

# **Flood Risk and Drainage SPD**

## **Supplementary Planning Document:**

### **Consultation statement**

## **Calderdale Metropolitan Borough Council**

### **Introduction**

This is the 'Consultation Statement' for the Flood Risk and Drainage SPD as required by the Town and Country Planning (Local Planning) (England) Regulations 2012. This statement sets out how the public and other stakeholders were consulted upon the SPD.

### **Consultation regulations**

The relevant regulations relating to the consultation process are explained below.

Regulation 12: Regulation 12(a) requires the Council to produce a consultation statement before adoption of the SPD, this must set out who was consulted, a summary of the issues raised, and how these issues were incorporated into the SPD. This statement is the 'Consultation Statement' for the adopted SPD as required by Regulation 12(a).

Regulation 12(b) requires the Council to publish the documents for a minimum 4 week consultation, specify the date when responses should be received, and identify the address to which responses should be sent. The consultation statement that accompanied the draft SPD set out that information.

Regulation 13: Regulation 13 stipulates that any person may make representations about the SPD and that the representations must be made by the end of the consultation date referred to in Regulation 12. The consultation statement that accompanied the draft SPD set out that requirement.

Regulation 35: Regulation 12 states that when seeking representations on an SPD, documents must be made available in accordance with Regulation 35. This requires the Council to make documents available by taking the following steps:

- Make the document available at the principal office and other places within the area that the Council considers appropriate;
- Publish the document on the Council's website.

These measures were undertaken as part of the draft SPD consultation.

### **Statement of Community Involvement (SCI)**

The SCI was adopted in 2016 and reflects the 2012 Regulations, set out above. It also specifies additional measures that the Council will undertake in consulting upon draft SPDs and these have been reflected in the consultation process for the Flood Risk and Drainage SPD. As per the SCI, the Council has involved key stakeholders in the preparation of this draft SPD for consultation.

### **Flood Risk and Drainage SPD Consultation Information**

Consultation on the SPD has been carried out in accordance with the Town and Country Planning (Local Planning) (England) Regulations 2012. The draft SPD was made available for inspection by the public for a four-week period between Friday 24<sup>th</sup> November 2023 and Monday 22<sup>nd</sup> December 2023. Copies of the draft SPD and consultation statement (setting out how comments should be made) were available at the following locations:

- Calderdale Council Custom First offices at Horton Street, Halifax
- Public libraries at Halifax Central, Akroyd, Beechwood Road, Brighouse, Elland, Hebden Bridge, King Cross, Mixenden, Northowram, Rastrick, Sowerby Bridge and Todmorden

Copies of the draft SPD were available to view on the Council's website at <https://calderdale.gov.uk/spds>. Further information was available by contacting the Spatial Planning team by email at [spatial.planning@calderdale.gov.uk](mailto:spatial.planning@calderdale.gov.uk) or by telephoning 01422 288001.

The following measures were undertaken to inform persons of the draft SPD consultation and document availability:

- Approximately 4000 notification emails sent to all individuals, organisations or bodies that the Council considers will be affected or interested in the SPD or may be involved in the delivery of the SPD (including ward Councillors, Parish Councils, statutory consultees, developers, business, local voluntary organisations, and all other individuals who have previously participated in the Local Plan examination or other document consultations).
- Press release issued.
- Council's social media pages updated at outset and throughout.
- The SPD and details of the consultation were posted on the Council's website.

### **Summary of Issues Raised and the Council's Response**

In the order of 60 representations were received from interest parties, including the Environment Agency.

Table 1 below is a schedule of all the representations received together with the Council's response. A number of additional minor revisions have also been made to the SPD in order to improve its clarity and readability.

Table 1: Flood Risk and Drainage SPD - Schedule of Representations Received and Revisions to SPD

Consultation Point	Consultee	Comment	Council response and SPD Revision (where applicable)
Whole document	1245761 Susan Miles (Todmorden Town Council)	<p><b>9</b> Todmorden Town Council welcomes the production of this Supplementary Planning Document and, through the application of its policy and content, reinforcement of the need for new developments to include flood mitigation measures as part of the Calderdale MBC planning application approval process.</p> <p>Todmorden has suffered dramatic physical, emotional and financial harm from recent flood events and whilst welcoming this SPD, would wish to see the document strengthened by an expectation that developers do not simply deliver the bare minimum required, but recognise that Todmorden has an ageing and limited infrastructure and valley profile, and that enhanced measures wherever possible, should be delivered.</p> <p>Whilst we acknowledge that this SPD refers to planning going forward, there is concern that extant permissions that are not yet significantly developed, will not meet the standards proposed in this document. Going forward these will still impact and where possible we would ask you to engage to bring such permissions up to current conditioning standards. By way of example one such application is that for Der St in Todmorden</p>	The concerns of Todmorden Town Council are noted. However, whilst ideally a permission would be updated to reflect any future concerns, this is not possible where a valid extant permission exists. Should the permission lapse then relevant issues could be re-examined.

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		(20/01367/FUL), where it has already been approved, yet it is clear that there is negative impact on the flooding of existing properties	
Whole Document	1246329 Mr James Langler (Historic England)	<p><b>10</b> Thank you for consulting Historic England on the above document. Whilst we do not have any specific comments regarding the contents of the consultation document, we would like to make the following general comment regarding flood risk and the historic environment.</p> <p>Flooding and its prevention, as well as the management of water resources, can impact on the historic environment and the significance of individual heritage assets, including the contribution made by their setting. It is therefore important that the management and reduction of flood risk, and the management of the water environment, is done in a manner that seeks to conserve and enhance of the historic environment, heritage assets and their setting. This includes sustaining and enhancing local character and the distinctiveness of historic townscapes and landscapes.</p> <p>Historic England has published a technical advice note Flooding and Historic Buildings which provides further information on this subject: <a href="https://historicengland.org.uk/advice/technical-advice/flooding-and-historic-buildings/">https://historicengland.org.uk/advice/technical-advice/flooding-and-historic-buildings/</a></p>	<p>The comments regarding the impact of flooding on the historic environment are noted and revisions made to highlight these via the addition of a new paragraph after existing paragraph 3.33</p> <p><b>Revisions</b> Add new sub-heading ‘<b>Flooding and the Historic Environment</b>’ after paragraph 3.33:</p> <p><b><u>Flooding and the Historic Environment</u></b> <i><u>Flooding and its prevention, as well as the management of water resources, can impact on the historic environment and the significance of individual heritage assets, including the contribution made by their setting. It is therefore important that the management and reduction of flood risk, and the management of the water environment, is done in a manner that seeks to conserve and enhance the historic environment, heritage assets and their setting. This includes sustaining and enhancing local character and the distinctiveness of historic townscapes and landscapes.</u></i></p> <p><i><u>Historic England has published a technical advice note ‘Flooding and Historic Buildings’ which provides further information on this subject: <a href="https://historicengland.org.uk/advice/technical-advice/flooding-and-historic-buildings/">Flooding and Historic Buildings   Historic England</a></u></i></p>


Consultation Point	Consultee	Comment	Council response and SPD Revision (where applicable)
			Add reference to Appendix 4 (List of References)
Whole document	1138084 Melanie Lindsley (The Coal Authority)	<p><b>11</b> Our records indicate that within the Calderdale area there are recorded coal mining features present at surface and shallow depth including; mine entries, coal workings and reported surface hazards. These features may pose a potential risk to surface stability and public safety.</p> <p>Where SUDs are proposed as part of the development scheme we always note that consideration will need to be given to the implications of this in relation to the stability and public safety risks posed by coal mining legacy. We highlight that the developer should seek their own advice from a technically competent person to ensure that a proper assessment has been made of the potential interaction between hydrology, the proposed drainage system and ground stability, including the implications this may have for any mine workings which may be present beneath the site.</p> <p>It may be prudent to include this within the SPD document if you consider that this would be helpful.</p>	<p>The comments regarding the coal mining legacy are helpful and should be included in Section 9 of the SPD.</p> <p><b>Revisions</b> Add the following text as an additional bullet point to para. 9.6:</p> <ul style="list-style-type: none"> <li>• <u>Where SUDs are proposed as part of the development scheme, consideration will need to be given to the implications in relation to the stability and public safety risks posed by coal mining legacy. Developers should seek advice from a technically competent person to ensure that a proper assessment has been made of the potential interaction between hydrology, the proposed drainage system and ground stability, including the implications this may have for any mine workings which may be present beneath the site.</u></li> </ul>
Whole document	1338968 Lizzy Walker	<b>General comments</b>	The suggestions will add clarity to the SPD. An updated version of the NPPF was published in

Consultation Point	Consultee	Comment	Council response and SPD Revision (where applicable)
	(Environment Agency)	<p>The document makes reference to both flood risk assessment (FRA) and site-specific flood risk assessment throughout. For consistency, we recommend that reference is made to either FRA or site-specific FRA to make it clearer to the reader.</p> <p>Please check that the document refers to relevant/ most up to date planning policy where applicable. For example, in line with national planning guidance, we recommend adding further context on how this SPD sits within the development plan.</p>	<p>December 2023 and since the SPD was published for consultation. Any necessary updates are made to the SPD.</p> <p><b>Revisions</b> All references to <del>FRA and site-specific FRA</del> revised to <u>site-specific FRA</u>.</p> <hr/> <p>The relationship between the Local Plan and the SPD is set out in Section 1 of the SPD and is consistent with the equivalent section in other SPDs produced by the Council. A revision is made to paragraph 1.3 to provide the full terminology for SuDS (a point raised in other representations).</p> <p><b>Revisions</b> 1.3 The SPD also emphasises the need for early and continued discussions with the Council's planning department, the Lead Local Flood Authority (LLFA), the necessary water management authorities and any organisation adopting the constructed drainage. Following the Flood and Water Management Act 2010, Calderdale MBC became the Lead Local Flood Authority (LLFA) responsible for managing flood risk from surface water, ground water and ordinary watercourses throughout the Borough. This SPD should be read in conjunction with all relevant guides, best practice documents, the National Planning Policy Framework (NPPF) and the CIRIA SuDS Manual. It is imperative that</p>

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		<p>The document sets out the preferred proxy for 'return period' as % annual events however, the document also makes continued reference to the 'return period' as 1:100 years which may be confusing to the reader/ applicant and not achieve the preferred direction of the SPD. We recommend reviewing this to make it clearer as to what the preferred proxy is.</p>	<p>consideration be given to Sustainable Drainage <u>Systems</u> (SuDS) design principles from the outset given their ability to assist with flooding, the risk from which will rise due to climate change and the multiple benefits they can bring, including increasing biodiversity. A separate SPD covers the issue of Biodiversity Net Gain and these two SPDs are inextricably linked.</p> <hr/> <p>The tables in the SPD are nationally published tables. Although the industry is transitioning away from using return periods in guidance and advice, there remains a substantial portion of the sector that use these. As reference to return periods remains of benefit to users of the SPD no revisions are made to the SPD.</p>
Whole document	1185995 Beth Yeadon (Persimmon Homes)	<p><b>44</b> We are currently working on a number of residential schemes in the Calderdale Local Authority Area, including our live planning application for 90 units at Hall Lane, Northowram (ref: LP0766), and our emerging proposal at Soaper Lane, Shelf (refs: LP1034 and 1036), which is due to be submitted in the New Year. Throughout the planning process, we have been keen to continually engage with the Council/ LLFA and relevant water management authority, and it</p>	Support for the SPD is noted.

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		<p>is welcomed that the Council see this as an example of best practice.</p> <p>Following a review of the document, it can be noted that we are largely supportive of the Draft Flood Risk and Drainage SPD. The guidance provided within the document is consistent with National and Regional policy, as well as recent guidance published by neighbouring Local Authorities. The SPD provides developers with greater clarity in respect of Policy CC2, CC3 and CC4 of the Local Plan (March, 2023), as well as site allocation guidelines.</p> <p>The allocation guidelines for Hall Lane, Northowram (ref: LP0766) in particular, suggest that green and blue infrastructure “such as SuDS and green roofs” should be considered on-site to reduce the infiltration rate of precipitation and provide storage for stormwater runoff. However, whilst the allocation guidelines for sites LP1034 and LP1036 both refer to the provision of SuDS, no specific reference is made to green roofs or any other particular SuDS technique. As the component of SuDS which may be delivered as part of a development varies on a site by site basis, it is welcomed that Table 9.1 of the SPD provides a list of other SuDS components that would be supported, such as permeable paving and filter strips.</p>	



Consultation Point	Consultee	Comment	Council response and SPD Revision (where applicable)
Whole document	1246930 Woodhouse Residents Association	<p><b>69</b> Drainage and flood risk protection remains a key concern for the WRA in terms of the significant Woodhouse Garden Community proposal. The site itself has significant ground water flooding issues across its extent because of its underlying geology and the presence of two aquifers and springs. This results in significant surface water runoff /standing water at times of prolonged or heavy rain when the ground water reaches the surface and is unable to drain away. Water continues to flow across the site as streams until the drier seasons.</p>  <p><i>Example of flowing water from the centre of the site out towards Ryecroft Lane - November 2023</i></p> <p>The scale of development proposed must also be considered in relation to the fact</p> <ul style="list-style-type: none"> <li>the south eastern section of the site is Flood Risk 2</li> </ul>	Support for the SPD noted

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		<ul style="list-style-type: none"> <li>• the remainder of the site is Flood Risk 1 within a Critical Drainage Area</li> <li>• it drains into a Zone 3 flood risk area at River Street</li> <li>• The Environment Agency maps show Bradley Park Dike, which forms the southern boundary of the site, to already suffer from high-risk velocities which run into the Calder (Flood Zone 3) to the east via a restricted culvert.</li> </ul> <p>Overall, we are pleased to see the SPD provides a robust process for dealing with flood risk and drainage on all developments. This is essential given the above points.</p>	
Whole Document	1346936 Natural England	<p><b>72</b> Natural England is a non-departmental public body. Our statutory purpose is to ensure that the natural environment is conserved, enhanced, and managed for the benefit of present and future generations, thereby contributing to sustainable development.</p> <p>Our remit includes protected sites and landscapes, biodiversity, geodiversity, soils, protected species, landscape character, green infrastructure and access to and enjoyment of nature.</p> <p>Whilst we welcome this opportunity to give our views, the topic of the Supplementary Planning Document does not appear to relate to our</p>	The fact Natural England has no specific comments to make on this SPD is noted.

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		<p>interests to any significant extent. We therefore do not wish to comment.</p> <p>Should the plan be amended in a way which significantly affects its impact on the natural environment, then, please consult Natural England again.</p> <p>Strategic Environmental Assessment/Habitats Regulations Assessment A SPD requires a Strategic Environmental Assessment only in exceptional circumstances as set out in the Planning Practice Guidance here. While SPDs are unlikely to give rise to likely significant effects on European Sites, they should be considered as a plan under the Habitats Regulations in the same way as any other plan or project. If your SPD requires a Strategic Environmental Assessment or Habitats Regulation Assessment, you are required to consult us at certain stages as set out in the Planning Practice Guidance.</p> <p>Please send all planning consultations electronically to the consultation hub at <a href="mailto:consultations@naturalengland.org.uk">consultations@naturalengland.org.uk</a>.</p>	
Para 1.1 (Page 3)	1245761 Susan Miles (Todmorden Town Council)	<p><b>9</b></p> <p>To this extent we are concerned that the statement in 1.1 “should not add unnecessarily to the financial burden on developments” could be seen by developers as a “catch all get out clause”,</p>	Whilst the Council agrees with the sentiment and concerns expressed in the representation the wording referenced comes from the Planning Practice Guidance on SPDs as set out below:

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		<p>enabling them to deliver solutions that pay lip service to ideally what is needed.</p> <p>For many years Todmorden has seen developers flout the rules, and by introducing this SPD we expect Calderdale MBC to deliver on enforcement where planning conditions relating to flood mitigation have not been met. A policy without “teeth” has no impact.</p>	<p><b><i>What is the role of supplementary planning documents?</i></b></p> <p><i>Supplementary planning documents (SPDs) should build upon and provide more detailed advice or guidance on policies in an adopted local plan. As they do not form part of the development plan, they cannot introduce new planning policies into the development plan. They are however a material consideration in decision-making. They should not add unnecessarily to the financial burdens on development.</i></p> <p><i>Paragraph: 008 Reference ID: 61-008-20190315</i></p>
Para 1.1 (Page 3)	1339566 Slow the Flow	<p><b>46</b></p> <p>Re purpose of plan: builds on policies in Local Plan - does this include the Placemaking &amp; Design policy/guidance - can't see any reference to it despite SuDS &amp; NFM appearing in the drafts for that.</p>	<p>The SPD provides further guidance in relation to Local Plan Policies rather than other SPDs. However, cross references are included between SPDs where appropriate. As the Placemaking and Design SPD had not been drafted at the time of consultation on this SPD cross references could not be included. Given the progress on the Placemaking and Design SPD relevant references are added to this SPD.</p> <p><b><u>Revisions</u></b></p> <p>Add to Section 3 after Local Plan Policy CC4 new sub-section:</p> <p><b><u>Supplementary Planning Documents</u></b></p> <p><i>A number of other Supplementary Planning Documents (SPDs) are also relevant to reducing</i></p>

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			<i>flood risk. These include the 'Biodiversity Net Gain' and 'Placemaking and Design Guide' SPDs. Section 5.1 of the 'Placemaking and Design Guide' SPD for instance discusses measures to reduce flood risk and includes a link to the flooding guidance on the the Council's website.</i>
Para 1.3 (Page 3)	1339566 Slow the Flow	<b>47</b> When writing out the full version of the acronym SuDS, it should be 'Sustainable Drainage Systems' (not just 'Sustainable Drainage').	Comment noted and appropriate revisions made.  <b>Revisions</b> All references in the SPD to SuDS will be replaced with <u>Sustainable Drainage Systems</u> when using the expanded form of the acronym.
How to Use this Supplementary Planning Document (Page 4)	1339566 Slow the Flow	<b>48</b> STF welcomes the language used in this introduction, there is a clear message that SuDS solutions are expected.	Support Noted
Figure 2.1 Calderdale river network (Page 5)	1338968 Lizzy Walker (Environment Agency)	<b>16</b> The figure is difficult to interpret. We recommend the image resolution is increased to make it clearer to read/interpret.	<b>Revisions</b> Figure 2.1 has been redrafted to improve its clarity.
Figure 2.1 Calderdale river network (Page 5)	1246930 Woodhouse Residents Association	<b>69</b> The map at Figure 2.1 does not appear to show the Bradley Park Dike (ordinary watercourse) which forms the southern boundary of the Woodhouse Garden Community with Kirklees Council (Bradley Woods) and flows into the River	<b>Revisions</b> Figure 2.1 has been redrafted to improve its clarity. Bradley Park Dike is overlain by the district boundary and cannot be shown more clearly at the published scale. The intention of Figure 2.1 is

Consultation Point	Consultee	Comment	Council response and SPD Revision (where applicable)
		Calder. This seems to be an omission and does not reflect the true position on the ground. The watercourse that forms this boundary should be included for accuracy. Where physical features form a local authority boundary, the normal rule of thumb is to take the centre point of that feature as the boundary.	to provide an overview of the various water courses in Calderdale rather than specific detail.
History of Flooding (Page 6)	1338968 Lizzy Walker (Environment Agency)	<b>17</b> We recommend including reference to and briefly detailing/ outlining notable historic events impacting Calderdale for example the 2015 December event.	Referencing and briefly detailing notable historic events impacting Calderdale could help in providing further context to the SPD. However, whilst Section 19 reports for major flood events could be referenced, such further detail has to be balanced against unnecessarily increasing the length of the SPD and impacting its readability.
Para 3.8 (Page 8)	1339566 Slow the Flow	<b>49</b> SuDS Approval Body (rather than SUD)	Editing correction noted. <b>Revisions</b> Amend heading preceding paragraph 3.8: Sustainable Drainage Systems – SUDs Approval Body – Section 3 of the FWMA 2010
Para 3.9 (Page 8)	1339566 Slow the Flow	<b>50</b> Could do with rewording for readability.	No revisions are considered necessary.
Para 3.10 (Page 8)	1339566 Slow the Flow	<b>51</b> Could do with rewording for readability.	No revisions are considered necessary.
Para 3.13	1339566	<b>52</b>	Comment noted.

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(Page 8)	Slow the Flow	SuDS, not SUDS or SuDs - Find + Replace both throughout, they occur a number of times.	<p><b>Revisions</b> All incorrect references/typing errors in the SPD to SuDS replaced with <u>SuDS</u>.</p>
Policy CC4 (Page 12)	1339566 Slow the Flow	<p><b>53</b> Policy CC4 needs a couple of commas - (after management &amp; watercourses) &amp; multi-benefit not multi benefit. There's also not mention of landscape character/importance in this summary - just refers to biodiversity &amp; geodiversity designations.</p>	Whilst the suggestions are noted, Policy CC4 is taken from the adopted Local Plan which is a statutory document and cannot now be amended.
Para 4.1 (Page 16)	1338968 Lizzy Walker (Environment Agency)	<p><b>18</b> Ensure all statutory function roles are covered. As it is currently worded, it is not clear where/ who/ when/ etc applicants are advised to seek advice in the early stages of a development proposal. We suggest reviewing the wording to make it clearer where the applicant can seek advice.</p>	<p>The scale and nature of a development will dictate the level of consultation and stage this needs to take place. All the listed WMAs should be consulted as early in the development process as possible in order to ensure a planning application has taken account of all relevant considerations. Further reference to this matter is provided in Section 9.5 of the SPD.</p> <p><b>Revisions</b> For clarity paragraph 4.1 is revised as follows:</p> <p>4.1 A number of key Water Management Authorities (WMAs) may need to be consulted during the planning application process. Applicants are advised to seek advice <u>from all WMAs</u> in the early stages of formulating a</p>

Consultation Point	Consultee	Comment	Council response and SPD Revision (where applicable)
			development proposal in order to ensure all relevant flood and water requirements are appropriately addressed and met. Key WMAs in Calderdale are:
Fluvial Flooding (Page 17)	1338968 Lizzy Walker (Environment Agency)	<p><b>19</b> Paragraph 5.4 includes reference/ link to the Flood Map for Planning. The map does not account for the impacts of climate change or defences. We recommend the map is updated to include climate change and defences.</p> <p>The definition note on the gov.uk webpage (<a href="https://www.gov.uk/guidance/flood-risk-and-coastal-change#para77">https://www.gov.uk/guidance/flood-risk-and-coastal-change#para77</a>) does not base the definition on hydraulic modelling. Therefore, for consistency with national guidelines we suggest removing this reference to avoid confusion.</p>	<p>The Flood Map for Planning is produced nationally and CMBC do not have the authority to amend it. Climate change and its consideration in development is described in other sections of the SPD.</p> <p>For clarity the reference to hydraulic modelling is removed as recommended by the EA.</p> <p><b>Revisions</b> 5.4 The Flood Map for Planning produced by the EA provides an overview of fluvial flood risk for Main Rivers and contributing Ordinary Watercourses. The Flood Map for Planning provides the defined flood zones <del>from available hydraulic modelling</del> for major rivers but does not cover every watercourse and further modelling/assessment may be required.</p>
Para 5.9 (Page 17)	1347413 John Butterworth	<p><b>1</b> Blanket bog is both an extraordinary carbon sink, it is also uniquely able to absorb rainfall. The two major areas of such bog in Calderdale are Wadsworth Moor and Walshaw Moor - both are described as 'degraded' by the Yorkshire Peat Partnership and Moors for the Future. No</p>	The point made is acknowledged and one which the Council supports. It is, however, beyond the scope of the 'Flood Risk and Drainage SPD' which specifically addresses flood risk and drainage in relation to development.



Consultation Point	Consultee	Comment	Council response and SPD Revision (where applicable)
		restoration work is planned by either organisation, but funds should be made available for restoration. Potentially the single biggest impact on flood alleviation in the Calder Valley.	
Para 5.9 (Page 17)	1339566 Slow the Flow	<p><b>54</b> Uses the term 'poor' land management which seems judgemental since land management may be considered 'good' for other purposes eg agriculture. Use 'incompatible' instead?</p> <p>Also 'Large anomalous rainfall events' are becoming less anomalous as we experience the increasing effects of climate change which could be noted here. It is implicit in s5 but maybe could do with spelling out?</p>	<p>The suggestions are more precise and are accepted.</p> <p><b>Revisions</b> 5.9 bp 2: <del>Peer</del> <u>Inappropriate</u> land management</p> <p>5.9 bp7: <u>Increasing numbers of</u> <del>Large anomalous</del>-rainfall events <u>due to climate change</u></p>
Reservoir Flooding (Page 18)	1338968 Lizzy Walker (Environment Agency)	<p><b>20</b> The details provided appear to be correct. However, issues around this are dealt with at a national level in the Environment Agency and respond on a case by case basis.</p>	The comments by the EA are noted.
Para 5.23 (Page 19)	1338968 Lizzy Walker (Environment Agency)	<p><b>21</b> We would recommend that you separate 'expressing flood risk' into two sections for consistency to make it clearer that there are different hydrological capabilities. For example, the probability of a flood event of a certain magnitude or greater occurring in each and any year as a percentage could be included in paragraph 5.23 and include the 'return period' under paragraph 5.24 to make it clearer.</p>	<p>The suggestions in the representation will add clarity to the SPD.</p> <p><b>Revisions</b> 5.22 Flood risk is an expression of the combination of the flood probability (how likely the event will happen) and the magnitude of the potential consequences (the impact such as economic, social or environmental damage) of the</p>

Consultation Point	Consultee	Comment	Council response and SPD Revision (where applicable)
		<p>Paragraph 5.23 states  <i>“The likelihood or risk of flooding can be expressed in two ways:</i></p> <ul style="list-style-type: none"> <li>• <i>Chance of flooding: As a percentage chance of flooding each year. <u>For example, for Flood Zone 3a there is a 1% annual probability of this area flooding and</u></i></li> <li>• <i>Return period: This term is used to express the frequency of flood events. It refers to the estimated average time interval between events of a given magnitude. For example, for Flood Zone 3a the return period would be expressed as 1 in 100 year.”</i></li> </ul> <p>Please check the underlined wording above is correct. Flood Zone 3a includes all events up to the 1:100 year event (1% chance of occurrence event). We recommend rewording the sentence to state it includes all events with a 1% or greater chance from rivers.</p> <p>The second bullet point in paragraph 5.23 (above) should include Flood Zone 3a and also include all events with a 1:100 year return period or greater from rivers.</p>	<p>flood event. <u>The likelihood or risk of flooding can be expressed in two ways.</u></p> <p><u>5.23 Firstly, as a percentage chance of flooding each year. For example, for Flood Zone 3a there is a 1% or greater annual probability of this area flooding from rivers. The percentage chance of flooding each year, often referred to as annual probability, is now the preferred method of expressing flood risk.</u></p> <p><u>5.24 Secondly, by referencing the return period which expresses the frequency of flood events. This refers to the estimated average time interval between events of a given magnitude. For example, for Flood Zone 3a the return period would be expressed as 1 in 100 year or greater for rivers. However, there is a move away from using return periods as an expression of flood risk as this approach does not accurately express the risk of flooding. For example, it is misleading to say that a 1 in 100 year flood will only occur once in every hundred years. This suggests that if it occurs in one year then it should not be expected to reoccur again for another 100 years, however this is not the case.</u></p> <p><del>5.23 The likelihood or risk of flooding can be expressed in two ways:</del></p>

Consultation Point	Consultee	Comment	Council response and SPD Revision (where applicable)
			<ul style="list-style-type: none"> <li>● <del>Chance of flooding: As a percentage chance of flooding each year. For example, for Flood Zone 3a there is a 1% annual probability of this area flooding.</del></li> <li>● <del>Return period: This term is used to express the frequency of flood events. It refers to the estimated average time interval between events of a given magnitude. For example, for Flood Zone 3a the return period would be expressed as 1 in 100 year.</del></li> </ul> <p>5.24 However, there is a move away from using return periods as an expression of flood risk as this approach does not accurately express the risk of flooding. For example, it is misleading to say that a 1 in 100 year flood will only occur once in every hundred years. This suggests that if it occurs in one year then it should not be expected to reoccur again for another 100 years; however this is not the case. The percentage chance of flooding each year, often referred to as annual probability, is now the preferred method of expressing flood risk.</p>
Para 5.24 (Page 19)	1338968 Lizzy Walker (Environment Agency)	<b>22</b> Paragraph 5.24 states  <i>“However, there is a move away from using return periods as an expression of flood risk as this approach does not accurately express the risk of</i>	Ditto representation 21 from the EA (above).

Consultation Point	Consultee	Comment	Council response and SPD Revision (where applicable)
		<p><i>flooding. For example, it is misleading to say that a 1 in 100 year flood will only occur once in every hundred years. This suggests that if it occurs in one year then it should not be expected to reoccur again for another 100 years; however, this is not the case. The percentage chance of flooding each year, often referred to as annual probability, is now the preferred method of expressing flood risk."</i></p> <p>We recommend the second bullet point in paragraph 5.23 is moved and added to the end of the existing text included in paragraph 5.24 above to make it clearer to the reader that the return periods are another way of expressing flood risk, with a caveat that this approach is the less preferred for the reasons outlined in paragraph 5.24.</p>	
Tables 5.1 & 5.2 (Page 19)	1338968 Lizzy Walker (Environment Agency)	<p><b>23</b></p> <p>There are inconsistencies in how Flood Zone 3b risk is defined in both tables.</p> <p>Table 5.1 defines Flood Zone 3b as <i>"1 in 25 or greater or designed to flood in a 1 in 1000 year flood."</i></p> <p>Table 5.2 defines Flood Zone 3b as <i>"land that would flood with an annual probability of 1 in 20 (5%) or greater in any year, or is designed to flood in an extreme (0.1%) flood."</i></p>	<p>The SPD requires updating to reflect the latest government guidance.</p> <p><b><u>Revisions</u></b>  <b>Table 5.1 column 2 functional flood plain/Return Period/Flood Zone 3b:</b>  <del>1 in 25 or greater or designed to flood in a 1 in a 1000 year flood</del> <u>3.3% or greater annual probability of flooding</u></p> <p><b>Table 5.2 Zone 3b Floodplain:</b></p>

Consultation Point	Consultee	Comment	Council response and SPD Revision (where applicable)
		<p>Please check the above wording and definition of Flood Zone 3b reflects the latest government guidance on Flood Risk and Coastal Change found here [<a href="https://www.gov.uk/guidance/flood-risk-and-coastal-change#para77">https://www.gov.uk/guidance/flood-risk-and-coastal-change#para77</a>]. We recommend you amend the definitions accordingly.</p>	<p>This zone comprises land where water from rivers or the sea has to flow or be stored in times of flood. This includes land <del>that would flood with an annual probability of 1 in 20 (5%) or greater in any year,</del> <u>having a 3.3% or greater annual probability of flooding, with any existing flood risk management infrastructure operating effectively or land that</u> is designed to flood in an extreme (0.1%) flood, such as a flood attenuation scheme.</p>
<p>Para 5.28 (Page 20)</p>	<p>1338968 Lizzy Walker (Environment Agency)</p>	<p><b>25</b> We recommend reference is made to Calderdale Local Plan specifically Policy CC2. Please note that once you update your Strategic Flood Risk Assessment (SFRA) reference to Flood Zone 3ai shouldn't exist and will be replaced with Flood Zone 3b. Both the Local Plan Policy CC2 and the SPD will need reviewing and amending accordingly once the SFRA is updated.</p>	<p>Referencing Policy CC2 in para 5.28 will benefit readers of the SPD. The SFRA will be updated as part of the overall evidence base update for the Local Plan review at which time the referencing and role of Flood Zone 3ai will be re-considered.</p> <p><b><u>Revisions</u></b> <u>Local Plan Policy CC2 Flood Risk Management (Managing Flood Risk in New Development) at paragraph 11 sets out how proposals within flood Zone 3ai be assessed.</u> Should sites in Flood Zone 3ai become available for new or further development (e.g.as brownfield sites) then both the risk at the sites and their role in managing flood risk in the surrounding area should be carefully considered with no increase in development footprint. Flood Zone 3ai includes the areas of land that would be in Flood Zone 3b if not already developed and should therefore be used as an indicator of flood risk, from a modelled</p>

Consultation Point	Consultee	Comment	Council response and SPD Revision (where applicable)
			1 in 20 year event (5% AEP), to existing developed sites. <u>When the SFRA is updated it will not reference flood zone 3a which will be subsumed within flood zone 3b. This will be reflected in the Local Plan Review and future iterations of this SPD.</u>
Para 5.29 onwards (Page 20)	1338968 Lizzy Walker (Environment Agency)	<b>26</b> We recommend including a link to the gov.guidance found here [ <a href="https://www.gov.uk/guidance/flood-risk-assessments-climate-change-allowances">https://www.gov.uk/guidance/flood-risk-assessments-climate-change-allowances</a> ] for Flood Risk Assessments: Climate Change allowances in this section.	Provision of a link to the government guidance suggested by the EA would benefit users of the SPD.  <b><u>Revisions</u></b>  5.29 The National Planning Policy Framework (NPPF) and supporting Planning Practice Guidance (PPG) on Flood Risk and Coastal Change set out how the planning system should help minimise vulnerability and provide resilience to the impacts of climate change. <u>Further guidance can be found at .Flood risk assessments: climate change allowances - GOV.UK (www.gov.uk)</u> Making an allowance for climate change will help to minimise vulnerability and provide resilience to flooding and coastal change in the future. The climate change allowances are predictions of anticipated change for:
Para 5.30 (Page 21)	1338968 Lizzy Walker	<b>26</b> Paragraph 5.30 refers to “they...”. It is not clear what you mean when you refer to, “they”. Is this in	Refers to climate change allowances in the last sentence of para.5.29 but for clarity the wording is revised.

Consultation Point	Consultee	Comment	Council response and SPD Revision (where applicable)
	(Environment Agency)	relation to paragraph 5.29 or difference allowances. For clarity, we recommend you review the sentence, so it is clear what is being referred to here.	<p><b>Revisions</b>  5.30 <del>They</del> <u>The climate change allowances</u> are based on climate change projections and different scenarios of carbon dioxide (CO<sup>2</sup>) emissions to the atmosphere. There are different allowances for different periods of time over the next century. Table 5.3 shows the anticipated changes to peak flow by river basin district due to climate change. In addition to the tables below reference should be made to the latest climate change allowances as stated by the Environment Agency and should be adhered to.</p>
Para 5.34 (Page 21)	1338968 Lizzy Walker (Environment Agency)	<p><b>27</b>  Paragraph 5.34 states  <i>"If the local planning authority consider the development is appropriate, even though it will not follow the flood zone compatibility categories for Flood Zones 2, 3a or 3b, use the higher central allowance"</i>.</p> <p>We recommend you review/remove the above sentence, as currently worded this applies that the Council may consider some types of development to be appropriate even though this is contrary to national planning policy.</p>	<p>The suggestion revision will increase the clarity of the SPD for users.</p> <p><b>Revisions</b>  Delete the following sentence form paragraph 5.34:  <del>If the Local Planning Authority considers the development is appropriate, even though it will not follow the flood zone compatibility categories for Flood Zones 2, 3a or 3b, use the higher central allowance.</del></p>
Table 5.4 (Page 22)	1339566 Slow the Flow	<p><b>55</b>  Table 5.4's column headings do not match text in paragraphs 5.37, 5.38, 5.39</p>	The reference should be to Tables 5.5 and 5.6.

Consultation Point	Consultee	Comment	Council response and SPD Revision (where applicable)
			<p><b>Revisions</b> 5.35 Increased rainfall affects river levels and land and urban drainage systems. <del>Table 4.4</del> <u>Tables 5.5 and 5.6</u> show anticipated changes in extreme rainfall intensity in small and urban catchments. The latest climate change allowance from the Environment Agency are now based on River Basin Management Areas, of which Calderdale sits within the Aire and Calder Management Area available <a href="#">here</a>.</p>
Para 5.35 (Page 22)	1339566 Slow the Flow	<b>56</b> Ref should be to table 5.4?	<p>Table reference corrected.</p> <p><b>Revisions</b> 5.35 Increased rainfall affects river levels and land and urban drainage systems. Tables 4.4 <u>5.5 and 5.6</u> show anticipated changes in extreme rainfall intensity in small and urban catchments.</p>
Table 6.1 (Pages 24-27)	1338968 Lizzy Walker (Environment Agency)	<p><b>28</b> Step 3 states: <i>“In areas of Calderdale that are defended from flooding the residual risk of breaching of the defence can mean that some locations in Flood Zone 1 could be at risk of flooding”.</i></p> <p>Please check the above statement is correct. The Environment Agency flood zones do not account for flood defences or climate change. Please note even if sites are defended, the Environment</p>	<p>Yes, this is correct, the flood map for planning only removes formal registered flood defences in the modelling. There are many other informal flood defences such as private assets and culverts that are represented in the modelling and if these were to fail, or become defective (blocked for example), areas of flood zone 1 could become inundated. The revisions set out below address this comment.</p> <p><b>Revisions</b></p>



Consultation Point	Consultee	Comment	Council response and SPD Revision (where applicable)
		<p>Agency flood zone designation does not change because it does not account for defences. We recommend that the above statement is reworded to state that this applies to all applications proposing development must consider residual risk regardless of the flood zone classification where appropriate.</p>	<p><b>Table 6.1 Step 3:</b>            In areas of Calderdale that are defended from flooding the residual risk of breaching of the defence can mean that some locations in Flood Zone 1 could be at risk of flooding. <i>Additionally, and where appropriate, all applications proposing development must consider residual risk regardless of the flood zone classification.</i> While the EA s recognised flood maps show the areas that would be at risk if there were no defences, the failure of such structures can produce different results. The pressure the water may be under at the time of breach and the pathway that it is forced to take may not be the same as if water were naturally overtopping the river banks. For this reason an FRA may be required for sites proposing residential uses in defended areas that are actually within Flood Zone 1. If this situation applies, breach modelling is also likely to be required as part of the planning process. Advice should be sought from the EA if further explanation is required on this point.</p>
Table 6.1 (Pages 24-27)	1338968 Lizzy Walker (Environment Agency)	<p><b>29</b>            Step 4:            Under a site-specific Flood Risk Assessment (FRA) is required, the following should be added as a separate bullet point after <i>“Where proposed development, or a change of use to a more vulnerable class, may be subject to other sources of flooding”</i>.</p>	<p>The suggestion increases the range of circumstances where a FRA may be required.</p> <p><b>Revisions</b>            Add additional bullet point at end of first bulleted list:</p>

Consultation Point	Consultee	Comment	Council response and SPD Revision (where applicable)
		<p>An FRA is also required for increases the vulnerability classification and is in flood zone 1 where your LPA's SFRA shows it is at risk from other sources of flooding. Perhaps the table could reference FRSA for FRAs here.  <a href="https://www.gov.uk/guidance/flood-risk-assessment-standing-advice">[https://www.gov.uk/guidance/flood-risk-assessment-standing-advice]</a></p>	<ul style="list-style-type: none"> <li>An FRA is also required where there are increases in the vulnerability classification, the site is in Flood Zone 1 and where the SFRA shows it is at risk from other sources of flooding. The FRSA for FRAs can be found here <a href="https://www.gov.uk/guidance/flood-risk-assessment-standing-advice">https://www.gov.uk/guidance/flood-risk-assessment-standing-advice</a></li> </ul>
Table 6.1 (Pages 24-27)	1246930 Woodhouse Residents Association	<p><b>69</b> We fully support the requirement for a surface water strategy for major developments such as the Garden Community sites.</p> <p>Where developments are to be brought forward via a phased approach, the SPD should be clear that the drainage strategy, including a surface water strategy, must be provided at outline application stage to ensure the drainage and flood risk of the whole site is adequately considered. It is NOT appropriate to consider phases on an 'ad hoc' basis as this could jeopardise the development of the site in its entirety and undermine the achievement of the Local Plan's housing targets.</p>	Support for the approach outlined in Table 6.1 and Step 5 which references the need for a surface water drainage strategy for the whole site where outline applications are submitted for major sites, is noted.
Para 7.3 (Page 32)	1338968 Lizzy Walker (Environment Agency)	<p><b>30</b> Paragraph 7.3 states  <i>"...applicants are strongly encouraged to work closely with Water Management Authorities."</i></p>	<p>The suggestion provides greater information for those undertaking FRAs.</p> <p><b>Revisions</b></p>

Consultation Point	Consultee	Comment	Council response and SPD Revision (where applicable)
		<p>We recommend that you may want to consider inserting additional text here that draws attention for applicants to the possibility of additional costs and potential time delays, as water management authorities may charge for the providing technical advice and/or reviewing assessments.</p>	<p>7.3 When undertaking a Flood Risk Assessment, applicants are strongly encouraged to work closely with Water Management Authorities. WMAs must agree that proposed developments are safe and that flood risk management partners (e.g. emergency services) would be able to respond quickly and appropriately to any incidents. Site-specific Flood Risk Assessments must detail how a site will be made safe and include plans for emergency access, egress and evacuation. <u>WMAs may also charge for providing technical advice and/or reviewing assessments, a process which could potentially induce time delays.</u></p>
<p>Para 7.7 (Page 32)</p>	<p>1338968 Lizzy Walker (Environment Agency)</p>	<p><b>31</b> Paragraph 7.7 states:  <i>“For guidance, residential development should be considered for a minimum of <u>100 years</u>, unless there is specific justification for considering a shorter period.”</i>  We recommend revising the wording as underlined above to clearly state this is for the development’s lifetime, for clarity.</p>	<p>The suggestion adds further clarity to the SPD.</p> <p><b>Revisions</b> 7.7 For guidance, residential development should be considered for <del>a minimum of 100 years</del> <u>the lifetime of the development</u>, unless there is specific justification for considering a shorter period.</p>
<p>Para 7.11 (Page 33)</p>	<p>1339566 Slow the Flow</p>	<p><b>58</b> Remove ‘where practicable’, and this type of language throughout. (You state early on that this is a guidance document, also that SuDS and NFM</p>	<p>The suggestion adds clarity to the SPD.</p> <p><b>Revisions</b> 7.11 The site layout should also respond to the characteristics of the location and the nature of the</p>

Consultation Point	Consultee	Comment	Council response and SPD Revision (where applicable)
		<p>are expected/preferred - no reason to provide an excuse for not using them).</p> <p>It is not just riverside developments that this applies to. Suggested edit:</p> <p>This may be particularly relevant to riverside developments, <b>or other relatively flat areas</b> where extreme events can be catered for in multi-function open space areas (likely to form part of the green infrastructure provision) that would normally be used for recreation but infrequently can flood.</p>	<p>risk. In some areas it is more appropriate to make space for water and allow controlled flood water onto areas of the development site, using SuDS and NFM measures <del>where practicable</del>. This is <i>may be</i> particularly relevant to riverside developments <i>or other relatively flat areas</i> where extreme events can be catered for in multi-function open space areas (likely to form part of the green infrastructure provision) that would normally be used for recreation but infrequently can flood.</p>
Para 7.12 (Page 33)	1339566 Slow the Flow	<p><b>59</b> Add: "Impermeable car parking will only be acceptable when combined with SuDS measures such as rain gardens and swales."</p>	<p>The suggestion improves the clarity of the SPD.</p> <p><b>Revisions</b> 7.12 Short-term <i>impermeable</i> car parking may be appropriate in areas subject to flood risk <i>but will only be acceptable when combined with SuDS measures such as rain gardens and swales, and</i> provided that flood warnings and signs are in place. It is important to consider the need that people should be able to move their cars to a recognised safe area within the warning time (hence the unacceptability of long term and residential car parking where residents may be away from the area for long periods of time). Car parks should ideally not be subject to flood depths in excess of 300mm depth since vehicles can be moved by water of this depth and may cause obstruction and/or injury. A guidance document</p>

Consultation Point	Consultee	Comment	Council response and SPD Revision (where applicable)
			titled <i>Flood Risks to People</i> was published by DEFRA / EA in 2006 which developed a method for estimating risks to people, both during and immediately after a flood event. This document contains useful information on the hazards of flooding.
Para 7.13 (Page 33)	1339566 Slow the Flow	<p><b>60</b> STF comments on previous iterations of this document appear to have been ignored. It is not true that SuDS and NFM should not be sited within the flood plain. Suggested rewording as follows:</p> <p>“The use of SuDS or Natural Flood Management within the flood plain should not count towards compensatory attenuation, as they cannot be utilised if flooded from the river. However, they can still have a beneficial effect on sites downstream in less extreme flood events, and should therefore not be discounted for use on flood plain areas, but should be fully understood and carefully designed.”</p>	<p>The suggestion adds clarity and detail to the SPD which supersedes the 2018 guidance note.</p> <p><b>Revisions</b> The use of SuDS or Natural Flood Management <del>should not be sited</del> <u>within the flood plain should not count towards compensatory attenuation, as they cannot be utilised if flooded from the river. However, they can still have a beneficial effect on sites downstream in less extreme flood events, and should therefore not be discounted for use on flood plain areas, but should be fully understood and carefully designed to ensure their operation is not compromised by any flood event.</u> <del>where implemented to manage surface water flows as they are important in reducing the risk of surface water flooding on site and cannot be utilised if flooded from the river. Additionally, the river will want to fully use its floodplain and these systems in the floodplain may compromise this ability.</del></p>
Para 7.17 (Page 33)	1338968 Lizzy Walker	<b>32</b> Paragraph 7.17 states:	

Consultation Point	Consultee	Comment	Council response and SPD Revision (where applicable)
	(Environment Agency)	<p><i>“An alternative could include the placing of parking or other flood compatible uses at ground level with more vulnerable uses at higher levels”.</i></p> <p>We recommend that the sentence is amended to include non-habitable uses should be sought on ground floor level to ensure the design of the development proposal prevents changes after planning permission has been determined that could potentially allow for more vulnerable uses on ground floor level.</p>	<p>The suggestion would ensure further protection for residents.</p> <p><b>Revisions</b>  7.17 An alternative could include the placing of parking <u>and other non-habitable uses</u> <del>or other flood compatible uses</del> at ground level <u>(to ensure the design of the development proposal prevents changes after planning permission has been determined that could potentially allow for more vulnerable uses on ground floor level)</u> with more vulnerable uses at higher levels. This is only appropriate for areas of low frequency flood risk and must ensure safe access and escape from the development and that the development is habitable for the duration of the flood, i.e. services to the properties will continue to function. When undertaking this approach no built elements should interrupt flood flow paths or reduce floodplain storage capacity.</p>
Para 7.19 (Page 34)	1338968 Lizzy Walker (Environment Agency)	<p><b>33</b>  Paragraph 7.19 states  <i>“Sleeping accommodation on the ground floor that relies on flood warnings and the implementation of flood proofing measures is hazardous.”</i></p> <p>Further explanation is required here to explain why solely relying on the Environment Agency’s flood warning system is hazardous and unlikely to be accepted.</p>	<p>The suggestions add clarity to the SPD.</p> <p><b>Revisions</b>  7.19 Sleeping accommodation on the ground floor that relies on flood warnings and the implementation of flood proofing measures is hazardous <u>and unlikely to be acceptable due to the speed with which flood events can occur in some instances.</u> <del>Residential uses in basements</del></p>

Consultation Point	Consultee	Comment	Council response and SPD Revision (where applicable)
		<p>Paragraph 7.19 further adds,  <i>“Residential uses in basements in flood risk areas are not recommended and should be avoided.”</i></p> <p>Please check the above wording as currently the above sentence is misleading and incorrect. The sentence either needs deleting or rewording to be in line with <u>Annex 3</u> of the National Planning Policy Framework which classifies basement dwellings as ‘highly vulnerable’ land use.</p>	<p><i>Basement dwellings</i> in flood risk areas are <i>categorised as a highly vulnerable land use in Appendix 3 to the NPPF not recommended</i> and should be avoided. Change of use from commercial to residential that results in proposed ground floor flats in Flood Zone 3 is unlikely to be acceptable unless finished floor levels are or can be raised above the predicted flood level (with an appropriate allowance for climate change), and there is safe access to and escape from higher storeys of the building.</p>
Compensatory Storage (Page 34)	1338968 Lizzy Walker (Environment Agency)	<p><b>34</b></p> <p>Reference is only given to <i>“land raising”</i> in paragraphs 7.20-7.22. This also includes ‘new built footprint’ as this is treated same as land raising in terms of floodplain compensation. Please see below suggested amendments to the wording.</p> <p>Paragraph 7.20 states:  <i>“Any proposals to modify ground levels or <b>construct new built footprint</b> will need to demonstrate in the Flood Risk Assessment that there is no increase in flood risk from all sources to the development itself or to any existing property elsewhere. Where land on site is raised above the level of the flood plain to protect properties, compensatory land must be returned to the floodplain.”</i></p>	<p>The suggestions add clarity to the SPD.</p> <p><b>Revisions</b>  <del>7.20 Any proposals to modify ground levels will need to demonstrate in the Flood Risk Assessment that there is no increase in flood risk from all sources to the development itself or to any existing property elsewhere. Where land on site is raised above the level of the flood plain to protect properties, compensatory land must be returned to the floodplain. This is to ensure that new flood risk is not created elsewhere in an unknown or unplanned for location. Land raising would generally only be applicable on smaller development sites or for a small portion of the developable site area.</del></p>

Consultation Point	Consultee	Comment	Council response and SPD Revision (where applicable)
		<p>We recommend you review the wording in this paragraph particularly around the requirements for floodplain compensation to be provided for any future development that displaces floodwater in the floodplain in the design flood event to be line with what is defined in the planning practice guidance. Please note that any volume of water that is lost in the floodplain must be compensated directly (level for level) to ensure there is no increase in risk as a result of the proposed development.</p> <p>Please note the Environment Agency can advise on the acceptability and core principles of floodplain compensation proposals however, the design responsibility lies within the applicant. Any application received where the applicant has not detailed the final floodplain compensation design in the flood risk assessment or evidence that a solution is possible, the Environment Agency is likely to object to the application.</p>	<p><u>7.20 Any volume of water that is lost in the floodplain as a result of development must be compensated for directly by on-site level-for-level compensatory storage, accounting for the predicted impacts of climate change over the lifetime of the development to ensure there is no increase in flooding from all sources to the development itself or to any existing property elsewhere. Therefore, any proposals to modify ground levels or construct new built footprint will need to demonstrate in the Flood Risk Assessment that these requirements are met. For example, where land on site is raised above the level of the flood plain to protect properties, compensatory land must be returned to the floodplain to ensure that new flood risk is not created elsewhere in an unknown or unplanned for location. Land raising would generally only be applicable on smaller development sites or for a small portion of the developable site area. The Environment Agency can advise on the acceptability and core principles of floodplain compensation proposals, however, the design responsibility lies with the applicant. Any application received where the applicant has not detailed the final floodplain compensation design in the flood risk assessment or evidenced that a solution is possible, is likely to result in an objection from the Environment Agency.</u></p>
Para 7.23	1338968	<b>35</b>	



Consultation Point	Consultee	Comment	Council response and SPD Revision (where applicable)
(Page 34)	Lizzy Walker (Environment Agency)	<p>Paragraph 7.23 states:  <i>“The construction of new flood risk defences may enable development to take place provided that there are wider sustainability benefits associated with their construction”.</i></p> <p>We recommend the above sentence is reviewed and reworded to advise that new developments located behind a new and or existing flood defence that the development proposal details, assesses, and sets out how it will manage residual risk.</p>	<p>The suggestions adds clarity to the SPD.</p> <p><b>Revisions</b>  7.23 The construction of new flood risk defences may enable development to take place provided that there are wider sustainability benefits associated with their construction <u>and the development proposal details, assesses and sets out how it will manage residual flood risk.</u> New defences create new residual risks that can take significant investment to fully understand and plan. Where defences are required, maintenance agreements will need to be reached through Section 106 of the Town and Country Planning Act 1990. In addition, Calderdale Council may also adopt new flood defences if appropriate agreements and funding are in place.</p>
Para 7.26 (Page 35)	1338968 Lizzy Walker (Environment Agency)	<p><b>36</b>  Paragraph 7.26 states  <i>“Environment Agency permission through a flood risk activity permit will also be required for any works that might affect a main river or flood defence”.</i></p> <p>The FRA is also a necessary part of a flood risk activity permit application and requirement from the Environment Agency. We recommend revising the above sentence to include reference to the FRA being a requirement. In addition, it should be noted that a site-specific FRA for planning cannot</p>	<p>The suggestions add clarity to the SPD.</p> <p><b>Revisions</b>  7.26 Environment Agency permission through a flood risk activity permit, <u>for which a FRA is a requirement.</u> will also be required for any works that might affect a main river or flood defence. <u>A site-specific FRA for planning cannot always be used to satisfy the requirements for a flood risk activity permit application. Any FRA submitted as part of the flood risk activity permit application</u></p>

Consultation Point	Consultee	Comment	Council response and SPD Revision (where applicable)
		<p>always be used to satisfy the requirements for a flood risk activity permit application. An FRA submitted as part of the flood risk activity permit application must assess the risk associated with each flood risk activity applied for and provide the necessary mitigation. Please see the following guidance (<a href="https://www.gov.uk/guidance/flood-risk-activity-risk-assessment-for-your-environmental-permits#risk-assessments-for-bespoke-permits">https://www.gov.uk/guidance/flood-risk-activity-risk-assessment-for-your-environmental-permits#risk-assessments-for-bespoke-permits</a>) for creating a FRA for a flood risk permit application.</p>	<p><i>must assess the risk associated with each flood risk activity applied for and provide the necessary mitigation. Further guidance for creating a FRA for a flood risk permit application. can be found at: (<a href="https://www.gov.uk/guidance/flood-risk-activity-risk-assessment-for-your-environmental-permits#risk-assessments-for-bespoke-permits">https://www.gov.uk/guidance/flood-risk-activity-risk-assessment-for-your-environmental-permits#risk-assessments-for-bespoke-permits</a>)</i></p>
<p>Para 7.28 (Page 35)</p>	<p>1338968 Lizzy Walker (Environment Agency)</p>	<p><b>37</b> The LPA may wish to state that any mitigation measures must be selected by comparing and assessing the suitability and effectiveness in comparison to the 1% AEP plus climate change flood event as defined in the planning practice guidance, for further clarity.</p>	<p>Paragraph 7.28 is revised to add further clarity to the SPD.</p> <p><b>Revisions</b> 7.28 Measures to manage flood risk from all sources should be stated. The selection of appropriate mitigation measures depends on the requirements of the development and its sensitivity to flood risk. Any mitigation measure selected should be sustainable in the future by taking into consideration the impact of climate change on flood risk <i>and by comparing and assessing the suitability and effectiveness in comparison to the 1% AEP plus climate change flood event as defined in the planning practice guidance on Flood Risk and Coastal Change (Paragraphs: 002 Reference ID: 7-002-20220825 and 078 Reference ID: 7-078-20220825).</i></p>

Consultation Point	Consultee	Comment	Council response and SPD Revision (where applicable)
Para 7.30 (Page 36)	1338968 Lizzy Walker (Environment Agency)	<p><b>38</b> In paragraph 7.30 we recommend including a link to flood risk standing advice (FRSA) (<a href="https://www.gov.uk/guidance/flood-risk-assessment-standing-advice">https://www.gov.uk/guidance/flood-risk-assessment-standing-advice</a>).</p>	<p>The suggested link to the EA's FRSA will benefit users of the SPD.</p> <p><b>Revisions</b> 7.30 You should follow the Environment Agency's standing advice (<a href="https://www.gov.uk/guidance/flood-risk-assessment-standing-advice">https://www.gov.uk/guidance/flood-risk-assessment-standing-advice</a>) if you are carrying out a Flood Risk Assessment of a development classed as:</p>
Table 7.1 (Page 36)	1338968 Lizzy Walker (Environment Agency)	<p><b>39</b> We suggest removing the first item in the table 7.1.</p> <p><del><i>Development within 20m of a main river? Contact the Environment Agency if so.</i></del></p> <p>The Environment Agency do not feel the applicant needs to contact us directly if the development is within 20 metres of the main river. If the development proposal is within 20 metres of a main river the LPA will consult us in the normal way as a statutory consultee on the planning application. If the Environment Agency consider it necessary for the applicant to speak to us directly for more detailed advice this can be done through our charged advice and or contact details to contact us about obtaining a flood risk activity permit which will be included as advice in our</p>	<p>Developers will need to contact the EA prior to a permission being submitted to gather desktop information (river levels etc) to inform the drafting of the FRA. The row referenced in the representation is therefore retained in Table 7.1.</p>

Consultation Point	Consultee	Comment	Council response and SPD Revision (where applicable)
		formal response back to the LPA on the planning application.	
Para 8.4 (Page 37)	1338968 Lizzy Walker (Environment Agency)	<b>40</b> In paragraph 8.4 we suggest including raising finished floor levels and floodplain compensation as other mitigation measures for addressing residual risk.	The suggestion improves the implementation of the SPD.  <b>Revisions</b> Add new bullet points to paragraph 8.4: <ul style="list-style-type: none"> <li>• <u>raising finished floor levels</u></li> <li>• <u>floodplain compensation.</u></li> </ul>
Para 8.5 (Page 37)	1338968 Lizzy Walker (Environment Agency)	<b>41</b> Reference is made to the Water Exclusion Strategy however, this does not include raising the finished floor level which is a key method. We suggest including raising finished floor levels above the residual flood level, alongside adequate safe access, and egress measures in the Water Exclusion Strategy.	The intention of Section 8.5 is to provide an overview and not to detail all possible measures that could be incorporated as part of a strategy to exclude water. Reference to other relevant documents is made in Section 8.2.  Sections 7.14 to 7.19 adequately cover raising floor levels.
Flood Resistance Measures (Page 37)	1338968 Lizzy Walker (Environment Agency)	<b>42</b> Please note flood resistance measures on their own are not likely to be sufficient enough to say that the development will be acceptable with regards to managing flood risk. We recommend you review and amend the wording accordingly.  In addition, we recommend using passive measures over non passive measures because they do not rely on human interaction. Non passive measures on their own present a higher	The suggestions add clarity to the SPD.  <b>Revisions</b> <del>8.6 Flood resistance measures reduce the risk of flood water from entering a building and can be referred to as 'dry proofing'. Measures include exterior water retaining walls and barriers built into building facades, gates that protect basement areas, doorway flood barriers, and airbrick covers.</del>

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		<p>risk and are prone to human error. For example, someone may forget to install a barrier or close a door. Where it is not possible to use passive measures, the applicant must provide sufficient reasoning as to why passive measures cannot be used.</p>	<p><del>8.7 The effectiveness of flood resistance measures depends upon the occupier understanding the features, utilising them correctly when required and carrying out any needed maintenance. Passive measures such as flood doors and self-closing airbricks are one way of reducing the risk. Water pressure and carried debris can also damage buildings and result in breaching of barriers. As a result these measures should be used with caution and accompanied by flood resilience measures.</del></p> <p><del>8.8 Flood resistance measures cannot be used in isolation as the only form of flood mitigation, but they may be useful within a suite of measures including appropriate high finished floor levels and safe access and escape routes. Flood resistance measures can aid recovery from an extreme event.</del></p> <hr/> <p><u>8.6 Flood resistance measures reduce the risk of flood water from entering a building but on their own are unlikely to be sufficient to make development acceptable regarding managing flood risk. They can be referred to as 'dry proofing' and include exterior water retaining walls and barriers built into building facades, gates that protect basement areas, doorway flood barriers, and airbrick covers. These measures cannot be</u></p>

Consultation Point	Consultee	Comment	Council response and SPD Revision (where applicable)
			<p><u>used in isolation as the only form of flood mitigation but may be useful within a suite of measures including appropriate high finished floor levels and safe access and escape routes. Flood resistance measures can also aid recovery from an extreme event. Additionally, water pressure and carried debris can also damage buildings and result in breaching of barriers providing a further reason that both passive and non-passive flood resistance measures should be used with caution and accompanied by flood resilience measures.</u></p> <p><u>8.7 The effectiveness of flood resistance measures depends upon the occupier understanding the features, utilising them correctly when required and carrying out any needed maintenance. Passive measures such as flood doors and self-closing airbricks are preferred to non-passive measures.as they do not rely on human interaction. Where it is not possible to use passive measures, the applicant must provide sufficient reasoning as to why passive measures cannot be used.</u></p>
Para 8.9 (Page 37)	1338968 Lizzy Walker (Environment Agency)	<b>43</b> We recommend revising the wording of this paragraph to include a caveat that water entry is not acceptable to be considered for compensatory storage because you cannot control what happens inside a building.	The suggestions add clarity to the SPD.  <b>Revisions</b> Flood resilient construction accepts that water will enter the building, but with careful design minimises the damage to allow the re-occupancy of the building as soon as possible. This is

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			<p>encouraged in water compatible developments within the functional flood plain. <u>However, for clarity, water entry will not be considered acceptable for compensatory storage.</u> Resilient construction can be achieved more consistently than resistance measures and is less likely to encourage occupiers to remain in buildings that could be inundated by rapidly rising water levels. Total prevention of water entry or 'dry proofing' to a building is very difficult to achieve and flood resilient measures are about reducing the impact caused by flooding Further details can be found in Improving the <i>Flood Performance of New Buildings</i> (DCLG, 2007).</p>
<p>Para 9.2 (Page 39)</p>	<p>1339566 Slow the Flow</p>	<p><b>61</b> Calderdale has a commitment to SuDS. The language here should be revised to clearly encourage the inclusion of SuDS as standard in ALL developments: minor developments as well as major, and including in non-flood-risk areas (because they can make a big difference to the downstream situation).</p> <p>Generally throughout; remove the use of the word "inappropriate" or "appropriate" (depending on context) in relation to SuDS and the application of these techniques. STF is unaware of any situation where it would not be appropriate to use SuDS. You state early on that this is a guidance document, also that SuDS and NFM are</p>	<p>The wording in the SPD reflects national guidance.</p>

Consultation Point	Consultee	Comment	Council response and SPD Revision (where applicable)
		expected/preferred - no reason to provide an excuse for not using them. Be brave/authoritative!	
Para 9.6 (Page 39)	1339566 Slow the Flow	<p><b>71</b></p> <p>Sewerage Sector Guidance Appendix C provides a mechanism for Yorkshire Water to adopt surface SuDS as sewers, where they meet certain criteria. This should be noted here. See <a href="https://slowtheflow.net/suds-barriers-removed-by-new-sewers-guidance/">https://slowtheflow.net/suds-barriers-removed-by-new-sewers-guidance/</a></p>	<p><b>Revisions</b></p> <p>9.6 The participation of other consenting bodies (particularly statutory consultees) in pre-application discussions should also be undertaken whenever possible to enable early consideration of all fundamental issues, even when further discussions will be required at a later stage. These agencies or bodies may include (but not be limited to):</p> <ul style="list-style-type: none"> <li>• Environment Agency</li> <li>• Canal and River Trust</li> <li>• Highway Authority</li> <li>• Yorkshire Water (sewage undertaker). <i>Along with its other functions Yorkshire Water can also potentially adopt SuDs as sewerage assets as set out on Appendix C to the 'Sector Guidance in relation to the adoption of sewerage assets by sewerage companies in England' - <a href="#">SSG Appendix C - Design and Construction Guidance v2-3_0.pdf (water.org.uk)</a>.</i></li> </ul>
CMBC Revision	N/A	In response to the possible introduction of new legislation, Building Control is seeking to collaborate more closely with the Flood team on matters related to flood risk. This is to ensure that the best practices and standards are followed in	<p>The addition is to ensure that matters relating to surface water drainage are also addressed during the construction phase.</p> <p><b>Revisions</b></p> <p>After paragraph 9.14 and new paragraph 9.14a:</p>



Consultation Point	Consultee	Comment	Council response and SPD Revision (where applicable)
		the design and construction of buildings and the attenuation of surface water.	<i>As well as being followed during the design phase, the best practices and standards must also be followed during the construction phase of buildings including the attenuation of surface water.</i>
SuDS and Planning (Page 40)	1339566 Slow the Flow	<b>62</b> 9.16 to 9.29 are most welcome, and should be moved to the start of this section as an introduction to SuDS and Calderdale's principles. (i.e. relocate this section before the currently numbered para 9.2.)	This text aligns with general guidance on preparing drainage strategies and therefore is not revised.
Para 9.28 (Page 41)	1245761 Susan Miles (Todmorden Town Council)	<b>9</b> Under clause 9.28 we wish to see “are expected to have been considered” to change to “must be considered”. The topography of Todmorden leads to greater impact from run-off and whilst the SPD makes occasional reference to this, we would like to see this strengthened to recognise the need to consider the overall incremental impact from one-off developments, whether new, conversions or extending existing properties, or surface changes, especially where developments on hillsides have a direct impact on properties lower down the hill.  Under clause 9.2 we would request that “unless demonstrated to be inappropriate” is removed. We believe that all development in flood risk areas should ensure SuDS are put in place.	The existing wording is in line with current planning policy on flood risk and drainage. Should national policy change and Schedule 3 of the FWMA 2010 be implemented, this will give scope to strengthen existing wording. No revisions are therefore made at this time.
Table 9.1	1339566	<b>63</b>	

Consultation Point	Consultee	Comment	Council response and SPD Revision (where applicable)
(Page 42)	Slow the Flow	<p>Add Blue Roofs / Rainwater harvesting for use within buildings.</p> <p>Add rain gardens - surface features collecting runoff from surroundings (e.g. 'inverted verges'), or raised planters intercepting downpipes. Can be used as soakaways, or to slow water and direct it to the next feature in the SuDS management train, depending on ground conditions.</p>	<p>The purpose of Table 9.1 is to provide an overview of common SuDS techniques and the title of Table 9.1 is revised to reflect this. Also reference is made to the CIRIA SuDS Manual C753 which contains much more detailed information.</p> <p><b>Revisions</b> Revise title of Table 9.1: Table 9.1 <del>Explanation</del> <u>Overview of Common SuDS techniques</u></p> <p>9.29 For further information please refer to the most recent guidance on SuDS and any available future SUDS documents from the LLFA, CIRIA or EA. <u>Whilst Table 9.1 provides an overview of some common SuDS techniques more detailed information can be found in the CIRIA SuDS Manual C753.</u></p>
Para 9.50 (Page 46)	1339566 Slow the Flow	<p><b>64</b> Information out of date - YW now refer to SSG 2020. See <a href="https://slowtheflow.net/suds-barriers-removed-by-new-sewers-guidance/">https://slowtheflow.net/suds-barriers-removed-by-new-sewers-guidance/</a> - note within this section somewhere that adoption of surface SuDS as sewers is a potential avenue for applicants to explore.</p>	<p>The information is not out of date and is therefore retained.</p> <p>Also see the response to representation 71 from Slow the Flow.</p>
Whole document	1185995 Beth Yeadon	<p><b>45</b> Whilst we are in support of the document, we do, however, request further clarification on the</p>	Support for the SPD is noted.

Consultation Point	Consultee	Comment	Council response and SPD Revision (where applicable)
	(Persimmon Homes)	Surface Water Submission Checklist. Paragraph 9.64 suggests that Table 9.2 and 9.3 sets out the minimum level of information required to be submitted to the LLFA on minor and major planning applications, although this is not clear as to what stage the information is required. It should be clarified that Tables 9.2 and 9.3 do not represent a validation checklist. Additionally, as we would expect that some of the information would be required to be submitted as part of a discharge of condition application, we request that the fourth column be amended to 'Full Application <i>and/or</i> Discharge of Conditions'.	The existing requirements are retained as these provide flexibility dependant on the local circumstance of each development proposal.
Tables 9.2 & 9.3 (Pages 48-49)	1339566 Slow the Flow	<b>65</b> Tables 9.2 and 9.3, edit 'Proposed/Preliminary Drainage Layout' to read 'Proposed/Preliminary Sustainable Drainage Layout', to emphasise the expectation that all drainage layouts should be sustainable.	As per the response to representation 61 from Slow the Flow, the wording in the SPD reflects national guidance.
Appendix 2 (Page 51)	1245761 Susan Miles (Todmorden Town Council)	<b>9</b> Appendix 2 – We would welcome a shift of emphasis from “less vulnerable” to “more vulnerable” in respect of “building used for shops etc”, whilst we recognise that this categorisation may reflect danger to life, the economic, employment and long-term impact on business owners is significant in itself in terms of health damage - physical and mental.	Appendix 2 to the SPD is Appendix 3 to the National Planning Policy Framework and so cannot be revised the local planning authority.
Appendix 3	1339566	<b>66</b>	The suggestion will add clarity to the SPD.

Consultation Point	Consultee	Comment	Council response and SPD Revision (where applicable)				
(Page 53)	Slow the Flow	Remove 'ideally' from "Any development in Flood Zones 2 or 3 should ideally be treated as major developments".	<p><b>Revisions</b> Remove 'ideally' from Second paragraph: The above criteria apply for developments in Flood Zone 1. Any development in Flood Zones 2 or 3 should <del>ideally</del> be treated as major developments for the purpose of surface water drainage.</p>				
Appendix 3 Calculate additional volumes for storage (Page 56)	1339566 Slow the Flow	<p><b>67</b> Could do with a box or a line accompanying 'State the site's geology:', for clarity that information input is required.</p>	<p>Although stated just before Section 6 may be clearer if included as a separate row just after 'Were infiltration rates obtained by desk study or infiltration test'.</p> <p><b>Revisions</b> Delete 'State the site's geology' above section 6 and Under Section 6 'Calculate additional volumes for storage' add new row as follows:</p> <table border="1" data-bbox="1346 1002 2000 1345"> <tr> <td data-bbox="1346 1002 1671 1241">Were infiltration rates obtained by desk study or infiltration test?</td> <td data-bbox="1671 1002 2000 1241">Infiltration rates can be estimated from desk studies at most stages of the planning system if a back-up attenuation scheme is provided.</td> </tr> <tr> <td data-bbox="1346 1241 1671 1345"><u>State the site's geology.</u></td> <td data-bbox="1671 1241 2000 1345"></td> </tr> </table>	Were infiltration rates obtained by desk study or infiltration test?	Infiltration rates can be estimated from desk studies at most stages of the planning system if a back-up attenuation scheme is provided.	<u>State the site's geology.</u>	
Were infiltration rates obtained by desk study or infiltration test?	Infiltration rates can be estimated from desk studies at most stages of the planning system if a back-up attenuation scheme is provided.						
<u>State the site's geology.</u>							

Consultation Point	Consultee	Comment	Council response and SPD Revision (where applicable)
Appendix 5 (Page 62)	1339566 Slow the Flow	<b>68</b> NFM should be in the Glossary? (It's in the abbreviations but missing from the Glossary)	NFM is useful addition to the Glossary.  <b><u>Revisions</u></b> An explanation of NFM is added to the Glossary.