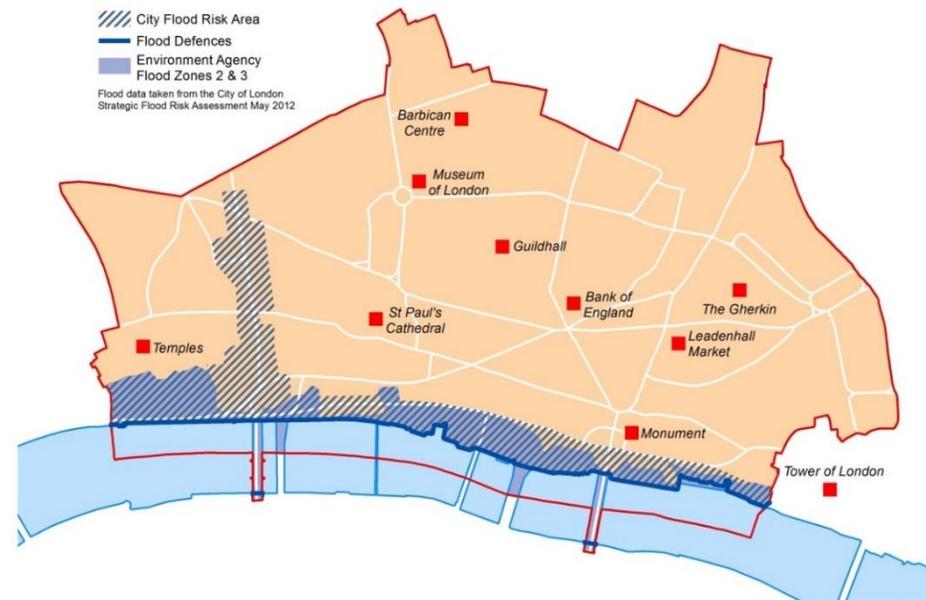


# Local Flood Risk Management Strategy 2014-2020 Final Review Dec 2020

**1 Introduction:** The City of London Local Flood Risk Management Strategy 2014-2020 was adopted in September 2014 and covers the period to 2020. This review highlights the progress that has been made against the objectives of this strategy.

**2 Flood Risk Management Strategy requirements:** The Flood and Water Management Act 2010 (section 9) requires that the City Corporation, as Lead local Flood Authority for the City, must develop, maintain, apply and monitor a strategy for local flood risk management in its area. This review forms the final monitoring of the Local Flood Risk Management Strategy 2014-2020 and will be reported to the Flood Risk Steering Group and the Planning & Transportation Committee.

**3 Assessment of local flood risks summary:** The City of London is at relatively low risk of flooding however there are specific areas that are at risk from river flooding, surface water/ sewer surcharge and ground water flooding.



## 4 Objectives for Managing Flood Risk in the City

The Local Flood Risk Management Strategy sets out a series of objectives for managing flood risk in the City and an action plan for achieving these objectives. Tables 1- 5 show progress against the action plan as green for actions that are complete or on- going

with procedures in place, orange where further work is needed to progress the actions or red where an action has been delayed beyond the intended completion date. Where actions are to be carried forward into the revised LFRMS 2020-27 this is indicated in the recommendations column.

Green	Actions that are complete or on- going with procedures in place
Yellow	Further work is needed to progress the actions
Red	Action has been delayed beyond the intended completion date.

#### 4.1 Table 1 Progress against Objective 1: Flood Risk Information

To provide up to date information regarding the level of flood risk within the City taking account of emerging climate change impacts

Action	Who	When	Final Review Dec 2020	Recommendation
We will review the City of London SFRA at least every 5 years or more frequently if evidence suggests that this is necessary. This frequency of review will enable the impacts of climate change to be taken into account as evidence emerges.	Built Environment-Planning  <u>Resilience Team</u>	2017	The City of London Strategic Flood Risk Assessment was revised in 2017  Work is progressing with Thames Water to review flood risk from burst watermains. This will be included in the next review of the SFRA in 2022	Further review of the SFRA is due in 2022.  <b>This action has been carried forward into the LFRMS 2021-27 as Measure 3</b>
We will keep under review the SFRAs and flood risk modelling that is carried out for neighbouring boroughs through the Central London North Flood Risk Partnership Group	Built Environment Planning  Drainage	Annually	Review of neighbouring SFRAs up to date	Continue to review and comment on SFRA's from our partner boroughs in the Central London North Partnership Group
We will provide the most up to date mapping and modelling to the EA for incorporation in future reviews of the FMfSW	Built Environment Planning	2013 to be reviewed by 2019	The most up to date modelling has been supplied to the EA and included in the 2017 SFRA	Provide updated modelling when SFRA is reviewed in 2022

<p>City Corporation as LLFA will continue to engage with other risk management authorities and other interested parties to improve data on flood risk for the City</p>	<p>Built Environment</p> <p>Other risk management authorities and interested parties</p>	<p>Ongoing</p>	<p>Engagement with other risk management authorities is progressing through partnership groups, GLA/LoDEG and through individual discussions</p>	<p>Continue engagement with other risk management authorities</p>
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#### 4.2 Table 2 Progress against Objective 2: Reduced vulnerability and cost of flooding

To reduce the vulnerability and cost to City businesses, residents and visitors of flood risk

Action	Who	When	Final Review Dec 2020	Recommendation
Apply the National Planning Policy Framework (NPPF) and National Planning Practice Guidance on flood risk, developing and implementing flood risk policy in the Local Plan which accords with the Sequential and Exceptions Tests.	Built Environment Planning	On-going	All planning applications for development within the City Flood Risk Area have been determined in line with NPPF and practice guidance. The draft City Plan 2036 provides up to date Local Plan policy which is due for adoption in 2022.	Continue to determine applications for development in the City Flood Risk Area in line with NPPF and practice guidance  <b>This action has been carried forward into the LFRMS 2021-27 as Measure 9</b>
Implement planning policy to avoid the development of vulnerable uses in the City Flood Risk Area as defined on the City of London Local Plan Policies Map	Built Environment Planning	On-going	All planning applications for development within the City Flood Risk Area have been determined in line with NPPF and practice guidance	Continue to determine applications for development in the City Flood Risk Area in line with NPPF and practice guidance  <b>This action has been carried forward into the LFRMS 2021-27 as Measure 9</b>
Require the use of green roofs and green walls and other urban drainage techniques in new development and encourage in existing buildings to improve flood	Built Environment Planning  District Surveyors	On-going	The Local Plan monitoring report on green roofs shows that there is now 42 600 m <sup>2</sup> of green roofs in the City. Other urban drainage techniques are encouraged through the SuDS approvals process. The draft City Plan 2036 includes an Urban Greening Factor policy which aims to	Stronger Urban Greening policies will improve flood resilience in the Square Mile  <b>This action has been carried forward into the LFRMS 2021-27 as Measure 9</b>

Action	Who	When	Final Review Dec 2020	Recommendation
resilience subject to impacts on heritage value	Town Clerks		maximise greening of new development	
Highlight the need for future raising of flood defences along the riverside to developers of property in this area encouraging a strategic approach to local flood defences.	Built Environment Planning	2013-2065	A Riverside Strategy is being developed with a main aim on implementing the aims of the TE2100.	Finalise the Riverside Strategy to provide a pilot for other riparian boroughs and a framework for flood protection in line with the TE12100 requirements  <b>This action has been carried forwards into the LFRMS 2021-27 as Measure 2</b>
Use pre-application meetings to promote flood resistance and resilience measures to property owners considering refurbishment or redevelopment in the City Flood Risk Area.	Built Environment Planning	On-going	Flood resistance and resilience is now routinely discussed at the relevant pre application meetings	Continue to promote climate resilience including flood resilience at pre application meetings.
Promote flood resistance and resilience measures to property owners in the City Flood Risk Area ensuring that the heritage implications of mitigation measures are taken into account.	Town Clerks <u>Resilience Team</u>	2013-14	Guidance notes and flood risk briefing notes have been prepared for riverside sites	Continue to develop guidance to assist property owners to mitigate against flood risk  <b>This action has been carried forward into the LFRMS 2021-27 as Measure 6 for historic assets and Measure 10 for commercial buildings</b>

Action	Who	When	Final Review Dec 2020	Recommendation
Work to ensure all City Corporation infrastructure is resistant and resilient to flood risk, such as the Waste Transfer Station at Walbrook Wharf	<p><del>Town Clerks</del></p> <p>Built Environment Highways &amp; Cleansing</p> <p>City Surveyors</p>	On-going	The electricity substation at Walbrook Wharf has been relocated and other measures have been taken to reduce flood risk at this site	Continue to review flood risk of City Corporation owned premises incorporating flood resilience measures in line with the City's Climate Action Strategy
Seek funding contributions from those who will benefit from any collective flood resistance and resilience measures	<p><del>Town Clerks</del></p> <p>City Surveyors</p> <p><u>Resilience Team</u></p>	On-going	<p>Funding of local flood defences has been included in riparian development sites.</p> <p>The riverside strategy is considering options for funding of flood defence raising to 2100</p>	Continue to address funding of flood resilience measures through planning and the Riverside Strategy
Continue to monitor the progress of the Flood RE proposals and assess their impact on the City	<p><del>Town Clerks</del></p> <p>Built Environment</p> <p><u>Resilience Team</u></p>	2013-2025	The Flood RE scheme runs until 2039 and applies to residential development therefore has limited applicability within the City	Evaluate any proposed insurance schemes to cover flood risk
Continue to assess flood risk for the City's risk register in the light of emerging information.	<p>Built Environment</p> <p><u>City Surveyors</u></p>	Annually		

Action	Who	When	Final Review Dec 2020	Recommendation
Continue to develop the necessary SAB processes within the City Corporation to fulfil this obligation within the timeframe laid down by Government	Built Environment	2014/15	The City Corporation has instigated an effective process for evaluation of Sustainable Drainage Measures in new development in line with government guidelines	Continue to evaluate SuDS and extend to cover public realm and minor development
The City Corporation has implemented a dynamic Highway Management System (HyMS). This will include information on assets which have an impact on flood risk. Public access to this register will be made available through the City of London web site	Built Environment Highways & Cleaving	On-going	Assets that have an impact on flood risk have been identified and mapped on the City Corporation's website	Continue to keep register of flood risks assets up to date
Update the condition and state of repair of the flood risk assets on HyMS incorporating Environment Agency data on river flood defence walls annually.	Built Environment Highways & Cleaving  <u>District Surveyor's Engineering Team</u>	On-going	Systems are now in place to record the state of repair of flood risk assets via the Environment Agency for Flood defence walls and Thames water, and highways and drainage contractors for other assets	Continue to keep state of repair data up to date on 6 monthly cycle

Action	Who	When	Final Review Dec 2020	Recommendation
Continue to maintain the register of flooding incidents	Built Environment Highways & Cleansing  <u>Resilience Team</u>	On-going	Procedure is in place to record and investigate flooding incidents affecting more than one property in the City	Continue to maintain a register of flooding incidents and investigations
Produce flood investigation reports for instances of multiple property flooding from a single source	Built Environment Highways & Cleansing	On-going	Procedure is in place to record and investigate flooding incidents affecting more than one property in the City	Continue to maintain a register of flooding incidents and investigations
Continue to support the City's businesses and residents by warning and informing them of flood risks and supporting business continuity and emergency plans	Town Clerks  Security and Contingency Planning  City Property Association  <u>Resilience Team</u>	On-going	The City's Multi Agency Flood Plan is under review in line with new government guidance which was issued in Sept 2020	Review MAFP in line with new guidance  <b>This action has been carried forward into the LFRMS 2021-27 as Measure 11</b>
Work with the City Property Association and other business and resident associations, as appropriate,	City Property Association	On-going	Guidance and riverside property briefing notes are available on the City Corporation's website	

Action	Who	When	Final Review Dec 2020	Recommendation
to raise awareness of flood risk amongst their members	City Businesses  City residents			
Encourage businesses and communities that are at risk of flooding to use the Environment Agency's flood warning service for river and groundwater flooding and any future flood warning system for surface water / sewer flooding.	Environment Agency  City Businesses  City residents	On-going	Guidance has been prepared to ensure that Flood Emergency Plans are in place for all new development	Continue to take all opportunities to promote flood resilience and warning measures
Prepare and implement site specific flood risk management plans for Farringdon Street, Paul's Walk and Victoria Embankment seeking contributions from beneficiaries of any area-wide flood alleviation measures	<del>Town Clerks</del>  Built Environment  Security & Contingency Planning	2014/15	A Riverside Strategy is being prepared. Flood risks elsewhere will be covered by guidance for different building types	Finalise the Riverside Strategy and flood resilience guidance for different premises types  <b>This action has been taken forward into the LFRMS 2021 -27 through Measures 2, 6 and 10</b>

#### 4.3 Table 3 Progress against Objective 3: Emergency response to flooding

To respond effectively in the event of flooding providing emergency assistance to those in need

Action	Who	When	Final Review Dec 2020	Recommendations
Ensure that emergency arrangements and plans are in place to respond to major incidents	Security and Contingency Planning	On-going	Security and Contingency Planning have comprehensive plans in place to respond to major incidents in the City including flooding.	Continue to review major incident plans in the light of climate projections
Embed the current MAFP by training and exercising it with appropriate partners.	Security and Contingency Planning	On-going	Training and exercising of major incident plans including the Multi Agency Flood Plan is ongoing	Continue to exercise major incident plans
Review and update the MAFP every five years or more frequently if circumstances require this.	Security and Contingency Planning  <u>Resilience Team</u>	2017	The City's Multi Agency Flood Plan is under review in line with new government guidance which was issued in Sept 2020	Review MAFP in line with new guidance  <b>This action has been carried forward into the LFRMS 2021-27 as Measure 11</b>

#### 4.4 Table 4 Progress against Objective 4: Recovery from flooding

To assist in recovery enabling the City residents and businesses to resume normal activities promptly

Action	Who	When	Final Review Dec 2020	Recommendations
Ensure that recovery arrangements and plans are in place to deal with flood recovery.	Security and Contingency Planning	On-going	Security and Contingency Planning have comprehensive plans in place to respond to major incidents.  Businesses should have their own recovery plans in place	Use revised Strategic Flood Risk Assessment (SFRA) to publicise flooding risk and promote contingency planning

#### 4.5 Table 5 Progress against Objective 5: Partnership working

To engage with other flood risk management authorities taking action to reduce flood risk through partnership working within and beyond the City's boundaries

Action	Who	When	Final Review Dec 2020	Recommendations
Work through Drain London to contribute to a coherent London wide approach to flood risk	Built Environment Planning & Drainage	On-going	City Corporation officers regularly contribute to the Drain London LoDEG meetings and share knowledge to promote a London wide approach to flood risk.	Continue to contribute to LoDEG
Work with the Central London North Flood Risk Partnership Group to ensure that appropriate policies are included in our partner's Flood Risk Strategies and Local Plans	Built Environment Planning & Drainage	On-going	City Corporation officers attend quarterly meetings and contribute to the Central London North Partnership Group.	Continue to contribute to the Central London North Partnership Group
Work with the Environment Agency to implement the City's actions from the TE 2100 Plan and the requirements of the Flood Risk Regulations	Town Clerks	Short term 2010 to 2035  Medium term 2035 to 2050  Long term 2050 to 2100	The City Corporation is working closely with the Environment Agency on implementation actions from the TE2100 plan including the development of a riverside strategy as a pilot for riparian authorities elsewhere	Finalise the Riverside Strategy and share learning

Action	Who	When	Final Review Dec 2020	Recommendations
Continue to discuss possible funding of local projects with the Environment Agency	Built Environment	Short term 2010 to 2015	The City Corporation secured TRFCC levy funding to progress the Riverside Strategy Approach	Seek future funding for local actions
Engage with Thames Water and OFWAT to progress widespread retrofitting of SuDS into existing properties through the Thames Water draft twenty five year plan consultation process	Built Environment	Consultation on plan for 2015 to 2040	Thames Water funding for SuDS is uncertain. Partnership working continues with Thames Water on the Drainage and Wastewater Management Plan	Continue engagement with Thames Water  <b>This action has been taken forward into the LFRMS 2021-27 as Measure 7</b>
Work with utility providers to build resistance and resilience to flood risk ensuring prompt recovery following a flood incident	Town Clerks Built Environment	On-going	Progress has been made on individual sites e.g. UK Power Networks at Walbrook Wharf. Wider engagement is needed with other infrastructure providers	Develop wider engagement with infrastructure providers  <b>This action has been carried forward into the LFRMS 2021-27 as Measure 8</b>
Work with transport providers to ensure implementation of flood resilience for transport networks	Town Clerks Built Environment Transport for London	On-going	London Underground has not included any City stations in its list of stations most at risk of flooding	Develop wider engagement with transport providers  <b>This action has been carried forward into the LFRMS 2021-27 as Measure 8</b>

Action	Who	When	Final Review Dec 2020	Recommendations
	<u>Network Rail</u>		Further engagement is needed with transport providers	
Work with technical bodies to provide technical guidance and training to increase awareness of flood risk and mitigation.	Town Clerks Built Environment	On-going	The Resilience Team actively feeds into consultations and guidance development on flood risk and resilience	Continue to engage with technical bodies
Work with emergency services to provide effective response to flooding incidents	Security and Contingency Planning	On-going	Security and Contingency Planning officers have regular liaison with emergency services	Continue to engage with emergency services

## 5 Conclusion

As the renewal of the Local Flood Risk Management Strategy approaches in January 2021 significant progress has been made in the fulfilment of the actions from the previous LFRMS 2014-20. Progress on this work has been accelerated through the City Corporation's decision to fund the Environmental Resilience Team in 2018. This work is essential for implementation of the resilience actions in the City's Climate Action Strategy.

Important steps have been taken in progressing a Riverside Strategy which is anticipated to be a major flooding priority for the City, this builds on the already available riverside site briefing notes. Measures to reduce surface water risk continue including expanding

SuD's to minor development and the public realm and introducing flooding resilience precautions in Corporately owned properties. However further progress is still be required in these areas.

Engagement continues with other Risk Management Authorities including with our neighbouring LLFAs (through the partnership meetings), London more widely (through LoDEG) and the EA as part of the Riverside Strategy Development. Discussions are also underway with Thames Water concerning watermain's burst and the drainage and wastewater management plan. Additional action will be required to engage and co-operate with other organisations such as utility and transport providers to properly understand their risks and potential implications of flooding to the Square Mile.

The Multi-Agency Flood Plan is a fundamental part of ensuring that the City is prepared for major flooding and this will be updated to reflect new governmental guidance. Guidance notes have all been prepared and are available on the website to educate occupiers and building owners on the possible impact of flooding to business and best practise preparations.