

Report of the Assistant Chief Executive (Citizens and Communities)

Report to Executive Board

Date: 22 June 2016

Subject: Storm Eva – Recovery Plan Update

Are specific electoral Wards affected?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
If relevant, name(s) of Ward(s): Adel and Wharfedale, Armley, Beeston and Holbeck, Bramley and Stanningley, Burmantofts and Richmond Hill, City and Hunslet, Guiseley and Rawdon, Harewood, Horsforth, Kippax and Methley, Kirkstall, Otley and Yeadon, Rothwell, Wetherby		
Are there implications for equality and diversity and cohesion and integration?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
Is the decision eligible for Call-In?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Does the report contain confidential or exempt information?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
If relevant, Access to Information Procedure Rule number: Appendix number:		

Summary of main issues

- Following the events of Storm Eva on the 26th and 27th December 2015, Leeds City Council, working together with local communities, volunteers, and partners, have been responding to a range of recovery actions in affected areas, using a citywide Strategic Recovery Plan. Most actions from the strategic recovery plan are now completed or have been incorporated into business as usual projects and work. There have also been further developments regarding long term infrastructure projects, with further funding promised for the River Aire Flood Alleviation Scheme beyond phase 1.
- The Council have been administering grants for affected residents and businesses, proactively contacting those affected to encourage applications and reporting on progress to the national ministerial recovery group. These schemes are being wound up in the coming weeks and months. Work is taking place with communities to look to future resilience and the establishment of more local flood groups and committees.
- The overall business impact is being assessed at both the Leeds and Leeds City Region level and regeneration proposals are being drawn up for specific affected areas. The Council have been administering grant funding for affected businesses, as

well as working with the LEP on schemes, and more than £3m of support has been provided, with these schemes to be wound up in the coming months. Further support continues to those businesses that are not yet fully operational, and those facing ongoing challenges in terms of recovery and flood resilience. There remain some outstanding clean-up priorities, such as debris on the riverbank and in overhanging vegetation. There is an opportunity to use remaining Government funding to support businesses in flood affected areas, and also to develop wider regeneration strategies for the Kirkstall Road corridor, and industrial areas of Hunslet.

4. Infrastructure updates are included in a separate Executive Board report on Linton Bridge. Work continues at a multiagency level on repairs, and future asset mapping and resilience.
5. The Council has continued to communicate on the recovery process and to make the public aware of available funding, as well as communicating on the developments regarding Flood Alleviation Schemes. Work continues to regularly update the alert systems for emergencies and subscription lists; as well as to signpost communities for self-help flood alert warnings.
6. Council lessons learned from the response and recovery to Storm Eva have been collected and the report and recommendations should be seen as highlighting the way forward in terms of dealing with floods and any improvements to our emergency procedures more generally. Work on the production of a Section 19 report into the cause and impact of Storm Eva is taking place and some interim findings will be available by the summer.

Recommendations

Members of Executive Board are recommended to:

- a) note the updates in the report, including on the progress of the Strategic Recovery Plan,
- b) endorse the implementation of the recommendations from the lessons learned review (as detailed at 3.7), and
- c) support the principle of the use of remaining government flood response funds to assist in supporting businesses in flood affected areas through further recovery and resilience measures, supporting any outstanding clean-up priorities, and the development of a wider regeneration strategy for the Kirkstall Road corridor and industrial areas in Hunslet, and request that the Director of City Development develops detailed proposals for this in consultation with the relevant Executive Member.

1. Purpose of this report

- 1.1 To update Members of Executive Board on the impact of Storm Eva in Leeds, specifically about the recovery plan, flood alleviation proposals for the city, regeneration and lessons learned. This report also links to the Executive Board item on Linton Bridge.

2 Background information

- 2.1 This is the third Storm Eva update report brought to the Executive Board since the events of December 2015, following papers in January, March and April.
- 2.2 The Executive Board report in January 2016 contained much of the detail on the events of Storm Eva and the immediate response work. The March 2016 report updated on recovery activity and the progress of support for affected residents and businesses, damage to infrastructure, and future resilience developments such as the Flood Alleviation Scheme and regeneration proposals. The April paper was specifically on flood alleviation.
- 2.3 As part of the recovery reporting process, data and information on the impacts in Leeds have been reported to central government through the Commonly Recognised Information Picture (CRIP) and directly to the Ministerial Recovery Group (MRG). The amount of detail required from central government has been reflected on as quite burdensome and has often been to short deadlines.

3 Main Issues

- 3.1 The overall numbers of properties known to have been affected by flooding around the Rivers Aire and Wharfe continued to be updated over the first few months of 2016 as intelligence became clearer. Given the specific circumstances of the Storm Eva flooding in Leeds compared to other parts of the country, particularly regarding the impact on flat complexes and buildings with multiple business occupants, the Department for Communities and Local Government has agreed to review its flooded properties definitions and guidelines to reflect a more urban environment. This has resulted in the following table outlining the numbers of properties affected in Leeds:

	Flooded	Affected	Severely Affected	Total
Residential	298	1902	483	2683
- Houses	242	125		367
- Flats	56	1777	483	2316
Commercial	371	307		678
Other (churches, allotments, sports clubs)	4	3		7
Total	673	2212	483	3368

- 3.2 The remaining parts of this main issues section build upon the basis of these numbers, and are separated into the headings of the Strategic Recovery Plan.

Progress on the Strategic Recovery Plan is included in Annex 1, with most of the actions either completed or now being considered as part of business as usual.

3.3 **Recovery Plan - Community**

3.3.1 The community recovery work has continued to develop since March, with the majority of flooded residents able to return to their homes but support being offered to those who remain in temporary accommodation and those making property resilience improvements. Around thirty households across the various wards of the city affected by Storm Eva are being supported with Council Tax Relief and other help and advice whilst they are still out of their properties. Work has continued to happen in respect of the following areas to support those affected and to build future community resilience.

3.3.2 **Grant schemes**

3.3.3 The grant funding received from Government, as reported in the January Executive Board paper, has been used to provide households affected by flooding with a £500 cash payment to help with recovery costs and a £5000 grant scheme for householders to make their properties more resilient to future flooding events. In addition to these cash grant schemes, those householders who have been subject to internal flooding were entitled to claim/receive council tax relief for a minimum of three months, with further extensions applied to those who have remained out of the properties beyond the three month period.

3.3.4 The Council has been proactive in promoting these schemes to those properties eligible, and recent additional activity has included:

- Contacting those who had received Council Tax relief for three months to see if they had been able to return to their properties or required further relief.
- Supporting residents groups to submit joint group applications for the Property Level Resilience scheme, pooling their individual grants.
- Door to door engagement on the Property Level Resilience grants to help residents apply for the scheme or to signpost to other relevant services.
- Initial conversations on property level resilience group schemes for residential flat complexes with central government.

3.3.5 As of 31st May, this activity has resulted in the following numbers of grants being processed and paid:

Grant scheme	Number of Eligible Properties	Grant applications received	% of Eligible Properties	Grants paid	% applications received	Total amount paid
Community Support scheme (£500)	781	688	88%	688	100%	£344,000
Property Level Resilience (up to £5,000) Households	298	84	28%	77	92%	£368,977

3.3.6 As well as the government funded grant schemes, Leeds Community Foundation has established a Flood Appeal with funds available to support individuals, charities, community projects and sports clubs affected by the floods, with individual households able to apply for up to £250, providing the damage caused cost more than the £500 that had already been paid by the Council, and organisations are able to claim up to £2,000. The appeal has raised £236,889, which will be match-funded by Government. A focus group has been established to review potential community schemes or flood groups that could access this fund. Other local flood appeals have also taken place across the city.

3.3.7 **Community Engagement and Communications**

3.3.8 Community engagement has continued to take place, with a greater emphasis being given to future resilience and organisation. Group property level resilience grants are being discussed with a number of local residents groups in affected areas.

3.3.9 In Kirkstall a Community Interest Company is now being set up to support future flood preparedness locally. A Flood Volunteer's Celebration Party event was also organised in May by the local group, open to all of the volunteers and council staff who helped in the clean-up.

3.3.10 In other areas further work is taking place to support local infrastructure, including for repairing the Lido in Otley. As part of the lessons learned exercise (see section 3.7) it is recommended that the council now looks to how it can best support local flood groups and community resilience initiatives, including potentially bids for funding to the Leeds Community Foundation Flood Appeal.

3.4 **Recovery Plan – Business**

3.4.1 Business Recovery has continued to focus on supporting those businesses in Leeds affected by Storm Eva to become fully operational and with access to funding and support to become more resilient in the future.

3.4.2 **Grant schemes**

3.4.3 More than £3m of support has been provided to affected businesses in Leeds since the start of January, including business support, property resilience, business rate reliefs and the Local Enterprise Partnership flood grant.

3.4.4 Central Government schemes administered by Leeds City Council have provided a grant of approximately £2,500 per business to help with recovery, as well as an ability to apply for a £5,000 property resilience grant. Details of the grants paid under these schemes to date are presented in the table below (correct as of 7th June).

Grant scheme	Number of Eligible Properties	Grant applications received	% of Eligible Properties	Grants paid	% applications received Paid	Total amount paid
Business Support scheme (up to	371	231	62%	204	88%	£447,460

£2,500)						
Property Level Resilience (up to £5,000) Businesses	371	78	21%	60	77%	£273,894

- 3.4.5 The Leeds City Region Local Enterprise Partnership has also operated a grant of up to £100,000, which has been administered by Leeds City Council. In addition to these cash grant schemes, those businesses that have had significant impact have been entitled to claim/receive business rates relief for a minimum of three months or longer if needed.
- 3.4.6 As the grant application schemes are drawn to a close, further work is taking place to look at how remaining funding available through the government grant schemes can be used to improve the quality of the environment of affected areas to support ongoing business investment. One activity being taken forward is an organised clean-up of the affected sections of the River Aire, being organised and supported jointly with the Environment Agency and other public, private and third sector organisations.
- 3.4.7 **Business Support**
- 3.4.8 The Council continues to offer support to those businesses who are yet to return to full operating capacity as well as a small number who are still in the process of taking decision as to closure or relocation. A number of businesses are being assisted with property searches, both within the Leeds area and the wider city region.
- 3.4.9 This support will continue with those businesses that still require it, with continued input from the Local Enterprise Partnership and the Manufacturing Advisory Service.
- 3.4.10 **Regeneration**
- 3.4.11 The Council and partners have worked hard to provide initial support to affected businesses, but a long term view also needs to be taken to ensure that flood affected areas not only recover effectively but continue to develop and realise their full potential as resilient, sustainable and attractive places to live, work and invest in.
- 3.4.12 Interventions and support continue to be offered to areas where there were significant impact on businesses, including in Kirkstall, Wetherby, Linton, Hunslet and Stourton. As the recovery phase comes to an end, there is now the opportunity to utilise remaining funding in the Community and Business Support Scheme grant provided to the Council by government, to support the delivery of regeneration activities to ensure longer term resilience. There is also an opportunity to support outstanding clean-up priorities, such as debris on the riverbank and in overhanging vegetation.
- 3.4.13 There is now an opportunity and need to develop a regeneration strategy for the Kirkstall Road corridor, and the industrial areas in Hunslet.

- 3.4.14 In Kirkstall there is a need to support businesses, particular small firms, manufacturing businesses, and firms in the film and TV sector. There is scope to mobilise the strong commitment to the area amongst businesses, residents and social enterprises, evident in the initial community response and clean-up initiative.
- 3.4.15 In Hunslet there is a need to support businesses and increase the level of flood resilience in the industrial areas affected by the flooding. This is an important employment corridor with many manufacturing firms, and it will be important to ensure it remains a successful business location.
- 3.4.16 In Collingham and Linton there is a need to support businesses affected by the closure of Linton Bridge.
- 3.4.17 A proposal for how remaining funding in the Community and Business Support Scheme grant may be used to continue to support businesses and support wider regeneration work will be brought forward to a meeting of the Board later in the summer.

3.5 **Recovery Plan - Infrastructure**

3.5.1 **Infrastructure update**

- 3.5.2 Details of the infrastructure damage and repairs to Leeds City Council assets are included in the Linton Bridge Executive Board paper (found elsewhere on the agenda). As detailed in that report, the council has been awarded £4.5m by government towards the cost of local highway repairs, listing Linton Bridge as a priority.
- 3.5.3 In addition to this, the citywide strategic recovery infrastructure subgroup met in April to discuss the progress of recovery works as well as to raise the prospect of working together on mapping key infrastructure. The group acknowledged the lessons learned from Storm Eva and that it is important for there to be a better shared understanding of the key infrastructure assets in the city, their location and any flood plans in place for their protection. Work to map key infrastructure will be ongoing over the coming months.
- 3.5.4 The Environmental Audit Committee has also published a report entitled 'Flooding: Cooperation across Government', with a focus on Storm Eva impact, infrastructure and investment. The Committee visited Leeds to collect evidence for the report and Leeds City Council contributed to that session. The resulting report has assessed that the Government is reactive rather than proactive in managing flood risk and lacks effective long-term strategic planning, with funding fluctuating annually.
- 3.5.5 **Flood Alleviation Schemes**
- 3.5.6 Progress on Phase One of the River Aire Flood Alleviation Scheme and the feasibility study for further phases was reported to Executive Board in April.

3.5.7 In addition, as reported in the March Executive Board report on Storm Eva, the EA are undertaking modelling work on the lower River Aire catchment area, which will be used to identify the most appropriate scheme to deliver from the ring fenced S106 money for Flood Alleviation works at Mickletown/Methley when the development commences.

3.6 **Recovery Plan - Media and Communications**

3.6.1 The Council has continued to communicate on the recovery process and to monitor ongoing media activity. Available assistance and grant schemes have been promoted and signposted via the Council's website, social media and press. Updates have been sent to key partners in the city and press releases issued. Further communications activity on the Flood Alleviation Scheme and regeneration work will be considered on an ongoing basis.

3.6.2 Work has also taken place to refresh the lists of those with access to the alerts systems operated by the resilience and emergencies service, with promotion of self-help access also being encouraged. More work will take place on this going forward to ensure wider access and awareness of the alerts available, as well as encouraging self-help.

3.7 **Recovery Plan - Prepare**

3.7.1 **Section 19 report**

3.7.2 Leeds as a Lead Local Flood Authority is preparing under Section 19 of the Flood and Water Management Act 2010 a report on the Storm Eva flooding event. The work carried out to date has been focused on data gathering from meetings with the public, businesses and others that were affected or witnessed the flooding. The Environment Agency is also gathering detailed information which will be used to formulate the report.

3.7.3 A detailed Section 19 Report will be published later this year but the high level findings appear to be:

- The flooding was primarily caused by high river flows causing the River Aire and the River Wharfe to come out of its channel.
- As local becks were not badly affected the source of the high river flows primarily came from across the catchment areas.
- The high river flows appear to have come about from Storm Eva falling onto very saturated upper and middle catchment areas from the extreme rainfalls during November and December.

3.7.4 **Leeds Institute for Data Analytics flooding event**

3.7.5 An event was held at Leeds Institute for Data Analytics (LIDA – part of the University of Leeds) on 17th May to bring together stakeholders from a variety of backgrounds on a city-wide response to issues of risk and vulnerability highlighted by the events of Storm Eva, with a particular emphasis on opportunities arising

from widespread availability of data and the capability to use this resource. The event, “Building a resilient Leeds: catalysing risk and vulnerability mitigation through a response to flooding” was well attended by colleagues from the council, Police, Environment Agency, Fire Service, NHS, third sector and academics.

3.7.6 The key themes emerging were:

- Data: Identify opportunities for further data sharing; evaluation of a mapping tool to visualise key data; opportunities to contribute to the next Flood Data Event at the Open Data Institute on 17th June.
- Research: Commit to a format for follow-up activity – look at establishing a group to meet and discuss how to influence investment in infrastructure in an innovative way.
- Communities: Introduce Voluntary Action Leeds to the West Yorkshire Resilience Forum. Discuss opportunity to bring together social media feeds to co-ordinate messages to the community.
- Modelling: Scenario testing first step; then quantify direct impacts and associated costs (e.g. using available Leeds City Council data).

3.7.7 Follow-up events around each of these themes are being planned.

3.7.8 **Lessons learned review**

3.7.9 In the Storm Eva recovery January Executive Board paper a commitment was given to undertake a lessons learned exercise. National guidance and experience suggests an important aspect of being prepared for future events is to take the opportunity to learn lessons about the effectiveness of the city’s resilience and emergency planning arrangements when they are tested by real events.

3.7.10 The report, included in full at annex 2, is the culmination of the lessons learned exercise that has taken place over the last few months. The report reflects upon the highly successful response and recovery work of Leeds City Council in the aftermath of Storm Eva, but also indicates some areas for improvement and more detailed work going forward. Consideration is also given to lessons shared from the West Yorkshire Resilience Forum debrief. There are 16 recommendations from the lessons learned report, under five theme headings, as detailed in the following table:

No.	Recommendation	Owner	Timescale
A. Flood prevention and preparation for emergencies			
1.	That work should be undertaken to map the key infrastructure in the city, utilising data from partner organisations where possible.	Director of City Development	Part of Strategic Recovery Plan – report by September 2016
2.	That consideration is given to how community resilience can be	Director of City Development /	To report back at 6months

	increased by building local flood groups, drawing best practice from existing groups such as Garforth.	Assistant Chief Executive (Citizens & Communities)	progress update
3.	That the emergency handbook be revised, including the production of a 'quick guide', and testing to take place working with key stakeholders.	Deputy Chief Executive	To be completed by September 2016
4.	That out of hours arrangements be reviewed, including those for the Christmas closedown, with consideration given to more flexible arrangements for out of hours resourcing such as voluntary call lists.	Director of City Development / Deputy Chief Executive	To report back at 6months progress update
B. Procedures for dealing with flooding incidents			
5.	That those teams with On Call arrangements reflect on their experience from Storm Eva and any improvements that can be made to existing procedures.	All Directors with on call services	To be completed by September 2016
6.	That the responsibilities between Flood Risk Management and Resilience and Emergencies Team in relation to flood incidents be agreed and clearly communicated.	Director of City Development / Deputy Chief Executive	To be completed by September 2016
7.	That lessons learned from Storm Eva regarding the single point of contact with the Council be taken into ongoing improvements to the Contact Centre and related services.	Assistant Chief Executive (Citizens & Communities)	To report back at 6months progress update
C. Key provisions and resources			
8.	That the sandbag policy be reviewed to provide greater clarity to all on when the council will provide sandbags.	Director of City Development	To be completed by September 2016
9.	That guidance be produced on the circumstance in which sandbags are effective and on other measures that can be taken to	Director of City Development	To be completed by September 2016

	protect properties safely.		
D. Public Awareness, engagement and communications			
10.	That the communications team consider how social media communication can be better coordinated during an emergency event.	Deputy Chief Executive	To be completed by September 2016
11.	That alternative communication channels arrangements for during an emergency incident be established, building on best practice examples.	Deputy Chief Executive	To report back at 6months progress update
12.	That work takes place to look into what a strategic coordination approach to volunteering during a flooding response would look like, involving partners from the third sector and community flood groups.	Assistant Chief Executive (Citizens & Communities)	Part of Strategic Recovery Plan – report by September 2016
13.	That a pro forma be developed to assist in the production of internal communication updates during an emergency response.	Deputy Chief Executive	To be completed by September 2016
E. Partnership working and cooperation			
14.	That further consideration be given to the collection, collation and use of data and intelligence from the council and partners to assist in flood response and recovery.	Director of City Development / Deputy Chief Executive	To report back at 6months progress update
15.	That lessons learned from the multiagency West Yorkshire Resilience Forum debrief be used to improve the cooperation between partners in future emergencies.	Deputy Chief Executive	Recommended to WYRF
16.	That feedback be provided to central government departments on the onerous nature of reporting required of local authorities during the response and recovery phases of Storm Eva, and the inadequacy of their guidelines in relation to a	Chief Executive	To be completed by September 2016

	major urban area such as Leeds.		
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4 Corporate Considerations

4.1 Consultation and Engagement

4.1.1 Community engagement events were reported as part of the January and March Executive Board paper and further engagement events have since taken place in a number of affected communities. Specific proposals to further mitigate the risk of flooding and its impacts upon residents, businesses and communities will continue to be subject to specific consultation and engagement arrangements. Future regeneration developments may also be subject to specific consultation and engagement going forward.

4.2 Equality and Diversity / Cohesion and Integration

4.2.1 Further initiatives to mitigate the risk and effects of flooding across the city will be subject to detailed Equality Impact Assessments to ensure that the most disadvantaged are not adversely impacted and that individual needs and the requirement to make reasonable adjustments where necessary are recognised. An equality screening document has been produced in relation to the Linton Bridge repairs (found elsewhere on the agenda).

4.2.2 Equality impact considerations are built into the council's own emergency and business continuity management arrangements.

4.3 Council policies and Best Council Plan

4.3.1 Under the council's renewed Best Council/Best City ambition agreed by the Executive Board in March 2016, Leeds aspires to be a compassionate city with a strong economy, supported by an efficient and enterprising local authority that works effectively with partners and communities. The response to December's flooding in Leeds was a testament to this compassion and joined-up working while the commercial effects highlight the importance of managing the risk of flooding for individual businesses affected (owners and employees) and the wider economy of Leeds.

4.3.2 The arrangements detailed in the report form part of the council's Emergency Planning Policy, Business Continuity Management Policy and Local Flood Risk Management Strategy. As part of the lessons learned recommendations it is suggested that a review of the Emergency Handbook take place as well as a number of other policies including in relation to out of hours and sandbags. These will need to be reviewed in line with Best Council/Best City ambitions.

4.4 Resources and value for money

4.4.3 In line with the council value of 'spending money wisely', the council is committed to using its resources in the best possible way in both the initial response and longer-term recovery stages from a flooding incident.

- 4.4.4 To date, we've received £3.435m of grant from central government to support the Communities and Business Recovery Scheme – which includes £500 community support payments, up to £2,500 business support grants and up to £5,000 property resilience grants.
- 4.4.5 We've also received £1.238m in separate government funding to support the Council Tax and Business Rate discount schemes – the discount schemes are separate and the funding will be reconciled to match the discounts actually given.
- 4.4.6 In regard to the Communities and Business Recovery Scheme, as was reported in the March Executive Board report, as expected there are a large number of those affected by flooding in Leeds not entitled to payments under the schemes, due to the nature of the impact particularly to flats and businesses in multiple occupancy buildings. Therefore the Council are supporting additional initiatives to utilise remaining funding from the individual property schemes, in line with the flexibilities permitted by central government. Funding for the clear up of the River Aire, in partnership with public sector, private sector and third sector partners is one such activity, as is the regeneration activity.
- 4.4.7 The recommendations of the lessons learned review have resource implications for the relevant council services and will need to be considered as part of ongoing resource planning, as will the regeneration activity.

4.5 Legal Implications, Access to Information and Call In

- 4.5.1 There are no specific legal implications or access to information issues with this report. The report is subject to call-in.

4.6 Risk Management

- 4.6.1 All corporate risks, and the action plans in place to mitigate them to an acceptable level, are reviewed on a regular basis and those related to flooding will be updated again in response to recent events. The lessons learned activity which is detailed in section 3.7 above and in annex 2 has been done within the framework of the council risks related to flooding and will be drawn upon in reviewing these risks and delivering actions to mitigate them.

5 Conclusions

- 5.1 Much of the Storm Eva Strategic Recovery Plan has now been completed or is in the process of being completed, indicating that the recovery phase is almost complete, with support set to continue for those who still require it. The response and recovery to Storm Eva and the work of the Council, partners and volunteers has been a credit to the City.
- 5.2 The lessons learned report highlights a number of these successes, as well as important areas where improvements can be made to existing policies and procedures to increase the city's resilience to future emergencies. These, together with the Section 19 report findings, should be used as the basis for a further report in the autumn on what changes and improvements have been made.

6 Recommendations

6.1 Members of Executive Board are recommended to:




- a) note the updates in the report, including on the progress of the Strategic Recovery Plan,
- b) endorse the implementation of the recommendations from the lessons learned review (as detailed at 3.7), and
- c) support the principle of the use of remaining government flood response funds to assist in supporting businesses in flood affected areas through further recovery and resilience measures, supporting any outstanding clean-up priorities, and the development of a wider regeneration strategy for the Kirkstall Road corridor and industrial areas in Hunslet, and request that the Director of City Development develops detailed proposals for this in consultation with the relevant Executive Member.

7 Background documents¹

7.1 None

¹ The background documents listed in this section are available to download from the Council's website, unless they contain confidential or exempt information. The list of background documents does not include published works.

Annex 1: Leeds Strategic Recovery Plan – Storm Eva 26 December 2015 **Updated progress 31 May 2016**

Key:	
	Complete/business as usual
	Ongoing/near completion
	Needing further work

No.	Relevant Executive Board Recommendation(s)	Action/Timeframe	Lead (named person)	Status/Commentary
1. Community				
1.1	EB4: Endorse the financial support and advice arrangements that have been put into place to support affected householders and businesses. EB5: Note the funding provided by Government to support the schemes at paragraph 3.1.2 and ask the Deputy Chief Executive to keep a record of all relevant expenditure associated with responding to Storm Eva.	Ensure financial assistance through the following schemes from early January: <ul style="list-style-type: none"> - Community Recovery scheme - Property Level Resilience scheme - Council Tax Discount scheme 	LCC Steve Carey/John Statham	Schemes run and formalised closing arrangements in place. Spend records and reporting to Government updated. PLR – ongoing push
1.2		Ensure advice and support is available to communities and residents and maintain and monitor and respond to the “contact us” interface from early January.	Adam Quesne LCC / Environment Agency/ LCC FRM	Completed
1.3		Ensure the appropriate use of funds donated through the Leeds Community Foundation Leeds Flood Relief Appeal; closing date end of January.	LCF / LCC Sally-Anne Greenfield/Shaid Mahmood	Complete and update provided in June Exec Board report. Focus group established to direct allocation of remaining funding.
1.4	EB8: Require the Director of City Development to work with the Environment Agency to identify measures that could be undertaken to increase flood resilience for all communities affected Storm	Look to assess, educate and build upon existing capacity within communities in relation to flood resistance and resilience starting with	LCC / Environment Agency	Ongoing commitment as part of business as usual to support Community Flood groups to be self-

	Eva.	community engagement events in affected wards and ongoing including other risk areas in Leeds, timeframes to be developed.	Shaid Mahmood	sufficient.
1.5		Ensure appropriate advise and support is given to residents regarding insurance, coordinating with insurance companies where appropriate	LCC Steve Carey	Completed
2. Business				
2.1	EB4: Endorse the financial support and advice arrangements that have been put into place to support affected householders and businesses. EB5: Note the funding provided by Government to support the schemes at paragraph 3.1.2 and ask the Deputy Chief Executive to keep a record of all relevant expenditure associated with responding to Storm Eva.	Linked to 1.1. Ensure financial assistance through the following schemes from early January: <ul style="list-style-type: none"> - Business Support scheme - Property Level Resilience scheme - Business Rate Relief scheme 	LCC Tom Bridges/John Statham	Schemes run and formalised closing arrangements in place. Spend records and reporting to Government updated. PLR – ongoing push
2.2		Linked to 1.2. Ensure advice and support is available to businesses, and maintain and monitor and respond to the “contact us” interface from early January.	LCC Tom Bridges	Completed
2.3	EB10: Request that the Director of City Development consider the development of a regeneration based approach to help Kirkstall recover from Storm Eva.	Ensure business in affected areas is minimised by implementing regeneration plans where appropriate or specific business support and advice for large companies.	LCC (Tom Bridges) / LEP?	Complete and ongoing as business as usual. Regeneration proposal included in June Exec Board update report
2.4		Run business engagement events in affected wards	LCC / Environment Agency	Completed
2.5		Work with other WY councils and the LEP to develop and implement a business support scheme on the right scale to respond to the incident.	LCC Tom Bridges / LEP	Completed LEP Business Flood Recovery Fund established - open until 30 th September 2016

2.6		Undertake a piece of work to understand the economic impact on the city, before the end of March 2016.	LCC/ Tom Bridges/Alan Gay	LCR work in hand to illustrate economic impact
2.7		Linked to 1.5 Ensure appropriate advise and support is given to businesses regarding insurance, coordinating with insurance companies where appropriate	LCC Tom Bridges	Completed with ongoing support to some businesses still not fully operational
3. Infrastructure				
3.1	EB9: Require the Director of City Development to complete a full assessment of all impacts of Storm Eva on city infrastructure and develop proposals for the necessary repair and rebuild work that maybe necessary, including work required on Linton Bridge.	Assess the impact on key physical infrastructure and assets and required action, in particular regarding: <ul style="list-style-type: none"> - Bridges - Roads - Council assets (including business continuity for services - Other assets 	LCC / Environment Agency / Utilities partners	Completed and updated included in Linton bridge June Exec Board report
3.2		Carry out repairs taking into consideration priority and urgency	LCC / Environment Agency	Completed and updated included in Linton bridge June Exec Board report
3.3	EB9: Require the Director of City Development to complete a full assessment of all impacts of Storm Eva on city infrastructure and develop proposals for the necessary repair and rebuild work that maybe necessary, including work required on Linton Bridge.	Prepare the case for schemes requiring Government funding – Linton Bridge	LCC / WY Resilience Forum	Update included in Linton bridge June Exec Board report. Further work still required on securing Government funding for some assets
3.4	EB6: Require the Director of City Development to work with the Environment Agency to bring a report to Executive Board as soon as possible on the city's flood alleviation developments including plans for seeking Government support to progressing phase 2 and 3 of the Leeds Flood Alleviation Scheme.	Progress to the next stage of the Leeds Flood Alleviation Scheme (River Aire) and a wider catchment approach to schemes across Leeds	LCC / Leeds MPs / Environment Agency	Completed and included in April Exec Board report

	EB7: Request that the Chief Executive write to the relevant Secretary of State requesting the urgent approval of £3m to allow for preparatory and design work to commence on Phase 2 of the Leeds (River Aire) Flood Alleviation Scheme with a firm commitment being provided by Government to support both phases 2 and 3.			
3.5		Ensure the resilience of key strategic infrastructure by identifying those key assets and evaluating the current resilience in place	LCC / Environment Agency / Utilities Partners	Ongoing following initial sub-group meeting, recommendation included as part of lessons learned
4. Media and Communications				
4.1		Monitor, respond and support traditional and social media on the flooding, communicating developments and maintaining profile whilst also highlighting Leeds as open for business	LCC Dee Reid/ Environment Agency	Completed
4.2		Develop a communications plan to support recovery response, and a communications strategy regarding Flood Alleviation Scheme(s)	LCC/Dee Reid	Completed, with business as usual decision to take place on further FAS communications
4.3		Capture the scale of enquiries, activity and impact e.g. properties affected, nature of effect, grants applied for and paid, case studies of impact etc. Using this also as an opportunity to explore data sharing with partners.	LCC/Partners	Completed and reported to Exec Board, DCLG and MRG on regular basis
4.4	EB1: Thank staff, partners, local ward members, community representatives, volunteers and all those affected by the floods for their efforts in supporting the recovery operation;	Ensure communications of thanks and appreciation to those working on the recovery operations	LCC/Partners	Completed
4.5		Update and manage the alerts system to ensure timely warning information is shared with the right	LCC Nigel Street	Ongoing. Self-help access to be considered as part of ongoing business as

		individuals/organisations. Also promote self-help access to information		usual for LCC.
5. Prepare				
5.1	EB11: Require the Director of City Development to make arrangements to undertake a statutory Section 19 investigation into the causes and impacts of the Storm Eva flooding event.	Complete the Section 19 assessment of the recent flooding events	LCC FRM/ Environment Agency	Interim update included in June Exec Board report, with full report due in 2016
5.2		Ensure immediate capacity for on call key services and consider undertaking a review of on call processes, increase in the short term.	LCC Neil Evans/Partners	Recommendation included as part of lessons learned
5.3	EB13: Require the Assistant Chief Executive (Citizens and Communities) to undertake a lessons learned exercise and provide a formal report on this to the Council's Corporate Governance and Audit Committee. EB14: Require the Assistant Chief Executive (Citizens and Communities) to ensure experiences and impacts in Leeds are fed into the national review of flooding.	Draw up lessons learned related to 2/3 key risks to feed future plans and to test the Severe Weather Plan: <ul style="list-style-type: none"> - City resilience - Council resilience 	LCC / Partners	Completed and findings and recommendations reported as part of June Exec Board report
5.4		Consider and evaluate future resilience needs (i.e. a cross-council Incident Management System that all responding council services can access/issue, receive and monitor progress with tasks)	LCC Nigel Street / Partners / WY Police	To be considered as part of ongoing preparedness and resilience work

Annex 2: Storm Eva Flooding - Lessons Learned Review Draft Report

Executive Summary

This review fulfils a commitment given in January's Executive Board paper to undertake a lessons learned exercise following the events of Storm Eva.

Whilst the response of Leeds City Council, working with partners and local community volunteers, should be seen as a credit to the city, and has received recognition nationally, however, it is recognised that it is still important to review and improve for the future. This review report outlines some lessons learned and recommendations to reinforce existing policies, improve procedures, strengthen partnerships around flooding, and ensure the progress of actions from the Storm Eva Strategic Recovery Plan.

The report focusses on five key elements of the response and recovery phase, outlining what went well and what could have been improved, based on qualitative evidence collected from interviews and written feedback from those staff across LCC and with external partners who play a role in our preparation and response to flooding, as well as with senior leadership officers, elected members and local members of parliament. The five key elements form the structure of the main section of the report:

- A. Partnership working and cooperation
- B. Public Awareness, engagement and communications
- C. Key provisions and resources
- D. Procedures for dealing with flooding incidents
- E. Flood prevention and preparation for emergencies

Based on the lessons in these five sections, the report outlines the following recommendations for relevant Directors to progress:

1. That work should be undertaken to map the key infrastructure in the city, utilising data from partner organisations where possible.
2. That consideration is given to how community resilience can be increased by building local flood groups, drawing best practice from existing groups such as Garforth.
3. That the emergency handbook be revised, including the production of a 'quick guide', and testing to take place working with key stakeholders.
4. That out of hours arrangements be reviewed, including those for the Christmas closedown, with consideration given to more flexible arrangements for out of hours resourcing such as voluntary call lists.

5. That those teams with On Call arrangements reflect on their experience from Storm Eva and any improvements that can be made to existing procedures.
6. That the responsibilities between Flood Risk Management and Resilience and Emergencies Team in relation to flood incidents be agreed and clearly communicated.
7. That lessons learned from Storm Eva regarding the single point of contact with the Council be taken into ongoing improvements to the Contact Centre and related services.
8. That the sandbag policy be reviewed to provide greater clarity to all on when the council will provide sandbags.
9. That guidance be produced on the circumstance in which sandbags are effective and on other measures that can be taken to protect properties safely.
10. That the communications team consider how social media communication can be better coordinated during an emergency event.
11. That alternative communication channels arrangements for during an emergency incident be established, building on best practice examples.
12. That work takes place to look into what a strategic coordination approach to volunteering during a flooding response would look like, involving partners from the third sector and community flood groups.
13. That a pro forma be developed to assist in the production of internal communication updates during an emergency response.
14. That further consideration be given to the collection, collation and use of data and intelligence from the council and partners to assist in flood response and recovery.
15. That lessons learned from the multiagency West Yorkshire Resilience Forum debrief be used to improve the cooperation between partners in future emergencies.
16. That feedback be provided to central government departments on the onerous nature of reporting required of local authorities during the response and recovery phases of Storm Eva, and the inadequacy of their guidelines in relation to a major urban area such as Leeds.

31 May 2016: Storm Eva Flooding - Lessons Learned Review

1. Introduction

- 1.1 In the Storm Eva recovery January Executive Board paper a commitment was given to undertake a lessons learned exercise. National guidance and experience suggests an important aspect of being prepared for future events is to take the opportunity to learn lessons about the effectiveness of a city's resilience and emergency planning arrangements when they are tested by real events.
- 1.2 This report is the culmination of the lessons learned exercise that has taken place over the last few months. Although it cannot possibly contain all of the detail of the evidence collected, it is meant as a true and honest reflection of what went well, what could have gone better and how we can improve, both in terms of response and in terms of recovery from a major flooding incident.
- 1.3 Whilst a strong focus has been on the events of Storm Eva, this report also includes lessons learned from previous flooding events over the past few years and will link to our preparedness for other incidents in the city.

Box 1: Framing around Council risks

Significant instances of flooding in recent times, culminating in the Storm Eva events of Boxing Day 2015, have reinforced the fact that this is a phenomenon that is likely to continue to threaten certain local communities in Leeds. Such a threat is already reflected in our Council risks:

- LCC1 (Corporate): City Resilience
- LCC2 (Corporate): Council Resilience
- LCC21 (City Development): Leeds fails to take effective measures to reduce the risk of flooding across the District that has a significant impact on homes, business, land and infrastructure.

It is important to ensure that there are appropriate measures in place to manage the three risks as they relate to flooding and the lessons learned in this report will be fed into the forward planning of measures. These are related to our statutory duties around Civil Contingencies and also our responsibility as the Flood Risk Management authority for Leeds

2. Methodology and evidence base

- 2.1 This lessons learned report is not intended to replace or supplant the technical Section 19 report that will be produced on the causes and impact of

Storm Eva. Instead, the methodology for this lessons learned review was planned deliberately to be a qualitative exercise, taking place through engagement with those staff across LCC and with external partners who play a role in our preparation and response to flooding, as well as with senior leadership officers, elected members and local members of parliament. Their expert insight and knowledge, as well as first-hand experience and reflection, is vital to the strength and utility of this report. Some information gathering also took place from email exchanges and initial feedback received during the response and recovery phase, as well as written evidence provided and relevant reflections from external partner exercises such as the West Yorkshire Resilience Forum Storm Eva debrief. Records from previous flooding incidents have also been drawn upon.

- 2.2 As the evidence has been collected key themes have been identified to help determine the structure of this report. In drawing out these key themes and building them into a coherent narrative for this report, we have on occasion paraphrased from the original evidence, but have tried to do so in a way that maintains the meaning intended from the source.

3. Main sections

3.1 A. Flood prevention and preparation for emergencies

3.1.1 The resilience of Leeds to flooding incidents relies significantly on the strength of its prevention measures and preparedness for an emergency incident. Infrastructure, and in particular flood alleviation schemes, play a significant role, but there is also a role for communities themselves to play also in resilience to flooding.

3.1.2 Leeds City Council must also have robust emergency plans in place, and be prepared to respond to an emergency at any time of the day, on any day of the year.

Box 2: Flood prevention and preparation for emergencies - what went well?

- The Emergency Handbook contact details were up to date and were utilised
- The ICT disaster recovery plan was invoked and supported the recovery of the internet systems.
- Feedback suggests the partly completed Flood Alleviation Scheme phase 1 defences helped to lessen the impact on Woodlesford
- Existing community flood groups mobilised and assisted some other affected areas.
- Community flood groups are being established in a number of new locations: Kirkstall, Methley and Otley.

What are the lessons learned?

3.1.3 *Infrastructure and Flood Alleviation Schemes*

3.1.4 With flooding from Storm Eva having been primarily river based, a lesson learned is the need for more adequate flood protection for the River Aire, beyond phase one of the Leeds River Aire Flood Alleviation Scheme, to take a whole catchment area approach. Other measures need also to be explored for the River Wharfe and the River Calder.

3.1.5 There is also a need to make sure that other critical infrastructure is identified and has procedures in place to secure it during a flooding incident. IT networks are now just as important an asset as electrical substations. One lesson learned from Storm Eva is that Leeds City Council and Emergency Partners need to be aware of where IT data centres are. Leeds City Council has since moved its internet POP's away from risk areas, although during Storm Eva it left staff without any services that require internet connections for a period of 24 hours, as well as other partners in the city.

3.1.6 *Community resilience*

- 3.1.7 Following previous flooding there has been a number of organised flood groups established in Garforth and Allerton Bywater. The Environment Agency has also done some work with local residents previously but this was not always completed, and it is often difficult to retain commitment in the period beyond the initial recovery from a flooding incident.
- 3.1.8 One of the main lessons from Storm Eva, and also flooding earlier in 2015, is the need for greater emphasis to be given to community resilience. Similar to in neighbouring areas such as Calderdale, although some flood groups already existed prior to Storm Eva, there were other communities impacted who had no such local arrangements. With a shortage of Council resources it is important to assess how local flood groups and other activities can be supported and facilitated to self-help and build local resilience to private properties and businesses. Communities are better placed than the council in many respects, being onsite, knowledgeable of their local area and able to apply for external funding. Positive developments in the recovery from Storm Eva have seen a number of additional flood groups established, building often on the volunteering effort or community meetings held. How the Council can support these groups going forward needs to be considered, including which service is responsible for this.
- 3.1.9 There is also a further potential lesson learned regarding the consideration of community flood resilience in new developments and regeneration areas. Although some buildings in the floodplain have been built with resilience in mind, there were some impacts that were outside of the building regulations e.g. to electrical supplies. How these could be made more resilient in existing and future buildings has potential benefits.

3.1.10 *Emergency Plans*

- 3.1.11 The evidence from Storm Eva suggests that there was a mixed picture in terms of both familiarity with the emergency plans and procedures and the use of them during the response phase (discussed further in section B).
- 3.1.12 In terms of preparation for emergencies a lesson learned is that there needs to be greater familiarity with the emergency plans and emergency handbook at senior officer level. There should also be a review of the emergency handbook to consider whether this can be made more accessible for strategic level reference during an emergency, in the form of an executive summary or quick guide.
- 3.1.13 The Storm Eva emergency was on a significant scale and the threat particularly to the city centre needs to be reflected in future emergency planning, particularly in the event of requiring an evacuation of the city centre. The fact that the Storm Eva flooding happened on non-working days should be remembered in this respect, as it would have required a much different approach during a working week; including to ensure safe routes out of the city.

3.1.14 Out of hours (including Christmas closedown)

3.1.15 Out of hours arrangements have been found in previous flooding incidents to have been a particular challenge, with the contact centre out of hours service reflecting that the experience during Wharfe flooding in October/November 2015 was more difficult than during Storm Eva. RET reflected in 2014 that unless we receive warnings well in advance with a high enough level of confidence the Council will always be stretched 'out of office hours' when staff numbers are reduced.

3.1.16

3.1.17 The fact that Storm Eva occurred during the Council's Christmas closedown period had a significant impact and particularly highlighted the need to have a robust approach to out of hours and for the Christmas closedown in particular.

3.1.18

3.1.19 One lesson learned in this regard could be for greater flexibility to staff out of hours. Suggestions have included extra financial incentives, or having a list of service staff happy to be contacted with an offer of additional work during out of hours, similar to an approach taken in Parks and Countryside.

3.2 B. Procedures for dealing with flooding incidents

3.2.1 As well as increasing preparedness for an emergency and understanding of emergency plans, it is also important that procedures and protocols during a response are effective to enable Council services and partners to minimise the impact of a flooding incident. This includes the warning systems in place, how emergency plans are enacted and then carried out, how responsibilities are managed and coordination takes place, whether that is during normal working hours or when services are on call.

Box 3: Procedures for dealing with flooding incidents - what went well?

- Community and business feedback praised the speed and visible/contactable presence of the LCC response to Storm Eva
- The reaction of staff to come into work was exemplary, with little resistance
- A high degree of goodwill from staff to work out of hours during the holidays
- Resilience and Emergencies Team officers organised quickly to provide and maintain response facilitation despite only a small resource
- High first time success rate when calling on call officers from other LCC departments – better than in previous years.
- On call officers worked very hard and did in many cases more than expected
- Council clean up response was praised by Members of Parliament, local residents and the business community at several events.
- Members and the Chief Executive and Senior Officers were present and visible.

What are the lessons learned?

3.2.2 *Warnings*

3.2.3 The Environment Agency and Met Office provide warnings on flooding incidents, and other warnings are then communicated by partners and organisations. As part of learning lessons from Storm Eva at a West Yorkshire level there has been acknowledgement from these two organisations that their warning systems could be better aligned to give local partners and citizens more clarity on the implications of their warnings. A number of community groups have fed back that they did not receive sufficient warning of the situation.

3.2.4 One lesson learned is the need to update and produce guidelines regarding when warnings will be notified to members and senior officers. It was also highlighted that there needs to be an update of the lists of stakeholders in the city who receive warning notifications via the council. Supporting self-help is also an important tool and learning about the right technology and information channels that individuals can use should be communicated appropriately.

3.2.5 *Enacting emergency plans*

3.2.6 As well as learning lessons regarding the content of the emergency plan and familiarity with it, a lesson learned from the Storm Eva should also be that there needs to be clearer understanding about the circumstances in which formal Gold and Silver level command structures need to be activated.

3.2.7 Previous flooding incidents since 2007 have not required the setting up of Emergency Management Gold and Silver command structures, and there has been a reflection from many that this should have been fully activated during Storm Eva but wasn't. Whilst there was a Gold command centre set up at the West Yorkshire level involving the multi-agency response, not having these structures in place for Leeds City Council, or a formal meeting of the emergency management team, meant that there was less of a strategic planning approach taken to the response and recovery. Senior officers instead became heavily involved in some instances in coordinating operational matters, which would normally sit within a silver command structure.

3.2.8 *On call arrangements*

3.2.9 In previous flooding incidents in communities in Outer East Leeds in August and September 2015, which both took place outside normal office hours, a number of the Council's on call services were put under significant pressure, and similar pressure on arrangements were felt during Storm Eva.

3.2.10 There are as a result a number of lessons learned that should be considered as part of a more comprehensive look at the existing on call arrangements.

- 3.2.11 Firstly there needs to be consideration given to what we expect from those on call. During Storm Eva this became a 24hr working role for many, which often was completed only thanks to the goodwill of the individuals involved. Going forward it would be worthwhile to consider if this is a sustainable or desirable approach.
- 3.2.12 Also where this is an individual covering on call duties as part of out of hour's arrangements, there needs to be clearer guidelines on what that individual will and won't be able to deliver. For example some on call officers are expected to answer telephone calls, periodically review emails, and in some incidences check social media. However this is not consistent across the organisation, with some on call officers expected to 'stand up' and perform full job roles. This variation is practical in many cases and reflects different work tasks; however the understanding of these responsibilities across services could be clearer and could perhaps lead to some simplification of approaches.
- 3.2.13 Some teams have reflected whether they need resources adding to the on call rotas, including the Voice (telecommunications) team within ICT, who were heavily involved in assisting in the transfer of Assisted Living Leeds from their flooded premises to Cross Green. Flood Risk Management also currently does not have on call arrangements, and relied on the goodwill of officers during the events of Storm Eva. This was reviewed five years ago, but was not changed due partly to financial pressures.
- 3.2.14 Given new ways of working and more people living and working outside of the city boundaries, it may be worth to consider how this will impact on the on call emergency response of the council. This is particularly the case regarding the Corporate Leadership Team who are mostly based outside of the Leeds area. Previously a CLT officer on call would receive periodically a test call from RET to see how long it would take them to get into the Town Hall if there was an emergency, however in many circumstances it would be difficult for a CLT officer to travel into the city quickly or practically in case of an emergency.

3.2.15 Responsibilities

- 3.2.16 Understanding and acting on the responsibilities of individuals and teams during a flooding incident can be difficult with an increase in demand and activity, and their sometimes is a necessary "get on and do" attitude which sees roles change and adapt to the circumstances. Lessons learned from Storm Eva suggest that staff showed a great deal of personal responsibility and flexibility to support communities and businesses, however there are some points upon which responsibilities might want to be clarified or refreshed.
- 3.2.17 There should also be consideration given going forward to the role of the Resilience and Emergency Team during flooding incidents and the type of requests that are handled by the team as opposed to elsewhere. This would prevent any unnecessary double-doing and would also allow the team to be

able to fulfil their role in ensuring the coordination with other emergency services.

3.2.18 The role of Flood Risk Management (FRM) in emergencies also should be considered and made clearer going forward. Whilst in the emergency plan the responsibilities of FRM only relate to grid blockages, in reality during Storm Eva the team were involved in site visits and also became the main providers of data on flooded properties; utilising the property gazetteer. Planning where the data collection responsibility will sit in the future should be agreed, and it has been suggested that wider use of the gazetteer would allow others to input intelligence, including potentially external partners.

3.2.19 Understanding who is the responsible owner of an issue when a customer contacts the organisation in an emergency is also something that should be reviewed, facilitating the role of the single point of contact by having the contact of those dealing with the requests from a service perspective.

3.2.20 Internal coordination

3.2.21 A fundamental lesson should be to reaffirm and improve how the single point of contact into the council is managed and optimised. During Storm Eva this was impacted by the out of hours timing and the strain on resources. One lesson from this is how messages are relayed to services, with the use of email not being appropriate in some circumstances where officers were not able to access email accounts. There also needs to be some reinforcement of the need for teams to supply the contact centre with information to relay to customers.

3.2.22 It is also important to coordinate who is taking on certain tasks when the remit for these falls between lines of responsibilities. One example of this was in the recovery phase of Storm Eva regarding attendance at public meetings, when there were occasions where multiple senior council representatives attended a small meeting, which may not have given the right impression. In the future it would be worth to coordinate this to avoid any reputational risk.

3.3 C. Key provisions and resources

3.3.1 In order to respond to a flooding incident well it is essential that teams have the right tools for the job. Key provisions such as equipment, vehicles and sandbags need to be in place if required, and staff, IT and other resources need to be mobilised and directed to the right places. Having clear and well-functioning policies for these key provisions during an emergency also helps to manage expectations from those internal to the council but also the general public.

**Box 4: Key provisions and resources -
what went well?**

- Sandbag distribution centres where in existence worked well
- Extra sandbag stock had been brought in during the November and December flooding meaning there was a strong starting point for distribution
- Extra staff were diverted from other parts of the Council to help with the response and were deployed effectively
- Work to restore the IT infrastructure was completed quickly, with many staff coming in on a goodwill basis to restore services.

What are the lessons learned?

3.3.2 Sandbags

3.3.3 During recent flooding events there have been a number of lessons learned regarding sandbags. Whilst it is important to recognise from a technical perspective the correct situations in which sandbags should be deployed, it is also important to recognise the reassurance that providing sandbags gives to the public.

3.3.4 In terms of the supply of sandbags during Storm Eva, the Council did well to secure extra sandbags from neighbouring areas and to deploy these to the affected areas. There were some issues with the closing out of requests for sandbags received through the contact centre, which could be improved to avoid duplication, but generally distribution was done well.

3.3.5 One lesson learned is around the guidelines provided in the sandbag policy and how decisions are made on enforcing or relaxing this guidance. As has also been remarked upon in flooding incidents in 2014 and 2015, it was not always clear to citizens, businesses and council elected members and staff as to whether sandbags were available on demand or whether the council would take a decision on where they were deployed, and many assumed that the Council would make sandbags available to whoever requested.

3.3.6 It will also be important going forward to increase understanding of the role of sandbags and the council's policy on providing them. Local established flood groups such as Garforth have shown how this can be effective and have built up their own resource for providing water bags locally, and Allerton Bywater have their own sandbag facility, which it would be worth to explore for other areas. As has been reflected on after previous floods, council officers, elected members and MPs could be provided with guidance on sandbag provision to help with consistent messaging, as on occasions during Storm Eva this caused additional public confusion.

3.3.7 *Staff resources*

- 3.3.8 As noted in section A the events of Storm Eva took place during the Christmas Closedown, which had a significant impact on staff resources. However there are still lessons that can be learned regarding the necessary staff resources needed during a flooding incident, particularly as an organisation that is reducing in size.
- 3.3.9 During Storm Eva there was an overwhelming response of officers who either came in on days off or extended their hours to ensure services continued to run. This was a real credit to the organisation, but should not be seen as a long term solution as goodwill may be tested if events become more frequent or happen in non-holiday periods.
- 3.3.10 Several teams have reflected that a lesson learned for them was around the availability of additional staffing resources and the need to have more robust plans for out of hours and be flexible about how staff might be incentivised for working outside of normal hours.
- 3.3.11 Teams involved in the recovery phase, around administering grant schemes for those affected and engaging with businesses and residents, have reflected that their ability to redirect staff to deal with these unexpected events has been very testing, particularly where specialist knowledge and expertise is needed. It might be worth to consider how with a reducing workforce there can continue to be flexibility to react to emergencies and provide expert skills.

3.3.12 *Equipment*

- 3.3.13 During Storm Eva the biggest challenge was the loss of internet and email services caused by flooding to the internet Point of Presence. The location of the supplying Data Centre was unknown which is something that should be learned from, not just in terms of the council's own services but also where other organisations in the city receive their data connection from. ICT staff worked quickly and effectively to rectify the situation and to transfer to another location to minimise the impact.
- 3.3.14 Other areas of equipment issues during Storm Eva were identified as vehicles and road signage shortages, and Assisted Living Leeds reflected on difficulties deploying their flood defences which could have lessened the impact on their operations. Individual services might wish to reflect any resource deficiencies as a lesson learned to take into their future resource planning.

3.4 D. Public Awareness, engagement and communications

- 3.4.1 Increasing public awareness in advance and during a flooding incident can have positive benefits, reducing the amount of contact calls and distress for residents and businesses, and helping people to be proactive to stay safe and

protect their properties. An effective communication response increasingly involves using social media, but also more traditional communications and face to face meetings. Volunteering can also be a major asset to assist stretched resources and engagement between Council officers and partners and the community can make the most of that additional support. Communication internally within the Council is also critical, to facilitate an effective response to flooding.

Box 5: Public Awareness, engagement and communications - what went well?

- Keeping Members up to date and well briefed was generally successful
- Flexible approach taken to using social media during IT failure to bring information together and share from key partners
- Grant schemes were set up quickly and advertised well via mailshots and face-to-face engagement, with follow up calls and visits taking place in many cases
- Public engagement events in affected areas were well attended and appreciated by the communities
- Face to face engagement with businesses helped improve the information picture and reassured most businesses of the help available.
- Positive feedback received about being able to access grants and them not being overly bureaucratic, in contrast to other affected authorities.
- The voluntary effort during the response to Storm Eva was a credit to the city and made national news.
- The response in Kirkstall, led by local councillors with support of local residents and businesses, meant there was a daily coordination of volunteering on the ground and key points of communications for resources and information.

What are the lessons learned?

3.4.2 Public information channels

3.4.3 During Storm Eva the loss of internet limited the amount of information that could be put up on the website and sent via email, and had a particular impact on public information. The on call capacity of communications and web team also impacted on this and it may be worth to consider extra resource for this given the increasing use of the internet and social media for information to make sure these channels are kept updated.

3.4.4 A number of community meetings suggested some difficulty was had in contacting the council in the hours of Boxing Day, and it has been acknowledged that there was a particular strain on resource at that time as

well as unclear information on what was developing. As well as the capacity of the contact centre being able to manage the volume of inquiries, a lesson learned needs also to be about how messages are then relayed back to customers, either via the contact centre or directly from services.

3.4.5 Social Media

3.4.6 Social Media during Storm Eva was a vital source of information and an invaluable tool for communicating messages to the public. Whilst many organisations and partners use social media, there are lessons learned as to how these can be most effectively harnessed to ensure the public are informed and reassured with factual information.

3.4.7 During Storm Eva the Council used social media well as a tool for informing and also for telling good news stories, particularly from environmental action. What has been reflected as a lesson learned is that in the future it would be worthwhile to have more of a managed approach to the use of social media, with greater coordination internally.

3.4.8 There is also a lesson to be learned about coordinating social media more with partners during an emergency. Retweeting and reposting has taken place during previous flooding incidents but there are potential advantages, in terms of public reassurance, to have public institutions in particular sharing the same messages.

3.4.9 Voluntary effort

3.4.10 The major lesson learned from Storm Eva on volunteering is the need to be able to coordinate volunteers in a way that uses the enthusiasm to help and channels it to where assistance is needed. With the large numbers of offers of volunteers and donations that were received unfortunately at times this had an adverse impact on the council's contact centre, with lots of offers of help being received and no recognised communication route to direct them. There were potentially additional opportunities to deploy volunteers to different parts of the city which were lost or not best utilised as a result.

3.4.11 To realise a genuine citywide effective volunteer response for future emergencies there could be benefit in establishing a strategic coordination position. During Storm Eva this was done more on an ad hoc and localised level, which meant it was difficult for some prospective volunteers to know where to go, and for council officers and volunteer coordinators to signpost to the right places. There were also some cases where volunteers were signposted to inappropriate work not suitable or a potential health and safety risk, which was difficult for services to manage. A more coordinated approach on volunteering in case of future emergencies could look to how these risks could be managed and processes in place to ensure that volunteers were doing appropriate tasks that did not put them at potential risk.

3.4.12 Internal communications

3.4.13 Where some lessons learned might be made on internal communications are in regard to the communication of updates and who should provide these. It has been suggested that a pro forma would have been helpful to allow either Resilience and Emergency Planning or Communications colleagues to issue general daily updates or as a template for requested updates from members..

3.4.14 The other main lesson learned for internal communication relates to the contingency methods in the event of an IT failure during an emergency, as took place in the first days of Storm Eva. Some innovation took place as officers utilised mobile apps such as WhatsApp, and it might be worth to consider how secure methods other than email or telephone can be utilised to ensure intelligence and actions are communicated, particularly with those on the front line.

3.5 E. Partnership working and cooperation

3.5.1 Responding to an emergency flooding situation will always be a task that needs to happen in partnership with other agencies, particularly blue light services. A West Yorkshire Resilience Forum (WYRF) exists to coordinate this multiagency approach, although other multiagency activity during a flooding incident takes place to support this, including engagement with the third sector and organisations like the Chamber of Commerce. Cooperation internally is sometimes thought of as automatic but in emergency response it is also essential that different parts of the organisation work together.

Box 4: Partnership working and cooperation - what went well?

- Internal cooperation worked well with liaison between street lighting and bridges
- Local multiagency working provided a strong decision making process through the West Yorkshire Resilience Forum
- Example of strong, flexible cooperation in providing on street parking permits to those whose parking was flooded in the city centre
- Good internal cooperation regarding the reporting of affected properties to help with sending out mailshots on the grant schemes available
- Internal recovery cooperation through the Council Recovery Group worked well together and kept a strategic overview of the recovery phase.
- Lines of communications with the Department for Communities and Local Government were open and allowed for good flows of information in both directions.
- Good joint working with other local authorities, including securing sandbags from Wakefield
- Volunteer response was overwhelming and highlighted the strong resilience and community spirit in many areas.

What are the lessons learned?

3.5.2 *Internal cooperation*

3.5.3 Feedback from previous flooding incidents has been that it has not been so straightforward to achieve an optimum level of internal support, particularly in out of hours circumstances, and lessons from Storm Eva suggest that there were still some issues regarding information gaps and reporting mechanisms.

3.5.4 Despite no formal Gold command structures to manage cooperation, there are numerous examples of how services acted flexibly and shared resources to support the response. One lesson learned was that some of this may have been assisted by more co-location or virtual co-location of those leading the response, with the Emergency Control Centre not utilised by services or senior officers.

3.5.5 Another lesson learned is around the collecting of data on affected properties. There were some positive examples of where this data was shared well but there is also a lesson about how technical desk based estimates can be supported by on the ground intelligence to create a more accurate picture sooner. Whilst there was a strong degree of confidence in the desk based data mapping, there was not a way to link this to information on the ground and the decision not to put greater resource into on the ground intelligence is something that has been reflected on as a missed opportunity.

3.5.6 A more robust approach to collecting and sharing data may also be relevant to other parts of the organisation and working with partners to understand how the data we have can be utilised during an emergency, for example how adult social care records of vulnerable people could be used to direct resources to assist these individuals in an emergency.

3.5.7 *Multiagency*

3.5.8 WYRF have done their own debrief and lessons learned on the multiagency response to Storm Eva, but there are lessons learned from a council perspective on how the multiagency response in Leeds performed.

3.5.9 Enacting the Gold command early at a West Yorkshire level was seen as the right decision and helped get agencies communicating from an early point. There has been some feedback that at times this felt like a police operation with other organisations supporting, something which the WYRF might want to reflect going forward. Generally information was shared well by the different partners but this could have been improved further, for example there is still some uncertainty around the source of an estimated figure of the properties affected early in the Storm Eva event which became the default figure for the media and other reporting. This later caused some issues for the Council in the reconciliation of these figures to central government.

3.5.10 One particular lesson learned from Storm Eva was regarding the deployment of army personnel, who were assigned to assist in Leeds in the immediate

response. In order to be more effective and to provide greater public confidence it would be worthwhile to brief those on the ground about the situation, as there were a number of issues with armed forces personnel giving misleading information to members of the public and businesses. The West Yorkshire Resilience Forum also reflected this lesson in its debrief, emphasising the fact that the presence of army personnel did not always reassure communities and there needs to be greater thought as to how they are deployed.

3.5.11 Another multiagency potential lesson learned is regarding the engagement with the Environment Agency (EA), in principle an emergency frontline service agency. In Leeds the EA has a separate presence for both the River Aire and the River Wharfe and during Storm Eva this made extra work for Council officers to communicate with the different contacts for the two rivers. A single Leeds point of contact might have been more efficient for both parties, and would have improved the sense of response leadership from the EA which on occasions seemed to be lacking.

3.5.12 Working with central government

3.5.13 Given the national impact of Storm Eva there was also an additional layer of multiagency work with central government, which continued into the recovery with the reporting and updating of affected properties, and the payment of grants. A lesson learned which we might wish to convey, with partners in the Department for Communities and Local Government in particular, would be around the onerous nature of reporting and the number of requests received from officials. Appreciating the need for due diligence, there was a sense to which the number and timing of requests put an unhelpful burden on the resources of the council that were trying both to continue to assist those who had been affected but likewise to re-establish quickly business as usual within a context of shrinking organisational size and budgets. There was also a frustration at the one size fits all approach taken, particularly on categorising of properties as flooded or affected by flooding, which didn't support the realities of a large urban area such as Leeds, and a lesson learned should be about how definitions and reporting can reflect these nuances.

3.5.14 Further to this, there are lessons that can be learned regarding the design and implementation of grant schemes for affected households and businesses. Whilst consistency nationally is helpful, local flexibility can help to create more appropriate support and allow for good practice to develop that can be applied elsewhere. For example on property level resilience grants initial guidance from Government prescribed for surveys on each property, which has restricted uptake and caused system bottlenecks in many authorities. In Leeds surveys have not been made mandatory and this has helped take schemes forward. Further flexibility would also allow for more imaginative resilience measures beyond financial support to individual properties, particularly where there is a clear shared community challenge.

4. Recommendations

- 4.1 The lessons learned of this report should be seen as an opportunity to improve on the strong approach already in place for managing flooding incidents in Leeds and the positive handling of the events of Storm Eva. Based on the evidence of this report, the following recommendations are suggested for consideration:

No.	Recommendation	Owner	Timescale
A. Flood prevention and preparation for emergencies			
1.	That work should be undertaken to map the key infrastructure in the city, utilising data from partner organisations where possible.	Director of City Development	Part of Strategic Recovery Plan – report by September 2016
2.	That consideration is given to how community resilience can be increased by building local flood groups, drawing best practice from existing groups such as Garforth.	Director of City Development / Assistant Chief Executive (Citizens & Communities)	To report back at 6months progress update
3.	That the emergency handbook be revised, including the production of a ‘quick guide’, and testing to take place working with key stakeholders.	Deputy Chief Executive	To be completed by September 2016
4.	That out of hours arrangements be reviewed, including those for the Christmas closedown, with consideration given to more flexible arrangements for out of hours resourcing such as voluntary call lists.	Director of City Development / Deputy Chief Executive	To report back at 6months progress update
B. Procedures for dealing with flooding incidents			
5.	That those teams with On Call arrangements reflect on their experience from Storm Eva and any improvements that can be made to existing procedures.	All Directors with on call services	To be completed by September 2016
6.	That the responsibilities between Flood Risk Management and Resilience and Emergencies Team in relation to flood incidents be agreed and clearly communicated.	Director of City Development / Deputy Chief Executive	To be completed by September 2016

7.	That lessons learned from Storm Eva regarding the single point of contact with the Council be taken into ongoing improvements to the Contact Centre and related services.	Assistant Chief Executive (Citizens & Communities)	To report back at 6months progress update
C. Key provisions and resources			
8.	That the sandbag policy be reviewed to provide greater clarity to all on when the council will provide sandbags.	Director of City Development	To be completed by September 2016
9.	That guidance be produced on the circumstance in which sandbags are effective and on other measures that can be taken to protect properties safely.	Director of City Development	To be completed by September 2016
D. Public Awareness, engagement and communications			
10.	That the communications team consider how social media communication can be better coordinated during an emergency event.	Deputy Chief Executive	To be completed by September 2016
11.	That alternative communication channels arrangements for during an emergency incident be established, building on best practice examples.	Deputy Chief Executive	To report back at 6months progress update
12.	That work takes place to look into what a strategic coordination approach to volunteering during a flooding response would look like, involving partners from the third sector and community flood groups.	Assistant Chief Executive (Citizens & Communities)	Part of Strategic Recovery Plan – report by September 2016
13.	That a pro forma be developed to assist in the production of internal communication updates during an emergency response.	Deputy Chief Executive	To be completed by September 2016
E. Partnership working and cooperation			
14.	That further consideration be given to the collection, collation and use of data and intelligence from the council and partners to assist in	Director of City Development / Deputy Chief Executive	To report back at 6months progress update

	flood response and recovery.		
15.	That lessons learned from the multiagency West Yorkshire Resilience Forum debrief be used to improve the cooperation between partners in future emergencies.	Deputy Chief Executive	Recommended to WYRF
16.	That feedback be provided to central government departments on the onerous nature of reporting required of local authorities during the response and recovery phases of Storm Eva, and the inadequacy of their guidelines in relation to a major urban area such as Leeds.	Chief Executive	To be completed by September 2016

5. Conclusions

- 5.1 The Storm Eva event was a significant challenge to the council, to the city and to a large part of the North of England. The response in Leeds from all those involved was a credit to the city and showed the resilience and community spirit that exists. Leeds City Council has been praised for its response locally and nationally and the recommendations of this report should be considered within this context.
- 5.2 The evidence in this lessons learned shows that there are still improvements that can be made to the policies, procedures and partnerships that are needed around flooding. It is important that these lessons are taken on board and appropriate alterations and amends are made as part of managing our council and city resilience corporate risks, as well as the specific City Development risk around flooding. This should be done in conjunction with learning from other partners in the city, city region and from approaches in other places.