# 1. Introduction

As Lead local Flood Authority (LLFA) the London Borough of Croydon (LBC) have a duty to prepare a Local Flood Risk Management Strategy (LFRMS) under the Flood and Water Management Act 2010 (FWMA). A LFRMS for the period 2023-2028 has been prepared. The LFRMS includes the following:

- flood risk management requirements
- relevant risk management authorities and roles and responsibilities
- an assessment of flood risk from multiple sources
- objectives for managing flood risk
- measures to achieve those objectives
- an action plan Summary of responses to consultation and proposed actions as a result

Another duty under the FWMA is that LBC must consult the public and other risk management authorities on the LFRMS. As such, LBC sought the views of its residents and business owners, and relevant risk management authorities, on the draft LFRMS. This consultation helped LBC improve its understanding of flood risk within the borough. The feedback received has been analysed and the draft LFRMS updated as a result. The results, analysis and actions as a result of the consultation are detailed in this document.

# 2. Methodology

Risk management authorities that may be affected by the strategy were consulted via email once the Strategy was drafted. This included neighbouring local authorities as LLFAs the London Boroughs of Merton, Sutton, Lambeth, Bromley and Surrey County Council. Transport for London, the Environment Agency and Thames Water were also consulted. To consult the public a survey was drafted on the GetInvolved platform. The survey went live on 22<sup>nd</sup> June and closed on 24<sup>th</sup> August. The survey was shared with Croydon residents and business owners via regular posts on Facebook, Twitter and Instagram. It was included in the weekly YourCroydon newsletter four times and a link to the survey was added to the Council website.

# 3. Findings

In total, 21 responses were received. Each response has been analysed including the comments received. Some have resulted in updates to the Strategy while others will be addressed through various actions. The results and analysis of the consultation, including actions identified, are detailed in this document. A summary of the questions and amendments to the LFRMS as a result of the responses received is included in Table 1. Section 4 includes more detail on the responses including comments received in the free text questions. Responses from the Council to each comment received are also included with actions identified to address each comment. To help with the analysis and determination of actions, the comments have been categorised into themes. The themes are as follows:

- cross team collaboration
- information sharing
- development
- third party
- localised flood risk
- educating
- resources

The next step for the LFRMS is that the consultation results will be presented to Cabinet. Once approved by Cabinet the LFRMS will be adopted and published on the Council website. Progress on the Strategy and action plan will be reported on at the quarterly LBC Flood Management Group meetings.

Ques	tion	Question type	Amendment to LFRMS
1	Are you completing this survey as a: (resident /	Checkbox	No change.
	business owner etc.)		
2	Please select the Croydon ward you live in	Dropdown	No change.
3	Which Croydon ward is your business based in?	Dropdown	No change.

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4	Which Croydon ward do you work in?	Dropdown	No change.
5	How concerned or not concerned are you about flooding in Croydon? (main rivers / groundwater etc.)	Multiple Choice	No change.
6	If you said you were concerned about flooding in Croydon, please explain why: (damage to private property / flooding of local facilities etc.)	Checkbox	No change.
7	Please say if there is anything else you want to comment on about flooding in Croydon:	Free text	No change.
8	How strongly do you agree or disagree that it is clear what Croydon Council's role is in flood risk management for the borough?	Single Choice	No change.
9	Please explain why you disagree	Free text	No change.
10	How strongly do you agree or disagree that it is clear which authority is responsible for certain types of flood risk?	Single Choice	No change.
11	Please explain why you disagree	Free text	Text added to stating that private land and asset owners are responsible for managing risk on their property. The text states that the Council works with such parties (e.g. Housing Associations and Network Rail) when required.  Hyperlink to Appendix B added to text in Section 1.3.
12	How strongly do you agree or disagree that the assessment of flood risk covers the main areas of risk in Croydon?	Single Choice	A hyperlink to the Environment Agency's long term flood risk mapping has been added to Section 1.4.
13	Please explain why you disagree	Free text	As per question 12 above.
14	Are there any other authorities, agencies, groups or people responsible for flooding in Croydon that you feel should be included in this section? If so, please tell us who and why?	Free text	Text added to Section 1.3 stating that the Council works with other authorities through forums such as the South West London Strategic Flood Group and Croydon Resilience Forum. A line has been added to state that the Council works with local flood groups and other organisations when required.  Some additions made to Appendix B to capture some of the suggestions.
15	How strongly do you agree or disagree with the proposed objectives for managing flood risk?	Single Choice	No change.
16	If you disagree with any of the proposed objectives, tell us which one(s) and why?	Free text	No change.
17	How strongly do you agree or disagree with the proposed measures to achieve the objectives?	Single Choice	No change.
18	If you disagree with any of the proposed measures, tell us which one(s) and why?	Free text	Line added under Objective 3 with link to where flood investigations, which meet the criteria, are published on the Council website.
19	How strongly do you agree or disagree with the action plan that details how we will monitor the progress of the objectives? appendix c	Single Choice	No change.
20	Please explain why you disagree and what you think we should do to improve it	Free text	No change.
21	Is there anything else you would like us to consider as part of this strategy review?	Free text	No change.

# 4. Survey Results and Analysis

# 4.1 Informative Questions

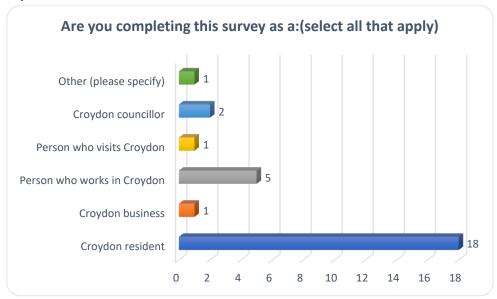


Figure 1: Question 1

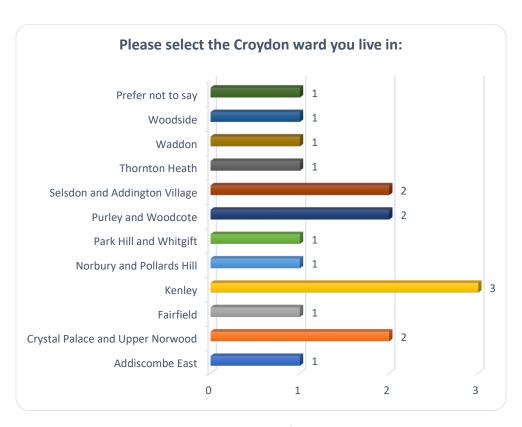


Figure 2: Question 2



Figure 3: Question 3



Figure 4: Question 4

The vast majority of respondents to the survey are residents of the borough with 18 responses. The next highest with five responses being those who work in the borough. The responded who selected 'other' was specified as a private road association. Respondents could choose multiple answers for question one, so it is likely there is some crossover in these results.

Of the respondents who live in the borough, 11 of the 28 wards are represented with one respondent who preferred not to say. The geographical spread covers the south west, west, central, south east, east and northern parts of the borough. One respondent did not wish to say in which ward their business is based in while three respondents work in Fairfield.

#### **Actions**

These questions are for information purposes only so no action is required.

# 4.2 LFRMS Section 1

Question 5 How concerned or not concerned are you about flooding in Croydon (select all that apply)?

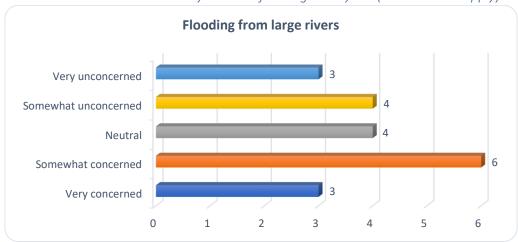


Figure 5: Question 5a

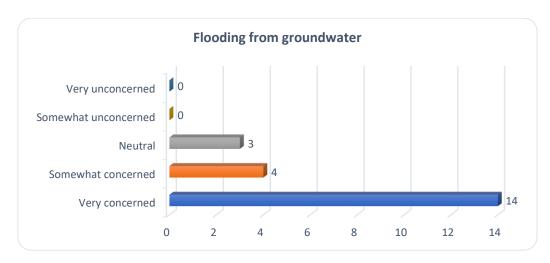


Figure 6: Question 5b

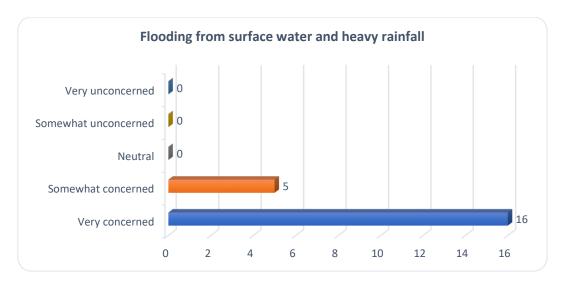


Figure 7: Question 5c

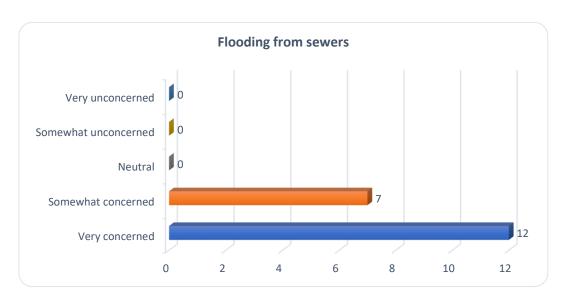


Figure 8: Question 5d

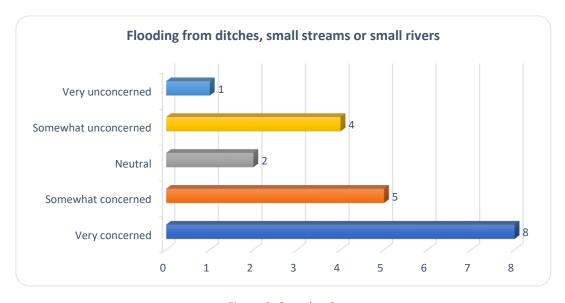


Figure 9: Question 5e

Respondents are mostly concerned about flooding from surface water, sewers and groundwater. There is less concern about flooding from large rivers and smaller watercourses. All those who responded are either somewhat or very concerned about flooding from sewers and surface water. Three respondents were neutral on groundwater flooding with the remaining either somewhat or very concerned. While responses on watercourses are more spread out, the majority are still concerned about flooding from smaller watercourses. The distribution on flooding from large rivers is more even with 11 respondents either unconcerned or neutral with six respondents somewhat or very concerned.

#### Action

This question helps the Council better understand the types of flood risk respondents are most concerned about.

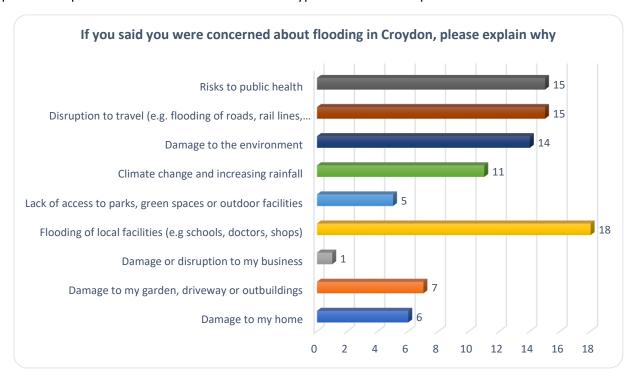


Figure 10: Question 6

#### **Results**

Almost all of those who submitted survey responses (18 out of 21) stated that flooding of local facilities was a reason for concern. This was followed by a large number of respondents concerned about risks to public health, disruption to travel and damage to the environment. More than half of respondents are concerned about climate change and increasing rainfall. A relatively low number of respondents are concerned about damage to private property and lack of access to green space and outdoor facilities. One person is concerned about damage to their business. In summary, the vast majority of respondents are concerned about the impact of flooding to public places, infrastructure and the environment than damage to private property. Understandably the one person who responded as a Croydon business is concerned about damage to that business.

#### Action

No actions proposed. This question helps the Council better understand what impacts of flooding respondents are most concerned about.

Question 7 Please say if there is anything else you want to comment on about flooding in Croydon:

, , ,	,	, ,
Comment	Theme	Action
If you swept the roads and cleared	Cross team	Comment to be shared internally with Street Cleansing
the drains ore frequently it would	collaboration	team.
help stop flooding		
Croydon no longer clean the leaves	Cross team	Council teams will work together to clean locations that are
and all rubbish from the drains on the	collaboration	more prone to flooding more frequently. Gullies can be
roads so when it rains heavily this		cleaned on a reactive basis following reports of blockages.
causes flooding as there is no where		Gully and drainage issues can be reported here - Love Clean

for the water to go. Residents properties are flooded		Streets app   Croydon Council. This will ensure the report reaches the correct team. For example, reports of debris blocking gully grates will go to Street Cleansing while reports of gullies not functioning will go to Highways.
Blocked gullies need to be addressed	Information sharing	Gullies are cleansed once per year as standard although some are cleaned quarterly. Parked cars can prevent gullies from being cleansed. The Council are looking at ways to improve this, for example by suspending parking in advance of the gullies being cleansed. By working with other Council teams this may improve efficiencies with planned works.  Blocked gullies can be cleansed on a reactive basis by reporting here - Love Clean Streets app   Croydon Council.  Council LLFA webpages to be updated to help inform residents on gully cleansing. This will include information on what areas are planned on being cleansed each month.
have soakaways in all future planning applications for roof / rainwater and	Development	Sustainable drainage systems (SuDS), including soakaways, are a requirement with all planning applications as per Local
driveways / roads made compulsory  Make sure all new building have soakaways to divert rainwater from roofs and gardens/drives /paved area instead of sewer	Development	Plan Policy DM25. Croydon Council, as the Lead Local Flood Authority, are a statutory consultee on all major development. With minor development, depending on the risk, Officers will seek conditions on approvals to provide water butts as a minimum to manage surface water on site.  Council LLFA webpages to be updated to include information on SuDS requirements with development.
Water leaks from burst water pipes could do with being more quickly.	Third party	Comment to be shared with Thames Water.  Thames Water provide clean water to the majority of the borough and wastewater services to the entire borough while SES Water provide clean water to the southern part of the borough.  Leaks can be reported to Thaes Water here - Thames Water - Report a problem - View and report problems and to SES Water here - Leaks   SES Water.
Flooding risk is increased because of blocked gullies on streets such as South Norwood Hill or Church Road which never seem to get cleared over the 26 years I've lived here despite numerous reporting of the issue.	Localised flood risk	Highways officer to look at this location to determine what action can be taken.
By the traffic Lights at the bottom of Denning Ave, Waddon when there is heavy rain it floods there, making it impossible to cross the road safely	Localised flood risk	Highways officer to look at this location to determine what action can be taken.
text alerts could be helpful	Cross team collaboration / Educating	Comment to be shared with Corporate Resilience to identify what alerts are currently sent.  The Council website includes information on how to sign up to flood warnings from the Environment Agency and severe weather alerts from the Met Office here - Households   Croydon Council. This will be communicated to residents.

Comments have been categorised into themes including cross team collaboration, information sharing, development, third party and localised flood risk. These reflect some common threads that have come through in the comments received with respondents feeling that current road sweeping and gully cleansing programmes are insufficient. Two comments have been made with regards to managing surface water through development, in particular this relates to infiltrating to the ground rather than connecting to sewers. A comment has been made referring to burst water pipes which will be passed on to the relevant authorities. Two specific locations have been highlighted as a concern by respondents. The final comment states that text alerts warning of flood risk could be helpful.

#### **Actions**

Cross team collaboration – these comments will be shared with the Street Cleansing team. Highways and Street Cleansing will work together to identify areas that need cleansing more frequently.

Information sharing – the Council are looking to improve the gully cleansing programme to overcome issues such as parked cars preventing gullies from being cleaned. This can be helped by sharing information with residents and business owners on which areas will be cleansed each month. This can be done at ward level. Residents can also report issues with gully and drainage issues through the link in the table above. This will ensure the report reaches the relevant team with appropriate action being taken to resolve the issue.

Development – SuDS, including soakaways, are a requirement with all planning applications as per Local Plan Policy DM25. The Council LLFA webpages will be updated to clarify the SuDS requirements with development.

Third party – burst water pipes are the responsibility of Thames Water and SES Water. The comment received will be shared with each organisation.

Localised flood risk – a Highways officer will investigate the two areas highlighted and determine what action can be taken.

Cross team collaboration / Educating – this comment will be shared with the Emergency Planning team to identify what alerts are currently sent. Information on how to sign up to EA and Met Office alerts is available on the Council website. This will be communicated to residents and business owners.

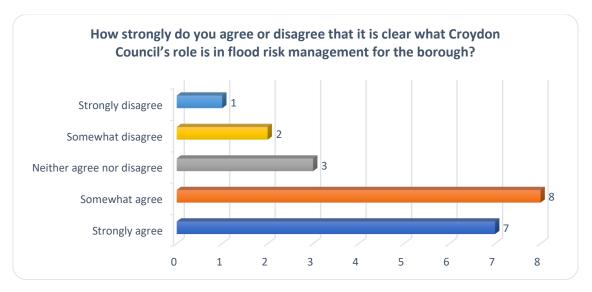


Figure 11: Question 8

# Question 9 Please explain why you disagree

Comment	Theme	Action
When the drains are not cleaned	Information	Gullies are cleansed once per year as standard although some
and we have heavy rains, the	sharing	are cleaned quarterly. Parked cars can prevent gullies from
council must realise the potential		being cleansed. The Council are looking at ways to improve
for the streets and residents		this, for example by suspending parking in advance of the
properties to be flooded. The drains		gullies being cleansed. By working with other Council teams
are now only cleaned when there is		this may improve efficiencies with planned works.

an incident of flooding. That's why I think Croydon does not know what it's role is or they are just not taking their responsibility seriously.  Because in more than 20 years, I have seen no evidence of Croydon Council acting to prevent flooding. The council, or its contractors, do not even clear debris from drain covers	Information sharing	Gully and drainage issues can be reported here - Love Clean Streets app   Croydon Council. This will ensure the report reaches the correct team. For example, reports of debris blocking gully grates will go to Street Cleansing while reports of gullies not functioning will go to Highways.  Council LLFA webpages to be updated to help inform residents on gully cleansing. This will include information on what areas are planned on being cleansed each month.
Flood risk management by the borough isn't communicated to the general population  Nothing has ever been done. The council makes excuses that they don't have the finances	Information sharing Information sharing	Council LLFA webpages to be updated to include detail of the flood risk management work completed and ongoing by the Council. These pages will be kept up to date as work progresses to keep residents and business owners informed.  The Council Highways team will work with the Communications team on how best to share information with residents.
It is not clear what Croydon Councils role is	Educating	Council LLFA webpages to be updated to clarify the flood risk management roles and responsibilities of Croydon Council and other risk management authorities.  This will include information on the responsibilities of each Council team (e.g. Street Cleansing for clearing leaves and debris from gully grates and Highways for water not draining away through gullies).

Table 3: Question 9

#### Results

The majority of respondents agreed that it is clear what role the Council has in flood risk management. Despite this there were also three respondents who disagreed and another three who were neutral on the question. Information sharing and educating are the two themes that have come through in the comments relating to question 9 with some similarities coming through in the responses. Some of these comments are similar to those received with question 7 relating to concerns about street and gully cleansing. It is apparent from these comments that the respondents feel that the Council does not communicate the work that has and is being done around flood risk management by the Council nor is it entirely clear what role Croydon Council has in flood risk management.

# **Actions**

Information sharing – in addition to the actions stated in question 7 the Council LLFA will be updated to include information on the flood risk management work completed and ongoing. This information will be kept up to date with Highways team working with the Communications team to identify how to best share information with Croydon's residents and business owners.

Educating – the Council LLFA webpages will be updated to clarify what role Croydon Council has in flood risk management.

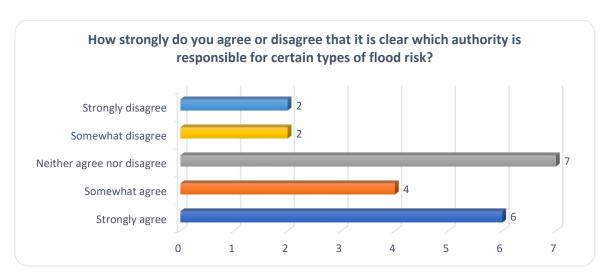


Figure 12: Question 10

# Question 11 Please explain why you disagree

Comment	Theme	Action
I do not know who is responsible. What I know is I pay my council tax to Croydon and if cleaning and maintenance of drains and whatever is subcontracted, at the end of the day it is Croydon's responsibility to ensure the roads and residents properties are not flooded due to lack of clean drains	Educating	Council LLFA webpages to be updated to clarify the flood risk management roles and responsibilities of Croydon Council and other risk management authorities.  This will include information on the responsibilities of each Council team (e.g. Street Cleansing for clearing leaves and debris from gully grates and Highways for water not draining away through gullies).
Flood risk management by the borough isn't communicated to the general population	Information sharing	Council LLFA webpages to be updated to include detail of the flood risk management work completed and ongoing by the Council. These pages will be kept up to date as work progresses to keep residents and business owners informed.  The Council Highways team will work with the Communications team on how best to share information with residents.
It is not clear whose responsibility it is to deal with floods on non-council land, or how the council can and will work with owners/managers of such properties	Educating	Council LLFA webpages to be updated clarifying that private land and property owners are responsible for flood risk management on their property. Croydon Council does work with private land and asset owners when required.  The Council is limited in terms of powers of enforcement while resourcing issues also restrict the actions the Council can take.
It is difficult to know who is responsible to deal with a flood, Croydon Council or Thames Water	Educating	Council LLFA webpages to be updated to clarify the flood risk management roles and responsibilities of Croydon Council and other risk management authorities.
Much clearer from the appendix - include in body of text rather than as an appendix?	Educating	A hyperlink to Appendix B (responsibilities of risk management authorities and other organisations) has been added to Section 1.3.

Table 4: Question 11

# **Results**

While the majority of respondents either strongly or somewhat agree there were seven who neither agreed nor disagreed. Four respondents either somewhat or strongly disagreed. The comments received with question 11 suggest that some residents feel it is unclear which authority is responsible for certain types of flood risk. One comment stated

it is unclear who is responsible for managing flood risk on private property or how the Council works with such private property owners. These comments have been categorised into the themes on educating and information sharing.

# **Actions**

Educating — as well as updating the LLFA webpages on Croydon Council's role and responsibilities, the webpages will also be updated to clarify the roles and responsibilities of other risk management authorities. This will include signposting to where useful and relevant flood risk management information can be found. With regards to private property owners, while Croydon Council does work with private land and asset owners when required, responsibility for managing risk lies with the owner of the property or asset. A line has been added to the Strategy to reflect this. The webpages will be updated to clarify this. One amendment to the document following the comments received is that a hyperlink has been included in Section 1.3 to allow for the reader to quickly navigate to Appendix B where there is more information on flood risk management roles and responsibilities.

Information sharing – as per the actions stated with question 9.

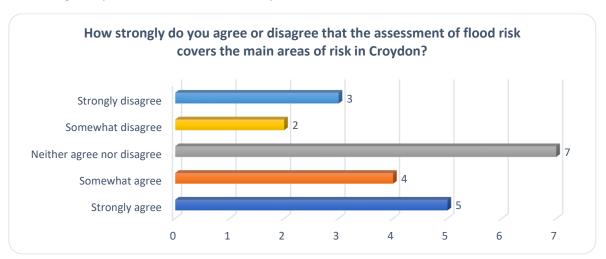


Figure 13: Question 12

Question 13 Please explain why you disagree

Comment	Theme	Action
It should cover all areas	Educating	Some areas are at a lower risk of flooding than others. Areas at greater risk need to be prioritised.  A link to the Environment's Agency's Flood Map for Planning was included in the strategy prior to the consultation while a link to the long-term flood risk mapping has been added to the document. Flood risk mapping for Croydon is included in Appendix E. These can be used to determine the risk of flooding in a particular area.  The Council LLFA webpages will be updated to explain this in more detail.
Drains on Croydon roads are no longer cleaned until there is an incident of flooding.	Information sharing	Gullies are cleansed once per year as standard although some are cleaned quarterly.  Parked cars can prevent gullies from being cleansed. The Council are looking at ways to improve this, for example by suspending parking in advance of the gullies being cleansed. By working with other Council teams this may improve efficiencies with planned works.  Blocked gullies can be cleansed on a reactive basis by reporting here - Love Clean Streets app   Croydon Council.  Council LLFA webpages to be updated to help inform residents on gully cleansing. This will include information on what areas are planned on being cleansed each month.

Only Purley is	Educating	The Strategy is a high-level document which takes a strategic look at flood		
considered as a flood		risk management in the borough. The action plan provides measures and		
risk and Norbury.		actions on how to meet the objectives of the strategy. The Surface Water		
Main areas of risk are	Educating	Management Plan (SWMP) looks at areas at risk in more detail, for example		
not outlined clearly in		Critical Drainage Areas. The current SWMP is available here Managing flood		
this section.		<u>risks   Croydon Council</u> . At the time of writing the SWMP is being updated.		
		The SWMP uses historic flood records, modelling and other information to		
		determine areas at risk.		

Table 5: Question 13

The majority of respondents agree that the assessment of flood risk covers the main areas of risk in Croydon with nine responses either strongly or somewhat agreeing. Seven responses neither agree or disagree with five either somewhat or strongly disagreeing. The comments received in the follow up question fall in the education and information sharing themes. Some of the comments suggest that all areas should be considered, or that only certain areas are considered and that main areas of risk are not outline clearly. Another comment has been received in this question which relates to the cleaning of highway gullies.

#### **Actions**

Educating – some areas of the borough are at greater risk than others. This is based on both flood risk mapping and the recorded history of flooding. These areas need to be prioritised as the risk is greater. The LLFA webpages will be updated to explain this in more detail including links and signposting to useful information regarding the risk to a particular area. This will include information on the Surface water Management Plan (SWMP) which is being updated at the time of writing. The SWMP looks at areas at risk in more detail, for example Critical Drainage Areas. A hyperlink to the Environment Agency's long term flood risk mapping has been added to Section 1.4 in the Strategy.

*Information sharing* – as per the actions related to gully cleansing previously (see question 7).

Question 14 Are there any other authorities, agencies, groups or people responsible for flooding in Croydon that you feel should be included in this section? If so, please tell us who and why?

Comment	Theme	Action
The dept in charge of cutting grass should make sure the debris is not left	Third party	Comment to be shared internally with Street Cleansing team.
in the road which then due to no road sweepers blocks the drains.		Council teams will work together to clean locations that are more prone to flooding more frequently. Gullies can be cleaned on a reactive basis following reports of blockages. Gully and drainage issues can be reported here - Love Clean Streets app   Croydon Council. This will ensure the report reaches the correct team. For example, reports of debris blocking gully grates will go to Street Cleansing while reports of gullies not functioning will go to Highways.
Thames Water, other water boards in the area, Surrey County Council	Third party	Line added regarding neighbouring councils to Appendix B.
Local flood groups	Third party	Line added to Section 1.3.
planning department	Third party	Line added to Appendix B.
planning department	Third party	
The Corporation of the City of London	Third	Line added to Section 1.3 regarding private land and asset
as Trustees for Kenley Common	party	owners.
Network Rail	Third party	Line added to Section 1.3. Network Rail are covered under 'Infrastructure Providers' in Appendix B.
Large landowners and countryside managers such as the Corporation for	Third party	Line added to Section 1.3 regarding private land and asset owners.

London, Wildlife Trust, Housing		
Associations.		
Thames Water & East Surrey Water	Third	Both are mentioned in Section 1.3 and are covered in Appendix
Co., should be involved in the Councils	party	В.
Flood strategy		
Charities like Thames 21	Third	Line added to Section 1.3.
	party	

Table 6: Question 14

Respondents have provided a number of suggestions on which other authorities, agencies or groups should be included. These range from charities to landowners, infrastructure providers and local flood groups. All of the suggestions have been categorised in the third-party theme.

#### **Actions**

Third party – the comment received with regards to grass cutting will be shared with the Street Cleansing team. Some text has been added to Section 1.3 stating that Croydon Council works with other authorities through forums such as the South West London Strategic Flood Group and Croydon Resilience Forum. A line has been added to state that Croydon Council works with local flood groups and other organisations when required. Some additions have been made to Appendix B to capture some of the suggestion.

# 4.3 LFRMS Section 2

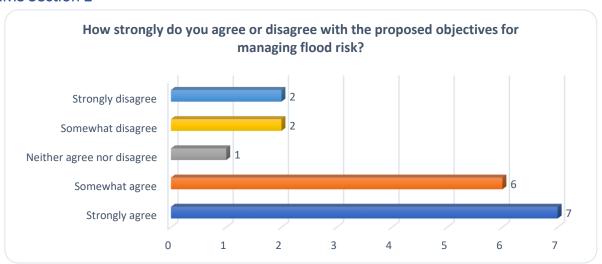


Figure 14: Question 15

Question 16 If you disagree with any of the proposed objectives, tell us which one(s) and why?

Comment	Theme	Action
I can't see what the plan or strategy is to prevent flooding in the first place. I want action , not review, look into, coatings	Educating	The Council acts to prevent flooding by maintaining the existing infrastructure including flood storage areas. Reactive measures include constructing new assets.  Council LLFA webpages to be updated. This will include a section on flood prevention and flood mitigation. Flood prevention is not always possible although some steps can be taken to prevent flooding by all those responsible. Mitigation is the approach used to lessen the impacts of flooding.
You can't even manage to provide a simple form, how can we rely on you to manage something serious like flood risks?  This survey says: "More information about the proposed objectives and measures is	Information sharing	Council LLFA webpages to be updated to include detail of the flood risk management work completed and ongoing by the Council. These pages will be kept up to date as work progresses to keep residents and business owners informed.  The Council Highways team will work with the Communications team on how best to share information with residents.

available in the full strategy document [link]." But there is no online link. So it is impossible to read your proposed objectives and measures. Incompetence, or deliberate? One of the main areas is increase Development SuDS are a requirement with all planning applications as per in development around croydon, Local Plan Policy DM25. The policy and London Plan drainage but properties continue to be built hierarchy require developers to prioritise green infrastructure without any regard for potential over traditional drainage methods and to meet certain criteria. Croydon Council, as the Lead Local Flood Authority, are a consequences statutory consultee on all major development. With minor development, depending on the risk, Officers will seek conditions on approvals to provide water butts as a minimum to manage surface water on site. Depending on the level of risk and type of development, a flood risk assessment and SuDS strategy may be required as part of an application. Council LLFA webpages to be updated to include information on SuDS requirements with development. If a development is connecting to a public sewer (foul, surface water or combined), permission must be sought from Thames Water. Thames Water have published their Drainage and Wastewater Management Plan (DWMP). The DWMP is a longterm strategic plan which sets how wastewater (foul) and drainage systems are to be extended, improved and maintained to ensure they are robust and resilient to future pressures, including development. The DWMP can be found here - Drainage and Wastewater Management Plan | Thames Water. Objective 5 - sustainability is vital Development One of the themes of the Local Plan is Croydon as 'A Place with a Sustainable Future.' It considers how the borough can for Croydon's prosperity, growth isn't. The current objective starts become a sustainable, well connected place and an from the assumption that growth environment prepared for the impacts of a changing must happen but this isn't correct. climate. More information can be found in Chapter 8 of the Continuous growth is not possible Local Plan, Environment and Climate Change. with finite resources and so sustainability should be a limit to This places sustainability at the core of achieving the Council's growth not an enabler. vision for Croydon. Policies are written to reflect this and development must demonstrate these polices are being met before development can commence. With development comes the need for infrastructure improvements so a collaborative approach with key stakeholders such as Thames Water is required. Thames Water have published their Drainage and Wastewater Management Plan (DWMP). The DWMP is a long-term strategic plan which sets how wastewater (foul) and drainage systems are to be extended, improved and maintained to ensure they are robust and resilient to future pressures, including development. The DWMP can be found here - Drainage and

Wastewater Management Plan | Thames Water.

A large majority, with 13 responses in total, agree with the proposed objectives for managing flood risk. Four respondents disagree with one respondent neither agreeing nor disagreeing. The comments received relate to the educating, information sharing and development themes. One respondent stated the objectives should be more about flood prevention while another is concerned about development and the potential impact of this. Another comment regarding objective 5 is concerned that growth is bring prioritised over sustainability and that sustainability is a limit to growth rather than an enabler.

#### **Actions**

Educating – when it comes to flood prevention the Council works to prevent flooding by maintaining the existing infrastructure including flood storage areas. The Council LLFA webpages will be updated to include a section on flood prevention and flood mitigation. Flood prevention is not always possible although some steps can be taken to prevent flooding by all those responsible. Mitigation is the approach used to lessen the impacts of flooding.

*Information sharing* – as per the actions relating to question 9.

Development – as per the actions relating to question 7. In addition to this, some additional information relating to Thames Water requirements from development and their DWMP has been included in the table above. The DWMP is a long term 25-year plan on how Thames Water sewer and drainage assets will be improved and maintained and be resilient to future pressures. One of the comments received was related to objective specifically. The table above clarifies that sustainability is at core of achieving the Council's vision for Croydon and as such, policies in the Local Plan are written to reflect this. A collaborative approach is needed with stakeholders such as Thames Water to ensure the provision of infrastructure is sufficient to meet the needs development in the future.

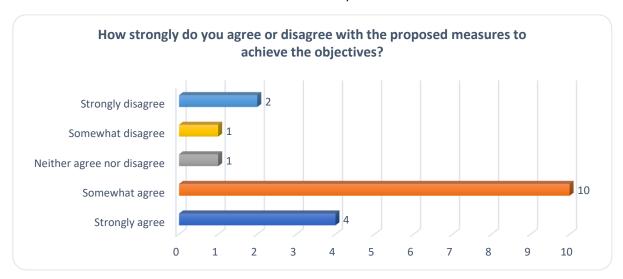


Figure 15: Question 17

Question 18 If you disagree with any of the proposed measures, tell us which one(s) and why?

Comment	Theme	Action
A lot of the measures are	Educating /	Council LLFA webpages to be updated. This will include a section on
reactionary, it does not	Cross team	flood prevention and flood mitigation. Flood prevention is not always
cover preventative	collaboration	possible although some steps can be taken to prevent flooding by all
measures.	/	those responsible, including property owners. Mitigation is the
	Development	approach used to lessen the impacts of flooding. The Council acts to
The key is in avoiding flood.		prevent flooding by maintaining the existing infrastructure including
Urban flooding typically		flood storage areas. Reactive measures include constructing new
correlates highly to the		assets.
level of fly-tipping and		
general garbage around the		Comment to be shared internally with Street Cleansing team.
area.		
		Council teams will work together to clean locations that are more
Croydon is at risk of turning		prone to flooding more frequently. Gullies can be cleaned on a
into a concrete jungle. Even		reactive basis following reports of blockages. Gully and drainage

protected areas like Norwood are at risk of over-development with not enough measures to ensure that trees are protected, grassland is protected. We have an environment where grass and soil is replaced with cement, tarmac road or tiled driveways.

We need clear drainage, free from garbage. And restrictions and compulsory requirements on what residents can and cannot do; eg every sq inch of grass and soil that tiled/tarmac/Astro turfed needs to be compensated with replanting twice the sq footage of soil and grass foregone.

issues can be reported here - <u>Love Clean Streets app | Croydon Council</u>. This will ensure the report reaches the correct team. For example, reports of fly tipping will go to Street Cleansing while reports of gullies not functioning will go to Highways.

SuDS are a requirement with all planning applications as per Local Plan Policy DM25. The policy and London Plan drainage hierarchy require developers to prioritise green infrastructure over traditional drainage methods and to meet certain criteria.

One of the Strategic Objectives of Chapter 9 of the Local Plan, Green Grid, is to 'improve the quality and accessibility of green space and nature whilst protecting and enhancing biodiversity.' Policy DM28 relates to trees specifically and states 'the Council will seek to protect and enhance the borough's woodlands, trees and hedgerows'.

Some trees are protected under Tree Preservation Orders (TPOs) while trees in Conservation Areas have further protection. With development, if there is no formal tree protection and there is tree loss, replacement planting may be sought through landscaping condition.

Some householder works are subject to permitted development rights (e.g. replacement of hard surfacing of less than 5m²), but such works are subject to surfaces either being made permeable or that provision is made to direct surface water to SuDS or a permeable area. From a Highways perspective, dropped kerb applications will not be approved unless the driveway is permeable or has a drainage system. This must be demonstrated before the application is processed.

Council LLFA webpages to be updated to include information on SuDS requirements with development.

Would like reports on flood investigations to be made publicly available

Objective 4: Add timeframe to flood response

Objective 7: add frequency to meetings

Information sharing

Line added under Objective 3 with link to published flood investigations.

Flood investigations are published on Council website. Council LLFA webpages to be updated clarifying when flood investigations are required.

With regards to Objective 4, the emergency response will be immediate following a flood event. After an event, the LLFA will work with stakeholders to identify the cause and impacts of the event as well as determine any action to be taken.

Regarding Objective 7, South West London Strategic Flood Group (includes neighbouring authorities, Thames Water and the Environment Agency) meetings are held quarterly. Meetings with risk management authorities take place when needed, for example on cross authority projects. Each group or project meeting will meet at the appropriate frequency.

Table 8: Question 18

### **Results**

A majority of respondents agree with the proposed measures to achieve the objectives with 14 either strongly or somewhat agreeing. One respondent neither agreed nor disagreed with three either somewhat or strongly disagreeing. The comments received are similar to those received with previous questions and relate to concerns about

flood prevention, fly tipping having an influence on flooding and the impact development is having on trees and green space. The comment also stated that there should be restrictions on what property owners can do when paving over green space. A comment has been received stating that flood investigations should be published with some suggestions also received regarding Objectives 4 and 7. The comments received have been categorised in the educating, cross team collaboration, development and information sharing themes.

#### **Actions**

Educating / Cross team collaboration / Development – as per the actions with question 16 (educating), question 7 (cross team collaboration) and question 7 (development). In addition to this the response in the table above has clarified that improving the quality and accessibility of green space and nature whilst protecting and enhancing biodiversity in a strategic objective of the Local Plan and also includes information on the protection of trees. Clarification has also been provided regarding householder permitted development and hardstanding while from a Highway's perspective, dropped kerb applications require that the driveway is permeable or has a drainage system otherwise the application will not be processed.

Information sharing – a line has been added to the Strategy under Objective 3 with a link to where flood investigations, which meet the Section 19 criteria, are published on the Council website. Responses to the suggestions regarding Objectives 4 and 7 have been included in the table above clarifying the approach to responding to flooding and also the frequency of meetings.

# 4.4 LFRMS Action Plan and Final Comments



Figure 16: Question 19

Question 20 Please explain why you disagree and what you think we should do to improve it

Comment	Theme	Action
I don't think the strategy adequately address the root causes of the issues. I feel it is very reactionary	Educating	Council LLFA webpages to be updated. This will include a section on flood prevention and flood mitigation. Flood prevention is not always possible although some steps can be taken to prevent flooding by all those responsible. Mitigation is the approach used to lessen the impacts of flooding. The Council acts to prevent flooding by maintaining the existing infrastructure including flood storage areas. Reactive measures include constructing new assets.
I strongly support this but have concerns on how well it can be delivered within existing resources	Resources	The actions have been drafted based on current resource availability. Some of the actions are designed to be ongoing while others are a once off. A major event may have a knock-on effect impacting progress of the action plan.
There appears to be a very limited role for the Parks Department in delviering this plan but management of our green and blue spaces should be a key	Cross team collaboration	Two actions are jointly led by Highways and Parks and Green Spaces. Some others are Highways led but will require close collaboration with Parks and Green Spaces e.g. Objective 2 Measure 1, Objective 3 Measure 3, Objective 4 Measure 4 and Objective 5 Measure 4.

element of flood	The Parks and Green Spaces team are invited to internal flood
management	management group meetings and Council teams collaborate on
	projects when relevant e.g. Bourne View Allotments flood
	storage area.

Table 9: Question 20

The majority of those that responded to the survey agreed that the action plan details how progress on the objectives will be monitored. Twelve respondents either strongly or somewhat agree with this. Three respondents neither agreed nor disagreed with a further three either somewhat or strongly disagree. One of the comments received is similar to some received with previous questions, with the respondent stating that the action plan is more reactionary than preventative. Another comment as been made in strong support of the action plan but stating a concern about delivery due to insufficient resource. The final comment relates to the role the Parks and Green Spaces team in delivering the action plan suggesting that there should be a greater role for the Parks and Green Spaces team. These comments have been categorised into the educating, resources and cross team, collaboration themes.

#### **Actions**

Educating – as per the action stated with question 16.

Resources – actions have been drafted with current resource in mind and are a combination of ongoing and once off to help manage the deliverability of the actions.

Cross team collaboration – there are a number of actions either jointly led with Parks and Green Spaces or requiring close collaboration with the Parks and Green Spaces team. Parks and Green Spaces are invited to Croydon Council flood management group meetings which is a forum to help Council teams work together more closely and share information.

Question 21 Is there anything else you would like us to consider as part of this strategy review?

Comment	Theme	Action
Street cleansing is a necessary part of managing flood risk.	Cross team collaboration	Comment to be shared internally with Street Cleansing team.
Similarly ensuring that development does not harden up too much surface area to allow for	/ Educating	Council teams will work together to clean locations that are more prone to flooding more frequently.
rain to soak in.		SuDS are a requirement with all planning applications as per Local Plan Policy DM25. The policy and London Plan drainage hierarchy require developers to prioritise green infrastructure over traditional drainage methods and to meet certain criteria. Croydon Council, as the Lead Local Flood Authority, are a statutory consultee on all major development. With minor development, depending on the risk, Officers will seek conditions on approvals to provide water butts as a minimum to manage surface water on site. Depending on the level of risk and type of development, a flood risk assessment and SuDS strategy may be required as part of an application.  Council LLFA webpages to be updated to include information on SuDS requirements with development.
I would like to see more of a focus on minimising the amount of surface water entering the foul	Third party	This comment will be shared with Thames Water who are responsible for the public sewers in the borough.
water network. I would also like to see more on how the strategy		Misconnections can be reported to Thames Water for investigation. The Council LLFA webpages will be updated to
addresses where gullies, soakaways and other flood prevention assets are on land not owned by the council, as these		include information on this (i.e. signposting to Thames Water).

poorly maintained assets can add to the flood risk.		Council LLFA webpages to be updated clarifying that private land, asset and property owners are responsible for flood risk management on their property.
Midway review of strategy in 2026	Resources	Progress of the Strategy is tracked via the action plan. This is reviewed through the Croydon Council flood management group which meets quarterly and consists of various teams with flood risk management responsibilities. An up-to-date version of the action plan will be uploaded to the Council LLFA webpages to allow residents and business owners to track progress.

Table 10: Question 21

Some comments have been received regarding street cleansing and development which are similar to comments received with previous questions. One respondent has comment stating that there should be a focus on minimising the amount of surface water entering the foul network. This comment also states that the Strategy should include more on how the Council works with asset owners on non-Council land. A comment stating that a mid-point review of the Strategy should be carried out in 2026. These comments have been categorised into the cross team collaboration, educating, third party and resources themes.

#### **Actions**

Cross team collaboration / Educating – as per the actions with question 7.

Third party – the comment regarding surface water entering the foul network will be shared with Thames Water. Council LLFA webpages will be updated to include clarifying that private land, asset and property owners are responsible for flood risk management on their property.

Resources – progress of the Strategy is tracked via the action plan through the Council flood management group which meets quarterly and includes various Council teams with flood risk management responsibilities. An up-to-date version of the action plan will be kept on the Council LLFA webpages.

#### Additional comments received via email

Comment	Theme	Action
clear street drains from debris and fallen foliage - enforce litter fines	Cross team collaboration	Comment to be shared internally with Street Cleansing team.  Council teams will work together to clean locations that are more prone to flooding more frequently.
secure function and capacity for run-off courseways and sewers - reuse water where possible	Development	SuDS are a requirement with all planning applications as per Local Plan Policy DM25. The policy and London Plan drainage hierarchy require developers to prioritise green infrastructure over traditional drainage methods and to meet certain criteria. The first preference on the London Plan drainage hierarchy is to reuse rainwater.  Through projects such as the Catherham Bourne and Chaffinch Brook flood alleviation schemes and the Bourne View Allotments flood storage area, the Council aims to attenuate and slow the flow of water before it enters the drainage system.
encourage/incentivise lawns and high-porous surfaces instead of hard standing in gardens. patios and driveways	Development	Some householder works are subject to permitted development rights (e.g. replacement of hard surfacing of less than 5m²), but such works are subject to surfaces either being made permeable or that provision is made to direct surface water to SuDS or a permeable area.
incentivise / subsidise guttering and roofing repairs	Third party	Property owners are responsible for the upkeep of their property and to ensure there is no risk posed to neighbouring properties.

advise those in low lying areas and those with basements and cellars how best to prepare to defend homes against flooding	Educating	Council LLFA webpages to be updated to include advice for property owners on how to protect basements and cellars from flooding (e.g. London Council's advice leaflet).
have emergency evacuations and recovery plans in place to protect life and restore services asap - evacuation plans, fresh and wastewater, electricity, mains gas, telephone services etc.	Cross team collaboration	Comment to be shared internally with the Corporate Resilience team.  As a Category 1 responder the Council has a responsibility to put emergency plans in place. The Council and the Croydon Resilience Forum (CRF) have a number of plans detailing response arrangements for different the different risks including flooding. These are reviewed and exercised on a regular basis, to ensure that they are fit for purpose. More information on Croydon Council and CRF emergency plans can be found here - Emergency plans   Croydon Council.

Table 11: Additional Comments

Some of the additional comments received are similar to comments received through the survey including a comment on keeping gullies clear and another that would like to see the Council encouraging permeable surfaces rather than hard standing. A comment has been received stating that functioning of the drainage network could be improved through water reuse. Another comment states that the Council should incentivise or subsidies roof and guttering repairs with another stating that advice should be given to those property owners in low lying areas or that have basements and cellars on how to protect their property from flood risk. The final comment states that evacuation and recovery plan should be in place in order to respond to flood events. These comments have been categorised as cross team collaboration, development, third party and educating.

#### **Actions**

Cross team collaboration – as per the action noted with question 7.

Development – as per the action noted with question 7.

Third party – property owners are responsible for repairing and maintaining their own property.

*Educating* – Council LLFA webpages will be updated to include advice for property owners on how to protect basements and cellars from flooding.

Cross team collaboration – this comment will be shared with the Corporate Resilience team. The Council and the Croydon Resilience Forum (CRF) have a number of plans detailing response arrangements for different risks including flooding. A link with more information has been included in the table above.