Flood Re. The Doncaster Review suggested that small and medium enterprises (SMEs) are particularly impacted by the lack of Flood Re support. Some larger businesses can self-insure. Some businesses had specific requirements from insurance which undermined affordability. Importantly, however, the report did suggest that "Nothing has emerged from this small sample to suggest systemic issues with accessibility, availability, or affordability." (page 10).

The recent report on the availability of insurance for small businesses (Wiseman & Hughes, 2018a; 2018b) found that although there has been a decline in insurance uptake since 2015, there appears to be little concern with the availability of insurance products for small businesses regardless of whether or not their business is located in a high/medium risk flood area. The majority (77%) of respondents stated that they arrange commercial insurance cover for their premises themselves. A further 12% have somebody else arrange it; and so a total of 89% of small businesses arrange commercial insurance cover for their premises. Only 10% do not have commercial insurance cover. The vast majority (98%; 97% of those at a high/medium risk of flooding and 98% of those at a low/very low risk) of businesses arranging commercial insurance cover did not experience any difficulty obtaining insurance due to risk of flooding.

Sakai, p., et. al (2021) explored the information barriers to SME insurance uptake and developed and tested tools to support better knowledge of SMEs having undertaken trusted flood risk mitigation measures.

Property Flood Resilience

Over the past 20 years, property flood resilience (PfR) has emerged as a flood risk management intervention with the potential to enable property holders (that is, flood receptors) at acute flood risk to mitigate against, and adapt to, significant damage (White et al, 2018). This is aligned to a push in recent years for the deployment of 'technological fixes' such as adaptive technologies and the promotion of green growth in the face of climate change.

Property flood resilience measures, like many protective and adaptive measures, are subject to a range of motivating and demotivating factors (Grothmann & Reusswig, 2006). Additionally, recent research states that human behaviour regarding adaptation requires careful assessment (Kuhlicke et al, 2020. The National Flood and Coastal Risk Management Strategy for England states that there is a need to "mainstream property flood resilience measures and to 'build back better' after flooding to reduce damages and enable faster recovery for local communities" (Environment Agency, 2020: 14). More particularly, the long-term investment scenarios show the potential for an estimated 200,000 homes in England to be fitted with property flood resilience over the next 50 years (Environment Agency, 2019a).

There are two types of PfR:

- The first are technologies, materials and features that prevent flooding at the building scale by keeping water out of or away from structures known as 'resistance' (or dry-proofing).
- The second is referred to as resilience, recoverability or repairability (or wet-proofing) whereby if water does enter a building, or if water is allowed to flood a structure in a controlled manner, it can be returned to a usable condition very quickly. The key to this latter type of PfR is that the

structure can be reinstated, cleaned and sanitised very quickly, significantly reducing the disruption caused to the building occupier.

Installed measures may in practice be a combination of the two elements.

Resilience measures can be split into two further elements: areas that can be sacrificed but then reinstated cheaply and relatively easily. The second are areas such as tiled floors or stainless steel kitchens that may not be damaged, but can be cleaned and readied for use again very quickly. Many (though by no means all) of these second types of measures are considered to be at low, or even no, cost (Lamond et al. 2016).

Despite the promise of PFR, and its perceived centrality to the future of flood risk management and to the management of residual flood risk in particular, barriers to the integration of property flood resilience have been well documented both in the academic literature and also in practice and policy reviews that have been conducted in recent years as PfR has been (often in a rather piecemeal fashion) promoted across flood affected communities. As was noted by a recent report by Policy Connect & Westminster Sustainable Business Forum:

"Resilience measures are currently being installed at a fraction of the pace required to adapt to the effects of climate change and this must be speeded up." (2020:5)

The industry itself has not reached maturity, with several of the larger market players going out of business in recent years. Insurers themselves have raised concerns regarding their confidence in the property resilience sector (May et al. 2015).

When it comes to consider risk mitigation, analysis distinguishes between situational factors such as communication and economic subsidies, and personal factors (such as personal and psychological components influencing individual behaviour (Attems et al. 2020). Research by the Social Market Foundation (and funded by Flood Re) identified the barriers to uptake of PfR. The work suggested that barriers occur at three stages in the decision making process: the motivation to take action, the ability to access and assess information, and the ability to take action (Oakley, 2018), Figure 7.10.

A lack of awareness of PfR or of the potential PfR products, materials and techniques can play in flood risk management can be the first challenge impeding PfR uptake. This is a challenge that can also be linked to a lack of flood literacy within certain sectors of society. In particular, awareness of the extent of flood risk and perceptions of flood risk is critical to framing engagement with PfR. For instance it has been suggested that some homeowners will only install PfR if they accept some degree of responsibility and believe that the technologies will work.

Elsewhere, the lack of ownership of flood risk has been identified by some as similarly undermining the engagement of property owners in PfR (Joseph et al. 2015). Somewhat paradoxically, this was a particular challenge for occasions when property owners were given grants to install PfR, causing further 'confusion' (Joseph et al. 2015: 262). Consequently, to help motivate residents in flood prone areas to "take their share in damage prevention, it is essential to communicate not only the risk of flooding and its potential consequences, but also the possibility, effectiveness and cost of private precautionary measures" (Grothmann & Reusswig, 2006: 101). In a more general sense adaptation

decisions can also be subject to 'single-action bias', with modest actions that have been taken disincentivising further adaptation (Buchanan et al., 2019).

Figure 7.10 - Increasing take up of action on flooding (Oakley, 2018: 9)

Motivation

Households need to be motivated to engage in the market in the first place. They need to believe both that they are at risk of flooding and that they are responsible for protecting their property against the likelihood of this or the damage that it might cause.

Access and assess information

Households need to access information about the various products available in the market and then be able to assess the costs and benefits (including quality and price). Together this means that households can understand the best value for money option.

Take action

Households need to be able to take the appropriate action. This requires that they can afford to take that action and that there are no behavioural biases that restrict the likelihood of action.

The implementation of PfR measures may require technical expertise and specialised knowledge, which can be a barrier for property owners who lack such knowledge. There is no 'one size fits all' approach to PfR measures; the efficiency of property flood resilience measures are "dependent on the situation of every individual property" (Attems et al, 2020: 15). Similarly, it has been suggested that the definition of success in the context of property resilience is contingent on many factors (Connelly et al., 2020). It has been suggested that experts need to have a mix of skills if they are to encourage and persuade people to install PfR in their properties:

"...the expert is in a dilemma. The expert can contribute to the flood resilience of homeowners only if they combine their engineering role with the role of a mediator and expert communicator." (Davids et al, 2023: 9)

However, the competence of individuals surveying for PfR and installing and maintaining measures is also of critical importance (May et al. 2015; Kelly, et al. 2020). Moreover, many property owners view returning their house to a pre-flood state without integrating PfR as the quickest form of flood recovery. The National Flood and Coastal Risk Management Strategy for England:

"If a property owner is already paying for clean-up and other related activities, it can be quicker and cheaper for them to just return their property to how it was before the flood. This risks being short sighted given the unavoidable impacts of climate change mean we will see more frequent flooding in the future." (Environment Agency, 2022: 79)

A recurring theme is the cost and affordability of PFR measures, a challenge that sits in a broader context that needs to also be understood. The 2021 Committee on Climate Change report called for

attention to be turned to funding mechanisms for adaptation measures, though noted that "missing markets and barriers to action" meant this is unlikely:

"There may be information failures, the value of the adaptation action may not accrue to where the expense is incurred, there may be a lack of sufficient financial returns, lack of coordinated, large scale, investment opportunities, or a range of other market failures and barriers may prevent effective measures being taken." (Committee on Climate Change, 2021: 113)

The theme of costs and funding is linked to the aforementioned challenge of literacy and understanding. Some property owners may perceive the risk of flooding to be low and may not, therefore, see the need to invest in PfR measures. PfR measures can undoubtedly be expensive and property owners may not have the financial resources to invest in them. Despite keenly advocating PfR, the National Flood and Coastal Risk Management Strategy for England acknowledges that not only can many measures, even relatively simple ones, have a cost that might be significant for some households (Environment Agency, 2020). Eleshere it has been noted that more work is required to understand the cost-benefit ratios of PfR (Lamond, et al, 2017).

There is a clear need, therefore, to increase the motivation of homeowners to invest in property flood resilience measures (Joseph et al., 2015). Funding and investment from public and private sources for property flood resilience projects has undoubtedly increased over recent years (Committee on Climate Change, 2023). Government schemes and utility companies in particular have provided a source of funding for PfR grants and support and advice on project delivery. But as noted by the Committee on Climate Change's 2023 report *Investment for a well-adapted UK*, much adaptation at the household level will have to be paid for by owners or occupants directly. Moreover, challenges with the design and implementation of Government commissioned and funded grant schemes have been detailed (Defra, 2023).

In 2020 the Environment Agency published research on applying behavioural insights to property flood resilience (Park et al., 2020). The project identified several factors such as adoption among peers, removing points of 'hassle' in the process and referencing social norms in messaging, which could be taken into account to help increase the uptake of PfR. Some property owners may be resistant to changes in the appearance or design of their properties, or may have cultural attitudes that discourage them from implementing PfR measures. Demonstrating this, a recent report observed:

"The desire for a sense of safety at home can cause people to reject adaptation interventions such as raised wall sockets and changed flooring, as they can serve as a daily reminder of an external threat that means one's home is not secure". (Devine-Wright & Quinn, 2023: 5)

There also are regulatory barriers. Regulations or planning policies may not incentivize or require PfR measures to be implemented in new or existing buildings. There is rarely, if ever, a compulsion to fit PfR into properties which is identified as a major challenge in the effort to integrate PfR across society. In a 2020 Inquiry, Policy Connect and Westminster Sustainable Business Forum recommended that Part C of Building Regulations should be updated to require properties at flood risk to have property flood resilience measures. An associated long-standing challenge has been a lack of standards for PfR, or concerns in the efficacy of standards where they do exist. A recent report by the Committee on Climate Change (2023)

was in accordance, and added that the drive for more PfR was undermined by a shortage of skilled construction workers.

The Committee on Climate Change has noted that there is currently no way of regulating effective and well-maintained property-level flood protection (2023). Tracking the effectiveness of property-level installations, the Committee has said, and how well they have worked in a flood event, is necessary to ensure PfR is well installed (2023: 244). Challenges with the design and implementation of Government commissioned and funded grant schemes have been detailed (Defra, 2023). property flood resilience measures deteriorate over time, undermining their long-term utility. They require maintenance, adjustment and oversight across time.

Given the range of well charted challenges in realising property level flow protection the UK government has developed a range of interventions and programs to support the development of the industry. In an effort to enhance the uptake of PFR into properties at flood risk and to understand and address the issues why property owners may or may not take up PFR Defra established a Roundtable to develop a Property Level Resilience Action Plan (Defra, 2017).

The Construction Industry Research and Information Association (CIRIA) recently published a Code of Practice and guidance for PfR (Kelly et al. 2020). Building on previous work (White *et al.* 2013; White et al. 2018) the Code details six benchmarking standards:

- 1. Hazard assessment
- 2. Property survey
- 3. Options development
- 4. Construction
- 5. Commissioning and handover
- 6. Operation and maintenance.

The Chartered Institution of Water and Environmental Managers (CIWEM) and partners have developed a training programme for PfR professionals commissioned by the Environment Agency. This establishes competencies for those delivering PfR in line with the Code of Practice. "Those completing the required training and demonstrating the relevant industry experience will be invited to apply to become a 'Certified Professional' in the delivery of flood resilience measures."³⁵

Flood insurance and property flood protection

Traditionally, risk transfer (e.g. insurance) and risk reduction (e.g., hazard mitigation) have typically been treated as two separate planning and financing processes within disaster risk management (c.f. Reguero et al. 2020). However, consideration has been given to how the integration of adaptation investments is related to, and interplays with, insurance in order to both encourage adaptation, and to price insurance risk more appropriately. It has been asserted, for instance, that strengthening the link between flood insurance and financial incentives can guide household level adaptation (Hudson, et al, 2016), and calls for much closer alignment between insurance and broader disaster risk reduction initiatives (Surminski et al, 2015).

³⁵ <u>https://www.ciwem.org/training/pfr-industry-training</u>

In particular, several reports published in recent years have examined the relationship between insurance, adaptation and in particular the integration of PfR into properties. Adaptation linked financial products, including loans, grants and insurance products. "Key is to develop financial instruments that monetise adaptation and insurance products designed for adaptation" (Climate Change Committee 2023: 320).

Flood Re's 'Build Back Better' scheme supports homeowners to install PfR to the value of up to £10,000 above insurance claims. The Climate Change Committee states that this is "good progress", but also noted that currently this is the only adaptation mechanism that Flood Re has in place (2023: 333), adding:

"Further incentives for PfR installation for homeowners and new build developers are required to ensure properties are sufficiently protected." (ibid.: 333)

However, the Government is yet to take forward proposals to encourage insurers to reduce premiums for properties with PfR fitted. Moreover, there are currently no subsidies or tax relief schemes to incentivise PFR in non-residential buildings, and there is only limited support for vulnerable households (Climate Change Committee, 2023. 333).

Businesses and small and medium enterprises need to have access to insurance and capital to invest in adaptation: "Businesses will need capital to take adaptation actions and insurance to insulate them from climate shocks" (Committee on Climate Change, 2023: 294). Other financial instruments could include targeted financial support and access to insurance for smaller businesses and poorer households to implement adaptation measures and also realise opportunities, such as reduced insurance or mortgage premiums (Climate Change Committee, 2023).

The Blanc review into insurance reported that "it is worth noting that any increased focus on the role of insurers and Flood Re in supporting better resilience measures can only increase people's awareness of the potential value of insurance" (Blanc, 2020: 41). Noting the benefits of the Flood Re scheme, the Climate Change Committee (2023) urges consideration of replacement or similar insurance initiatives "and the contribution these can make to scaling private and household investment in climate adaptation" (2023: 331).

Work published by the OECD (2023) encourages insurers to communicate longer-term climate risk information to policyholders, along with potential adaptation options and any potential benefits in terms of premium reductions or discounts. The same report also recommends the support of resilient reinstatement in the aftermath of climate disasters by encouraging insurers to provide resilience improvements (that is, betterment) and seeking opportunities to complement insurance claims payments with public funding or guarantees for improvements.

Flood Re itself has recommended that insurers should offer lower insurance premiums for properties that have been made more resilient to flooding and to be able to support insurers who decide to encourage more resilient repairs following a flood (Flood Re, 2019). In 2020 FloodRe commissioned a report by WPI Economics on the possibility of the development of Flood Performance Certificates (FPC) (Oakley & Ahern, 2020). An FPC informs a property owner, as well as possible tenants or future property owners, of the property's flood risk, and steps that could be taken to mitigate the risk.

"Flood performance Certificates (FPC) have been mooted as a potential means of addressing the barriers households face in implementing their own flood protection and resilience measures" (Oakley & Ahern, 2020: 6)

Elsewhere others have called for insurers to provide advice for customers on possible flood risk mitigation and adaptation. That is not to say that the provision of advice would be necessarily straightforward. Providing tailored advice to individual (and in particular, residential) policyholders is challenging for the insurance sector given the high transaction costs involved in assessing risk and identifying potential risk reduction investments at the level of individual buildings (Seifert-Dähnn, 2018 cited in OECD, 2023). We must also remain critical regarding insurance. Whilst access to affordable and adequate insurance may be beneficial for certain households under certain circumstances, some households in different areas or under alternative circumstances might be left behind, subject to further inequity.

8 Monitoring and Evaluation Framework

As outlined, the project engages with complex themes including climate and flood disadvantage, flood resilience and climate adaptation (particularly the contribution of insurance and property flood resilience), community engagement, and climate and flood risk understanding and literacy.

In terms of the broad themes, the evaluation and the empirical work will place particular emphasis on appraising the characteristics of flood disadvantage and poverty, the challenges to penetration and uptake of insurance, and difficulties and opportunities for the better use and integration of property level resilience in the urban fabric. We have taken a multi-methods approach to the research, drawing upon a number of both quantitative and qualitative techniques, alongside a spatial analysis of both areas.

As explained elsewhere, it is vital to appreciate the broader socio-political, economic, cultural and public policy/ administrative landscapes within which climate risk and flood disadvantage is conditioned. These complex factors are mutually dependent, requiring a research and evaluation framework that needs to - as far as possible - capture the intricacies and interconnections between different variables. Our approach, including the methods we used throughout the project, are now outlined. Many of the themes and potential interventions identified in this project will be developed, tested and evaluated in the forthcoming FCRIP Project.

Project management and steering group

A project steering group was established to provide strategic oversight and ensure that key stakeholders were engaged in the project management and delivery process at an appropriate level. The project steering group ensured that agreed deliverables as set out in the approved project brief were achieved in a timely manner. It has also provided a sounding board for the final report including its key findings, recommendations and how they are presented. Importantly it also facilitated alignment with the emerging FCRIP project for which the Flood Poverty project would provide valuable evidence and recommendations for further actions that would be delivered through the Resilient Roch FCRIP project. The steering group consisted of representatives from Rochdale BC, North West RFCC, EA, UU, NFF, GMCA and Flood Re.

Day to day project management was provided by Rochdale Borough Council's Planning and Strategic Housing services supported by the National Flood Forum who provided a dedicated project officer and specialist support for workstreams concerning financial resilience, community engagement, monitoring and evaluation and compiling the final report and associated dissemination.

To keep track of progress across the workstrands, and to maintain momentum in the project, each member of the team kept an activity log. This recorded key information about meetings, interviews, relevant site visits and events. All meetings, both internal and external, had key points and actions noted. All relevant email communication has also been stored on file. Where relevant, copies of documents and evidence of findings have been also kept on file.

Key members of the team used the sharing platform "Dropbox" to store files. Importantly, all personal details that could be used to identify any participants, as well as any and all sensitive information

were carefully redacted before sharing. Collaborative drafting of the final report took place using Googledocs before being finalised in MS Word.

Stakeholder Analysis

Flooding focussed stakeholders include the Environment Agency, United Utilities, Greater Manchester Combined Authorities and the National Flood Forum. Rochdale Borough Council is a member of the Irwell Catchment Partnership, hosted by Groundwork and consisting of organisations and environmental groups concerned with flood risk, water quality and biodiversity of the Irwell catchment.

A desk top study was created checking the GIS locations of community infrastructure including the addresses of schools, libraries, sports facilities and faith groups. Trawls of social media, websites, adverts and promotions were undertaken to identify community groups and their meeting places. Some well-known buildings host various community groups or may be hired for functions and these were targeted. Project officer local knowledge of community groups and leaders in the area was utilised and the Township Officers connections were also used to promote the project.

A large number of organisations and individuals were interviewed as part of the project, with follow up meetings arranged in several cases. A list can be found at Appendix 7. Some of the stakeholders contacted were already known to the project's team from previous engagement or collaboration but others were suggested or introduced by other contacts, for example the insurance provider for one of the social housing providers.

Mapping

As noted, flood disadvantage is framed and conditioned by many complex socio-economic, environmental, demographic, cultural and political variables. Understanding this backdrop is crucial both to develop a composite image of the areas and its risk to flooding in the most holistic sense of the word, but also to frame understandings and perceptions of insurance and property flood resilience.

This work will also establish a context for understanding other dimensions of 'flood poverty' and 'climate disadvantage' beyond exposure to the hazard.

For this work we have drawn on mapping work by the 2021 Census, the ONS more widely, Climate Just and their work with the Joseph Rowntree foundation, consultative work by JBA as well as in house work at Rochdale Borough Council.

Desk-based work

The work has produced a summary of recent policy developments and key research literature on a series of themes that are pertinent to the project. This is presented in Chapter 2. It provides context, first by introducing the concepts of flood disadvantage and flood poverty, and then providing the context for understanding contemporary flood risk management in the UK. The chapter then looks at how individuals, householders and property owners and managers are increasingly held responsible for flood resilience. In particular, there is an emphasis on defining a role for property holders to both install and maintain their own flood resilience measures. There is a role that insurance can play, though the chapter focuses on how its penetration, particularly within certain sectors of society, can be limited.

The chapter does not serve as a comprehensive review of already existing evidence and literature. Rather, it looks at key policy developments and critical academic literature that is then used to inform the context for the research.

Questionnaire surveys

Two questionnaire surveys were conducted across the course of the project designed to provide a baseline for the more in-depth qualitative inquiry. The two surveys had different objectives, with the first providing a generic baseline for the project (which will also later inform the FCRIP Project) and the second focusing on insurance. Both questionnaires were posted (as paper copies) to the same properties as identified through local intelligence.

Specifically, these were properties that RBC had recorded as being affected - even if relatively insubstantially - by flooding in December 2015. This information was also cross referenced with RBC's resilience grant database. This equated to 388 properties consisting of 303 residential properties and 85 businesses. The majority of these properties were in the central Rochdale and Littleborough area. With a view to boosting the reach of the questionnaire further, information regarding the surveys was posted on the RBC website, and through social media (Figure 8.1) although this could have generated responses from properties that had not flooded. In addition, the two local flood groups, community group leaders and the Township Officers were also asked to help advertise the questionnaires by disseminating the link to access the website online version.

Figure 8.1 - Tweet to disseminate the questionnaire link



Click here for more info - rochdale.gov.uk/flooding/maint...

Available until 31st January 2023 ㅣ



Both questionnaires were given a six week deadline for returns. There was, however, an incentive to be entered into a prize draw for £50 High Street Voucher for questionnaires that were returned within four weeks. The RBC website was used to host the online version of the questionnaires. This could be accessed with a link or a QR Code that was also printed on the paper copies sent to properties.

Across both questionnaires, several that were posted were returned as no longer at this property / incorrect address. Of the approximately 12 returns of this nature, the majority of these were from the businesses. In terms of response rates, the first questionnaire received 60 returns (~16%). The second questionnaire had 43 returns (~10%).

To gain informed consent for participation in the questionnaires, background information on the project and our rationale for the research was clearly presented (peer reviewed by the National Flood Forum). This focused on a (relatively brief, but clear, articulation of why the work is being done, how it will possibly help the area and residents in the future, and how it will inform future policy and practice. On both questionnaires (and in both the paper and online versions), it was stressed that all information would be handled in accordance with GDPR (Figure 8.2) and would be used only for the purpose of the project (including associated dissemination activities).

Figure 8.2 - Data protection of information provided in the questionnaires.

Data Protection

Your co-operation is voluntary and without obligation. If you respond to the survey and then change your mind you can request for your response to be withdrawn by contacting [xxx] up to 14 days after submission. Phone: 078583 xxx Email: xxx@Rochdale.Gov.Uk up to 14 days after submission.

In accordance with the General Data Protection Regulations (2018) all personal data is managed in compliance with the requirements of the General Data Protection Regulations and will only be used within this project.

To pilot the first questionnaire, two members of the local Wardleworth Flood Action group were asked to review and fill in the questionnaire and to provide feedback. Relatively minor changes were made to the questionnaire, mainly to clarify specific questions and to shorten the length of the survey with a view to boosting the response rate.

The second questionnaire focused on insurance. It used the 2020 Doncaster Blanc Review and successive Defra-funded reviews into insurance as the basis for many of the questions. However, to encourage a greater response rate, and to ensure the questionnaire addressed this project's specific objectives, several sections were substantially edited and refined and shortened. A draft of the questionnaire was piloted this with one member of the Wardleworth Flood Action Group and one resident who had previously been flooded in Littleborough. Refinements were made. In addition, the questionnaire was peer reviewed by a representative from the National Flood Forum.

Data storage & analysis

Data collected and generated through the project was held on Rochdale Borough Council systems and is subject to the Council's GDPR policies, including retention and disposal policies. Simple, traditional software was used to analyse the data and produce the report, including the use of protective measures such as passwords and encrypted memory sticks. Paper questionnaires were scanned electronically and the paper copies shredded.

Workshops

There were various online workshops held throughout the project. The choice of using online workshops instead of face to face options was to maximise the amount of people from different areas to attend, but also as a consequence of there being some remaining Covid restrictions / guidelines in place across the course of the project.

There were two online workshops held with flood consultancies and insurance organisations. One was held on 6th July 2021 and the other on 13th September 2021.

The invitations for both workshops were initially sent to known contacts. They were, however, encouraged to share the invitations around their organisations and any other contacts that they thought would be interested in the project.

The objectives of the workshops were twofold:

- 1. To discuss substantive issues around flood poverty, insurance and PfR.
- 2. To comment on and ultimately to validate the empirical research strategy, including to help identify contacts and interviewees.

The workshops outlined the background to the project and efforts were made to draw links to ongoing work both within Rochdale (for instance the development of the Outline Business Case for the FCRIP Project) and beyond (such as updates on the Roch fluvial flooding alleviation scheme and work currently being undertaken by FloodRe). The workshops were also used to review and develop the emerging stakeholder mapping, and a discussion regarding the development of the climate disadvantage maps.

The first workshop had 27 attendees. It lasted for approximately 2 hours. There was a recording of the meeting and the link to this and the presentation shown in the meeting was sent to invitees with a follow-up 'thank you' email. The findings and discussion of this meeting helped shape the follow up workshop held in September.

The second workshop had 19 attendees and again lasted 2 hours. For this workshop a "Miro" interactive whiteboard was used to help the attendees place discussion points and opinions. Afterwards, detailed notes and a link to the video recording of the meeting was sent to invitees with a follow-up thank you email.

The points discussed were taken into consideration when developing themes of the flood poverty project and report.

An interactive part of the workshop then discussed substantive themes regarding insurance and property flood resilience, including:

- An assessment/ discussion of why people do/ do not have insurance (as well as other issues regarding, for instance, underinsurance);
- A discussion of structural forces framing insurance uptake;
- A discussion of knowledge gaps.
- Further identification of synergies with on-going work and other related programmes.
- Review and discussion of resident survey engagement strategy, protocols and schedule.

The findings and discussion of this meeting helped shape the follow up workshop held in September.

The second workshop held on 13th September had 19 attendees and lasted 2 hours. A "Miro" interactive whiteboard was used to help the attendees place discussion points and opinions. The financial resilience workshop notes taken during the working and a link to the video recording of this was sent to invitees with a follow-up thank you email. The points discussed were taken into consideration when developing themes of the flood poverty project and report (Appendix 4)

In addition to these two main workshops, there were also two smaller workshops held with prominent members of the community and local councillors in January 2022. Invitations were sent directly to known colleagues, as well as the local Township Officers to help ask people to join. Although there was smaller numbers attending, we still held these online due to still fluctuating Covid restrictions and to help manage other diary commitments.

The 10th January 2022 workshop had 4 attendees and members of the team also participated to take notes and help create discussion. The 13th January 2022 workshop had only 2 attendees as another invitee couldn't attend on the day. Again team members also attended to take notes and help create discussion.

There was an online meeting asking the same themes with the Littleborough Flood Resilience Group on the 29th January 2022 and the Wardleworth Flood Action Group on 21st March 2022.

We also held informal discussions with the two local flood group's members regularly throughout the project. This included asking them to review the questionnaire, opinions on insurance, their views on what the project needed to tackle and other people / groups they thought should be involved.

Interviews

A series of detailed qualitative (semi-structured) interviews were conducted with key stakeholders to explore the core research themes in further detail. Using semi-structured interviews is acknowledged to provide a loose structure, whilst ensuring that there is a degree of commonality between interviews. A generic schedule was developed, linked to key research themes. This was, however, refined

for each interviewee (according to sector) to reflect their particular interests and expertise. At times, certain sections or themes were followed in more detail than others, again according to the interviewee's particular knowledge or expertise. The interviews varied in duration, with some lasting around 40 minutes, and the longest lasting almost two hours.

Most (though not all) of the interviews were conducted by two of the project team, with one individual leading the questioning/ discussion, and the other taking notes. Interviews were also digitally recorded with the permission of interviewees. Interviewees were assured confidentiality. Each interview transcript was given a unique code, with personal or identifying information stripped out of the text. Informed consent was secured through the provision of background information to every interviewee. To ensure research best practice, the lead interviewer explained the purpose of the research, with it being made very clear at the outset that participation was entirely voluntary and that the interview could be terminated at any point by the interviewee. It was also explained that additional comments would be 'off the record' if interviewees were discussing issues that might be contentious or sensitive. It must be said, however, that at no point was this requested by any participant.

As noted earlier, several interviewees were identified in the workshop, whilst others were identified through purposive sampling, namely that they are acknowledged to be important stakeholders in the case study context (Appendix 8).

Analysis of the interviews took place through conventional and well-established coding protocols.

In addition to formal interviews, discussion also took place with other stakeholders of interested parties, including with FCRIP Projects, the Climate Change Committee Adaptation Sub-Committee, representatives of the Greater Manchester Combined Authority (officers working on the development of a regional landlord charter), and with Rochdale's climate action team.

UPVC Specialist

As noted, a key element of the project involved a detailed assessment of the local stock of property flood resilience and protection retrofitted to properties in the wake of the December 2015 flooding.

The project instructed a UPVC Specialist - a local contractor already known to the Rochdale Borough Council - to conduct these surveys. The competence and profile of the PFR doctor was carefully considered.

It was decided that the main residential areas of Rochdale and Littleborough would be targeted. Where possible and contact details were still correct and up to date, the team tried to contact via phone and email initially to try and book appointments.

162 properties were visited, 216 doors were checked and 29 needed extra maintenance.

Letters were also posted and hand delivered to maximise promotion of the surveys to targeted areas. Local community group leaders and the local flood groups were asked to help promote the surveys as well as the Rochdale Council of Mosques and local Township Officers. The Council website was also used to advertise the PfR maintenance checks visits, stressing that they were free. After two initial visits to properties in Wardleworth and Littleborough, it was decided that the UPVC Specialist would concentrate on the PFR doors installed as part of the Storm Eva grant.

When all contact details were exhausted in the main target areas, it was agreed that the UPVC Specialist could "door knock" with an authorising letter from the Council. Relevant departments, including the Council Contact Centre, the Trading Standards department as well as local social housing providers were advised when they were visiting the area.

Eight residents / tenants advised either by telephone / email or directly to the UPVC Specialist that they did not want a survey. In total, 162 properties were surveyed with a total of 216 doors surveyed. The surveyor was provided a simple proforma to complete for each property surveyed to assist both with auditing and record keeping. This recorded any issues (including photographs) regarding the presence, status, condition and viability of protection features. The UPVC Specialist was often in contact with the project team to advise of location, any issues and to check repairs were agreed to before completing. Twenty nine (29) 'on the spot' repairs were conducted. The surveyor reported that almost all of the doors needed some degree of realignment.

At the end of this aspect of the project, the surveyor was engaged in a thorough debrief where records were run through and general reflections on the work were captured (conducted in the style of a qualitative interview - see above).

9 NW capacity building

The Rochdale Flood Poverty Project has generated a huge amount of learning and recommendations and an important aspect is sharing the findings with a range of audiences. At the core of the project is that there are significant potential benefits through taking an integrated, cross-sectoral approach to managing the impacts of flood risk. The proposals for dissemination are to encourage discussion, closer working across sectors and innovation.

The Rochdale Flood Poverty Project is relevant to a number of individual sectors and dissemination will involve presentations and discussions that are particularly relevant to them and therefore reports and documents will need to be tailored accordingly. Similarly, operational and policy audiences will be interested in different aspects of integrated approaches to reducing the impact of flooding. The key sectors that the Flood Poverty report focussed on were:

- Physical property and street level flood risk reduction
- Housing
- Financial resilience
- Flood (water and climate change) literacy

Integrated delivery of this approach is, by necessity, through a wide range of stakeholders, as well as flood risk management authorities (RMAs). Dissemination is also about relationship building; creating the situation where integrated delivery is possible, building trust, finding common ground, seeing the benefits of new collaborative approaches, efficient use of resources that unlocks innovative projects.

The Flood and Coast Resilience and Innovation Resilient Roch Project offers the opportunity to take the dissemination programme forward over a number of years, alongside further lessons learned. Undoubtedly the dissemination will evolve, but three spatial groupings of stakeholders are relevant:

- Within Rochdale
- Across North West England, including Greater Manchester
- Nationally

Some of the discussions are already happening. In Rochdale there is interest from all of the organisations that the project has worked with so far. An article is being prepared for Horizon Magazine and Environment Agency has already filmed one of the team members for its communication programme.

Nationally, Rochdale Borough Council has been approached by Defra, the Association of British Insurers and the British Insurance Brokers Association. There have also been discussions with Flood Re and the Emergency Planning Society and there are proposals to present to the PfR Round Table and the All Party Parliamentary Group o Flooding in the near future.

Future opportunities

Through the Resilient Roch Project (part of the Environment Agency's Flood and Coast Resilience and Innovation Programme) there are significant opportunities to generate discussions around the lessons learned from this project. An important part of this will be working with the Environment Agency through a collaborative approach.

Within Rochdale, there are opportunities to focus dissemination on elected members and senior officers, the many ngo's involved in this report, Responsible Providers, letting and managing agents, insurance providers and local community groups. These are currently being taken forward.

In Greater Manchester there are opportunities through the Combined Authority to address Integrated Water Management (FROG) and Climate Change adaptation sectors (Climate Change Unit), particularly through the integrating function of local government. There are also opportunities to work with academia.

The issues raised in the report have a wider resonance throughout the North West. Whilst there will be a need for local solutions the North West RFCC can usefully provide a focus for discussions. The project will work through delivery of a dissemination and demonstration/event programme for local, Greater Manchester and North West target audiences, using workshops, events and presentations to different groupings, as well as hosting material on the Flood Hub. The North West FCRIP community provides another opportunity. These discussions can also feed back in to development of the Resilient Roch Project.

There has already been national interest in the Rochdale Flood Poverty Project because it addresses relatively new issues and could have policy and delivery implications. As well as the organisations already mentions, consideration needs to be given to communicating with the Committee on Climate Change, Efra Select Committee, RFCC Chairs and other RFCCs and the FCRIP community across England. Within the local government sector, ADEPT, DLUC and the Statutory Housing Authority are possible opportunities. Wider civic organisations, such as the Emergency Planning Society, TCPA and CIWEM are also likely to have an interest.

On social media there re opportunities to use LinkedIn to draw attention to the results of the project, whilst material can be held on Rochdale Borough Council, National Flood Forum and Flood Hub websites.

10 Conclusions and legacy

The Flood Poverty project developed a set of findings that are particular to Rochdale, but which are likely to have much wider applicability. In doing so it was necessary to articulate some principles to underpin these findings, but which could also be used to assist the development of recommendations that form the basis of a legacy programme. This includes activities to be developed and embedded in future local housing and environmental programmes and Flood and Coastal Resilience Innovation Programme funded actions in the Resilient Roch project and Rochdale's Housing programme, for example. The principles include a model of delivery through voluntary networks and other stakeholder networks.

This chapter sets out overall legacy recommendations, as well as collating the principles, findings and a summary of recommendations, brought together from foregoing sections.

Overall, this report has shown that there are significant opportunities to increase resilience to the impact of flooding through taking an integrated, cross sectoral approach to policy and service delivery. In a disadvantaged community there cannot be an assumption that long term property maintenance will occur without long term support and intervention from third parties such as a local authority or a housing provider. There is a question about how we incentivise other sectors, such as the insurance industry, how we reach out to these more challenging markets. Residual risk is more than what remains after tackling physical aspects of flooding. Affordability, housing standards and maintenance, as well as literacy deficits reduce resilience and the Flood and Coastal Resilience and Innovation Programme (FCRIP) offers the opportunity to test how these can be addressed. The report makes a number of recommendations, most of which will be taken forward through the Resilient Roch project and the integration of sectoral delivery of programmes in Rochdale. Many recommendations are operational, where the work of different sectors, particularly housing, can contribute to residents and business resilience to flood risk. Others are more policy orientated. All are outlined later in this Executive summary, and in more detail in the relevant sections in the report. The overall approach is outlined below:

- Financial resilience is a key element of resilience. In particular, access to affordable, clearly
 defined insurance is a vital component of this. Work will be undertaken to increase penetration
 of what already exists through developing promotional material and working across pre-existing
 networks, but also through cultivating new opportunities to enhance insurance and broader
 financial resilience through more innovative initiatives, including savings schemes and debt and
 money management charities.
- Property level flood resilience has a vital role to play, particularly in managing residual flood risk. However, the standard approach of expecting households and property owners to maintain resilience measures is sub-optimal. Support for both raising awareness of property resilience measures and providing support and - ideally - intervention for longer term maintenance is required, and has been piloted in this research.
- In terms of **housing and property management**, opportunities to increase flood resilience through interventions at both operational levels (e.g. private landlords team) and in terms of policy (including wrapping considerations of flooding into housing policy and strengthening the obligations on landlords and the professional bodies). Some of these will have limited impact on the sector but are important from a flood risk point of view, such as working with Rochdale Borough Council's Private Sector Landlord Office to broach flood risk issues with tenants.
- The report has also identified both a need to and opportunities for enhancing **flood and climate literacy**. This will require nuanced approaches that are integrated across other activities, that are multi-sectoral and that both reflect the complex diversity of (micro) communities and using the existing ecosystem of civil society, faith-based and advocacy organisations.

The way forward

- a. What we do in Rochdale FCRIP and beyond social housing, insurance companies, ngo networks,
- b. Widening to the NW similar communities, similar issues, peer connectivity
- c. Getting it on the national agenda Flood Re, ABI, BIBA, Efra Select Committee, APPG Flooding Defra, DLUC, RFCCs FCRIP

Legacy recommendations

Develop the legacy of the Flood Poverty Project		
WE WILL	BY	
Embedding the lessons learned	in business as usual and project	
Embed and disseminate the lessons learned from the Flood Poverty project in to Rochdale's work	 Embedding lessons learned in the work of Rochdale Borough Council as business as usual Developing the lessons learned and exploring the ideas generated from this project through the Resilient Roch Project and including them in it's Theory of Change Promote the learning from this project through the Flood and Coastal Innovation Programme Widening the discussion to similar communities in the North West, where there are similar issues and promoting peer connectivity Promoting the discussion on to the national agenda in a range of sectors – housing, flood risk management, insurance, PfR 	

Principles

A series of principles were developed as the project evolved, underpinning the research and recommendations for future work.

Principles

Recognising risk and disadvantage

Recognise the ways in which climate disadvantage (and flood poverty) is dependent upon and exacerbates broader aspects of socio-economic disadvantage. In particular, there is a need to identify how and why certain sectors of society are more vulnerable to climate change, and have differentiated capacities to respond to climate risk.

'Just' adaptation

Care must be taken to ensure adaptation initiatives recognise, account for and ultimately address climate disadvantage, both now and in the future as risk (climate change, flood risk and broader socioeconomic risk) evolves. Use and promote already existing adaptation systems and initiatives, particularly where we can demonstrate these address social injustices and boost financial resilience.

Avoid unintended consequences

Avoid unintended adverse consequences ('maladaptation') and 'lock-in' to decisions that may prove to be counter-productive to ensuring future resilience.

Adaptation that links to broader social, economic, environmental and public policy agendas Integrate and embed flood adaptation and financial resilience initiatives within broader public policy and organisational activities. Identify opportunities to place flood risk adaptation within wider climate change agendas (e.g. integration with climate mitigation initiatives and Net Zero policies).

Collaboration & networking

Work through and collaborate with existing networks and with organisations (particularly those already working on financial resilience) that already have a presence established in areas that are trusted and have credibility.

Working with communities

The large number of distinct communities of place and topic makes working with all communities through standard forms of engagement difficult. Alternative approaches are required that use existing networks that are sensitive to cultural requirements and the specific conversations needed.

Targeted engagement

The level and type of flood and financial literacy required varies with flood risk, deprivation, type of housing and whether PfR is involved. Stakeholder literacy requirements vary according to sector and the organisations' role.

Embed lessons learned

Embed the innovation, engagement and lessons learned through this project to become business as usual, especially through the Resilient Roch Project, as part of the Flood and Coastal Resilience and Innovation Programme and the Theory of Change project used in evaluation.

Findings

The project generated a number of findings, listed at the head of each chapter and which are collated here. These are linked to the key workstreams in the Resilient Roch project.

Chapter 3 The relationship between Flooding, Housing and the Neighbourhood Investment Programme in Rochdale	1 Physical Measures	2 Financial Resilience	3 Stakeholder and community engagement
24. The impact of flooding in Rochdale is not distributed evenly.			
25. High flood risk areas in Rochdale often have high Indices of Multiple Deprivation (IMD) populations partly because housing is relatively cheap for both homeowners and tenants. Compared to other areas, housing is relatively cheap because of different combinations of the risk of flooding, poor build quality and a lack of maintenance. But there is also a multi- layered and multi-faceted evolution of the communities that contributes to this. This all leads to a self perpetuating cycle.			
26. Significant investment is required to tackle low build quality, energy efficiency, damp, mould and services in cellars that are at risk of inundation			
27. Deprivation heightens people's vulnerability to the impacts of flooding and reduces their ability to develop resilience.			

28. Homeowners, including landlords, often do not have the resources to invest in their properties. There are also those who have the money, but lack the inclination, knowledge or motivation to invest. There is a huge expectation amongst some people that the local authority should invest on their behalf.		
29. The current market conditions do not enable or encourage many private landlords to borrow to invest in their properties. Even if market conditions improve, it is unlikely that the incentives will exist for landlords to do more than the basic minimum to make their property habitable and rentable.		
30. There is a legislative/ regulatory gap that makes it difficult to encourage landlords to invest in their properties to reduce flood risk and reinstate their properties after a flood.		
31. Local authorities have an important role in coordinating and integrating investment to achieve multiple and co-benefits, e.g. property standards and future proofing property resilience in climate and flood resilience.		
32. There are sometimes social justice issues where grants are targeted at the "able to pay", e.g. energy efficiency measures that focus on larger properties due to the greater carbon reduction opportunities.		
33. There is a lack of specific regulation and guidance on landlords' responsibilities for tenants when a property floods, for informing them about flood risk, and helping them understand measures installed to reduce those risks.		

34. Letting agents and managing agents are important stakeholders for engaging with landlords and tenants. The quality of the service they provide is highly variable. Improvement will require knowledge, incentivisation and much better targeted legislation.		
35. Many SMEs in central Rochdale believe that the River Roch scheme will protect them and consequently are not concerned about property insurance. Overall, they lack adequate flood cover.		
36. There are opportunities to use the development of Flood Performance Certificates to help improve the physical resilience of properties, but there are also social justice issues that need to be addressed.		

Chapter 4 Financial resilience	1 Physical Measures	2 Financial Resilience	3 Stakeholder and community engagement
37. Flooding, like fire, can be a major shock to financial wellbeing of individuals, families, small businesses and communities.			
38. In considering flood risk, property insurance is recognised as the single most important mechanism to support financial resilience. Insurance is commonly used as a proxy for overall financial resilience.			

 39. Insurance is a voluntary activity. Except in certain circumstances, such as a requirement as part of a mortgage policy, property owners and tenants do not have to take out property insurance. 40. Many homeowners and tenants do not have property insurance. Of the 74 responses to the questionnaires, 50 (68%) 	
affirmed they had some form of insurance. For renters, of the 12 respondents to the 2021/22 survey six (50%) had contents insurance while of the seven respondents to the 2022/23 survey two (29%) confirmed they had contents insurance. However, both the small sample size and the qualitative statements given by those affirming they had some form of cover indicate this	
figure may be lower. 41. Many people cannot afford property insurance and/or have other priorities associated with deprivation.	
42. There appears to be a lack of understanding, particularly amongst younger people, about the need for insurance.	
43. Some people have a lack of understanding of how to get insurance	
44. Many do not have the resources to invest in their properties to make them more resilient.	

45. There has been a very significant reduction in the number of insurance brokers with a physical presence, leading to a lack of access to insurance.		
 46. Whilst 97% of owner-occupiers had at least one of buildings or contents insurance with 95% having both in the Blanc Review in Doncaster in Rochdale, of 40 homeowners who replied to our 2021/22 survey, 22 (55%) had either buildings or contents insurance (the questionnaire did not differentiate). In our 2022/23 survey of the 34 homeowners who replied to our survey 28 (82%) had either buildings insurance or buildings and contents insurance together. 		

Chapte	r 5 Property Flood Resilience (PfR)	1 Physical Measures	2 Financial Resilience	3 Stakeholder and community engagement
6.	The health check demonstrated that the use of a local contractor provided a different approach to PfR maintenance. This indicates an opportunity to upskill people and channel funds into the local economy.			
7.	The majority of properties with PfR required maintenance that would not be available through traditional routes, i.e. through maintenance agreements. There are associated social justice issues.			
8.	There is a need to improve working arrangements with landlords and Responsible Providers (RPs) in relation to PfR inspection and maintenance and			

future property refurbishment and improvement.	
 The health check identified a need to improve specific points in the British Standard for Flood Protection Products (BS851188). 	
10. The health check identified opportunities to improve national policy and some simple steps home or business owners can take to keep their PfR working well?	

Chapter 6 Increasing Flood Literacy	1 Physical Measures	2 Financial Resilience	3 Stakeholder and community engagement
 The research identified a need, and some broad opportunities, to improve flood literacy for homeowners, landlords and tenants, businesses, local construction trades and property management professionals, amongst others. 			
 Improving literacy extends beyond the understanding of flooding and flood risk. Linkages can be drawn to the river, issues around water supply and drainage, broader engagement with the environment and to climate change mitigation and adaptation more generally. 			
11. It would be helpful for every person and organisation with a role in the community to understand how climate change and the water cycle affects them, those at significant flood risk require a different understanding. These need to be shaped by the different places, communities and			

proximity to the River Roch and take account of a variety of ways of engaging.	
12. Active participation by residents, businesses, risk management agencies and others with a role in the community are required in some places where flood risk is high. But this can relate to many dimensions, including PfR, financial resilience and community action.	
 13. There is an opportunity to deliver joined up climate and flood literacy through the Rochdale Climate Change Action Plan. The plan has a programme of work designed to support carbon literacy ('Carbon literacy for all' - CC43) and a further objective to 'improve flood literacy so that residents and businesses understand their flood risks and how they can be more flood resilient' (CC2). 	
14. Communities in the areas are complex, with many micro communities each of which would need a separate engagement approach to build relationships.	
15. There are many existing networks that engage with micro communities	
16. There are opportunities to use existing networks to engage with the many micro communities to promote and animate community action, including street champions, citizen science. There are also significant difficulties in setting up	

bespoke engagement with all of the	
communities.	

Chapter 7 General findings on flooding and deprivation learning	1 Physical Measures	2 Financial Resilience	3 Stakeholder and community engagement
5. Flood risk is a significant and increasing threat. Climate change and urbanisation have altered precipitation patterns and the behaviour of water catchments placing more people and places at flood risk. In urban areas some causes of flooding can be at the microscale and driven by surface water.			
6. The notion of <i>disadvantage</i> draws attention toward wider perspectives and the complex social factors compound inequalities and injustices. In particular, flood disadvantage recognises differences in exposure and vulnerability of people to flood risk and the divergent capacity of citizens to cope with, and to recover from, flooding. Flood Poverty recognises the economic barriers and challenges and is an element of disadvantage. It translates to location poverty and therefore issues of health and environment, for example.			

7. Resilience refers to the ability of individuals, communities, businesses, and the environment to withstand, adapt to, and recover from the impacts of natural disasters, climate change, and other hazards. It encompasses the capacity to anticipate, prepare for, respond to, and recover from disruptions, while also taking measures to reduce vulnerabilities and to enhance long-term sustainability.	
 Flood insurance and property flood resilience are vital elements of contemporary flood resilience. However, they are not without critique nor are they without practical challenges. 	

Recommendations

Listed below are the key recommendations, linked to the Resilient Roch project workstreams. More detailed recommendations are listed at the end of each chapter.

Housin	er 3 The relationship between Flooding, og and the Neighbourhood Investment mme in Rochdale	1 Physical Measures	2 Financial Resilience	3 Stakeholder and community engagement
7.	Support Rochdale Boroughwide Housing (RBH) to encourage residents to become more resilient.			
8.	Support Rochdale Boroughwide Housing (RBH) and Responsible Providers (RPs) of supported housing to make their properties more resilient.			
9.	Work with Rochdale Town Centre Business Improvement District Manager to provide support and advice to small and medium sized enterprises (SMEs)			

 Working through Rochdale Borough Council's Private Landlord Sector Team to improve resilience in the private rented sector. 		
 Explore opportunities to ensure that Flood Performance Certificates (FPCs) apply to all residential properties, should the concept be taken forward. 		
12. A higher level of responsibility should be placed on utility companies to ensure that whatever they are putting into a property is not vulnerable to flooding.		

Chapter 4 Financial resilience	1 Physical Measures	2 Financial Resilience	3 Stakeholder and community engagement
 Raise awareness of the importance of financial resilience and the value of property insurance by working in partnership with RPs and insurers to reach social housing tenants. E.g. through the distribution of literature and e-training 			
2. Promote existing schemes (and demonstrate why property insurance cover is important) through enhanced engagement with social housing tenants that have either never purchased insurance or have allowed their insurance cover to lapse.			

3. Provide a variety of routes for people to learn about and access insurance, particularly for those on low incomes, who have limited digital access, where English is not a first language, or people who feel more confident with face to face contact.		
4. Promote financial resilience against the impacts of flooding through engagement with local, trusted organisations already in existence in the area (e.g. Citizens Advice Bureau, local religious organisations, housing associations, local food banks and other charities).		
5. Explore opportunities to expand the current insurance scheme offered to RBH tenants to tenants in the private housing sector, and those eligible for social housing and on social housing waiting lists.		
6. Consider whether different models of insurance are needed for residential property insurance for low income households		
7. Raise awareness of the importance of financial resilience and value of property insurance by working in partnership with stakeholders. E.g. co-producing events		
8. Work with the insurance industry to improve access to residential property insurance.		
9. Develop a multi-agency/ multi-sectoral approach to promote increased uptake of insurance and/ or savings.		

10 Promote schemes (and their importance both to flood resilience and to community resilience more generally) within the local authority and social housing providers.		
11. Develop training on the Housing Act 2004 and financial resilience that is targeted at all housing professionals, including managing agents, letting agents, RSLs, all property holders.		
(n.b. to be offered at Executive, policy and operational tiers of the organisation, and potential contractors)		
12. Assessing how accreditation for landlords could be improved to deliver significant benefits to tenants at flood risk (particularly through already existing landlord schemes).		
13. Contribute to raising landlord and managing agent standards as a means of increasing tenant resilience to flooding.		
14. Assessment of possible regulatory changes. That would improve the resilience of tenants.		
15. Explore opportunities to develop simple savings schemes to build financial resilience		
16. Promote the value of flood insurance to small businesses		

17. Consider whether a formalised way of gathering information about small businesses would be beneficial to promoting financial resilience	
18. Developing partnerships with larger property owners to establish the opportunities for collaborative working to deliver financial resilience benefits for tenants.	

Chapte	er 5 Property Flood Resilience (PfR)	1 Physical Measures	2 Financial Resilience	3 Stakeholder and community engagement
1.	Identify the skills, capacity and practicality needed to set up a local resilient repair network.			
2.	Improve engagement with landlords, estate and letting agents and managing agents to ensure that PfR is regularly inspected and properly maintained.			
3.	Influence PfR guidance and BS standards			
4.	Consider ways to implement UPVC health check specific recommendations			
5.	Explore building control and planning implications of installation and maintenance of PfR and related building assets.			

Chapter 6 Increasing Flood Literacy	1 Physical Measures	2 Financial Resilience	3 Stakeholder and community engagement
 Follow a series of good practice principles: VI. Using pre-existing networks (rather than using a flood advisor). VII. Commissioning services through pre- existing providers. VIII. Providing training, information and support first with and then through key stakeholders and networks. IX. Using community hubs. X. Deploying cross sectoral approaches. Understanding and working with diversity. Build on existing relationships with stakeholders and networks to engage on 			
flood resilience issues. 3. Work with Rochdale Boroughwide Housing to extend organisational and staff flood literacy and to support their work within flood risk communities.			
 Work with key stakeholders (including professionals, elected representatives, officers and the community and voluntary sector) to support flood, climate and water literacy and understanding. 			
5. Promote collective literacy in communities of place or interest, for example at a street scale where people understand risk and when neighbours change it isn't lost and also they understand when and how to help each other and the value of collective action.			
 Work with communities at significant risk of flooding to support their flood, climate and water literacy and understanding. 			

Work with the wider commu (including those at limited risk of flood to support their flood, climate and w literacy and understanding.

Chapter 10 Conclusions and Legacy	1 Physical Measures	2 Financial Resilience	3 Stakeholder and community engagement
 Embed and disseminate the lessons learned from the Flood Poverty project in to Rochdale's work 			

References

Adger, W.N. (2006) 'Vulnerability.' Global environmental change, 16(3), 268-281.

Attems, M.S., Thaler, T., Genovese, E. & Fuchs, S. (2020) 'Implementation of property-level flood risk adaptation (PLFRA) measures: Choices and decisions'. *WIREs Water*, 7(1), 1-19.

Bank of England (2022) Results of the 2021 Climate Biennial Exploratory Scenario (CBES).

Barnett, J. & O'Neill, S. (2010) 'Maladaptation'. Global Environmental Change 20(2), 211-213.

Barth, J., Bond, S. & Stephenson, J. (2023) *Community engagement for climate change adaptation. Research Summary for the South Dunedin Future Programme*. Centre for Sustainability, University of Otago.

Begg, C., Walker, G. & Kuhlicke, C. (2015) 'Localism and flood risk management in England: The creation of new inequalities?' *Environment and Planning C*, 33(4), pp. 685-702

Bevan, J. (CEO of the Environment Agency) (2018). 'Surface water: the biggest flood risk of all'. *CIWEM Surface Water Management Conference*. 17th October 2018. Available online: <u>https://www.gov.uk/government/news/surface-water-the-biggest-flood-risk-of-</u> <u>all#:~:text=Surface%20water%20flooding%20is%20a%20risk%20because%20of%20its%20reach,other%2</u> <u>Oform%20of%20flood%20risk</u>. [Accessed 10th May, 2023]

Bichard, E. & Kazmierczak, A.E. (2012) 'Are homeowners willing to adapt to and mitigate the effects of climate change?', *Climatic Change*, 112(3-4), 633-654.

Blanc, A. (2020) *Independent Review of Flood Insurance in Doncaster*. Available online: <u>https://www.gov.uk/government/news/independent-review-of-flood-insurance-published</u> [Accessed 7th December, 2023]

Blank, G & Dutton, W.H., with Lefkowitz, J. (2019) *Perceived Threats to Privacy Online: The Internet in Britain*. Oxford Internet Survey. Oxford Internet Institute, University of Oxford.

Booth, K., Davison, A. & Hulse, K. (2022) 'Insurantial imaginaries: Some implications for home-owning democracies'. *Geoforum*, 136, 46-53.

Booth, K. & Tranter, B. (2018) 'When disaster strikes: Under-insurance in Australian households', *Urban Studies*, 55(14), 3135-3150.

Bracken, L.J., Oughton, E.A. Donaldson, A., Cook, B., Forrester, J., Spray, C., Cinderby, S., Passmore, D. & Bisset, N. (2016) 'Flood risk management, an approach to managing cross-border hazards'. Natural Hazards 82(2), 217–240.

Breil, M., Zandersen, M., Pishmisheva, P., Branth Pedersen, A., Romanovska, L., Coninx I., Rogger, M., Johnson, K. (2021) 'Leaving No One Behind' in Climate Resilience Policy and Practice in Europe. European Topic Centre on Climate Change impacts, Vulnerability and Adaptation (ETC/CCA) Technical Paper 2021/2. DOI: /10.25424/cmcc/justtrans_europe

Brisley, R., Welstead, J., Hindle, R. & Paavola, J. (2012) *Socially just adaptation to climate change*. Joseph Rowntree Foundation, York.

Buchanan, M.K., Oppenheimer, M. & Parris, A. (2019) 'Values, bias, and stressors affect intentions to adapt to coastal flood risk: a case study from New York City'. *Weather, Climate, and Society*, 11(4), 809–821.

Buckle, P., Mars, G. & Smale, S. (2000) 'New Approaches to Assessing Vulnerability and Resilience'. *Australian Journal of Emergency Management*. Winter, 8-14.

Butler, C. & Pidgeon, N. (2011) 'From 'flood defence' to 'flood risk management': exploring governance, responsibility, and blame'. Environment & Planning C, 29(3), 533–547.

Carroll, B., Morbey, H. Balogh, R. & Araoz, G. (2009) 'Flooded homes, broken bonds, the meaning of home, psychological processes and their impact on psychological health in a disaster'. *Health Place*, 15(2), 540–547.

Chartered Insurance Institute (n.d.) *Public Trust in Insurance*. Available online: https://www.cii.co.uk/media/9224356/trust-in-insurance_the-challenge_liz-barclay_final.pdf [Accessed 15th May, 2023]

Committee on Climate Change (2023) *Progress in adapting to climate change: 2023 report to Parliament*. Climate Change Committee, London.

Committee on Climate Change (2022) *Progress in reducing emissions 2022: Report to Parliament*. Climate Change Committee, London.

Committee on Climate Change (2021) Independent Assessment of UK Climate Risk: Advice to Government For the UK's third Climate Change Risk Assessment (CCRA3).

Connelly, A., White, I. & O'Hare (2020) "The best flood I ever had": Contingent resilience and the (relative) success of adaptive technologies'. *Cities*, 106: 1-9.

Cutter, S.L., Boruff, B.J. & Shirley, W.L. (2003) 'Social vulnerability to environmental hazards'. *Social Science Quarterly*, 84(2), 242–261.

Cutter, S.L., Mitchell, J.T. & Scott, M.S. (2000) 'Revealing the Vulnerability of People and Places: A Case Study of Georgetown County, South Carolina'. *Annals of the Association of American Geographers*, 90(4), 713-737.

Davids, P. R., Priest, S., & Hartmann, T. (2023). 'On the horns of a dilemma: Experts as communicators for property-level flood risk adaptation measures'. *Journal of Flood Risk Management*, forthcoming.

Deeming, H., Whittle, R. & Medd, W. (2012) 'Investigating resilience, through 'before and after' perspectives on residual risk'. In: Bennett, S. (ed.) *Innovative Thinking in Risk, Crisis and Disaster Management*. Farnham, UK: Gower.

Defra (2023) Evaluation of Property Flood Resilience Repair Grant Scheme: Final report Stage 4. Defra, London.

Defra (2021) Consultation on amendments to the Flood Re scheme Summary of responses. Defra, London.

Defra (2022) Summary of Affordability and Availability research report FD2721.

Defra (2017) Defra property flood resilience roundtable. End of year 1 report. Defra, London.

Defra (2012) *Flood Resilience Community Pathfinder: Prospectus*. Available online: https://www.local.gov.uk/sites/default/files/documents/flood-resilience-communit-487.pdf

Devine-Wright, P. & Quinn, T. (2023) *Place attachment, flood risk and adaptation*. Defra, London.

Dodman, D., Hayward, B., Pelling, M. Castan Broto, V., Chow, W., Chu, E., Dawson, R., Khirfan, L., McPhearson, T., Prakash, A., Zheng, Y. & Ziervogel, G. (2022) 'Cities, Settlements and Key Infrastructure'. In: *Climate Change 2022: Impacts, Adaptation and Vulnerability. Contribution of Working Group II to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change* [H.-O. Pörtner, D.C. Roberts, M. Tignor, E.S. Poloczanska, K. Mintenbeck, A. Alegría, M. Craig, S. Langsdorf, S. Löschke, V. Möller, A. Okem, B. Rama (eds.)]. Cambridge University Press, Cambridge, UK and New York, NY, USA, pp. 907–1040,

Doorn, N., Brackel, L. & Vermeulen, S. (2021) 'Distributing Responsibilities for Climate Adaptation: Examples from the Water Domain', *Sustainability* 13(7), 3676.

EIOPA (2021), *Report on non-life underwriting and pricing in light of climate change*, European Insurance and Occupational Pensions Authority.

England, K. & Knox, K. (2015) *Targeting flood investment and policy to minimise flood disadvantage*. Joseph Rowntree Foundation, York.

Environment Agency (2021) *Living better with a changing climate. Report to Ministers under the Climate Change Act.* Environment Agency, Bristol.

Environment Agency, Chief Scientist's Group. (2021). *The state of the environment: the urban environment*. https://www.gov.uk/government/publications/state-of-the-environment/the-state-of-the-environment-the-urban-environment#fn:133

Environment Agency (2020) *National Flood and Coastal Erosion Risk Management Strategy for England*. Environment Agency, Bristol.

Environment Agency (2019a) Long-term investment scenarios. Available from: <u>https://www.gov.uk/government/publications/flood-and-coastal-risk-management-in-england-long-term-investment/long-term-investment-scenarios-ltis-2019</u>

Environment Agency (2019b) *Working together to adapt to the changing climate: flood and coast.* Available from:

https://www.gov.uk/flood-and-coastal-erosion-risk-management-research-reports/working-togetherto-adapt-to-a-changing-climate-flood-and-coast [Accessed 12th June, 2023]

Environment Agency (2016) Adapting to a changing climate. The Environment Agency's second adaptation report under the Climate Change Act. Environment Agency, Bristol.

Fielding, J.L. (2012) 'Inequalities in exposure and awareness of flood risk in England and Wales'. *Disasters*. 36(3), 477-494.

Financial Conduct Authority (2022) *Financial Lives 2022 survey: insights on vulnerability and financial resilience relevant to the rising cost of living*. Available online: <u>https://www.fca.org.uk/data/financial-lives-2022-early-survey-insights-vulnerability-financial-resilience</u> [Accessed 14th July, 2023]

Financial Conduct Authority (2020) *Financial Lives 2020 survey: the impact of coronavirus*. Available online: <u>https://www.fca.org.uk/publication/research/financial-lives-survey-2020.pdf</u> [Accessed 14th July 2023]

Financial Inclusion Commission (2017) Improving the financial health of the nation - The missing piece in the Financial Inclusion Debate? Improving access to household insurance. Available online: https://financialinclusioncommission.org.uk/wp-content/uploads/2020/09/Financial-Inclusion-Commission-Improving-access-to-household-insurance.pdf [Accessed 20th May, 2023]

FloodRe (2023) *Our Call to Action: Delivering a vision of affordable flood insurance.* Available online: https://www.floodre.co.uk/wp-content/uploads/Flood_Re_Transition_Plan_report_2023-1.pdf

Flood Re (2019) *Quinquennial Review*. Available online: <u>https://www.floodre.co.uk/wp-</u> <u>content/uploads/QQR_FINAL.pdf</u> [Accessed 13th February, 2023] Flood Re (2018) *Securing a future of affordable flood insurance*. Available here: https://www. floodre.co.uk/wp-content/uploads/2018/07/Flood_Transition2018_AW.pdf

Green, C. & Penning-Rowsell, E. (2004) 'Flood insurance and government: 'parasitic' and 'symbiotic' relations.' *The Geneva Papers on Risk and Insurance. Issues and practice*. 29(3), 518-539.

Greene, G., Paranjothy, S. & Palmer, S. (2015) Re'ilience and vulnerability to the psychological harm from flooding: the role of social cohesion'. American. Journal of Public Health, 105(9), 1792–1795.

Grothmann, T., & Reusswig, F. (2006). People at risk of flooding: Why some residents take precautionary action while others do not. *Natural Hazards*, 38(1–2), 101–120.

Hall, M. & Bailey, P. (2022) Social deprivation and the likelihood of flooding. Environment Agency, Bristol.

Holling, C.S. (1973) 'Resilience and stability of ecological systems'. *Annual Review of Ecology and Systematics*, (4), 1–23.

House of Commons (2015) *Living with water*. All party group for excellence in the built environment. UK Parliament, London.

Housing Ombudsman Service (2023) *Special Report on Rochdale Boroughwide Housing*. Housing Ombudsman Service, Liverpool.

Houston, D., Werritty, A., Bassett, D., Geddes, A., Hoolachan, A. & McMillan, M. (2011) *Pluvial (rain-related) flooding in urban areas: the invisible hazard*. Joseph Rowntree Foundation, York.

Hudson, P., Botzen, W. W., Feyen, L., & Aerts, J. C. (2016) 'Incentivising flood risk adaptation through risk based insurance premiums: Trade-offs between affordability and risk reduction'. *Ecological Economics*, 125, 1–13.

Hutter, B. M. & Bailey, P. (2022) *The challenges of using social resilience indicators: From Armchair Thinking to Research and Policy*. Environment Agency, Bristol.

IPCC (2014) Climate Change 2014: Impacts, Adaptation, and Vulnerability. IPCC.

JBA Trust (2020) *Lancashire: A chronology of flash flooding*. Available online: https://www.jbatrust.org/wp-content/uploads/2020/09/Lancashire.pdf [Accessed 10th August, 2023]

Johnson, L. (2015) 'Catastrophic fixes: cyclical devaluation and accumulation through climate change impacts', *Environment and Planning A*, 47(12), 2503-2521.

Johnson, C., Penning-Rowsell, E. & Parker, D. (2007) 'Natural and Imposed Injustices: The Challenges in Implementing 'Fair' Flood Risk Management Policy in England.' *The Geographical Journal*, 173(4), 374-390.

Johnson, C. & Priest, S. (2008) 'Flood risk management in England: a changing landscape of risk responsibility?' *International Journal of Water Resources Development*, 24(4),513–525.

Joseph, R., Proverbs, D., Lamond, J., Joseph, R., Proverbs, D., & Lamond, J. (2015). 'Homeowners' perceptions of property-level flood risk adaptation (PLFRA) measures: The case of the summer 2007 flood event in England'. International *Journal of Safety and Security Engineering*, 5(3), 251–265.

Judge, L. & Marshall, J. (2022) *Housing Outlook Q2 2022*. 30th April 2022. Available online: https://www.resolutionfoundation.org/publications/housing-outlook-q2-2022/

Kanemura, R., McGarvey, A. & Farrow, A. (2023) *Time well spent 2023*. NCVSO. Available online: https://www.ncvo.org.uk/news-and-insights/news-index/time-well-spent-2023/#/

Kazmierczak, A., & Cavan, G. (2011) 'Surface water flooding risk to urban communities: analysis of vulnerability, hazard and exposure'. *Landscape and Urban Planning*, 103(2), 185–197.

Kelly, D., Barker, M., Lamond, J., McKeown, S. & Blundell, E. (2019) *Code of practice for property level resilience*. CIRIA, London.

Kuhlicke, C., Seebauer, S., Hudson, P., Begg, C., Bubeck, P., Dittmer, C., Grothmann, T., Heidenreich, A., Kreibich, H., nLorenz, D. F., Masson, T., Reiter, J., Thaler, T., Thieken, A. H. & Bamberg, S. (2020) 'The behavioural turn in flood risk management, its assumptions and potential implications'. *WIREs Water*, 7(3).

Lager, F., Coninx, I., Breil, M., Bakhtaoui, I., Pedersen, A.B., Mattern, K., van den Berg, H., Sini, E., Galluccio, G., Klein, R. & Vierikkom K. (2023) *Just Resilience for Europe: Towards measuring justice in climate change adaptation ETC CA Report 1/23*. ETC CA.

Lamond, J., McEwen, L., Rose, C., Wragg, A., Rotimi, J., Twigger-Ross, C., Papadopoulou, L., White, O., Dhonau, M. & Proverbs, D. (2017) *Supporting the uptake of low cost resilience for properties at risk of flooding: Final report (FD2682)*. Defra, London.

Lamond, J. & Penning-Rowsell, E. (2014) 'The robustness of flood insurance regimes given changing risk resulting from climate change', *Climate Risk Management*, 2, 1-10.

Lamond, J., Rose, C., Bhattacharya-Mis, & Joseph, R. (2018) *Evidence review for property flood resilience phase 2 report*. FloodRe.

Lamond, J., Rose, C., Joseph, R., & Proverbs, D. (2016). *Supporting the uptake of low cost resilience: Summary of technical findings* (FD2682). Defra, London.

Lindley, S., O'Neill, J., Kandeh, J., Lawson, N., Christian, R. & O'Neill, M. (2011) *Climate change, justice and vulnerability*. Joseph Rowntree Foundation, York.

Lucas, C. H. & Booth, K.I. (2020) 'Privatizing climate adaptation: How insurance weakens solidaristic and collective disaster recovery'. *WIREs Climate Change*, 11:e676.

Lujala, P., Lein, H., Rød, J.K. (2015) 'Climate change, natural hazards, and risk perception: the role of proximity and personal experience'. *Local Environment*, 20(4), 489–509.

Maskrey, S.A., Priest, S. & Mount, N.J. (2018) 'Towards evaluation criteria in participatory flood risk management'. Journal of Flood Risk Management, 12(2), 1-14.

May, P., Emonson, P., O'Hare, P, Cobbing, P., Connelly, A., Lawson, N. & Burchard, H. (2015) *Surveying for Flood Resilience in Individual Properties*. Defra, London.

Miller, J.D. & Hutchins, M. (2017) 'The impacts of urbanisation and climate change on urban flooding and urban water quality: A review of the evidence concerning the United Kingdom'. *Journal of Hydrology: Regional Studies*, 12, 345-362.

Ngai, R., Brook, E. High, H., Dale, A., Trewhella, S. & Nicholls, R. (2022) *Measuring resilience to flooding and coastal erosion*. Environment Agency, Bristol.

Nye, M., Tapsell, S. & Twigger-Ross, C. (2011) 'New social directions in UK flood risk management: moving towards flood risk citizenship?' *Journal of Flood Risk Management*, 4: 288–297.

Oakley, M. (2018) *Incentivising household action on flooding: options for using incentives to increase the take up of flood resilience and resistance measures.* Social Market Foundation.

Oakley, M. & Ahern, J. (2020) Flood performance certificates Developing a blueprint for how they can support household climate resilience. WPI Economics, London.

OECD (2023) *Enhancing the insurance sector's contribution to climate adaptation*. OECD Business and Finance Policy Papers, No. 26, OECD Publishing, Paris.

O'Hare, P. (2021) *Planning and participation*. Lund Humphries, London.

O'Hare, P. & White, I. (2018) 'Beyond 'just' flood risk management: the potential for—and limits to alleviating flood disadvantage'. *Regional Environmental Change*, 18, 385–396.

O'Hare, P., White, I. & Connelly, A. (2016) 'Insurance as maladaptation: Resilience and the 'business as usual' paradox'. *Environment & Planning C*, 34(6), 1175-1193.

O'Keefe, P., Westgate K. & Wisner, B. (1976) 'Taking the naturalness out of natural disasters'. *Nature*, 260, 566–567.

O'Neill, J. & O'Neill, M. (2012) *Social justice and the future of flood insurance*. Joseph Rowntree Foundation, York.

Park, T., Matthew Oakley, M. & Luptakova, V. (2020) *Applying behavioural insights to property flood resilience (FRS17191)*. Environment Agency, Bristol.

Peltzman S (1975) The effects of automobile safety regulation. Journal of Political Economy 83(4): 677–726.

Penning-Rowsell, E. (2015) 'Flood insurance in the UK: a critical perspective', WIREs Water, 2, 601–608.

Penning-Rowsell, E. & Priest, S. (2015) 'Sharing the burden of increasing flood risk: who pays for flood insurance and flood risk management in the United Kingdom', *Mitigation and Adaptation Strategies for Global Change*, 20, 991–1009.

Policy Connect & Westminster Sustainable Business Forum (2020) *Bricks and Water: Building resilience for England's Homes*.

Pörtner, H.-O., D.C. Roberts, H., Adams, I., Adelekan, C., Adler, R., Adrian, P., Aldunce, E., Ali, R., Ara Begum, B., BednarFriedl, R., Bezner Kerr, R., Biesbroek, J., Birkmann, K., Bowen, M.A., Caretta, J., Carnicer, E., Castellanos, T.S., Cheong, W., Chow, G., Cissé, S., Clayton, A., Constable, S.R., Cooley, M.J., Costello, M., Craig, W., Cramer, R., Dawson, D., Dodman, J., Efitre, M., Garschagen, E.A., Gilmore, B.C., Glavovic, D., Gutzler, M., Haasnoot, S., Harper, T., Hasegawa, B., Hayward, J.A., Hicke, Y., Hirabayashi, C., Huang, K., Kalaba, W., Kiessling, A., Kitoh, R., Lasco, J., Lawrence, M.F., Lemos, R., Lempert, C., Lennard, D., Ley, T., Lissner, Q., Liu, E., Liwenga, S., Lluch-Cota, S., Löschke, S., Lucatello, Y., Luo, B., Mackey, K., Mintenbeck, A., Mirzabaev, V., Möller, M., Moncassim Vale, M.D., Morecroft, L., Mortsch, A., Mukherji, T., Mustonen, M., Mycoo, J., Nalau, M., New, A., Okem, J.P., Ometto, B., O'Neill, R., Pandey, C., Parmesan, M., Pelling, P.F., Pinho, J., Pinnegar, E.S., Poloczanska, A., Prakash, B., Preston, M.-F., Racault, D., Reckien, A., Revi, S.K., Rose, E.L.F., Schipper, D.N., Schmidt, D., Schoeman, R., Shaw, N.P., Simpson, C., Singh, W., Solecki, L., Stringer, E., Totin, C.H., Trisos, Y., Trisurat, M., van Aalst, D., Viner, M. Wairiu, Warren, R., Wester, P., Wrathall, D. & Zaiton Ibrahim, Z. (2022) 'Technical Summary'. [H.-O. Pörtner, D.C. Roberts, E.S. Poloczanska, K. Mintenbeck, M. Tignor, A. Alegría, M. Craig, S. Langsdorf, S. Löschke, V. Möller, A. Okem (eds.)]. In: Climate Change 2022: Impacts, Adaptation and Vulnerability. Contribution of Working Group II to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change [H.-O. Pörtner, D.C. Roberts, M. Tignor, E.S. Poloczanska, K. Mintenbeck, A. Alegría, M. Craig, S. Langsdorf, S. Löschke, V. Möller, A. Okem, B. Rama (eds.)]. Cambridge University Press, Cambridge, UK and New York, NY, USA, pp. 37-118..

Priest, S.J., Clark, M.J. & Treby, E.J. (2005), 'Flood insurance: the challenge of the uninsured'. *Area*, 37(3), 295-302.

Reguero, B.G., Beck, M.W., Schmid, D., Stadtmüller, D. Raepple, J., Schüssele, S., Pfliegner, K. (2020) 'Financing coastal resilience by combining nature based risk reduction with insurance. Ecological Economics, 169.

Resolution Foundation (2022) 'England's poorest families are most exposed to the financial consequences of flood events'. 30th April 2022. <u>https://www.resolutionfoundation.org/press-releases/englands-poorest-families-are-most-exposed-to-the-financial-consequences-of-flood-events/</u>

Rochdale Borough Council (2022) *Protecting the planet for our people and places. Rochdale's Climate Change Strategy and Delivery Plan - a partnership approach 2021 - 2025.* Available online: <u>https://www.rochdale.gov.uk/downloads/file/1120/climate-change-strategy-and-delivery-plan</u>

Roder, G., Hudson, P. & Tarolli, P. (2019) 'Flood risk perceptions and the willingness to pay for flood insurance in the Veneto region of Italy'. *International Journal of Disaster Risk Reduction.*, 37, 101172

Rollason, E., Bracken, L.J., Hardy, R.J. & Large, A.R.G. (2018) 'Rethinking flood risk communication'. *Natural Hazards*, 92, 1665-1686.

Rufat, S., Tate, E., Burton, G. & Maroff, A.S. (2015) 'Social vulnerability to floods: Review of case studies and implications for measurement', *International Journal of Disaster Risk Reduction*, 14(4), 470-486.

Sakai, P., Sakai, M., Zeyu, Y., Franzini, F., De Ita., C. (2021) *Bridging the knowledge gap to boost SMEs flood resilience*. University of Leeds and University of York.

Samwinga, V., Proverbs, D. G. & Homan, J. (2004) Exploring the Experience of UK Homeowners in FloodDisaster.RoyalInstitutionofCharteredSurveyors.Availableathttp://www.rics.org/site/download_feed.aspx?fil eID=2488&fileExtension=PDF

Sayers, P. B., Carr, S. Moss, C. & Didcock, A. (2020). *Flood disadvantage: Socially vulnerable and ethnic minorities*. Sayers and Partners LLP.

Sayers, P.B., Horritt, M., Penning Rowsell, E., and Fieth, J (2017). *Present and future flood vulnerability, risk and disadvantage: A UK assessment*. Sayers and Partners & Joseph Rowntree Foundation, York.

Sayers, PB., Horritt, M., Carr, S., Kay, A., Mauz, J., Lamb, R., & Penning-Rowsell E (2020). *Third UK Climate Change Risk Assessment (CCRA3): Future flood risk*. Committee on Climate Change, London. Sayers, P., Penning-Rowsell, E.C. & Horritt, M. (2018) 'Flood vulnerability, risk, and social disadvantage: current and future patterns in the UK', *Regional Environmental Change*, 18(2), 339-352.

Seifert-Dähnn, I. (2018), 'Insurance engagement in flood risk reduction - Examples from household and business insurance in developed countries'. *Natural Hazards and Earth System Sciences*, 18(9), 2409-2429.

Smith, N. (2005) 'There's No Such Thing as a Natural Disaster'. http://understandingkatrina.ssrc.org/Smith/ Surminski, S., Aerts, J.C.J.H., Botzen, W.J.W., Hudson, P., Mysiak, J. & Pe'rez-Blanco, C.D. (2015) 'Reflections on the current debate on how to link flood insurance and disaster risk reduction in the European Union'. *Natural Hazards*, 79, 1451–1479.

Tapsell, S.M., Penning-Rowsell, E.C., Tunstall, S.M. & Wilson, T.L. (2002) 'Vulnerability to flooding: health and social dimensions.' *Philosophical transactions of the royal society of London*. *Series A: Mathematical, Physical and Engineering Sciences*, 360(1796), 1511-1525.

Thaler, T. & Hartmann, T. (2016) 'Justice and flood risk management: reflecting on different approaches to distribute and allocate flood risk management in Europe', *Natural Hazards*, 83, 129-147.

Thaler, T. & Levin-Keitel, M. (2016) 'Multi-level stakeholder engagement in flood risk management—a question of roles and power: lessons from England'. *Environmental Science & Policy*, 55(1), 292–301.

Thaler, T. & Priest, S. (2014) 'Partnership funding in flood risk management: new localism debate and policy in England'. *Area*, 46(4), 418–425.

Thrush, D., Burningham, K. & Fielding, J. (2005) Flood Warning for Vulnerable Groups: A review of theliterature.EnvironmentAgency,Bristol.Availableonline:https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/290693/scho0505bjbr-e-e.pdf

Tunstall, S.M. & Parker, D. (1999) *Flood Warning Research Audit Report to the Environment Agency*. Flood Hazards Research Centre, Middlesex University, Enfield.

Tunstall, S. M., Tapsell, S. M. & Fernandez-Bilbao, A. (2007) *Vulnerability and flooding: a re-analysis of FHRC data: country report England and Wales*. Project Report. European Commission.

Twigger-Ross, C., Coates, T., Deeming, H., Orr, P., Ramsden, M. and Stafford, J. (2011) *Community Resilience Research: Final Report on Theoretical research and analysis of Case Studies. Report to the Cabinet Office and Defence Science and Technology Laboratory*. London: Collingwood Environmental Planning Ltd:

Twigger-Ross, C., Kashefi, E., Weldon, S., Brooks, K., Deeming, H., Forrest, S., Fielding, J., Gomersall, A., Harries, T., McCarthy, S., Orr, P., Parker, D. & Tapsell, S. (2014) *Flood Resilience Community Pathfinder Evaluation: Rapid Evidence Assessment*. Defra, London.

UK Health Security Agency (2022) *Flooding and health: assessment and management of public mental health.* Available online:

www.gov.uk/government/publications/flooding-and-public-mental-health-assessment-and-management/flooding-and-health-assessment-and-management-of-public-mental-health

Ürge-Vorsatz, D., Rosenzweig, C., Dawson, R.J., Rodriguez, R.S, Bai, X., Barau, A. S., Seto, K.C. & Dhakal, S. (2018) 'Locking in positive climate responses in cities', *Nature Climate* Change. 8, 174–177.

Walker, G. & Burningham, K. (2011). 'Flood risk, vulnerability and environmental justice: Evidence and evaluation of inequality in a UK context'. *Critical Social Policy*, 31(2): 216-240.

Walker, G., Burningham, K., Fielding, J., Smith, G., Thrush, D. and Fay, H. (2006) Addressing Environmental Inequalities: Flood Risk. Bristol: Environment Agency.

Weichselgartner, J. (2001) 'Disaster mitigation: the concept of vulnerability revisited'. *Disaster Prevention and Management*, 10(2), 85-94.

Werrity, A., Houston, D., Ball, T., Tavendale, A., & Black, A. (2007) *Exploring the social impacts of flood risk and flooding in Scotland*. Report to the Scottish Executive https://discovery.dundee.ac.uk/en/publications/exploring-the-social-impacts-of-flood-risk-and-flooding-in-scotla

White, I., Connelly, A., Garvin, S., Lawson, N. and O'Hare, P. (2018), Flood resilience technology in Europe: identifying barriers and co-producing best practice. *Journal of Flood Risk Management*, 11(S1), 468-478.

White, I., O'Hare, P., Lawson, N., Garvin, S., and Connelly, A. (2013) Six Steps to Property Level Flood Resilience – Guidance for Property Owners. Manchester, UK.

Whittle, R., Medd, W., Deeming, H., Kashefi, E., Mort, M., Twigger Ross, C., Walker, G., Watson, N. (2010) *After the Rain – learning the lessons from flood recovery in Hull*, final project report for Flood, Vulnerability and Urban Resilience: a real-time study of local recovery following the floods of June 2007 in Hull^{*}, Lancaster University, Lancaster UK.

Wiseman, J. & Hughes, S. (2018a) *Affordability and availability of flood insurance for households and small businesses*. Defra, London.

Wiseman, J. & Hughes, S. (2018b) Availability of insurance for small businesses. Defra, London.

Wolff, J. & de-Shalit, A. (2007). *Disadvantage*. Oxford University Press, Oxford.

Appendices

1. Terms of Reference

Flood Poverty Project - Terms of Reference for Project Board

Objectives

To provide a project management structure that ensures the effective and timely delivery of the Flood Poverty project in order to deliver its agreed outputs and outcomes as set out in the Financial Agreement **Membership and voting rights**

- A chair will be appointed from within the Project Board's membership
- Rochdale Borough Council will provide secretariat support
- Each member of the Project Board will have one vote where decisions need to be taken.
- The appointed chair will hold a casting vote where there is a stalemate
- A meeting timetable will be agreed at the initial meeting of the Project Board. Meetings will be held quarterly unless there is agreement that an extraordinary meeting is required.
- Membership will be drawn from:
 - Rochdale Borough Council
 - Environment Agency
 - o Regional Flood and Coastal Committee
 - National Flood Forum
 - Flood Re:
 - Greater Manchester Combined Authority
 - Manchester Metropolitan University

Other stakeholders will be invited to attend meetings where that would assist the delivery of the project.

Core Responsibilities

To carry out the following roles and responsibilities to ensure the effective and timely delivery of the project:

- To facilitate the active involvement of all core stakeholders in the project including decision making where appropriate
- Provide strategic oversight of delivery of the project's agreed work programme including any specified deadlines and milestones, risk management and financial control.
- To provide appropriate scrutiny for the delivery of work packages and associated monitoring and evaluation
- To receive reports from the Project Team and provide advice and direction where required e.g. progress reporting, dissemination and corrective actions
- To ensure appropriate communication takes place with the Regional Flood and Coastal Committee and the Environment Agency including the provision of reports as requested

Review

The Terms of Reference will be reviewed every six months to ensure they reflect the needs of the project.

2. Detailed project plan

A specific project plan and Gantt chart was produced and agreed by the project board

Task	Deliverable	Responsible party	Date of completion, end:
No.			(for example, date or by
			week 2)
1 (i)	Project officer in post	National Flood Forum	1 April 2021
1 (ii)	Work package 1 Initiation	LeadPartner/	30 May 2021
	completed	National Flood Forum/	
		Manchester Metropolitan	
		University	
1	Inception	Lead Partner	30 April 2021
	Programme Board meeting		
	held (Quarterly thereafter)		
2	Review learning completed	Lead Partner/	31 December 2022
		National Flood Forum/	
		Manchester Metropolitan	
		University	
3i	Housing and Neighbourhood	Lead Partner	28 February 2023
	Investment Programme		Resilient Roch for
	baseline review and		Community training
	community surveyors		
	training completed		
3ii	Housing and Neighbourhood	Lead Partner	Resilient Roch
	Investment Programme		
	completed		
4i	Insurance Review baseline	National Flood Forum	31 September 2022
	information and develop		
4ii	survey Insurance: Training for	National Flood Forum	31 September 2022
-111	community survey		
4iii	Insurance: Develop and pilot	National Flood Forum	Options developed 31
	options		March 2022
			Resilience Roch
5i	Overview of PfR health check	Lead Partner	31 March 2023
	and vulnerabilities completed		

5ii	PfR work package completed	Lead Partner	Resilient Roch
5iii	PfR work package – dissemination and capacity building programme completed	Lead Partner/ National Flood Forum/ Manchester Metropolitan University	Resilient Roch
6i	NW capacity building work package – create programme	Lead Partner/ National Flood Forum	31 December 2023
6ii	NW capacity building Year 1 delivery	Lead Partner/ National Flood Forum	31 December 2023
6iii	NW capacity building Complete delivery	Lead Partner/ National Flood Forum	31 December 2023
7i	Work package – Flood Literacy delivery plan prepared	National Flood Forum	Resilient Roch
7ii	Flood Literacy work package completed	National Flood Forum	Resilient Roch
8i	Monitoring and Evaluation framework agreed	Manchester Metropolitan University	31 May 2021
8ii	Monitoring and Evaluation Year 1 work programme delivered	Manchester Metropolitan University	31 March 2022
8iii	Monitoring and Evaluation Year 2 work programme completed	Manchester Metropolitan University	31 March 2023
9	Confirm legacy programme recommendations	Lead Partner, National Flood Forum	31 March 2023
10	WP10 Final Report	Lead Partner	30 August 2023
11	WP11 Post project review/evaluation (for RFCC)	Lead Partner	October 2023 or other date proposed by RFCC

3. Risk Assessment

Strategic risks

Community participation - involving the community in the many aspects of the project underpins many of the learning benefits. In the past, certain communities have had consultation fatigue and therefore clear evidence of the immediate and longer term practical benefits will need to be demonstrated to secure involvement. More recently, some people are still not re-engaging with society following Covid19.

Stakeholder participation - As the project evolves it will be important to engage with a wide range organisations and individuals from different sectors. Project steering arrangements will seek to ensure that the widest range of people are engaged with, whilst at the same time ensuring that they are prioritised in the most efficient way.

Project coordination - Successful delivery is contingent upon good coordination with different projects, such as Rochdale Borough Council's Housing programme to ensure that learning and messaging is consistent and timing of actions support each other rather than working in isolation or conflict. This will be achieved through the steering arrangements and working closely with stakeholders.

Inflation and the economy - People in deprived areas are more exposed to economic downturns and financial shocks. Inflation could impact peoples' willingness and ability to participate in the project.

A flood incident - A flood incident might hamper delivery of some of the work programme, though this would in turn provide some learning opportunities for interventions previously implemented. Lessons from previous projects

Defra Flood Risk Communities' Pathfinder - Rochdale was fortunate to participate in the Defra Flood Risk Communities' Pathfinder between 2013 and 2015. This established good community working practices and a trusted role for the National Flood Forum as an 'honest broker' working with all stakeholders. It highlighted some of the challenges and ways forward for working with a range of different types of community.

Natural Flood Management (NFM) project - A successful NFM pilot was conducted as part of the development of the approach to NFM. From this, good relationships were established with landowners and managers, together with a thorough understanding of the challenges and practical solutions.

Household retrofit - Following the Storm Eva flooding in 2015/16 a household retrofit programme consisting of combined energy efficiency and household flood protection measures, including PfR, was delivered. Participation rates exceeded 90%. The learning from this has helped to shape this project, providing:

o data on issues such as insurance uptake in 2015/16 and now;

 \circ an opportunity to revisit properties that had PfR measures installed to establish if they are still fit for purpose and to test maintenance options.

4. Financial workshop summaries

Workshop held on 6th July 2021

Examples of current schemes

Watermark case study

Flood funds are often created to provide financial assistance and support to communities affected by floods. These funds can be established by governments, local authorities, charitable organisations, or community initiatives. Their purpose is to help individuals, businesses, and communities recover from the impacts of flooding, including property damage and loss.

Watermark Flood Fund, Calderdale

Watermark Calderdale is a campaign to build a resilience fund for our towns in the event of future flooding. The campaign aims to build a pot of money that can be accessed by businesses & households immediately when future floods hit.

Shops or businesses sell a Watermark product, and a percentage (or all) the profits go into a fund.

The fund is managed by the Community Foundation for Calderdale (the people who raised over £3 million

for our communities in the Boxing Day 2015 floods) who will then distribute the money if floods hit

Calderdale again.

In an interview, the organiser behind the fund emphasised that the scheme centred on self-reliance: "Locally so many businesses and in some cases households and even charities are not insured...After a flood we go out cap in hand and ask for money. We want to start doing stuff for themselves. So we thought, let's create a fund in readiness for the next flood."

Later in the same interview, he added: "We seemed to be at the behest of the Government all the time. There's the £5k flood resilience grants and other support mechanisms, but they always came with strings attached. So we thought we need to be responsible for our own destiny; have more control and more autonomy. But it also gave us some identity and purpose. We're really recognised in the community now."

The schemes organiser was unapologetic that the fund did disperse a lot of finds to local businesses:

"My foundation was the only one to support businesses. If businesses go under then people lose jobs and that has a big impact on the community. So we were able to demonstrate giving grants to businesses fell within our remit."

The scheme's dispersal of funds were triggered when the local authority's Gold Committee met. A committee of local people agreed where funds should be allocated. The fund was also set up to match savings in the Credit Union, up to £10,000.

The schemes organiser told us: "It was very important, we don't call it a replacement for insurance. But effectively that is what it is...It was also really good from an image perspective. They see us as their saviour".

At the moment, the scheme retains some residual funds that are invested in an attempt to slowly grow the resources: "in theory you could use the funds while you're waiting for the flood". We were also told that since the global pandemic, there was a discernible, 'giving fatigue' that meant the Scheme was, at the moment, struggling to get donations.

- Watermark Calderdale http://watermarkfund.org/calderdale/ is a campaign to build a resilience fund for our towns for future flooding. Our aim is to build a pot of money that can be accessed by businesses & households immediately when future floods hit (because they will – it may be 5 years time, it may be next week!).Watermark is a not for profit campaign and is a joint venture between Totally Locally & Community Foundation for Calderdale. How Watermark works: Shops, makers, businesses, growers and service providers produce a WATERMARK product. They badge it up with the WATERMARK stickers or branding. This could be a beer, a book, a coffee & cake special, a climbing course, an artisan lamp, even an insurance policy, a concert or event (yes, these are already signed up!). The shop or business sells their WATERMARK product, and a percentage (or all) of the profits go into a fund. The fund is managed by the Community Foundation for Calderdale (the people who raised over £2 million for our communities in the Boxing Day 2015 floods) who will then distribute the money if floods hit Calderdale again.
- WATERMARK FLOODSAVE http://watermarkfund.org/calderdale/watermark-floodsave/ is a match funded savings scheme for businesses and homes who are not covered by the FloodRe scheme. A unique flood savings scheme that can protect you financially against flooding.

£125,000 has been set aside from the money raised for the flood fund, to create the **WATERMARK FLOODSAVE** scheme.

It's really easy, your money is secure and you will double any of your savings in the event of a flood.

Here's how it goes.....

- **1.** You save money monthly, or as often as you like up to £150 per month.
- **2.** If a flood happens, your money saved will be doubled.
- **3.** You can withdraw your any time you like no penalties.

4. You can save up to **£5,000** (If you do, you will receive **£10,000** if you are flooded). Sounds a bit too good to be true?

Well it's a way of distributing the money that was so generously given in the flood appeal, and it's a way of encouraging houses and businesses to save in case of another flood.

It is a unique scheme that is funded by the Community Foundation For Calderdale, and is a no strings attached way of making your business, home (and in fact towns) that bit more flood proof

• FEMA's Hazard Mitigation Grant Program https://www.fema.gov/grants/mitigation/hazard-mitigation#news provides funding to state, local, tribal and territorial governments so they can rebuild in a way that reduces, or mitigates, future disaster losses in their communities. This grant funding is available after a presidentially declared disaster. In this program, homeowners and businesses cannot apply for a grant. However, a local community may apply for funding on their behalf.

Examples of possible interventions

- Rochdale Borough Housing insurance premiums paid weekly through rental payments
- Can we get coordinated resilience measures in place across an area and link this to insurance premiums for both residential and commercial insurance? E.g. A small industrial estate collectively taking action to reduce risk working with Rochdale Council and with insurers to reduce premiums.
- Can we set up a legacy project, subject to "ducks being in a row"? For example, the combination of River Roch Scheme, Natural Flood Risk Management, PfR solutions, urban infrastructure measures, household measures (water butts, green roofs, etc) and planning policy documents will reduce risk, but this may not be visible to insurers through standard data sources. What can we do when all of these are in place? What can we do now?
- Parametric insurance, where the claims management process is eliminated by specifying the payment levels should a specified level of flooding occur. E.g. <u>Flood Flash</u> and <u>Lemonade</u>.
- Urban retreat a scheme to buy properties in at risk areas to enable people to move on. The properties are either repurposed to be used for less vulnerable activities (residential to business for example?) or demolished and the land used for other purposes. How would this be funded? Currently ad hoc schemes take place. Can a national approach be developed?
- Social finance. Southern Water has just agreed £1bn of additional finance from a shareholder to improve assets (with the aim of improving their business model profits). Anglian Water issues bonds to hedge funds in order to invest in assets that reduce costs over time, thereby enabling them to pay the hedge fund. Local authorities utilise prudential funding for projects, but in the

past used municipal bonds to create water supply reservoirs, such as in Wales (Birmingham and Liverpool). What are the opportunities to do interesting things?

- Behavioural aspects There are examples of estate agents (Southwell) and landlords providing information and guidance on flood risk and/or PfR in an area to people moving in to properties. Could more be done? Could it be mainstreamed?
- What about analogous examples? In order to be insured to work in a university lab space you have to demonstrate competence by attending training and the like. Could something similar be done for insurance. Do this 30 minute training/ watch a video and you will get a discount on your premium, or have access to a wider market?
- Landlord registration scheme that requires landlords to have appropriate insurance

Workshop held on 13th September 2021

Rochdale Flood Poverty Project - Summary of options for addressing financial resilience for people at risk of flooding

The output of the Flood Resilience workshop held on 13th September is a long list of possible measures to address financial resilience for people at risk of flooding.

Thank you to all those who participated in the workshop. If you have any further thoughts please email Sarah Parkington Sarah.Parkington@Floodforum.org.uk

The next stage will be to consider which of these measures might be piloted in different combinations in different places in Rochdale and to develop these concepts in to practical projects. We are keen to involve a wide range of people in this endeavour, so will be contacting you with further updates.

- 1. Flood Care and Watermark and other similar schemes that combine savings with match funding that can be made available to residential property owners and businesses following a flood. What dormant charitable funds are there that could be used to create funds?
- 2. Training for brokers and other sectors of the insurance industry on flood risk, and how flood risk management involves a combination of interventions
- 3. Further work to understand why people get insurance, or not. Creation of typologies
- 4. Understand what insurance people need in different scenarios. Creation of typologies
- 5. Tailored business cases for insurance, residential and commercial. Personalised plans for business and individual properties, to go in tandem with the Neighbourhood Flood Plan. These could then be combined to present a case to insurers using and developing the Leeds model. The impact of flooding on SMEs has recently been documented, alongside some work to identify practical interventions to improve financial resilience Sakai, P., et al. (2021) Bridging the knowledge gap to boost SMEs flood resilience. University of Leeds and University of York. <u>https://icasp.org.uk/wpcontent/uploads/sites/13/dlm_uploads/2021/06/SMEs-and-Flooding_Sakai_Report_vF.pdf</u>
- 6. Parametric insurance E.g. Flood Flash and Lemonade. Currently rather niche markets, what is the opportunity to develop something for vulnerable communities in deprived areas
- 7. Urban retreat a scheme to buy properties in at risk areas to enable people to move on and to repurpose the area for other uses
- 8. Social finance. We are becoming used to the concept of Green Finance, where investors such as hedge funds and water companies pay for environmental benefits. There may also be an opportunity to raise funds to deliver social benefits (a lack of flooding) that thereby generates funds to pay interest payments, especially for surface water issues.

- 9. Early warning systems, especially for surface water
- 10. Flood literacy a combination of measures to improve flood literacy amongst people in places, including community hubs, Flood Action Groups, generating conversations in existing groupings, involving people equitably in different projects, encouraging existing groups to get involved in projects

11. Developing the role of trusted very local advocates. To leverage trusted messengers: identify and train neighbourhood resilience advocates amongst trusted community leaders (fire brigade, religious leaders, Flood Action Groups, etc).

12. Financial resilience doctor along the lines of PFR doctor. To cover Insurance and other forms of financial resilience. Community surgeries, Social housing financial support. See note on trusted very local advocates

- 13. Traditional flood risk management projects
- 14. PfR (Window Doctor)
- 15. Housing retrofit combining energy efficiency and flood resilience measures

16. Videos/ animation/ light touch 'training' in exchange for a discount scheme or some kind of reward.

17. Relating discounts to positive flood action (backyard suds/ permeable driveway) e.g. https://slowtheflow.net/nfm-suds-opportunities/

18. Scheme along the lines of neighbourhood watch – but for neighbourhood flood plan/ flood action group etc.

19. Specific roles for Flood Action Groups

20. Nudge orientated campaigns. X% of your neighbours have insurance – do you?

21. Different levels of flood insurance, something along the lines of travel insurance – gold, silver bronze cover (though it might drive flood poverty rather than alleviate it). Different levels of benefit are available, but how these are promoted might also be considered.

22. Can someone in the community be a flood insurance champion – go to speak to people about flood resilience in exchange for some kind of incentive.

23. Insurance explainers – frequently asked questions.

24. Locally branded flood insurance initiative (along the lines of FEMA).

- 25. Take account of cultural sensitivities. Shariah risk solutions?
- 26. Landlord registration scheme that includes requirements on flooding e.g. relocation of tenants if flooded, drying out and reinstating homes to industry standards.
- 27. Shorthold tenancy agreements, working with letting agencies to ensure that agreements protect tenants and focus on insurance/financial resilience
- 28. Guidelines for landlord/tenant communications e.g. 'flood packs' for new tenants. E.g. Southwell, Notts. Also, for new property owners.
- 29. Social housing insurance schemes e.g. RBH
- 30. FEMA Community Rating System and badged Community Insurance schemes. The Community Rating System (CRS) is a voluntary incentive program that recognizes and encourages community floodplain management practices that exceed the minimum requirements of the National Flood Insurance Program (NFIP). Over 1,500 US communities participate nationwide.
- 31. FEMA's Hazard Mitigation Grant Program <u>https://www.fema.gov/grants/mitigation/hazard-</u> <u>mitigation#news</u>
- 32. Training in house maintenance clean the gutters, drain covers, etc.
- 33. Flood Action Groups or community groups to list assets. RBC to assess condition and share with agencies. Add a layer to the RBC website. Given out when local searches are undertaken and for pre-planning applications.

5. Questionnaire results

Results from the 2021/22 Roch Valley Neighbourhood Flood and Climate Resilience Project Resident Questionnaire

<u>https://consultations.rochdale.gov.uk/research/fab96385</u> This report was created on Tuesday 09 May 2023 at 11:56. The activity ran from 06/12/2021 to 06/01/2022. Responses to this survey: **60**

1.1: Is your property residential or business?

There were 60 responses to this part of the question.

Option	Total	Percent
Residential	52	86.67%
Business	8	13.33%
Combination	0	0.00%
Not Answered	0	0.00%

1.2: Do you own or rent the property?

There were 60 responses to this part of the question.

Option	Total	Percent
Own	44	73.33%
Rent (private landlord)	10	16.67%
Rent (Housing Association)	6	10.00%
Not Answered	0	0.00%

1.3: Approximately how long have you lived here or operated from these premises?

There were 53 responses to this part of the question.

Option	Total	Percent
0 - 6 Months	1	1.67%
6 - 12 Months	1	1.67%
1 - 2 Years	0	0.00%
3 Years +	51	85.00%
Not Answered	7	11.67%

2.1: Did you know your property is in a flood risk area?

There were 60 responses to this part of the question.

Option	Total	Percent
Yes	50	83.33%
No	8	13.33%
Unsure	2	3.33%
Not Answered	0	0.00%

2.2: Are you signed up to Environment Agency Flood Alerts?

There were 58 responses to this part of the question.

Option	Total	Percent
Yes	38	63.33%
No	20	33.33%
Not Answered	2	3.33%

2.3: There is a Flood Group in your local area. Were you aware of this?

There were 60 responses to this part of the question.

Option	Total	Percent
Yes, I am a member	5	8.33%
Yes, but I am not a member	17	28.33%
No	38	63.33%
Not Answered	0	0.00%

2.4: When flooding has occurred in the past, what areas of your property were impacted? (Please select all that apply)

There were 60 responses to this part of the question.

Option	Total	Percent
My property has never flooded internally or externally	3	5.00%
My main property flooded internally	28	46.67%
My garage and/or outbuildings flooded	7	11.67%
My garden and/or driveway flooded	20	33.33%
Flooding occurred in the suspended floor and/or cellar/basement	32	53.33%
Other, please state.	3	5.00%
Not Answered	0	0.00%

If other, please specify below:

There were 3 responses to this part of the question.

2.5: Please tell us about the flood/s you have experienced since 2015?

Please comment below:

There were 48 responses to this part of the question.

3.1: Do you currently have any flood protection or flood resilience measures installed at your property?

There were 59 responses to this part of the question.

Option	Total	Percent
Yes	45	75.00%
No	11	18.33%
Not sure	3	5.00%
Not Answered	1	1.67%

3.2: Did you live in the property when the measures were installed?

There were 56 responses to this part of the question.

Option	Total	Percent
Yes	37	61.67%
Νο	13	21.67%
Not sure	6	10.00%
Not Answered	4	6.67%

4.1: What measures are installed at your property? (Please select all that apply)

There were 49 responses to this part of the question.

Option	Total	Percent
Flood Doors	37	61.67%
Flood Barriers	20	33.33%

Flood Gates	9	15.00%
Airbrick Protection	12	20.00%
Air Vent Protection	8	13.33%
Sump Pump	3	5.00%
Portable Pump	3	5.00%
Non-Return Valve (Domestic wastepipes)	18	30.00%
Non-Return Valve (Foul Sewer)	5	8.33%
Silicone Sealing (Around wastepipes and utilities)	5	8.33%
Rendering or repointing Walls	4	6.67%
Waterproof Spray (On external walls)	6	10.00%
Toilet bung or pan seal	1	1.67%
Not Answered	11	18.33%

4.2: Are all the measures that were installed still in place at the property?

There were 53 responses to this part of the question.

Option	Total	Percent
Yes	45	75.00%
No	4	6.67%
Don't know	4	6.67%
Not Answered	7	11.67%

4.3: If you answered 'no' to the previous question, please explain why some measures are no longer in place?

Please comment below:

There were 9 responses to this part of the question.

4.4: Have you adapted your property internally to reduce the damage caused by a flood?

There were 57 responses to this part of the question.

Option	Total	Percent
Yes	11	18.33%
No	40	66.67%
Don't know	6	10.00%
Not Answered	3	5.00%

4.5: If yes to Question 4, how have you adapted your property internally? (Please select all that apply)

There were 15 responses to this part of the question.

Option	Total	Percent
Raised or sealed gas and/or electric service meters	6	10.00%
Raised boiler	1	1.67%
Raised electrics	9	15.00%
Water resilient skirting boards	3	5.00%
Water resilient plaster or membranes to internal walls	2	3.33%
Replace suspended timber floor with treated timber floor	2	3.33%
Water resilient floor coverings (e.g. tiles instead of carpet)	4	6.67%

Raised kitchen appliances/white goods or flood resilient kitchen units	5	8.33%
Installation of lift-joint butt hinges to remove internal doors during flooding	0	0.00%
Other (please explain)	4	6.67%
Not Answered	45	75.00%

If other, please specify below:

There were 6 responses to this part of the question.

4.6: Did you, personally, contribute money for the measures provided as part of the RBC scheme?

There were 54 responses to this part of the question.

Option	Total	Percent
Yes	11	18.33%
No	43	71.67%
Not Answered	6	10.00%

4.7: On a scale of 1 to 5, how confident are you that the measures installed will reduce flood risk? (1 being 'no confidence' and 5 being 'very confident')

There were 52 responses to this part of the question.

Option	Total	Percent
1	12	20.00%
2	8	13.33%
3	19	31.67%

4	10	16.67%
5	3	5.00%
Not Answered	8	13.33%

4.8: On a scale of 1 to 5, has the installation of these measures reduced your worry, stress and anxiety around flood risk? (1 being 'not at all' and 5 being 'completely reduced')

Option	Total	Percent
1	19	31.67%
2	12	20.00%
3	14	23.33%
4	8	13.33%
5	1	1.67%
Not Answered	6	10.00%

There were 54 responses to this part of the question.

5.1.1: When your flood protection/ flood resilience measures were installed, were you shown how to operate them? - I have been provided with <u>detailed</u> guidance on how my products worked and how to maintain them

There were 35 responses to this part of the question.

Option	Total	Percent
Yes	14	23.33%
No	21	35.00%
Not Answered	25	41.67%

5.1.2 When your flood protection/ flood resilience measures were installed, were you shown how to operate them? - I have been provided <u>some</u> guidance on how my products worked and how to maintain them

There were 33 responses to this part of the question.

Option	Total	Percent
Yes	15	25.00%
No	18	30.00%
Not Answered	27	45.00%

5.1.3 When your flood protection/ flood resilience measures were installed, were you shown how to operate them? - I have been provided with <u>no</u> guidance on how my products worked and how to maintain them

There were 26 responses to this part of the question.

Option	Total	Percent
Yes	14	23.33%
No	12	20.00%
Not Answered	34	56.67%

5.2: If you are a tenant in a rented property, has your landlord/ letting agent shown you how to deploy and maintain the measures? Or, if you have recently purchased the property, did the previous owners or their agent show you or explain how to deploy and maintain the measures?

There were 52 responses to this part of the question.

Option	Total	Percent
option	TUtai	Fercent

Yes	2	3.33%
No	10	16.67%
Not Applicable	40	66.67%
Not Answered	8	13.33%

5.3: Have you ever had to use your flood protection measures? For instance, have you had to install a door flood barrier after receiving a flood alert?

There were 52 responses to this part of the question.

Option	Total	Percent
Yes	25	41.67%
No	27	45.00%
Not Answered	8	13.33%

5.4: How confident are you in using your measures?

There were 49 responses to this part of the question.

Option	Total	Percent
Very confident	13	21.67%
Quite confident	22	36.67%
Not confident	14	23.33%
Not Answered	11	18.33%

5.5: How capable are you in using the measures? For instance, do you need any assistance from family members or neighbours?

There were 47 responses to this part of the question.

Option	Total	Percent
I am fully capable in installing and operating the measures at my property	28	46.67%
I am somewhat capable in installing and operating the measures and only occasionally need assistance	8	13.33%
I cannot install and/ or operate the measures on my own and require assistance	6	10.00%
I need help to install and/ or operate my measures, but there is no one I can ask	5	8.33%
Not Answered	13	21.67%

5.6: Do you know how to maintain the measures you have installed?

There were 51 responses to this part of the question.

Option	Total	Percent
Yes	23	38.33%
No	28	46.67%
Not Answered	9	15.00%

5.7: Have you undertaken maintenance on any of the measures since they were installed in 2015?

There were 51 responses to this part of the question.

Option	Total	Percent
Yes	10	16.67%

No	41	68.33%
Not Answered	9	15.00%

5.8: Who maintains your measures?

There were 48 responses to this part of the question.

Option	Total	Percent
I have not needed to undertake any maintenance	33	55.00%
I undertake any required maintenance	8	13.33%
I have a maintenance contract with a contractor who installed the measures	0	0.00%
I use local contractors to complete any required maintenance	2	3.33%
Other, please state – e.g. neighbour or family member?	5	8.33%
Not Answered	12	20.00%

If other, please specify below:

There were 3 responses to this part of the question.

5.9: Are any of your measures currently damaged or not working properly?

There were 51 responses to this part of the question.

Option	Total	Percent
Yes	6	10.00%
No	26	43.33%
Unsure	19	31.67%

Not Answered	9	15.00%

5.10: If yes, please tell us which products are currently damaged or non-functional.

Please comment below:

There were 9 responses to this part of the question.

6.1: When do you install or use your measures? For instance, if there is a forecast of heavy rain, a weather warning, when advised by a flood group or neighbours or when you go away for a period time such as a holiday? Please also tell us if you never install or use your measures.

Please comment below:

There were 36 responses to this part of the question.

6.2: Have you used your measures during a flood?

There were 45 responses to this part of the question.

Option	Total	Percent
Yes	20	33.33%
Νο	25	41.67%
Not Answered	15	25.00%

6.3: If you answered yes to question 2, please tell us when?

Please comment below:

There were 17 responses to this part of the question.

6.4: How effective were the measures in reducing flood water entering your property or reducing flood damage?

There were 39 responses to this part of the question.

Option	Total	Percent
I have not used my measures in a flood event.	20	33.33%
The measures successfully reduced water entering my property and causing damage	8	13.33%
The measures were not successful in reducing water entering my property and causing damage	11	18.33%
Not Answered	21	35.00%

6.5: If your measures did not work as expected, has anything been done to rectify the issues?

If your measures did not work as expected, has anything been done to rectify the issues?

There were 27 responses to this part of the question.

Option	Total	Percent
Yes	6	10.00%
Νο	21	35.00%
Not Answered	33	55.00%

6.6: If you answered yes to the previous question, please provide information on how issues were rectified.

Please comment below:

There were 8 responses to this part of the question.

7.1.1 Do you have buildings or contents insurance? - I have buildings insurance

There were 54 responses to this part of the question.

Option	Total	Percent
Yes	32	53.33%
No	17	28.33%
Don't know	5	8.33%
Not Answered	6	10.00%

7.1.2 Do you have buildings or contents insurance? - I have contents insurance

There were 56 responses to this part of the question.

Option	Total	Percent
Yes	34	56.67%
Νο	19	31.67%
Don't know	3	5.00%
Not Answered	4	6.67%

7.2: Please tell us a little more about why you do/ don't have buildings and contents insurance.

Please comment below:

There were 29 responses to this part of the question.

7.3: Have you made an insurance claim after a flood event?

There were 55 responses to this part of the question.

Option	Total	Percent
Yes	16	26.67%
No	39	65.00%
Not Answered	5	8.33%

7.4: Have you found it difficult to access house insurance which includes damage caused by flooding due to the flood risk at the property or history of flooding?

There were 51 responses to this part of the question.

Option	Total	Percent
Yes	28	46.67%
No	23	38.33%
Not Answered	9	15.00%

8.1: Please provide your name:

Name/s: There were 54 responses to this part of the question.

8.2: Please provide your address:

Address: There were 54 responses to this part of the question.

8.3: Please provide your postcode:

Postcode: There were 53 responses to this part of the question.

8.4: Please provide your email address:

Email Address: There were 41 responses to this part of the question.

8.5: Please provide your Phone Number:

Phone Number: There were 47 responses to this part of the question.

Free text responses to first questionnaire survey

"To my knowledge the property hasn't flooded since 2015.

In 2015 the whole downstairs of the property flooded and had to be fully stripped and replastered"

Boxing day 2015, cellar was flooded with 2 foot worth of water, entered from the ground upwards, carpets, furniture electricals ruined, replaster and refurbish walls, and lots of stress, anxiety and large cost to cover all the ruined things.

"Garden flooded, drain outside house near lamppost flooded over due to it being blocked with what look to be bricks and stones.

December flooding caused me to loose my car as it was a right off, was unable to start all electrics went on it, I'd only just bought the car a few months before, didn't get as much back as I purchased from it.

Loss of kids toys in front and back garden and garden furniture.

Water entered into house not as much as neighbouring houses in Dec, but think I helped prevent further entering of this, as packed the doors with lots of bedding, towels and anything else I used to stop it gaining access onto property which where all ruined. Had a 2 year old who didn't know what was going on, not settling into staying at family members house, not able to get to work due to no car and loss of earnings. Not able to rebuy a car for many months"

Flooding mainly happens when the river gets full. And then the water enters the cellar.

If we have bad weather e.g. rain and the river floods this floods my cellar and is a weekly occurrence. The walls are now damp due to the constant flooding and my gas and electric meters are in the cellar which is very dangerous especially as my mother is a pensioner with health issues. As this is a regular occurrence my mother is scared to be in her home especially when im (son) at work or not at home. This has been ongoing as far as i can remember and it has got worse as it happens to flood more.

Only flooding in the cellar everytime it rains

"I had minimal flooding in 2015 just a few inches but is meant new floorings, skirting boards and new furniture to replace things that were water damaged. I also lost a lot of my kitchen implements which were in the cellar.

The water came through the back yard into the cellar and over the doorstep into the house.

Physically it had a big affect on me as Im disabled and needed help to move furniture that was damaged out of the house and to move things not damaged upstairs.

Mentally I was badly affected as I lost things I cant afford to replace, had most of my downstairs stuff upstairs meaning I was unable to get to my craft supplies which I use to keep me sane when I cant get out.

I always felt cold and lived without floor coverings for a long time and even now panic when I get a flood warning"

"As you know from your records we were flooded in December 2015.

In 2004 the Environment Agency carried out flood defence work to the front of our building and also installed flood defence barriers due to the fact we have a stream that runs in front of our premises. The storm in December 2015 caused the water levels to rise and breach the barriers. The whole building was flooded to a depth of approx. 12" and caused considerable damage to plant and machinery. We spent the Xmas holidays clearing the building of water and cleaning everything to assess the damage. We also have a side entrance that didn't have barriers installed as the Environment Agency insisted that their 'modelling' had shown that water would never reach this area - but it did!! Since the flood in 2015 we have had the existing flood barriers replaced with higher ones and also barriers fitted to the side entrance.

The land in front of our building was excavated by the Environment Agency at the same time as the original barriers were installed in 2004. A hump was formed to divert the water back into the stream towards our building to save the buildings further down the road, in other words, we became the sacrificial lamb.

The Environment Agency have cleared a lot of rubble from the stream which has improved the flow of water but we are concerned about the damage that the force of the water when high, is doing to the foundation of the building.

Because we had to make a claim on our insurance for the damage to machinery, we now have an excess of £10,000 should we be flooded again. We have since seen the water levels rise quite considerably but so far we have escaped further flooding due to the heightened barriers doing their job.

So yes, this is a constant worry as £10,000 excess to a small company like ours is a big deal and as the weather is becoming more and more extreme and unpredictable, you can't help but worry."

We have had water come in our cellar and garden

Surface water & overflow from the brook on the industrial estate entered our premises through the main roller shutter door and also seeped through walls from adjoining properties which were also impacted.

"Main flood was Boxing Day 2015 when property internally flooded, came up through floor, and the damp proof course was too low, Also area outside apartment had grassed area with kerbs, but kerb stones were holding the water, so these were later removed,

Every room affected in ground floor apartment, woodwork, flooring, skirting board, doorways, came up through, all carpeting affected too. Wasn't very deep but but seeped through, even in fitted wardrobe.

Move out whilst work re-done - hotel for 5 months, Insurance paid out,

May 2016, only just moved back in and had 2nd floor, not as bad and didn't have to move out, but most of carpets affected again. Insurance did pay out again luckily.

Some repeat external flooding events, a lot of surface water and through gabion wall on car park."

"In the 2015 floods our cellar was flooded. About half the cellar was full of water. The outside street was full of water and looked like it was going to come in the house and the cellar via the open grates outside of the front window. Luckily it stopped raining so the water did not enter our living area in the house. Our floor in the living room was damaged (not sure of the reason) it all became uneven. We had to have a new floor put in.

We were very stressed when this happened. We turned our electricity off because the water was very close to our meters which are in our cellar. We sent the children to their grans house to stay the night. We keep an eye on the weather at all times because we want to be better prepared next time."

Boxing Day 2015 cellar was flooded to around waist high. Main damage to electrical tools and other items we used to store/keep in the cellar.

Our basement/cellar was flooded with over a meters height of water. All the property in kept in the basement was destroyed. We have since experienced more floods despite their being "defences" installed. The issue appears to be with the drainage which needs to be addressed

Downstairs Property was flooded and basement caused damp mould and smell. Kids were scared as they didn't know what was happening they get worried when it rains a lot as they think it might get flooded again.

There was a lot of water where the whole of downstairs was covered up to the knees this caused mould, damp on the walls as well as the basement which has left a smell. This has impacted the family in so that they are anxious everytime it rains heavily. We also suffer from asthma so this has made it worse especially in the winter

"Since 2015 my property has been flooded on several occasions. The main area affected is the front/living room, but on a couple of occasions the kitchen also. The main bulk of the water used to enter through the front door gaps. and gas pipe entry. Since I had flood doors fitted I have noticed that the water comes up through the floor. My floor covering was ruined but luckily I managed to move everything to higher areas.

Watching the water come in is very stressful, and the clean up after is even worse, Then it takes a long while to dry out, and its not nice to live in the house after. I have a young son, who cant stay with me until the house is dry."

Results from the 2022/3 questionnaire

https://consultations.rochdale.gov.uk/research/72196bf3

This report was created on Monday 16 January 2023 at 16:29. The activity ran from 17/11/2022 to 06/01/2023. Responses to this survey: **43**

1: On a scale of 1 to 5, how concerned are you about flooding affecting your property?

There were 43 responses to this part of the question.

Option	Total	Percent
1. Very concerned	20	46.51%
2. Concerned	10	23.26%
3. A little concerned	11	25.58%
4. Slightly concerned	1	2.33%
5. Not at all concerned	1	2.33%
Not Answered	0	0.00%

2: On a scale of 1 to 5, how important do you think it is to insure your home?

Option	Total	Percent
1. Extremely important	31	72.09%
2. Very important	5	11.63%
3. Moderately important	3	6.98%
4. Slightly important	2	4.65%
5. Not at all important	2	4.65%
Not Answered	0	0.00%

3: Which of the following best applies to you?

There were 43 responses to this part of the question.

Option	Total	Percent
I own my home with a mortgage	15	34.88%
I own my home outright	19	44.19%
I own my home through a shared ownership scheme	0	0.00%
I rent my home from a Council (Local Authority)	2	4.65%
I rent my home from a housing association, housing co-operative, charitable trust or registered social landlord	1	2.33%
I rent my home from a private landlord or letting agency	4	9.30%
I rent my home from my relative or friend or the relative or friend of another household member	0	0.00%
Other	2	4.65%
Don't know	0	0.00%
Not Answered	0	0.00%

If other, please specify below:

There were 2 responses to this part of the question.

4: Do you have home insurance?

Option	Total	Percent

Buildings	4	9.30%
Contents	3	6.98%
Both buildings and contents together	26	60.47%
I have no property insurance	7	16.28%
I don't know	3	6.98%
Not Answered	0	0.00%

5: If you do have buildings insurance, how was it organised?

There were 40 responses to this part of the question.

Option	Total	Percent
I/we organised and paid for my/our own buildings insurance policy	29	67.44%
My landlord organised the buildings insurance	3	6.98%
I am a leaseholder and the freeholder organised the buildings insurance	0	0.00%
As far as I know the building was not insured	2	4.65%
Don't know	6	13.95%
Not Answered	3	6.98%

6: If you did buy buildings insurance, which company did you arrange cover with?

Please comment below:

There were 28 responses to this part of the question.

7: Was there a particular reason you went with this company?

Please comment below:

There were 24 responses to this part of the question.

8: If you do have contents insurance, how was it organised?

There were 40 responses to this part of the question.

Option	Total	Percent
I/we organised and paid for my/our own home contents insurance policy	30	69.77%
My landlord organised the contents insurance and it was included in the rent	0	0.00%
I didn't have any contents insurance	8	18.60%
Don't know	2	4.65%
Not Answered	3	6.98%

9: If you did buy contents insurance, which company did you arrange cover with?

If other, please specify below:

There were 30 responses to this part of the question.

10: Was there a particular reason you went with this company?

Please comment below:

There were 25 responses to this part of the question.

11: Do you have any property other than your main home (for instance a garage or lock-up) which could be affected by flooding?

Option	Total	Percent
Yes	12	27.91%
No	31	72.09%
Not Answered	0	0.00%

12: How easy do you find it to understand insurance?

There were 43 responses to this part of the question.

Option	Total	Percent
1. Very easy	9	20.93%
2. Quite easy	20	46.51%
3. Not sure	8	18.60%
4. Quite difficult	2	4.65%
5. Very difficult	4	9.30%
Not Answered	0	0.00%

13: Would you like training/ further info on insurance?

Option	Total	Percent
Yes	8	18.60%
No	35	81.40%
Not Answered	0	0.00%

14: If you answered 'yes', please let us know if there are any themes you would like to know more about.

Please comment below:

There were 7 responses to this part of the question.

15: Thinking about how you shop around for insurance and discussions with insurance companies, how straightforward have you found it to get the insurance that you feel meets your needs?

There were 42 responses to this part of the question.

Option	Total	Percent
Very straightforward	5	11.63%
Quite straightforward	20	46.51%
Slightly difficult	2	4.65%
Very difficult	7	16.28%
I have not purchased insurance cover	8	18.60%
Not Answered	1	2.33%

16: If you have insurance, how did you renew? Please select as many as apply

Option	Total	Percent
I searched online for specific companies	11	25.58%
I phoned specific companies	4	9.30%
I went to a broker	6	13.95%
I self-insure	1	2.33%

I used an insurance comparison site (e.g. money supermarket)	17	39.53%
I got help from a trusted third-party (e.g. a religious organisation or charity)	1	2.33%
Other	5	11.63%
Don't know	5	11.63%
Not Answered	3	6.98%

There were 4 responses to this part of the question.

17: If you do not have insurance, what were the main reasons why? Please select as many as apply

Option	Total	Percent
I couldn't get a quote / was refused by everyone I approached	4	9.30%
The costs of premiums were too high	5	11.63%
The excesses were too high	4	9.30%
The risk wasn't high enough to justify the cost of taking out insurance	1	2.33%
I didn't get around to it	2	4.65%
I decided to take the risk	1	2.33%
I didn't know where to look for insurance	0	0.00%
Other	4	9.30%
Don't know	2	4.65%
Not Answered	30	69.77%

There were 3 responses to this part of the question.

18: If you do have insurance but found the process difficult, what were the difficulties in getting insurance? Please select as many as apply

There were 21 responses to this part of the question.

Option	Total	Percent
I couldn't get a quote / was refused by everyone I approached	7	16.28%
It was not possible to find the right kind of insurance to meet my needs	6	13.95%
The cost of the insurance was too high	10	23.26%
The excesses were too high	6	13.95%
It was too much hassle, or it was too confusing, to get insurance	3	6.98%
The risk wasn't high enough to justify the cost of taking out insurance	2	4.65%
I didn't get around to taking out or renewing my insurance	0	0.00%
I decided to risk not having insurance	0	0.00%
I did not know how to get insurance	2	4.65%
I did not think it was my responsibility to organise buildings insurance	0	0.00%
Other	3	6.98%
Don't know	5	11.63%
Not Answered	22	51.16%

If other, please specify below:

There were 2 responses to this part of the question.

19: If you do have insurance, how do you renew? When you get an insurance renewal, which of the following best describes what you do next?

There were 37 responses to this part of the question.

Option	Total	Percent
I just look at it and take no further action	1	2.33%
I look at it and if I'm happy with it I don't take any further action	11	25.58%
I sometimes take some action to obtain a lower quote regardless of whether or not I'm happy with the renewal quote	8	18.60%
I always take some action to obtain a lower quote	13	30.23%
It's not applicable as I don't ever have insurance	4	9.30%
Not Answered	6	13.95%

20: Is your property...?

Option	Total	Percent
Detached	2	4.65%
Semi-detached	4	9.30%
Terraced (including end terrace)	28	65.12%
Flat, maisonette or apartment	4	9.30%
Other	3	6.98%
Not Answered	2	4.65%

There were 4 responses to this part of the question.

21: How many people are in your household?

Children (Under 18): There were 15 responses to this part of the question.

Adults (18 - 65) There were 32 responses to this part of the question.

Adults (65+) There were 18 responses to this part of the question.

22: What kinds of income do you receive into your household? Please select as many as apply

Option	Total	Percent
Earnings from employment or self-employment	22	51.16%
Pension from a former employer	9	20.93%
State Pension	13	30.23%
Child Benefit	3	6.98%
Income Support	1	2.33%
Other State Benefits	1	2.33%
Tax Credits	5	11.63%
Employment Support Allowance (ESA)	2	4.65%
Interest from savings etc.	1	2.33%
Other kinds of regular allowance from outside the household	1	2.33%
Other sources e.g. rent	1	2.33%
No source of income	2	4.65%

Prefer not to say	2	4.65%
Not Answered	3	6.98%

There were 2 responses to this part of the question.

23: Is there anything further you would like to tell us about your experience.

Please comment below: There were 13 responses to this part of the question.

24: Name/s:

Name/s: There were 42 responses to this part of the question.

25: Address:

Address: There were 32 responses to this part of the question.

26: Email Address:

Email Address: There were 22 responses to this part of the question.

27: Phone Number:

Phone Number: There were 26 responses to this part of the question.

Free text responses to second questionnaire survey

- 43 questionnaires returned, a decrease on last year (60 returned questionnaires)
- 7/10 people were concerned or very concerned. Only one respondent was not concerned.

- Continued bias towards owner occupiers, with 8/10 respondents either owning home outright or with a mortgage.
- Even so, 7 respondents said they did not have buildings insurance and a further 3 did not know which implies they do not.
- Of those who had insurance, respondents tended to find the process quite easy and used online services. A majority did not want more training although around 1 in 5 thought it would be useful.
- Those that gave comments were evenly split on their choice of insurer between pure cost and suitability (the insurer specifically covered flooding).
- Although a small sample size for those that could not get insurance, the key barriers were financial (either in premiums or unrealistic excess) and that no one would cover them.
- Those that had insurance had a wide array of behaviours when it came to renewal.
- Around one in three households had at least one person receiving a pension, pointing towards a generally older demographic.

6. Good landlord schemes, licensing and guidelines

The issue of poor quality private sector housing is a long-standing one. There have been many attempts to raise standards through guidelines, charters, licensing and accreditation, with varying degrees of success. Some examples are set out below.

Rochdale Private landlord scheme

In Rochdale Borough we were told in several interviews that good landlords will only come forward to be a "good landlord" if they want to be known. 'Good' landlords are already known to the local authority and usually are not on the radar of enforcement because they have not been reported for any infringements by tenants. There is an accreditation scheme and good landlords will want to put things right when HHRS inspections are done because the property is an investment. In contrast, poor landlords will not come forward to be a part of this scheme. They don't want to do any additional work and, if they did join the scheme, would be very wary that the local authority would be dealing with any complaints.

Greater Manchester Combined Authority Good Landlord Charter

Greater Manchester Combined Authority Good Landlord Charter is under development and will consist of two different elements, a scheme to tackle bad housing through supporting local authority enforcement against landlords and a Charter encouraging better practice. This is at the very early stages of development. Stakeholder groups are being established - landlords, tenants, third sector groups, social landlords. The objective is to come up with a common standard for private and social landlords though they acknowledge that it will be challenging. The Charter will avoid creating a new standard, instead it will refer to and adopt existing standards.

Manchester Student Homes Accreditation Scheme

The <u>Manchester Student Homes Accreditation Scheme</u> aims to recognise and promote landlords, agents and private halls of residence that offer a reliable service and who conduct their business in the spirit of fairness, professionalism and to provide a good service. The Code of Standards has the following specific references to flooding. It has no reference to insurance.

1.14. Repairs and Maintenance

...

Landlords and/or their Agents will ensure that:

f. In the event of 'an act of God, fire, flood' or any other unforeseeable circumstance and the property is deemed temporarily uninhabitable the Landlord is to provide to the Student Tenant a package with measures to support the Student Tenant during the interim period. This may involve providing Student Tenants with suitable alternative accommodation or consideration given to the termination of the tenancy. If the situation warrants it compensation should be considered.

Accreditation Plus Standards

4.1. Once an application is received, in addition to the criteria listed in section One of this Code MSH will assess the application against the following additional criteria:

a. The Landlord and/or Agent has a clear and robust set of procedures in place for all aspects of their business, including but not limited to procedures involving : sign-ups, deposits, repairs and maintenance, complaints and disputes, rent arrears, fire and flood

Are Landlord Charters useful?

Interviewees commented that the proposed Greater Manchester's Good Landlord Scheme is very similar to the existing Rochdale Landlord Accreditation Scheme though lack of capacity has meant that whilst it is available it is running *"in the background"*. There have been one or two new landlords entering the Scheme and some existing landlords are registered. It is currently of limited value to all landlords and tenants because demand is such that if you can view a property first and get it, its condition is irrelevant. When questioned, one tenant said:

"I've tried to view 80 properties before this one came up and so I didn't have a choice. I just have to take it or I'm going to be living in your temporary accommodation. And I really don't want to be bed and breakfasting at your behest".

It is suspected that some landlords are exploiting this intense competition. For some tenants they come to the conclusion that reluctantly, their only route of recourse is to complain to the local authority. Once they do so, action can start to hopefully rectify problems.

Interviewees confirmed that the Greater Manchester's proposed Good Landlord Scheme and Rochdale's Landlord Accreditation scheme generally attract the better landlords because they want to participate. There may also be added benefits for landlords in that they get direct access to a Rates and Benefits officer or they get early information about new legislation, forthcoming grants and so on. Good landlords will come forward because they are not concerned about their properties being inspected. Generally, if tenants tell them there's a problem, they sort it out. The bad landlords are always difficult to engage with because all they want is the rental income with absolute minimum expenditure. They are also, we were told, the landlords who have 'played the system' for instance using the appeals system and dragging processes out. In one case with the Residential Property Tribunal a family had no heating and hot water for over 18 months. Nothing could be done about the delay because the landlord had an appeal underway and kept asking for appeal hearings to be rescheduled. Interviewees commented that whilst the local authority may firm up the regulatory response with a stronger enforcement process, cases need to get to the works and default stage at the earliest opportunity even if legal teams are not comfortable defending cases that get to court or the Tribunal.

A further point is that there is some reticence in asking landlords to admit that a property is at flood risk. This could be a commercial disincentive and would possibly undermine the overall effort of the Charter. Emphasising opportunities for retrofit and insurance in much more generic terms might result in

more progress and possibly help persuade landlords to go beyond legal obligations. Consideration is also being given to accreditation in the Charter.

Selective licencing

Selective licensing schemes are a different approach. A selective licensing scheme means that all private landlords in a designated area must have a licence to rent out a privately-rented property. Selective licensing aims to improve the private rented market. It means property must be of a decent standard and adhere to certain conditions. Selective licensing also gives tenants confidence that houses and flats in a designated area will be healthy and safe to live in.

<u>Birmingham Selective Licensing Scheme</u> is being introduced 25 of Birmingham's 69 wards and will start on 5th June 2023, following a successful application to the Department of Levelling Up, Housing and Communities

Landlords have been able to apply for a licence from 22 May 2023. Each licence costs £700 and lasts for five years. Each property requires a separate licence. The following information is required to apply for the licence:

- name and contact details of anyone with an interest in the property this could include the owner, freeholder or mortgage company
- the date of birth of the person who will be the licence holder
- a floor plan of the property with measurements of all the rooms and their position in the property for example, ground floor left, first floor front right
- the current electricity installation inspection and test certificate
- the most recent gas safety certificate (if applicable)
- a debit or credit card to pay the licence fee.

The NOTICE OF DESIGNATION OF AN AREA FOR [the Birmingham] SELECTIVE LICENSING states:

ENFORCEMENT

9. Upon the designation coming into force on 5 June 2023 any person having control of or who manages a licensable property without a licence or allows a licensed property to be occupied by more households or persons other than as authorised by a licence, is liable to prosecution and upon summary conviction is liable to an unlimited fine pursuant to the provisions Section 95(1) of the Housing Act 2004.

10.A person who breaches a condition of a licence is liable to prosecution and upon summary conviction is liable to an unlimited fine.

11. The Council, as an alternative to initiating a prosecution, may pursue one or more of a range of other enforcement actions including the imposition of a financial penalty of up to £30,000 and/or taking management control of the unlicensed property.

12.Further, where an offence has been committed an application may also be made by the Council and/or tenant under the provisions of section 96 and 97 of the Housing Act 2004 for a Rent Repayment Order to pay back up to 12 months' rent.

Interviewees has mixed views on the value of licencing schemes.

National Landlord Accreditation Schemes

There are a number of Landlord Accreditation Schemes promoted by sector trade bodies. They offer a range of services including, to varying degrees, certification, training, promotion. To gain membership and certification a number of these schemes require someone from an organisation to do a foundation course:

- <u>National Residential Landlords Scheme</u>
- <u>UK Association of Letting Agents</u>
- <u>Safeagent</u>
- Private Rented Sector Development Scheme
- <u>The Chartered Trading Standards Institute</u>
- Association of Residential Managing Agents
- The Institute of Residential Property Management (IRPM)
- <u>Property Mark</u> (National Association of Estate Agents)

These schemes are entirely voluntary for letting agents and managing agents. Letting or managing agent do not have to have any training or accreditation, unlike estate agents who organise property sales. However, where a mortgage is involved, some mortgage companies require a letting or managing agent to be registered with one of the organisations above.

Redress schemes

It is a legal requirement for all lettings agents and property managers in England to belong to a Government approved redress scheme from 1 October 2014. Redress Schemes for Lettings Agency Work

and Property Management Work (Requirement to Belong to a Scheme etc)(England) Order 2014 (SI 2014 No. 2359) <u>https://www.legislation.gov.uk/uksi/2014/2359/contents/made</u>. Estate agents, letting agents and managing agents must register with one of the statutory redress schemes in England and Wales if, in the course of their business they let or manage property:

- <u>https://www.gov.uk/redress-scheme-estate-agencies</u>
- •

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_ data/file/926539/Lettings_Agents_and_Property_Managers_redress_scheme.pdf [10] [11]

These enable customers, landlords and tenants for rented accommodation to complain to one of the approved redress schemes if a complaint cannot be resolved between the participants.

Organisations <u>must</u> join a redress scheme if they are:

- an estate agent dealing with residential properties in the UK
- a letting agent or property manager in England or Wales

The approved redress schemes are:

- Property Redress Scheme <u>www.theprs.co.uk</u>
- The Property Ombudsman <u>www.tpos.co.uk</u>

Fines of up to £5,000 may be imposed by the local authority and a licence revoked if an organisation does not join one of the two redress schemes. There are a number of exclusions for local authorities, charities and where the managing agent owns the block of flats which they are managing. All the letting and managing agents interviewed were members of the Property Redress Scheme.

7. List of interviewees

Rochdale Borough Council Senior Housing Offic Private Sector Landlord Office Town Centre Office Metro Moneywise Community Foundation for Calderdale 2 Flood Action Groups 6 individuals West Pennine Insurance Brokers AON Action Together 2 Manchester Combined Authority officers **Allied Business Services UPVC** specialist **Simply Properties** SEARZ **Citizens Advice Bureau** Thistle **PDS Doorsets Euro Options** Bellfield Road Garage **RB Smedley Insurance Brokers** Lighthouse Project Rochdale Boroughwide Housing

Fair4AllFinance