

GREATER MANCHESTER COMBINED AUTHORITY

DATE: 30 July 2021

SUBJECT: Response to Flood Risk Management Issues

REPORT OF: Paul Dennett City Mayor of Salford and Greater Manchester Portfolio Leader, Housing, Homelessness and Infrastructure

Steve Rumbelow Portfolio lead Chief Executive for Housing, Homelessness and Infrastructure

Steven Pleasant Portfolio Lead Chief Executive for Healthy Lives & Quality Care

PURPOSE OF REPORT:

To agree on a proposed approach to addressing strategic issues relating to flood risk and water management in Greater Manchester.

RECOMMENDATIONS:

The GMCA is requested to:

1. To note the issues raised in this report.
2. To agree the short-term actions set out in section 7.

CONTACT OFFICERS:

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Equalities Implications:

Flooding tends to disproportionately affect and impact those who live in more deprived areas, the most vulnerable and least likely to be able to afford insurance.

Climate Change Impact Assessment and Mitigation Measures –

Impacts Questionnaire		
Impact Indicator	Result	Justification/Mitigation
Equality and Inclusion	G	Flooding tends to disproportionately affect and impact those who live in more deprived areas, the most vulnerable and least likely to be able to afford insurance. As per question 1. As per question 1. As per question 1.
Health	G	
Resilience and Adaptation	G	Flood risk is one of the greatest climate risks to Greater Manchester, responding to this risk increases the resilience of people and places. As per question 1. As per question 1. As per question 1.
Housing		Managing risk from flooding is a requirement of the statutory planning process.
Economy	G	
Mobility and Connectivity		
Carbon, Nature and Environment	G	Flood risk management goes hand in hand with measures to improve water quality and reduce diffuse pollution.
Consumption and Production		
Contribution to achieving the GM Carbon Neutral 2038 target		
Further Assessment(s):	Equalities Impact Assessment and Carbon Assessment	
Positive impacts overall, whether long or short term.	Mix of positive and negative impacts. Trade-offs to consider.	Mostly negative, with at least one positive aspect. Trade-offs to consider.
		Negative impacts overall.

Carbon Assessment		
Overall Score		
Buildings	Result	Justification/Mitigation
New Build residential		
Residential building(s) renovation/maintenance	N/A	Not applicable Not applicable
New Build Commercial/Industrial	N/A	
Transport		
Active travel and public transport	N/A	
Roads, Parking and Vehicle Access	N/A	
Access to amenities	N/A	
Vehicle procurement	N/A	
Land Use		
Land use	TBC	
No associated carbon impacts expected.	High standard in terms of practice and awareness on carbon.	Mostly best practice with a good level of awareness on carbon.
		Partially meets best practice/ awareness, significant room to improve.
		Not best practice and/ or insufficient awareness of carbon impacts.

Risk Management:

See paragraphs 1.2-1.4 and 2.1-2.4

Legal Considerations:

See paragraphs 2.1-2.4

Financial Consequences – Revenue:

N/A

Financial Consequences – Capital:

N/A

Number of attachments to the report: 1 – Appendix A.

Comments/recommendations from Overview & Scrutiny Committee: N/A

BACKGROUND PAPERS:

[Greater Manchester Infrastructure Framework \(2019\)](#)

TRACKING/PROCESS		[All sections to be completed]
Does this report relate to a major strategic decision, as set out in the GMCA Constitution		Yes
EXEMPTION FROM CALL IN		
Are there any aspects in this report which means it should be considered to be exempt from call in by the relevant Scrutiny Committee on the grounds of urgency? No		Please state the reason the report is exempt from call-in
GM Transport Committee	Overview & Scrutiny Committee	
N/A	[Date considered by the relevant Overview & Scrutiny Committee]	

1. Background

- 1.1 Leaders received an update last April on issues in relation to flood risk and water management in Greater Manchester. The report covered three areas: Governance, funding/investment, capacity /resources. It was noted that in recent years there have been several major flooding incidents across Greater Manchester. Through climate change this risk is increasing and resources are limited. Often risk coalesces in urban areas, within our strategic development locations and where communities live. Whilst 12% of flood defences in Greater Manchester are in a state of disrepair, given funding constraints there is a balance to be struck between increasing the resilience of existing assets, building new defences and addressing risk from surface water.
- 1.2 Flood risk management is a cross portfolio issue. It cuts across duties, responsibilities and agencies. It involves planning, preparation, engagement, investment, partnerships, responding to events and recovery. Despite being one of the greatest risks identified on the Greater Manchester Community Risk Register¹ we don't at present view and approach the issue through a single co-ordinated and strategic lens.
- 1.3 As previously reported, governance changes were made in 2020 to provide stronger direction for the delivery of flood risk and water management. The Planning and Housing Commission (PHC) is now the conduit for the North West Regional Flood and Coastal Committee (RFCC) members and political engagement. All local authorities in Greater Manchester are represented providing a direct route to the GMCA portfolio holder and the GMCA. The Strategic Infrastructure Board (SIB) is the route to engagement with infrastructure providers. The Greater Manchester Resilience Forum is the statutory partnership with responsibilities for coordinating activity across different agencies to plan and prepare for the impact of civil risks, including flooding. However, issues remain with limited capacity at both the local authority and GMCA levels.
- 1.4 Whilst flood risk management includes actions to prepare, respond and recover from flood events this report focusses on the actions that the GMCA can take to better support the Local Authorities in reducing and mitigating flood risk. Engagement with the GMRF will continue through the Chief Resilience Officer who is appointed by the GMCA.
- 1.5 Engineering alone is not a solution as climate change is increasing the intensity of rainfall and the cost to re-build the entire sewer network and increasing the height of existing defences would be prohibitive and disruptive. Hard defences also require long term maintenance and an upgrade once they no longer provide the necessary standard of protection. Currently in Greater Manchester the annual maintenance costs of existing flood defences for the

¹ See: [GM Prepared - Community Risk Register \(gmemergencyplanning.org.uk\)](http://gmemergencyplanning.org.uk)

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Environment Agency (EA) is approximately ~£2.9m. Maintenance costs for Local Authorities are currently unknown.

- 1.6 A mix of solutions is required and, for example, green infrastructure such as sustainable drainage systems (SuDs) and other nature-based solutions across catchments and within urban areas need to become standard, making space for water whilst slowing the flow. The GMCA is leading on a project (IGNITION) working with the Living Lab at Salford University to explore how to retrofit SuDs and design other nature-based solutions. Used well, such mitigations can also mitigate other climate-related risks such as urban heat and air pollution.
- 1.7 The Plan of the 9 (Places for Everyone joint Development Plan Document) identifies the key growth corridors and gateways, the principal town centres and the concentration of the supply of land for new homes within the existing urban area and on brownfield land. The Plan also sets out policy requirements to manage flood risk, sustainable drainage and green infrastructure.
- 1.8 The Irwell and Mersey catchments dominate Greater Manchester, covering around 78% of its total area, with the River Douglas and Glaze Brook being the other fluvial catchments. All catchments except the River Douglas drain into the Manchester Ship Canal, which therefore has a very important drainage and flood management function. The United Utilities drainage network interacts with these catchments and crosses multiple local authority boundaries.
- 1.9 Flood risk and water management issues have cross cutting responsibilities that don't respect Local Authority administrative boundaries. A strategic approach needs to be adopted where risk and water management issues impact across districts within Greater Manchester or from outside of the Greater Manchester boundary.
- 1.10 Within Greater Manchester there are 63,478 properties at risk from river flooding and 162,979 properties at risk from surface water (Source: Environment Agency). Surface water is the greater (most frequent), most complex risk and will overlap in some areas with river flooding risk. This is likely to increase because of future climate change projections which will see potential precipitation rise by 59% in 2050 and population growth within urban areas. This is the responsibility of the Lead Local Flood Authorities (LLFAs) and not specifically covered in this report.
- 1.11 Impacts are not limited to properties, many more people are affected when essential transport services, energy and water infrastructure are interrupted, or schools and workplaces are damaged by flooding. [Research](#) undertaken nationally on economic damages to infrastructure (bridges, roads, sewer collapses (sinkholes), schools, loss of electricity, rail and the compounding effect etc.) concluded that the economic and cost implications of damages to business properties and infrastructure were significantly larger than household

property. This conclusion is consistent with experience in Greater Manchester. As an example, the infrastructure costs to the following Local Authorities: Bolton, Bury, Rochdale, Salford and Wigan associated with the 2015 boxing days floods was £11.5M.²

- 1.12 Resources at the Local Authority and GMCA level are limited. Local Authorities receive insufficient funding to undertake their statutory duty for an ever increasing and complex problem which can have significant and long-term impacts on people’s livelihoods, health and wellbeing. There are varying levels of investment across the different Local Authorities within Greater Manchester. A common theme is that further support from Government is required. The GMCA can support by lobbying for that financial support.
- 1.13 The National Flood and Coastal Erosion Risk Management Strategy (NFCRMS) for England now has a stronger direction on a ‘place-based approach’ to climate resilience. This is defined as the “Environment Agency working with partners to bolster resilience to flooding across the nation delivering today’s growth and infrastructure resilient in tomorrow’s climate”. It’s also an acknowledgement that every place is different and that “local people will define their place in different ways. For some it might be their county, city, town or village. For others, a place could mean a river catchment”. It is critical that the GMCA uses its convening and advocacy role to work in partnership with EA and UU to (a) improve GMs ability to access the resources and support that they can bring and (b) support EA and UU to increase the resources that they have available for this agenda.
- 1.14 Water flows through catchments and urban areas and disregards administrative boundaries. Thus partnerships are vital as they enable evidence, expertise and resources to be shared. There are roles and actions that are required at the strategic catchment level as well as within individual localities and this challenge cannot be resolved by working solely at the GM or local level.
- 1.15 The issues highlighted above are not unique to Greater Manchester and reflect those identified in the National Infrastructure Strategy (2020) and more recently in the [Environment Food and Rural Affairs Committee](#) inquiry (2021) into flood risk. One of the most significant issues is that Local Authorities lack the revenue that can be deployed to develop and deliver projects, create and maintain partnerships, identify funding opportunities and respond to complex issues on the ground. Over the next 12 months it’s recommended that the CA should work with the Environment Agency and United Utilities to raise the following strategic challenges with Government: and the National Infrastructure Commission:
- A lack of revenue funding and contributions towards partnership funding.

² Source: Greater Manchester Update on Infrastructure Issues Following Storm Eva Date: 10 June 2016 From: Lead AGMA Chief Executive for Civil Contingencies To: DCLG

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- An ageing workforce and need for transition planning and associated development of skills, training, and experience.
- Input into the Green Book review and HMG departmental guidance relating to capital projects to ensure that they reflect broader outcome metrics such as flood risk and natural capital.
- Engage and develop a stronger partnership with United Utilities as well as other infrastructure providers e.g. Highways England, Network Rail who have important water management roles.
- Raise with MPs and partners the long standing issue of SuDs and enactment of Schedule 3 of the 2010 Flood and Water Management Act to mandate SuDs in new development.

2. Resources and Responsibilities

2.1 The Greater Manchester Combined Authority is the sub regional partnership represented on the Regional Flood and Coastal Committee (RFCC). The RFCC is a statutory committee as defined by the Flood and Water Management Act (2010). The GMCA is responsible for:

- Providing strategic advice to help support the delivery of Government's National Flood and Coastal Erosion Risk Management Strategy, as well as contributing to the delivery of local plans and strategies;
- Helping to inform plans proposed by the Environment Agency and challenge and debate any issues that arise;
- Helping to support and engage communities on flood risk and coastal erosion issues;
- Actively engaging with local communities, particularly to gain external financial contributions;
- Communicating local priorities and successes, seeking views from external stakeholders and community groups to help raise awareness of flood and coastal erosion risk management work;
- Keeping abreast of flood and coastal erosion risk issues in the region and policy developments in Defra and the Environment Agency; and
- Contributing to the work of sub-groups, if set up by the Committee

2.2 In addition to the RFCC, the EA and United Utilities (UU) are represented on several GMCA administered groups and boards. The Greater Manchester Resilience Forum (GMRf) is a partnership of agencies from across Greater Manchester with responsibility for co-ordinating and overseeing emergency planning derived from the Civil Contingencies Act (2004). The GMRf reports to the CA through Chief Resilience Office and the Deputy Mayor for Policing and Crime and GMCA's Deputy Chief Executive. The connections with the right agencies are in place and can be harnessed into focused action.

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- 2.3 The 10 Local Authorities in Greater Manchester are Lead Local Flood Authorities (LLFAs) with specific statutory duties. They are responsible for managing local flood risks with a duty to co-operate with other risk management authorities. As reported to leaders last April, Local Authority officers within the LLFAs are responsible for local flood risk management, local strategy, evidence gathering, project development, often as well as delivering transport schemes, responding to planning applications etc. There are capacity, skills and experience gaps in some districts which prohibits the identification of projects and progression of concepts into outline and full business cases.
- 2.4 Whilst the GMCA doesn't have a statutory duty, it has a role to strategically support the LLFAs working through the RFCC and in enabling the LLFAs to co-operate with others. The GMCA needs to support its local partners in meeting their objectives and overcome challenges. This report explores the best ways in which the GMCA might be able to achieve this.

3. **Debrief from the recent events of storm Christoph and any other relevant flood risk analysis**

3.1 Following the response to storm Christoph a multi-agency debrief took place to identify good practice and areas of response that could be improved for any future flooding response. Eight core priorities for future work have been identified and an action plan to address these is being developed and will be implemented under the governance of GMRF:

- **Modelling and mapping data** – the modelling/mapping data provided by the EA is critical to enabling early identification of key areas at risk. This data includes risk analysis before an incident and, when coupled with Met Office modelling during rainfall events, real-time data to inform incident response. Building on the learning from storm Christoph, the EA will consider how additional data/mapping can be provided during a response.
- **Cross border implications of response** – due to the geographical boundaries used to respond to incidents in the EA, which tend to be based on river catchments, it was difficult to obtain a comprehensive picture of potential flooding in GM that took account of upper catchments lying in neighbouring counties and of the impacts of all major catchments in GM. Cross-border communication with neighbouring local resilience fora could also have been strengthened to better inform impacts upstream and downstream of GM.
- **Training and exercising** – prior to storm Christophe, multi-agency training and exercising had been undertaken across the 10 GM districts however some incident commanders may have benefitted from a more detailed understanding of plans, terminology and data interpretation.

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- **Vulnerable residents** – during storm Christoph it was necessary to access information about vulnerable residents to offer support to help them to evacuate and stay safe. The system in place to identify vulnerable residents needs to be reviewed to ensure information can be provided in a timely manner and in a usable format.
- **Administrative support** – agencies identified the need for greater support to be available to multi-agency response structures. The situation may have been exacerbated by many administrative staff already being deployed to support the Covid response.
- **Access to data and mapping information** – gaps were identified in information available on Resilience Direct, a shared platform for confidential information, about potential flood zones and the properties affected for each local authority area.
- **Property level flood protection** – an inconsistent approach to the provision of sandbags or of any temporary protection to those likely to be affected was reflected in a mismatch between community expectations and a number of current district policies.
- **Strategic and local flood plans** – as usual after flooding events, to ensure all learning from the response of storm Christoph and other smaller flooding events is put into practice, a review will be undertaken of the GM strategic multi-agency flood plan and the multi-agency Borough level flood plans.

4. Investment Funding and Greater Manchester Pipeline

- 4.1 The evidence (the National Flood and Coastal Erosion Risk Management Strategy, (2020)) suggests that for every £1 spent on flood risk reduction, there is approximately £5 return in cost avoidance. Increasing the resilience of places will also attract inward investment, increase land values, support regeneration and delivery of new homes on brownfield land.
- 4.2 The EA has identified that economic losses from the winter 2019 to 2020 flooding is estimated to be about £333 million. But the economic damage avoided from the protection provided is at least 14 times greater than that, at around £4.6 billion – £9.3 billion.
- 4.3 The National Flood and Coastal Erosion Risk Management (FCERM) Strategy for England now has a stronger direction on a ‘place-based approach’ to climate resilience. Working better together and in partnership at multiple spatial scales will achieve better outcomes for people in Greater Manchester.
- 4.4 DEFRA Grant in Aid (GiA) is currently the main source of funding for flood risk management capital schemes but this often requires partnership contributions to enable GiA to be allocated. Whilst eligibility for funding is based on a

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number of outcomes including those for the economy (costs avoided), environment (habitat created) and society (mental health), the main weighting is afforded to improving the standards of protection to existing properties. GiA funding alone will not be able tackle the challenges as a result of increased risk of flooding from future climate change. Therefore, greater emphasis is needed on identifying more innovative ways of funding nature-based solutions/green infrastructure which provide a flood risk benefit as well as enhanced water quality and wider climate resilience.

- 4.5 The pipeline of flood risk projects identified in the current 6yr Flood and Coastal Erosion Risk Management programme 2021 – 2027, will deliver a reduction in risk to 20% of properties in Greater Manchester within a 1 in a 100-year flood outline (a list³ of the current schemes is set out in Appendix A Tables 1 and 2). A third of projects will be delivered by Local Authorities. This funding is a finite pot, however, there are options to reprioritise projects locally across the 6yrs and draw down ‘in year’ funding, for example from other projects where funding has been allocated but the project hasn’t been delivered as forecast.
- 4.6 Match funding contributions for GiA are called “partnership contributions”. LLFAs are asked to provide match funding to all projects regardless of the flooding source or who is responsible for delivery. Contributions are required to bring forward projects within the RFCC flood programme. Several proposed flood risk reduction projects are not meeting the GiA criteria / benefits cost ratios (BCRs), for example an outline business case hasn’t been developed or there isn’t sufficient partnership funding, or homes protected. Further analysis by the EA is under way to identify (a) the funding gap and (b) how BCRs can be improved.
- 4.7 Funding is not limited to the public sector or the EA programme. UU are implementing Asset Management Plan (AMP) 7 (2020-2025) investments and preparing now for AMP8 (2025-2030). The water industry economic regulator Ofwat has agreed £5.8bn of total expenditure (Totex) with UU delivering a 4% base equity return to shareholders. The Department of Environment and Rural Affairs (DEFRA) and Ofwat have invited water companies to accelerate this investment to support a green recovery⁴. Furthermore, Electricity North West Limited (ENWL) have produced a draft business plan for 2023/28 which includes measures to improve the resilience of the electricity network from flooding.
- 4.8 GMCA officers are working with UU, EA and ENWL to identify shared outcomes and ways to strengthen day to day working for example using investment identified for resilience within the ENWL business plan (2023-28)

³ These are indicative only and are subject to change from future funding allocations and development of detailed business cases

⁴ The United Utilities Scheme are: (1) £13.411 million to develop nature-based solutions through partnership working; (2) AMP8 WINEP investments at Bury: £44.060 million to improve the river environment by increasing sewer capacity; and (3) Tackling storm overflows: £5.399 million to investigate ways to reduce harm from storm overflows.

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as partnership funding for GiA, informing the refresh of the RFCC Business Plan and exploring how the Greater Manchester Environment Fund can enable nature-based solutions by attracting investment for biodiversity – enabled through biodiversity net gain as per the draft Environment Bill (2021) and Places for Everyone Policy.

- 4.9 Investment can only take place in a project where there is a detailed business case supported by partnership contributions. It's essential that projects in Greater Manchester are appropriately developed to utilize the funding allocated or bring forward other projects that are capable of being delivered through re-allocated funding. There is a need for a pipeline of strategic projects worked up to take advantage of any funding that becomes available either through underspend in other areas across the 6yr programme or through funding rounds announced over the coming years. There is a particular need to identify those strategic projects with cross boundary impacts that may not be the focus of current activity. This will be the key action taken forward in the coming months by the GMCA in partnership with the LAs and utilities, driven in the first instance by assessing the catchment areas and mitigating projects that could mitigate downstream impacts.

5. Surface Water Risk

- 5.1 Addressing surface water risk is a particular challenge with complex interactions between the sewer network, the highway network, main rivers, smaller tributaries and local authority assets (bridges, roads, culverts, embankments etc.).
- 5.2 There are many barriers and challenges to recording data during and after a flood event that need to be addressed, including a consistent approach to data collection, verification, and presentation. Written and visual records are recorded during flood events and S19 flood investigation reports are a statutory requirement, however there is often a lack of resources at district level to complete this comprehensively and consistently. Records from events are useful sources of evidence to inform investment business cases.
- 5.3 Local Authorities can't generate revenue from their assets unlike UU and the EA and maintenance funding provided is insufficient. On this and other relevant issues, the GMCA will work with the GMRF and utilize the RFCC and the CA's public affairs team to lobby Government for financial support.

6.0 Water Management Across Greater Manchester

- 6.1 There are tangible benefits in having a single joined up conversation with infrastructure providers (utilities) to overcome barriers to delivery. Our aim is to deepen existing partnership working arrangements with individual infrastructure providers to support better water management across GM.

- 6.2 The RFCC is refreshing its Business Plan. The first and current plan had a three-year timeframe from 2019 to 2022. It's now being reviewed (Summer 2020) to better align it to the National Flood and Coastal Erosion Management Strategy (2020) and will be adopted in July.
- 6.3 Because the 10 districts and GMCA haven't collectively identified and agreed GM's strategic priorities for flood risk management there is a gap between the RFCC business plan, UU's long term investment strategies (and associated outcome measures) and Greater Manchester's ambitions in reducing flood risk. As set out in paragraph 3.9 above CA officers are working with the infrastructure providers to identify areas for improvement.
- 6.4 The 5 Year Environment (2019-24) includes priorities that are relevant. These are: (a) embedding climate change resilience and adaptation into all policies, (b) increasing the resilience of and investment into our critical infrastructure. In recognition of the role that natural capital has in addressing (or contributing to) flooding issues (c) managing our water environment sustainably and delivering a net gain for biodiversity. There is a need to ensure that the actions being undertaken as part of the 5 year Environment Plan address these issues moving forward.
- 6.5 Green infrastructure such as sustainable drainage systems (SuDs) and other nature-based solutions (NBS) across catchments and within urban areas need to become standard in new development, making space for water whilst slowing the flow and providing wider natural capital benefits such as improved air quality and water quality. Current uptake across Greater Manchester is low. The CA will work with Local Authorities and partners to embed these principles in areas of growth identified through the spatial plans. This will aim to identify a pipeline of strategic projects that can then bid for funding as and when the opportunity arises.
- 6.6 The Draft Places for Everyone Plan like the 2020 Greater Manchester Spatial Framework includes a draft policy on sustainable drainage, including criteria to ensure that they are designed to provide multifunctional benefits wherever possible for example delivering improvements to water quality, biodiversity and recreation. Through IGNITION, the CA and the project partnership team are seeking to develop new models to delivering SuDs solutions. It will be critical to addressing flood risk management that the actions identified through IGNITION are implemented and that those policies identified through the spatial plan are imbedded in the work that is undertaken across the CA.

7. Conclusion and Recommended Actions

- 7.1 Addressing the flood risk challenge is a long-term investment and commitment. The risks will have to be managed and lived with. It is recommended that the following short-term actions are progressed by the GMCA to support the local authorities in Greater Manchester:

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1. Actively lobby for resources into Greater Manchester and communicating our challenges to national Government with a view to influencing national policy direction.
2. Work with utilities to identify opportunities for partnership contributions.
3. Work with UU / EA to assess the catchment areas that impact Greater Manchester and identify projects that will benefit multiple downstream Local Authorities.
4. Review projects that have funding awarded and confirm the position on partnership contributions and opportunities for third party contributions to those projects.
5. Identify a pipeline of strategic projects that could be brought forward to bid for future funding opportunities.

APPENDIX A – EXISTING PIPELINE OF FLOOD RISK PROJECTS

Table 1 – Local Authority Led Projects

Project Name	Lead Risk Management Authority - Name	Project Type	Present Value Whole Life Costs (£)	Start of construction	OM2 (Households) moved to lower flood risk category)
Bolton Inlets and Screens Improvement	Bolton Metropolitan Borough Council	Defence	591,552	01/06/2023	262
Lenham Gardens Surface Water Alleviation Scheme	Bolton Metropolitan Borough Council	Defence	272,788	01/09/2023	86
Horwich Town Centre Flood Alleviation	Bolton Metropolitan Borough Council	Defence	3,009,000	01/07/2021	248
Mill Brook, Hollymount, Bury	Bury Metropolitan Borough Council	Defence	80,000	01/02/2023	40
Harwood Road Culvert	Bury Metropolitan Borough Council	Defence	125,000	01/02/2023	40
Lumb Carr Culvert	Bury Metropolitan Borough Council	Defence	140,000	01/02/2023	60
New Street Culvert	Bury Metropolitan Borough Council	Capital Maintenance	415,000	01/02/2023	100
Ramsbottom Flood Mitigation	Bury Metropolitan Borough Council	Defence	650,000	01/02/2023	80
Shaw, Cringle, Ley and Willow Brook	Manchester City Council	Defence	600,000	01/12/2022	230
Manchester Trash Screens Phase 2	Manchester City Council	Defence	150,000	01/03/2023	60
Manchester Restoration of Open Channels of Ordinary Watercourses	Manchester City Council	Capital Maintenance	1,067,000	01/12/2021	618
Grasmere Rd, Royton, Oldham	Oldham Metropolitan Borough Council	Capital Maintenance	171,182	01/07/2021	36
Oak View Road, Greenfield Oldham	Oldham Metropolitan Borough Council	Capital Maintenance	475,000	01/08/2021	58
Valley Mews, Greenfield, Oldham	Oldham Metropolitan Borough Council	Defence	478,500	01/08/2021	82
Golburn Clough, Greenfield, Oldham	Oldham Metropolitan Borough Council	Defence	490,000	01/08/2021	258
Turf Hill	Rochdale Metropolitan Borough Council	Defence	700,000	01/07/2021	48
Groundwater Study - Castlewood Road, Kersal	Salford City Council	Defence	141,595	01/06/2021	102
Stockport Parklife	Stockport Metropolitan Borough Council	Defence	3,275,000	01/09/2024	600
Schools Hill, Cheadle Surface Water Mgmt Scheme	Stockport Metropolitan Borough Council	Defence	115,000	01/08/2022	24
Stockport Rd, Romiley	Stockport Metropolitan Borough Council	Defence	450,000	01/10/2024	116
Wild Bank Hill Inlet Structure Improvements, Tameside	Tameside Metropolitan Borough Council	Capital Maintenance	700,000	01/07/2022	398
Longford Brook Flood Alleviation Scheme	Trafford Metropolitan Borough Council	Defence	325,000	01/08/2027	76
Timperley Brook Surface Water Management	Trafford Metropolitan Borough Council	Defence	490,000	01/08/2023	280
Wigan Structural Survey and Inspection of Poor and Very Poor Assets - Phase 2 Perry Brook	Wigan Metropolitan Borough Council	Capital Maintenance	333,448	01/06/2021	54
TOTAL			15,245,065		3,956

Table 2 – Environment Agency Led Projects

Radcliffe & Redvales FRM Scheme	Environment Agency	Defence	314,491,507	01/07/2019	1,614
River Roch, Rochdale & Littleborough	Environment Agency	Defence	400,000,000	01/06/2021	1,924
Asset Recondition allocation	Environment Agency	REC	-	-	
National Debris Screen Project - GMMC (NWO013E/000A/028A)	Environment Agency	Capital Maintenance	10,814,468	-	612
Priority Screen Replacement: Bolton and Wigan	Environment Agency	Capital Maintenance	3,240,000	01/04/2021	216
Dean Brook Culvert, Bolton	Environment Agency	Capital Maintenance	14,913,838	01/05/2021	44
Pipeline Priority: Leigh East - Higher Folds, Bedford and Lilford	Environment Agency	STR	40,436,000	01/07/2024	1,676
River Irwell, Kearsley	Environment Agency	Defence	20,000,000	17/05/2023	160
Pipeline Priority: River Mersey, South Manchester	Environment Agency	Capital Maintenance	41,945,000	01/07/2025	1,732
Irwell Vale to Chatterton	Environment Agency	Defence	50,711,000	01/11/2022	232
Capital £40m Asset Replacement Fund (Strand 2) - Sale and Didsbury FSR Inlet Roof Replacements	Environment Agency	Capital Maintenance	-		
Cringle Bk, Ladybarn	Environment Agency	Defence	40,442,120	01/10/2023	886
Black Brook Culvert Refurbishment	Environment Agency	Capital Maintenance	5,361,290	01/04/2022	80
Jenny Beck Culvert Refurbishment, Bolton	Environment Agency	Capital Maintenance	4,413,690	01/05/2022	254
Wardle Brook Culvert Refurbishment, Wardle	Environment Agency	Capital Maintenance	5,629,350	01/04/2022	84
Pipeline Priority: Sinderland Brook and Tributaries – Brooklands and Timperley South	Environment Agency	Capital Maintenance	19,536,000	01/09/2024	816
Pipeline Priority: Poise Brook - Offerton Green	Environment Agency	Defence	7,428,000	01/07/2024	286
Bessy Brook, Bolton	Environment Agency	Defence	1,000,000	01/04/2023	126
River Tame, Uppermill	Environment Agency	Defence	15,000,000	01/10/2022	170
Common Lane Bk, Leigh	Environment Agency	Defence	12,108,786	01/04/2022	84
Alder Forest, Eccles	Environment Agency	Defence	11,507,355	01/06/2021	184
TOTAL			1,018,978,404		11,180

BOLTON MANCHESTER ROCHDALE STOCKPORT TRAFFORD
BURY OLDHAM SALFORD TAMESIDE WIGAN