

Date: 1 March 2018

Mr. Sadiq Khan
Mayor of London
City Hall
The Queens Walk
London
SE1 2AA

Dear Mr. Khan

Thames Regional Flood and Coastal Committee's response to the Mayor's draft London Plan

The Thames Regional Flood and Coastal Committee welcomes the opportunity to respond to the public consultation on your draft London Plan. We are a committee established by the Environment Agency under the Flood and Water Management Act 2010. The Committee brings together members appointed by Lead Local Flood Authorities (LLFAs) and independent members, with a purpose that includes ensuring there are coherent plans for identifying, communicating and managing flood and coastal erosion risks across catchments and shorelines and providing a link between the Environment Agency, LLFAs, other risk management authorities, and other relevant bodies to build understanding of flood and coastal erosion risks.

We are pleased to see that many of the environmental policies of the current London Plan have been strengthened and we welcome your ambition in the draft Plan and your draft Environment Strategy. Your updated London Plan provides the opportunity to ensure new homes are resilient, and improve the environment for existing and future generations. Impacts of climate change are already being seen with the country experiencing more extreme weather patterns. It is vital that planning decisions are made in the context of these impacts, in addition to reduced natural resources and limited environmental capacity, and that decision makers look to the benefits of maintaining and improving a healthy environment and managing flood risk. We are pleased to see many of these key themes reflected in your draft London Plan.

Our main points in response to the draft London Plan are set out below. Our detailed comments on the Plan's policies and content are included in Appendix 1. Our response to the Regional Flood Risk Appraisal is included in Appendix 2.

Summary of our response

We particularly welcome your support for the Thames Estuary 2100 plan (TE2100), which sets out how tidal flood risk will be managed in the Thames Estuary to the end of the century. It is a leading example of embedding climate change adaptation into the heart of major projects and plans. We also welcome your recognition of the importance to London of co-operation on the issue of safeguarding sites for a potential new Thames Barrier.

The strengthening of the sustainable drainage policy is welcome. There are more properties and infrastructure at risk of surface water flooding in London than any other source and so it is imperative that new development is achieving greenfield run-off rates, in a sustainable manner. Although new development will play a large role in reducing surface water run-off in London, the plan should be strengthened to encourage retrofitting of sustainable drainage systems.

We also have concerns that the flood risk implications of the small sites policy have not been fully assessed. Sites of this size are not sequentially tested in terms of flood risk and would have to be dealt with as part of the windfall sites process, which does not allow the Local Planning Authority to plan for an appropriate level of mitigation. Proposals for sites which are not classed as major development are not required to provide sustainable drainage information as part of their applications. In addition, sites under 1 hectare do not require Flood Risk Assessments and proposals for the extension or conversion of existing properties have limited requirements. Given these limited requirements and the scale of development expected to come forward from small sites, the cumulative impact of the proposed approach has the potential to significantly increase flood risk. In addition, the policy does not comply with the requirements of policy SI12 to manage current and expected flood risk in cost effective way and well as supply appropriate infrastructure and mitigation.

Whilst we appreciate the focus of the Plan must be London, it is disappointing that there is no recognition that flooding issues in London are influenced by rain falling outside London. This rain drains into a network of local rivers, continues flowing through the Thames catchment towards London. There is a substantial risk of flooding as this water converges in London. We would like to see the Mayor supporting the London Boroughs, Environment Agency and infrastructure suppliers to adopt an integrated catchment approach to flood risk management. This involves working cooperatively with partners outside the London boundary to ensure a coordinated and mutually beneficial approach to future flood-related investment decisions. To help support this collaborative working we see the need to produce a Statement of Common Ground on agreed (and disputed) issues. This can further encourage uncooperative authorities to co-operate and promote collaboration and cross boundary working to fund key pieces of flood defence infrastructure.

We support your policy confirming Green Belt status should be protected. This is because we share your desire to maintain green infrastructure and improve quality of life, but also because the green belt can help make space for water and therefore reduce flood risk.

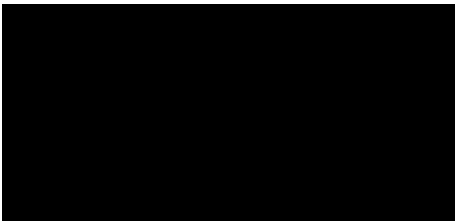
We consider there is a need to further develop the Regional Flood Risk Appraisal (RFRA) to evidence the Plan, and the Environment Agency should continue to support that with data and advice. Notably, there is a need to develop the application of the Sequential Test for the designated growth areas, given the Plan's reliance on delivering ambitious housing targets in these locations.

We would also like to see a more detailed assessment of the impacts of climate change in the RFRA. Please refer to our appended detailed comments on the RFRA.

This concludes the main points of our response, and I now invite you to review our detailed comments and recommendations in the appendices to this letter.

The Committee and I look forward to working together with you in the future, turning the ambitions within this Plan into a healthier, safer and more resilient future environment for communities and businesses in London and the wider catchment.

Yours sincerely



Professor Robert Van de Noort
Chair, Thames Regional Flood & Coastal Committee

<p>London Plan ref. Chapter/ Para. / Page</p>	<p>Thames Regional Flood and Coastal Committee (RFCC) response: Comments Our detailed comments on individual policies and text</p>	<p>Thames RFCC Response: Recommendations Our recommendations for changes to the Plan</p>
<p>SI12 Flood Risk Management Page 359</p>	<p>We strongly support the policy, subject to amendments. We welcome the explanatory text (page 360), at the following paragraphs:</p> <ul style="list-style-type: none"> • Para.9.12.1 – supporting cross-boundary co-operation between Lead Local Flood Authorities. • Para.9.12.2 –the Thames Estuary 2100 Plan which will help London adopt an ‘adaptive pathways’ approach to managing future tidal flood risk; • Para 9.12.3 - a new Thames Barrier; • Para 9.12.4 - ‘Riverside Strategies’ (para 9.12.3) to coordinate improvements to flood risk management in the vicinity of the river; • Para.9.12.5 - the Thames river basin district Flood Risk Management Plan, as part of a collaborative and integrated approach to catchment planning. • Para 9.12.6 – making buildings (and utilities) resilient to the consequences of flooding • Para.9.12.7 – support for setting buildings back from flood defences to ensure future management and upgrading is cost-effective and sustainable. <p>We have read the draft Regional Flood Risk Appraisal (RFRA 2017), and are largely supportive of this. However, we consider that the draft RFRA can be improved, and refer you to our appended key messages on the RFRA specifically. These comments notwithstanding, the draft RFRA needs to more clearly</p>	<p>SI12:</p> <ul style="list-style-type: none"> • Point A should include the Thames Regional Flood and Coastal Committee (RFCC) as well as the Environment Agency and Lead Local Flood Authorities. Thames RFCC has a key role in deciding on flood defence spending priorities, and there is a now a strong working relationship with London authorities which it is important to recognise and continue. • Point A should specifically refer to Thames Water or at least water and sewerage companies. • Strengthen policy Point F. The policy wording, ‘Where possible...’ places insufficient imperative for development proposals to be set back from flood defences. We recommend alternative wording to read, ‘Unless exceptional circumstances are demonstrated for not doing so, development proposals should be set back from flood defences to allow for foreseeable future maintenance and upgrades,

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<i>SI12 continued</i>	<p>set out the rationale used in the application of the Sequential Test to assessing flood risk (<i>National Planning Policy Framework, paragraphs 100-104</i>).</p> <p>Section 1.3 of the draft RFRA addresses the application of the Sequential Test. Paragraph 18 of that section highlights that the strategic approach followed was to reduce, by a varying percentage, via the Strategic Housing Land Availability Assessment (SHLAA) process, the potential housing capacity of sites dependent upon an evaluation of the level of flood risk. Paragraph 19 says that in major growth locations and town centres, the expectation is that boroughs will need to apply the Sequential Test in more detail when allocating uses.</p> <p>In our view, the rationale used in applying the Opportunity Area-specific % reductions used should be clearly set out. Further, we recommend adding text to the RFRA's subsequent text on the Opportunity Areas, to demonstrate how the Sequential Test has been applied within the growth areas, including any information provided by the Local Authorities following their consultation. Currently there is an element of uncertainty in the evidence on flood risk, particularly in the Opportunity Areas, where housing numbers are set by the Plan. If subsequent application of the Sequential Test by boroughs shows that the new homes targets in the Plan cannot be accommodated within areas at lowest flood risk, then consideration would need to be given to accommodating development in areas of higher flood risk. If assessment shows that the development cannot be safely</p>	<p><i>and employing natural flood management methods to increase flood storage, and to create recreational areas and habitat.'</i></p> <ul style="list-style-type: none"> • Add a new paragraph to explanatory text to read: <i>'Measures to address flood risk, should be integral to development proposals and considered early in the design process. This will ensure they provide adequate protection, do not compromise good design, do not shift vulnerabilities elsewhere, and are cost-effective.'</i> • Review the explanation of the application of the flood risk sequential approach, and consider our appended key messages on the RFRA. Work to develop the RFRA is recommended.

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<i>SI12 continued</i>	<p>accommodated, some boroughs may fail to accommodate their housing targets.</p> <p>Note that the Environment Agency would object to the approval of planning permission should proposed development restrict the future upgrading of flood defences.</p> <p>It is important to design out flood risk from the earliest stages of development design. Consequently we recommend that an additional point is added to explanatory text, which is similar to that included at paragraph 3.10.3 related to crime.</p> <p>Whilst we appreciate the focus of the Plan must be London, it is disappointing that there is no recognition that flooding issues in London are influenced by rain falling outside London. This rain drains into a network of local rivers, continues flowing through the Thames catchment towards London. There is a substantial risk of flooding as this water converges in London. We would like to see the Mayor supporting the London Boroughs, Environment Agency and infrastructure suppliers to adopt an integrated catchment approach to flood risk management. This involves working cooperatively with partners outside the London boundary to ensure a coordinated and mutually beneficial approach to future flood-related investment decisions. To help support this collaborative working we see the need to produce a Statement of Common Ground on agreed (and disputed) issues. This can further encourage uncooperative authorities to co-operate</p>	

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<p>Page, 360, Para.9.12.3</p> <p>Page, 360, Para.9.12.4</p> <p>Page 360, para 9.12.7</p> <p>Policy SI13 Sustainable drainage Page 361</p>	<p>and promote collaboration and cross boundary working to fund key pieces of flood defence infrastructure.</p> <p>Reference is made to the <i>'Environment Agency's'</i> Thames Estuary 2100 Plan, which we consider is inaccurate. The TE2100 Plan is not owned by the Environment Agency, but is a partnership plan.</p> <p>We recommend clarifying the policy expectations of 'Riverside Strategies' as distinct to the Joint Thames Strategies as required under policy SI14 B. There may be overlap.</p> <p>Amend, for consistency with our comment above on Policy SI12, point F.</p> <p>We also have concerns that the flood risk implications of the small sites policy have not been fully assessed. Sites of this size are not sequentially tested in terms of flood risk and would have to be dealt with as part of the windfall sites process, which does not allow the Local Planning Authority to plan for an appropriate level of</p>	<p>Suggested re-wording, to read <i>'The Thames Estuary 2100 Plan (TE2100), published by the Environment Agency, and endorsed by government, focuses on a partnership approach to tidal flood risk management.'</i></p> <p>We recommend that this be re-worded, removing <i>'Wherever possible'</i>, and adding. <i>'From the earliest stages in the design process, development should be set back...'</i></p> <p>The Plan should assess the flood risk implications of the small sites policy on other policies within the Plan.</p>

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	<p>mitigation. Proposals for sites which are not classed as major development are not required to provide sustainable drainage information as part of their applications. In addition, sites under 1 hectare do not require Flood Risk Assessments and proposals for the extension or conversion of existing properties have limited requirements. Given these limited requirements and the scale of development expected to come forward from small sites, the cumulative impact of the proposed approach has the potential to significantly increase flood risk. In addition, the policy does not comply with the requirements of policy SI12 to manage current and expected flood risk in cost effective way and well as supply appropriate infrastructure and mitigation.</p> <p>We support Policy SI13, subject to minor strengthening, and welcome the aim for development proposals to achieve Greenfield run-off rates. We welcome the drainage hierarchy within the policy which we consider makes the Plan's expectations clear.</p> <p>We further welcome the imperative for boroughs (Para.9.13.1) as Lead Local Flood Authorities, to prepare Local Flood Risk Management Strategies, and Surface Water Management Plans. We have actively encouraged the boroughs to develop their plans.</p> <p>We consider that it would support the London Sustainable Drainage Action Plan, and its emphasis on retrofitting, to have that directly supported within Policy SI12.</p>	<p>SI13:</p> <ul style="list-style-type: none"> • Strengthen policy Point D, such that '...address issues...' is substituted with, '...that promotes increased water use efficiency, improves river water quality, and enhances biodiversity, amenity and recreation.' • We suggest supporting retrofitting, by inserting an additional bullet point E to read, 'Development proposals should demonstrate that they have considered the potential of

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<p>Policy SI14</p>	<p>We recommend that the explanatory text references Chapter 3, 8 and 9's policies. Notably, the Plan's expectation that the consideration of good design, green infrastructure, and integrated water management solutions, will assist in identifying opportunities for development to move up the Plan's sustainable drainage hierarchy.</p> <p>We support this policy. Co-ordination and alignment between marine and terrestrial planning both inside and outside London will</p>	<p><i>retrofitting solutions to achieving greenfield run-off rates wherever practicable'</i></p> <ul style="list-style-type: none"> • We recommend reinforcing the sustainable drainage hierarchy by adding the text in italics below to the end of paragraph 9.13.3, 1st sentence on Page 363 which reads, 'This should include suitable pollution prevention measures, <i>ideally by using soft engineering and green infrastructure'</i>. • We suggest cross-referral to relevant policy objectives elsewhere in the Plan related to good design, public realm 'greening', and to the need for integrated solutions to water management. <p>SI14:</p> <ul style="list-style-type: none"> • Amend paragraph 9.14.2. The last sentence implies that Riverside

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<p>Waterways – strategic role Page 363 Page 365</p>	<p>contribute to delivery of our Thames Estuary 2100 Plan, and to the identification of options for a new Thames Barrier.</p> <p>We strongly support the following text which will encourage a more strategic and collaborative approach:</p> <ul style="list-style-type: none"> • Paragraph 9.14.2 - Recognition that London’s waterways are multi-functional assets • Paragraph 9.14.3 – The establishment of the Thames London Waterways Forum • Paragraph 9.14.4 – The renewed emphasis on establishing Thames Policy Areas • Paragraph 9.14.6 –We welcome reference to the preparation of Joint Thames Strategies, subject to the recommendation below. See also notes above under Policy SI12 on the need for clarity of function between Joint Thames Strategies and Riverside Strategies. 	<p>Strategies are widely available, but they are not yet. Change to ‘Many of these functions will also be supported by boroughs’ local Riverside strategies...’etc. Also reference the ‘greening’ policies of Chapter 8 as supporting Policy SI14.</p> <ul style="list-style-type: none"> • Amend para. 9.14.6. We recommend that a new point is added reading, <i>the cumulative impacts of river crossings and other structures at ‘catchment’ scale</i>’. • Amend para. 9.14.6. We also recommend amending points regarding environmental improvements and / or ecological importance to <i>include ‘ecological enhancement’</i>. These may for example cover, ease of fish and eel passage, and river restoration opportunities

Appendix 2: Regional Flood Risk Appraisal (RFRA) Key messages

Thames Regional Flood and Coastal Committee response: Key Messages from Regional Flood Risk Appraisal	Thames RFCC Response: Recommendations
<p>Flood risk informing housing targets</p> <p>Section 1.3 needs to more clearly set out the rationale used in the application of the Sequential Test to assessing flood risk (<i>National Planning Policy Framework, paragraphs 100-104</i>).</p> <p>Paragraph 18 of that section highlights that the strategic approach followed was to reduce, by a varying percentage, via the Strategic Housing Land Availability Assessment (SHLAA) process, the potential housing capacity of sites dependent upon an evaluation of the level of flood risk. Paragraph 19 says that in major growth locations and town centres, the expectation is that boroughs will need to apply the Sequential Test in more detail when allocating uses.</p> <p>In our view, the rationale used in applying the Opportunity Area-specific % reductions used should be clearly set out. Further, we recommend adding text to the RFRA's subsequent text on the Opportunity Areas, to demonstrate how the Sequential Test has been applied within the growth areas, including any information provided by the Local Authorities following their consultation. Currently there is an element of uncertainty in the evidence on flood risk, particularly in the Opportunity Areas, where housing numbers are set by the Plan. If subsequent application of</p>	

the Sequential Test by boroughs shows that the new homes targets in the Plan cannot be accommodated within areas at lowest flood risk, then consideration would need to be given to accommodating development in areas of higher flood risk. If assessment shows that the development cannot be safely accommodated, some boroughs may fail to accommodate their housing targets.

Climate Change

Although some work has been done to show potential impacts of climate change, this should be stronger throughout the whole document.

The high level assessment of climate change applies the 1 in 1000 year flood risk, as the 1 in 100 year + allowance for climate change equivalence but was only applied to Opportunities Areas. It is therefore not possible to determine the potential impact climate change may have on development of smaller sites. A large proportion of the housing targets in the London Plan are to be met by development on small sites. These targets may not be met if these areas are not safe from flood risk for the lifetime of the development and this has not been addressed within the RFRA. Also, although there has been an assessment of climate change increasing flood risk for the opportunity areas, there is no clear analysis of what the potential impacts this may have.

Clarity of mapping

It should be made very clear on the map of multiple sources (Map 1) that this takes into account flood defences.

Climate Change

Linked to paragraph 18 and Map 2.

Greater analysis is required on the impact of climate change assessment of Opportunity Areas. For example, are the opportunity areas with the highest percentage within the 1 in 1000 year outline, within the tidal flood extent and therefore currently at residual risk? Or are some of these areas currently unprotected and so require a large amount of planning for future flood risk is required in order to develop safely in these areas? Will any Opportunity Areas struggle to meet their housing targets due to flood risk?

Linked to paragraph 18

Greater analysis is required on the impact of climate change on other London sites. As there is a higher reliance on smaller sites to deliver housing numbers, there should be more work to determine the impact of climate change on these sites.

Recommendations link to London Plan

Recommendation 1 and 2 should be linked to the Flood Risk Policy in the London Plan SI12. This is consistent with Recommendation 3 which is linked to policy SI13.

Thames Flood Risk Management Plan

The Catchment Flood Management Plan (CFMP) is mentioned frequently within the document. It would be more appropriate to mention the Thames Flood Risk Management Plan rather than the CFMP at these places. The FRMP is a statutory document, and was published more recently than the CFMP, which is not statutory. Many of the measures for managing flood risk have been incorporated into the FRMP from the CFMP.

Natural Flood Management

More reference should be made to Natural Flood Management throughout the RFRA. Natural Flood Management is part of the Government's 25 year plan for the environment and so we would like a section within the RFRA which describes how Natural Flood Management can contribute to reducing flood risk and where Natural Flood Management is likely to be most effective, such as outer London Boroughs. It would also be beneficial to include details of current natural flood management schemes and any existing case studies.