

Local Plan Partial Review Issues and Options Consultation Summary



THE ROYAL BOROUGH OF
KENSINGTON
AND CHELSEA

Section 14: Flooding and drainage

Please note that the Issues and Options document was discussed at the Flooding Steering Group meeting (Wednesday 2 December 2015) and Discussion Group (Monday 1 February 2016, 10.00am-12.00pm). The comments given at the FSG meeting are included at the end of this document under 'other comments'.

Issue 1: Flood risk

Critical Drainage Areas (CDA)

Question 1

Should the Council use the vulnerability classification of the NPPF / Planning practice guidance to restrict highly vulnerable uses¹ (in terms of access and egress e.g. self-contained basements) in CDAs? Currently the Environment Agency restricts this type of land use in flood risk zone 3, inside the tidal breach.

16 + 4 Discussion Group responses. Key points:

- 14 answered 'yes' to the question, 2 answered 'no' and 4 'did not know'.
- The use of the existing vulnerability classification and existing guidance (planning practice guidance) was favoured by residents, the Environment Agency (EA) and the Mayor of London.

Question 2

Should the Council require specific measures to address flood risk in CDAs? What might those measures be?

17 + 4 Discussion Group responses. Key points:

- 14 answered 'yes' 2 answered 'no' and 5 'did not know' or left it blank.
- How to address the cumulative impact of all the developments (incremental effects)? The Strategic Environmental Assessment / Sustainability Appraisal assess the cumulative impact of the whole plan but it was considered that cumulative impacts for drainage should be considered too, akin to how Construction Traffic Management Plans consider cumulative traffic impacts.
- EA: importance of linking the Local Flood Risk Management Strategy action plan with

¹ <http://planningguidance.communities.gov.uk/blog/guidance/flood-risk-and-coastal-change/flood-zone-and-flood-risk-tables/table-3-flood-risk-vulnerability-and-flood-zone-compatibility/>

Critical Drainage Areas (CDAs) to get developers to deliver relevant projects.

- EA: importance of reducing surface water run-off of new sites to the Greenfield run-off rate.
- Mayor of London: measures are not likely to be the same for every site as they may suffer from or contribute to flood risk.
- Thames Water (TW): standard flood risk measures should be introduced and developers should provide maintenance information.

Flood risk protection and prevention measures

Question 1

Should the Council ask for standard flood risk measures in specific areas? Should the Council require flood risk mitigation and resilience measures (such as raising threshold/floor levels, protection of light wells and basement entrances, raising electrical sockets, etc) in areas identified in the Surface Water Management Plan at high risk of flooding?

15 + 4 Discussion Group responses. Key points:

- 14 answered 'yes' to the question, 4 answered 'no' and 1 'did not know'.
- Residents wanted reference to Thames Water's 'heat' map showing the lack of capacity in the sewers in London. This will show that the whole Borough could be considered as a CDA.
- The impact of development in CDA should not be weakened and should be prioritised.
- Will this be covered by Building Regulations?
- EA: measures could be requested depending on our confidence in the data and actions in the Local Flood Risk Management Strategy. Data should be readily available for developers.
- Mayor of London: considered that whereas standard measures will apply to some areas, the detail will be determined by the Flood Risk Assessment which will show the depth of flooding.

Question 2

Should the Council require information about how these measures will be maintained to ensure they will be operational during a flooding event?

14 + 4 Discussion Group responses. Key points:

- 10 answered 'yes' to the question, 7 answered 'no' and 1 'did not know'.
- Keep these options under review and only introduce them if further surface water flooding events occur.
- Will this be covered by Building Regulations?
- It was in the owners' interest to maintain them. There may be an issue with absentee owners.
- This may increase the Council's workload.
- EA: reasonable for the Council to require this as developers should demonstrate that the development is safe for its lifetime.
- Mayor of London: important for flood resilience measures to be operational.

Question 3

Should the Council include a policy about the protection and maintenance of flood defences and flood risk assets?

14 + 4 Discussion Group responses. Key points:

- 16 answered 'yes' to the question, 1 answered 'no' and 1 left it blank.
- Keep these options under review and only introduce them if further surface water flooding events occur.
- EA: recommended a policy for the protection and maintenance of flood risk assets. Thames Water agreed.
- Mayor of London: proper maintenance could be difficult due to frequent ownership or occupancy changes.
- Discussion Group: residents said that communal gardens could be designated as a flood risk management asset (under the Flood and Water Management Act 2010) and be included in the Lead Local Flood Authority register. However, they considered that the problem with this type of asset may not be building them, but managing them. The Local Plan should refer to the merits of trees as SuDS.

Question 4

Should the policy cover access and egress and emergency exit routes to ensure development in high risk areas is protected from flooding?

15 + 4 Discussion Group responses. Key points:

- 10 answered 'yes', 7 answered 'no' and 2 did not know or left it blank.
- Keep these options under review and only introduce them if further surface water flooding events occur.
- EA: recommended a policy for the protection and maintenance of flood risk assets and for access and egress. Thames Water agreed and considered that the policy should also include emergency exit routes.
- Mayor of London: asked for the policy to cover this at a general level and to explain that buildings should remain safe for occupants in case of flooding.
- Discussion Group: considered that there was no need for this as Flood Risk Assessment already cover access and egress.

Question 5

The maps in the Surface Water Management Plan show the possibility of surface water flood depth after a 1 in a 100 year storm event. Should the Council use a minimum depth threshold to require flood protection and resilience measures? Will a depth of 0.5m or deeper be an appropriate threshold?

14 + 4 Discussion Group responses. Key points:

- 6 answered 'yes', 4 answered 'no' and 8 did not know or left it blank.
- EA: suggested some wording to refer specifically to the 1 in 100 year storm event if the policy was to be included. They explained that flood resilience measures are less

effective as surface water flooding events are quick with no much warning.

- Mayor of London: warned about the buildings suffering from potential structural issues due to the pressure of water if they are designed to keep 0.5m of water outside the building. They considered that engineering advice should be sought.
- Thames Water: these measures should be required in flood risk areas and should not be linked to a minimum depth threshold.
- Earl's Court Partnership: flood protection and resilience should be specified and designed in accordance with British Standard BS 85500, based on the hazard rating of the flood, rather than a depth criterion. They were therefore against applying a blanket threshold across all developments.

Question 6

Should the Council refer to the importance of addressing flood risk and surface and foul water run-off from upstream development (White City, Old Oak Common and Park Royal, etc) which could have a potential effect in the capacity of the sewer system?

14 + 4 Discussion Group responses. Key points:

- 13 answered 'yes' to the question, 3 answered 'no' and 2 did not know or left it blank.
- Residents considered that the Council was already doing this.
- EA: this may not be too feasible for developers and may require agreement with other local authorities. It seems that there was a misunderstanding as the policy would not request developers to address flood risk downstream but to reduce surface water run-off as much as possible in their developments.
- Thames Water: should refer to the importance of addressing flood risk upstream and noted that the majority of Park Royal drains into the River Brent and does not drain into the Borough. They referred to their work with the Mayor of London and the Old Oak Common and Park Royal Integrated Water Management Strategy.
- Old Oak Common and Park Royal Development Corporation (OPDC): explained how it is addressing this through the Integrated Water Management Strategy and welcomed comments and partnership working.
- Mayor of London: is working with the OPDC on the Integrated Water Management Strategy.

Issue 2: Surface water run-off and SuDS

Question 1

Should the Council specify the percentage improvement required in relation to greenfield runoff rate and different storm events? Or should the Council address only impermeable surfaces (not just in front gardens but any new impermeable surfaces)? Should the Council put an emphasis on requiring the most sustainable SuDS, the need to maximise green infrastructure (links to biodiversity policy), maximise water quality and provide amenity value?

15 + 4 Discussion Group responses. Key points:

- 12 answered 'yes', 3 answered 'no', 4 did not know or left it blank.
- There were different responses and different percentages of surface water run-off

reduction suggested. A target of 25% reduction, in line with the Mayor of London's London Sustainable Drainage Action Plan was considered as good by the Discussion Group. Thames Water supported the reduction of surface water run-off to achieve greenfield run-off for major developments and some degree of attenuation in smaller developments. The Kensington Society requested to aim for no surface water run-off and to require SuDS (all below garden development should divert run-off to SuDS).

- Flexibility to account for site-specific conditions and to provide more sustainable SuDS even if this would achieve a lesser reduction of surface water and clarity on the requirements for greenfield run-off was requested by developers (Earl's Court Partnership).
- Residents asked if the Council could use an Article 4 direction to prevent non-permeable surfaces in back gardens. All new surfaces should be addressed. The maintenance of existing green infrastructure was considered important.
- Natural England: supported the requirement of the most sustainable SuDS. The EA also supported this and recommended to follow the London Plan policies for surface water run-off rates and to consider more restricted rates in Critical Drainage Areas if supported by an evidence base.
- An awareness campaign to the existing policy of resisting impermeable surfaces in front gardens was considered beneficial.
- Mayor of London: considered London Plan policy which aims for greenfield run-off but with a minimum threshold of 50% reduction over the existing situation was working.

Question 2

Should the Council require extra SuDS when swimming pools are proposed and/or whenever there is groundwater discharged into the sewer system?

14 + 4 Discussion Group responses. Key points:

- 14 answered 'yes', 1 answered 'no' and 3 did not know or left it blank.
- Respondents considered that there should be a flow control system to store and slow the flow and reduce the peak. Thames Water explained that there should be a management protocol in place to ensure pools are emptied at off-peak periods.
- Thames Water: it does not have to accept groundwater discharges and if groundwater needs to be discharged it should be included in the drainage strategy for the site.
- Mayor of London: supported factoring in groundwater discharge into the rainwater calculations.
- Councillor: SuDS and surface water run-off reduction measures should be monitored to reduce flooding.

Question 3

To ensure SuDS are maintained, should the Council include a policy to require maintenance schedules?

14 + 4 Discussion Group responses. Key points:

- 10 answered 'yes', 6 answered 'no' and 2 did not know or left it blank.
- Residents asked at the Discussion Group if the maintenance of SuDS is mentioned in Land Charges. If conditions for maintenance are breached then enforcement action should be taken.

- EA: either a separate maintenance policy or including reference to maintenance in the SuDS policy to make clear it is the owner's/developer's responsibility.
- Thames Water and the Mayor of London: supported the inclusion of a maintenance policy. The Mayor of London said that some councils have included maintenance in conditions (which is our current position).

Question 4

Should the Council use DEFRA SuDS non-statutory standards² or adopt its own standards?

11 + 4 Discussion Group responses. Key points:

- 4 supported option 1 (adopt DEFRA standards), 3 supported option 2 (adopt our own standards), 8 did not know or left it blank.
- EA: a deviation from DEFRA standards should be supported by a robust evidence base.
- Thames Water: due to the critical flooding issues the Council should adopt its own standards.
- Mayor of London: it was a matter for the Council but it is important that there was consistency with other London boroughs. Developers also asked for consistency.

Question 5

Should the Council specify what information regarding the SuDS should be provided (i.e., construction, maintenance, ownership, etc)?

11 + 4 Discussion Group responses. Key points:

- 8 answered 'yes', 5 answered 'no' and 2 did not know or left it blank.
- Discussion Group: Could Council do spot checks if there is not enough resource to check upon completion of every development.
- EA: providing this information will make it easier and quicker for developers to provide the right information. Thames Water agreed that the requirements should be specified upfront.

Question 6

Should the Council include a policy to support retrofitting existing buildings with SuDS when an associated planning permission is required, even if the proposal will not have direct drainage implications?

15 + 4 Discussion Group responses. Key points:

- 8 answered 'yes', 8 answered 'no' and 3 did not know or left it blank.
- This could be too onerous for the developer. Even the EA said that the policy may not always be feasible to implement.
- Thames Water: supported introducing the policy to maximise existing infrastructure. It considered this would assist in addressing the effects of climate change.

² www.gov.uk/government/uploads/system/uploads/attachment_data/file/415773/sustainable-drainage-technical-standards.pdf

- Mayor of London: this will be in line with the London Sustainable Drainage Action Plan but there could be limits to which it could be delivered in buildings which are not the subject of a planning application.

Question 7

Should the Council require permeable surfaces instead of impermeable surfaces when hard surfaces are proposed in any garden / landscaped areas?

14 + 4 Discussion Group responses. Key points:

- 15 answered 'yes', 2 answered 'no' and 1 did not know or left it blank.
- Overwhelming support. However, the EA raised feasibility issues for small developments.
- Mayor of London: explained that it will depend on the ground conditions and in some cases it will be preferable to direct run-off to SuDS.
- Thames Water: requested that if impermeable surfaces were proposed, peak flow attenuation should be provided or these surfaces should drain to permeable areas.
- Some residents considered that the Council should be more proactive regarding Article 4 directions, so it is no longer permitted development.
- Earl's Court Partnership: each site should be analysed individually to account for constraints.

Question 8

Should the Council include a separate policy for minor and for major applications in relation to the provision of SuDS? Should the Council require the use of the SuDS tool and if so review the tool to that effect?

13 + 4 Discussion Group responses. Key points:

- 7 answered 'yes' to the question, 6 answered 'no' and 4 did not know or left it blank.
- Discussion Group: asked to refer to the London Plan requirement for major applications.
- EA: separating requirements may be clearer but thought the use of the SuDS tool should not be mandatory and developers should only demonstrate the provision of SuDS. This view was supported by developers (Earl's Court Partnership).
- Thames Water: wanted major development to achieve greenfield run-off and minor development to demonstrate no net increase in combined flows into the sewer.
- Mayor of London: a policy will be supported in light of the NPPF and will be encouraged.
- Earl's Court Partnership: that small sites are often more constrained and as such, should be subject to an individual assessment early on in the design process. Therefore, supported separate policies recognising this.

Issue 3: Water infrastructure projects

Option 1

The Council should not introduce a general policy on flooding and drainage infrastructure provision or upgrade works and instead use its existing wider Local Plan policies to determine any such applications.

Option 2

The Council should introduce a general policy on flooding and drainage infrastructure provision or upgrade works, against which any future proposals could be determined.

9 + 4 Discussion Group responses. Key points:

- 8 supported option 1 (not to introduce an infrastructure policy) and 5 supported option 2 (introduce an infrastructure policy).
- Residents explained that infrastructure provision is ongoing but flood risk could come back, so there should be a mention of the impacts of developments within the Counters Creek catchment.
- This could be a statement rather than a policy. There is a need to work collaboratively with different stakeholders and neighbouring boroughs as the Council has done with the Thames Tideway Tunnel and the Counters Creek.
- The Council could simply refer to the policies which will be used to deal with this type of development.
- Thames Water: wanted the inclusion of a general policy which will normally support the provision of new infrastructure. They also supported the introduction of a policy to attenuate surface water from the public realm and highways.
- Tideway (the company building the Thames Tideway Tunnel): supported the introduction of a Thames Tideway Tunnel policy to reflect the Policy 5.14 (Water Quality and Wastewater Infrastructure parts D and E) added in the London Plan March 2015.

Do you have any other comments, issues or options (reasonable alternatives) you would like to raise regarding this section?

3 + 4 Discussion Group + 2 Flooding Steering Group responses. Key points:

- Residents requested that further information was added or issues included in future policies and Local Plan:
 - the relationship of surface water and groundwater should be included in the new flooding policy, along with incremental effect of development.
 - The policy should reflect the size chosen by the Environment Agency (in relation to flood risk assessments).
 - Explanation in the documents that a hectare (Ha) is 10,000m².
 - Clarify that non-return valves are not Sustainable Drainage Systems (SuDS).
 - Explain more about what a self-contained basement is (in terms of means of escape).
 - Explain what major and minor development means.
 - Include evidence base information regarding: how tree root systems can soak water; the report from the Independent Advisory Group (Thames Water).

- Add after figure 14.2 in the Issues and Options document, another map with surface water information and the Thames Water map showing the sewerage capacity.
- EA: no need to update the Strategic Flood Risk Assessment (SFRA) but that breach modelling was being undertaken and climate change allowances for peak river flow have been changed. Policies should include greater emphasis on the Thames Estuary 2100 Plan.
- Earl's Court Partnership: the main tidal flood risk to the site is from a breach of the defences, not a complete failure of the defences. They referred to the EA updated breach modelling which is not included in the current SFRA. They requested a clarification from the Council and the EA so as not to constrain development.
- Thames Water: supports the inclusion of a specific policy on water consumption.