

Statement of Common Ground between Wyre Forest District Council and the Environment Agency

1) Introduction

Under the National Planning Policy Framework (NPPF, 2019), strategic policy making authorities, such as local planning authorities, should produce, maintain and keep up to date a Statement of Common Ground (SofCG) to highlight agreement on cross boundary strategic issues with neighbouring local authorities and other relevant bodies.

This SofCG has been produced to support the submission of the Wyre Forest District Local Plan (2016 – 2036). It sets out how Wyre Forest District Council has engaged with the Environment Agency in order to fulfil its Duty to Cooperate requirements.

2) Parties Involved

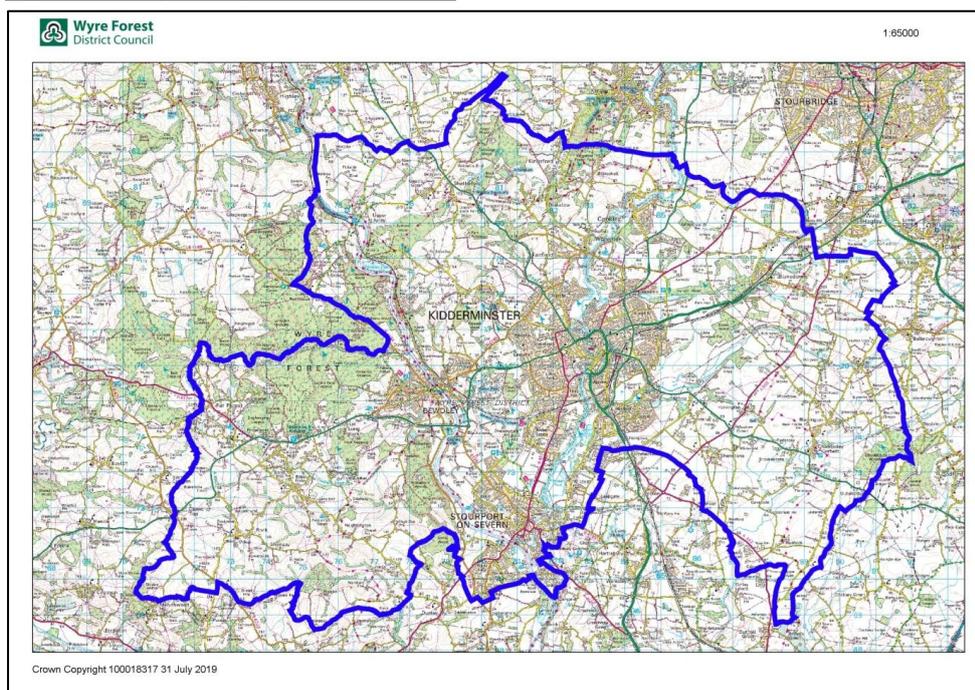
This SofCG has been prepared jointly by Wyre Forest District Council (WFDC) and the Environment Agency (EA). The Environment Agency is a statutory consultee.

The SofCG covers those matters agreed and disagreed by the parties with regards to the proposed Wyre Forest District Local Plan (2016-2036), in order to fulfil the Duty to Cooperate requirements as outlined in paragraph 27 of the NPPF.

3) Strategic Geography

This SofCG covers all of the Wyre Forest District and has been produced for the purposes of the Wyre Forest District Local Plan (2016-2036), which is due to be submitted to the Planning Inspectorate in Spring 2020. Figure 1 below shows the district boundary of Wyre Forest District.

Figure 1: Map of Wyre Forest District



4) Background / Duty to Cooperate

There has been ongoing engagement between WFDC and the Environment Agency throughout the preparation of the WFDC Local Plan Review. WFDC has consulted with the Environment Agency at every stage of plan making. The Local Plan Review consultation periods were as follows:-

- Issues and Options Consultation – September / October 2015
- Preferred Options Consultation – June / August 2017
- Pre-Submission Consultation – November / December 2018
- Pre-Submission Consultation (re-opened) – September / October 2019

5) Strategic Matters Identified

The Environment Agency responded to the WFDC Local Plan Pre-Submission consultation that was undertaken in November / December 2018. Table 1 shows a summary of the responses received from the Environment Agency (the full response can be viewed in Appendix 2).

Table 1: Environment Agency response to WFDC Local Plan Pre-Submission (2018)

	Issues raised by the Environment Agency (EA) to the 2018 consultation (Reg 19)
Environment Agency (2018 response)	<p><u>Policy 11F – Regenerating the Waterways</u></p> <p>The EA note that Policy 11F has been updated in line with EA recommendations and it now refers to Policy 15C as well as the inclusion of some further wording. The EA support this update.</p>
Environment Agency (2018 response)	<p><u>Policy 12 – Strategic Infrastructure</u></p> <p>The EA support the integrated approach to strategic infrastructure. The EA particularly note the reference to the potential provision of a contribution towards infrastructure such as flood alleviation schemes (new or maintenance of existing), flood warning provision for example relevant to EA remit. The EA have suggested that, for some specific sites which may be reliant upon flood warning and/or contribute to flood defence infrastructure, WFDC include some reference to such within the policy/reasoned justification.</p>
Environment Agency (2018 response)	<p><u>Policy 14 – Green Infrastructure (GI)</u></p> <p>The EA support the approach to incorporating, protection/enhancement of GI within the Locality – the EA would encourage GI that would help enhance and maintain habitat for those species protected under the Conservation of Habitats and Species Regulations 2010.</p> <p>Within Policy 14 the EA would recommend the addition of the need to enhance blue infrastructure. The EA would seek appropriate blue infrastructure i.e. ‘blue’ landscape elements are linked to water such as pools, pond and wetland systems, artificial basins or watercourses. Along with green infrastructure they help form an interconnected network of environmental enhancements within and across catchments. The EA would also welcome identification of opportunities for measures</p>

	<p>to secure net gains for biodiversity, and other environmental improvements, in line with the NPPF recent revisions.</p> <p>Note – Please see current government consultation on ‘net gains key issues’ which is seeking to pursue a broader Environmental Net Gain approach. https://consult.defra.gov.uk/land-use/net-gain/</p>
<p>Environment Agency (2018 response)</p>	<p><u>Policy 15A – Water Conservation and Efficiency</u></p> <p>The EA note that a policy has been included to secure higher (more stringent) levels of water efficiency for residential development throughout the district.</p> <p>In line with the approach for justifying higher levels of water efficiency policies, the EA have recently produced mapping which show areas of water stress and/or catchments that are likely failing due to low flows. This is within appendix A of the EA response for information/inclusion within the Water Cycle Study evidence. It should be noted that whilst this does not cover the whole area, it covers most of Wyre Forest district (covering the east of the district). WFDC may want to secure higher water efficiency throughout the district as proposed in the policy to help achieve this water resource reduction objective. Note – primary sources of evidence which might support higher water efficiency standards for new dwellings are detailed in appendix A of the EA 2018 consultation response. The EA map is collated based on the following sources: Water Stressed Areas Classification (2013), Water resource management plans produced by water companies, River Basin Management Plans. Please see ‘Appendix A’ – Map and note on Water Resource and Efficiency.</p>
<p>Environment Agency (2018 response)</p>	<p><u>Paragraph 15.5</u></p> <p>The EA consider that the text provided here is currently not entirely accurate. The EA would suggest to remove this line and suggest it is replaced with the following modification:</p> <p>“The Wyre Forest area covers surface and groundwater bodies that are either at risk of or have been impacted by abstraction. In areas such as this the Environment Agency is working with abstractors including water companies to reduce the impact of abstraction on the environment and bring it to more sustainable levels.”</p> <p>Similar to other local plans you should also consider inclusion of water efficiency policy for non-residential development.</p> <p>For non-residential, the EA would recommend that WFDC also include – “Ensuring/supporting developments that follow the water conservation hierarchy. Where standards currently exist for a particular non-domestic building type in BREEAM, maximum points should be scored on water and a minimum of 25% water savings for any other development.”</p> <p>BREEAM (BRE Environmental Assessment Method) is a widely used</p>

	<p>environmental assessment method for non-domestic buildings. It sets the standard for best practice in sustainable design and is used as a measure to describe a building’s environmental performance (http://www.breeam.com/index.jsp).</p>
<p>Environment Agency (2018 response)</p>	<p><u>Policy 15B – Sewage Systems and Water Quality</u></p> <p>Policy currently says – “Strategies to help mitigate the impact of development on water quality will be required at planning application stage.”</p> <p>The EA would seek reference to the inclusion of Water Framework Directive (WFD) objectives. The EA would seek measures to improve water quality and water body status to help achieve good ecological status. The EA would expect the Council to help address WFD failures through its role as planner, issuing ordinary watercourse consents and as land manager. All watercourses in the district (and UK) are duty bound to reach Good Ecological Status or Potential (GES/GEP) by 2027. It is essential that WFD is fully integrated into the Local Plan process and that all future development helps to address the issues that currently prevent the watercourse from achieving GES/GEP.</p> <p>The EA suggest the policy be amended to include – “Proposals should seek opportunities to improve water quality and help achieve good ecological WFD status.”</p> <p>Reasoned Justification text (15.12) could include – “WFD data is available from the Environment Agency’s Catchment Data Explorer tool at: http://environment.data.gov.uk/catchment-planning/RiverBasinDistrict/9”</p> <p>With regard to the Water Cycle Study, the EA have previously confirmed to WFDC that the EA is satisfied with the evidence provided. The EA confirmed there are no likely barriers to growth from an environmental (water quality) waste water capacity perspective. The EA advised WFDC to contact Severn Trent Water Ltd to confirm any physical infrastructure constraints/requirements. The EA note the planning requirement within part iii of the policy.</p>
<p>Environment Agency (2018 response)</p>	<p><u>Policy 15C – Flood Risk Management</u></p> <p>The EA would support the Policy 15C subject to the following amendments.</p> <p>Part ii – bullet point add – confirms “any opportunities for wider flood risk benefits” “Flood management and flood warning plan requirements”.</p> <p>Bullet point 5 of Policy 15cii) after ‘flood storage will be maintained’ could say ‘improved’ (where possible).</p> <p>Additional point within 15cii: Bullet point 3 could also include “Where</p>

	<p>necessary any flood proofing/resistance measures are incorporated into the design”.</p> <p>15Cii) Where appropriate, the FRA could recommend contributions towards new or existing flood defence infrastructure maintenance and/or improvement where necessary and flood warning contributions where development is reliant upon that service, in accordance with the NPPG tests for such obligations.</p> <p>Part iii appears to duplicate some text from within the NPPG (flood risk). This could be made more locally specific by amending it/adding the following: “iii) Consideration of wider benefits and opportunities, including from cumulative impact assessment, to help ensure development will be safe, and reduce floor risk in the catchment where possible.”</p> <p>Amend Part v) so it reads: A minimum 8m access strip is provided adjacent to watercourses for maintenance purposes. It should be appropriately landscaped for biodiversity benefits. The width of the strip may be reduced for smaller ‘Ordinary’ watercourses, i.e. to separate out from those EA Main River ones.</p>
<p>Environment Agency (2018 response)</p>	<p><u>Policy 16B – Pollution and Land Instability</u></p> <p><u>Para 16.3</u> – Similarly where developments are subject to an Environmental Permit from the Environment Agency the EA would encourage pre-application discussions.</p> <p>Could also say “We would encourage the parallel (twin) tracking) of an Environmental Permit application with the planning application to provide reasonable degree of certainty on the land use planning impacts and pollution control measures.”</p> <p>Could say that “These applications should provide an appropriate level of detail to inform a reasonable degree of certainty on the planning application and to ensure the principle of the development and use of the land is acceptable with cross reference to performing constraints”.</p> <p><u>Para 16.6</u> – the EA would support the inclusion of the need for developers to consider the EA Groundwater Protection position statements in relation to protection of groundwater. (recommend put a link to it in the reasoned justification 16.6).</p>
<p>Environment Agency (2018 response)</p>	<p><u>Policy 28B – Chalets, Caravans, Mobile Homes</u></p> <p>The EA support the policies set out for Chalets, Caravans, Mobile Homes, as well as conforming to flood risk management policies set out in the document and NPPF.</p>
<p>Environment Agency (2018 response)</p>	<p><u>SFRA (Flood Risk)</u></p> <p>Sites OC/12 and OC/13 do not seem to be detailed within table 13-1 in the SFRA report.</p>

	<p>Policy 32.2 point 4 – it appears that (0.24ha) falls within a flood zone, however there is no detail on how this site has been assessed, or what modelling has been undertaken. The EA flood map for planning shows no flood zone for the Hoo brook at this site. The site is not documented in the Detailed Site Summary Table. The EA would seek clarity on the above to inform the deliverability of this site and further development requirements.</p> <p>Site OC/13a & OC/13n (Land at Stone Hill & Land at Stone Hill North). The EA note that this is a large development with an Ordinary Watercourse (Hoo Brook) which flows across the site from east to west. Some smaller watercourses/ditched don't appear to have been picked up in the SFRA appraisal?</p>
<p>Environment Agency (2018 response)</p>	<p><u>Sites within Flood Zone 3 and 2</u></p> <p>For site allocations which include areas of Flood Zones 2 and/or 3, the EA would seek clarification that the Council are satisfied there is sufficient land available within Flood Zone 1 to accommodate the proposed development (i.e. number of houses or hectares (ha) of employment land). There is some uncertainty in relation to some sites.</p> <p>The EA would recommend that you cross reference/include specific FRA requirements and circumstances local to the site within the related site allocation policy text, i.e. “the design of the site will need to satisfactorily address flood risk...”</p> <p>There are several sites which are allocated brownfield sites within high risk Flood Zones, and some are partially protected by Flood Alleviation Schemes. Such developments should consider FRA overtopping and breach scenarios – flood proofing resilience and sequential approach, no ground floor accommodation.</p>
<p>Environment Agency (2018 response)</p>	<p><u>Site BR/BE/1</u></p> <p>The EA notes that the majority of this site is within the floodplain, with 52% within Flood zone 3B (where such development should not normally be permitted), but note it is brownfield regeneration. The EA recommend adding an additional point to Policy 34.1 as follows: “1. Proposals for this site should address and aim to reduce and provide betterment to flood risk. Part of this site is located in flood zone 3 (defended by demountable barriers) and flood zone 2 (undefended). There should be no habitable rooms at ground floor level. Contributions to flood defence maintenance/improvements, flood warning, may be required. 7. A site-specific FA should determine levels with Climate Change allowances and take into account defence overtopping scenarios.”</p>
<p>Environment Agency (2018 response)</p>	<p><u>Site BHS/39 – 0.04ha</u></p> <p>The EA agree this site needs a further site specific FRA – whole site in Flood Zone 2 however is inundated in a 1 in 100 year plus 35%. If any residential dwellings are proposed the EA would expect them to be</p>

	located above ground floor, and the FRA to detail possibility of overtopping, flood management and warning, contributions to defence maintenance and warning.
Environment Agency (2018 response)	<u>FHN/11</u> The EA note the site benefits from the Kidderminster Flood Alleviation scheme, any FRA must take into account climate changes impact and any breach scenarios / contributions.
Environment Agency (2018 response)	<u>WA/BE/3 Catchem's End</u> The EA note this site is partially located in Flood Zone 3, and have a flood embankment, control gate and trash screen assets further upstream of the Riddings Brook. The EA may seek contributions from developers to the existing defence / embankment for the ridings brook, this would be to help for general maintenance work of the embankment and trash screen. The EA support Policy 34.3, point 8. The opportunity to open up Riddings Brook should be investigated.
Environment Agency (2018 response)	<u>BHS/17</u> The EA note that the majority of this site is within Flood Zone 3 and 2, related to conversion of the carpet factory building, but you are saying it is not suitable for residential conversion?
Environment Agency (2018 response)	<u>MI/36 Firs View Yard, Wilden Lane</u> Policy 33.17, point 3 – the EA support this statement, the number of pitches should be restricted and no new Caravans classified as High vulnerable are to be permitted in the floodplain.
Environment Agency (2018 response)	<u>BHS/10</u> Policy 30.56 – the EA support the opportunity for River corridor enhancements here, as well as the addition of and flood risk reduction benefits. The EA support Policy 30.24 points 1, 4.
Environment Agency (2018 response)	<u>OC/6</u> This is a 10ha site, mainly within Flood Zone 1, with an ordinary watercourse along the Southern Boundary of the site. Any blue infrastructure habitat enhancements would be welcomed at this site. The EA support point 5, 8, 9 of Policy 32.3.

The Environment Agency also responded to the WFDC re-opening of the Local Plan Pre-Submission consultation that was undertaken in September / October 2019. Table 2 shows a summary of the responses received from the Environment Agency (the full response can be viewed in Appendix 1).

Table 2: Environment Agency response to WFDC Local Plan Pre-Submission (2019)

	Issues raised by the Environment Agency (EA) to the 2019 consultation (Reg 19)
Environment Agency (2019 response)	<p><u>Policy AM36.11 – Land off Station Drive, Blakedown, WFR/CB/3</u></p> <p>The EA note site WFR/CB/3 is allocated for car parking and residential development (50 dwellings).</p> <p><u>Flood Risk:-</u></p> <p>Based on the EA Flood Map for Planning (Rivers and Sea) the northern boundary of the site, is partially located within Flood Zones 2 and 3 of an ‘unnamed’ tributary (classified as an Ordinary Watercourse) of the Blakedown Brook.</p> <p>Based on EA records, the watercourse does not benefit from detailed site specific hydraulic modelling. The EA Flood Map in this location is informed by National generalised JFlow modelling of the River Stour (2011).</p> <p>Paragraph 155 of the NPPF states: <i>“inappropriate development in areas of flooding should be avoided by directing development away from areas at highest risk, but where development is necessary, making it safe without increasing flood risk elsewhere.”</i></p> <p>The Plan should apply a sequential, risk-based approach to the location of development – taking into account the current and future impacts of climate change. The Council should be satisfied that there is sufficient developable area on site, bearing in mind site size and quantum of development, whilst avoiding Flood Zones 2 and 3. In the absence of detailed site specific modelled flood risk information, or a site specific FRA, to confirm an appropriate climate change allowance the Council may wish to utilise the current Flood Zone 2 extent to indicate the likely, nominal, Flood Zone 3 with climate change extent.</p> <p>Some assessment is necessary in the Plan, to confirm that the site is developable. This includes safe occupation and that there will be no impact on third parties. The Council should seek opportunities for enhancement, including perhaps the removal of watercourse modifications within the locality of the site which may benefit from biodiversity and improve the local flood risk regime.</p> <p>Based on indicative scale of development, detailed modelling is likely to be required at the planning application stage to verify the design flood extents, developable areas and ensure that the development will be sustainable.</p> <p>Whilst Policy AM36.11 makes no reference to the areas of Flood Zone 2 and 3 present within the site allocation which is an omission, the EA note point 5 refers to the Churchill and Blakedown Valleys Local Wildlife Site adjoining the site to the north and the requirement for</p>

	buffering embankment and woodland retained as open space. The LWS on site appears to coincide with the areas of Flood Zones 2 and 3.
Environment Agency (2019 response)	<p><u>Policy AM36.11 – Land off Station Drive, Blakedown, WFR/CB/3</u></p> <p>The EA note site WFR/CB/3 is allocated for car parking and residential development (50 dwellings).</p> <p><u>Waste Water Infrastructure</u></p> <p>The site does not appear to have been assessed within the Water Cycle Study (WCS) and therefore it is unclear whether the proposed housing growth can be accommodated in consideration of waste water infrastructure. Information on local treatment works and their ability to accommodate housing and employment growth are included within the WCS. The EA recommend the Council identifies the receiving sewage treatment works and whether the housing can be accommodated without impacting upon the receiving treatment works. The Council should look at physical capacity issues (e.g. network pipes) in consultation with the Water Company; and environmental capacity (quality of treated effluent) issues.</p> <p>Where there is an identified constraint (amber or red) the Council should demonstrate that there is a solution (it may be already programmed, or could be a possible future infrastructure upgrade) to help improve the capacity issue and enable the development to go ahead. This will require consultation with the Water Company. The outcome of this may inform a ‘phasing’ policy within the Plan where appropriate. It may also be necessary to include this within the Infrastructure Delivery Plan, to set out any key milestones for waste water infrastructure upgrades and improvements. The evidence produced should give a reasonable degree of certainty to all parties, helping demonstrate development is deliverable, and importantly ensure that the plan is ‘sound’.</p>

6) Matters that parties agree on

Table 3 below shows the matters that both parties agree on from the 2018 consultation (Regulation 19).

Table 3: Matters that both parties agree on from the 2018 consultation (Regulation 19)

	Issues raised by the Environment Agency (EA) to the 2018 consultation (Reg 19)	WFDC Response
Environment Agency (2018 response)	<p><u>Policy 11F – Regenerating the Waterways</u></p> <p>The EA note that Policy 11F has been updated in line with EA recommendations and it now refers to Policy 15C as well as the inclusion of some further wording. The</p>	WFDC notes the support from the EA to Policy 11F.

	EA support this update.	
Environment Agency (2018 response)	<p><u>Policy 12 – Strategic Infrastructure</u></p> <p>The EA support the integrated approach to strategic infrastructure. The EA particularly note the reference to the potential provision of a contribution towards infrastructure such as flood alleviation schemes (new or maintenance of existing), flood warning provision for example relevant to EA remit. The EA have suggested that, for some specific sites which may be reliant upon flood warning and/or contribute to flood defence infrastructure, WFDC include some reference to such within the policy/reasoned justification.</p>	WFDC notes the support from the EA to Policy 12.
Environment Agency (2018 response)	<p><u>Policy 14 – Green Infrastructure (GI)</u></p> <p>The EA support the approach to incorporating, protection/enhancement of GI within the Locality – the EA would encourage GI that would help enhance and maintain habitat for those species protected under the Conservation of Habitats and Species Regulations 2010.</p> <p>Within Policy 14 the EA would recommend the addition of the need to enhance blue infrastructure. The EA would seek appropriate blue infrastructure i.e. ‘blue’ landscape elements are linked to water such as pools, pond and wetland systems, artificial basins or watercourses. Along with green infrastructure they help form an interconnected network of environmental enhancements within and across catchments. The EA would also welcome identification of opportunities for measures to secure net gains for biodiversity, and other environmental improvements, in line with the NPPF recent revisions.</p> <p>Note – Please see current government consultation on ‘net gains key issues’ which is seeking to pursue a broader Environmental Net Gain approach. https://consult.defra.gov.uk/land-use/net-gain/</p>	<p>WFDC notes the support from the EA to Policy 14.</p> <p>WFDC intend to amend the wording of Policy 14 as a suggested modification to the Local Plan, based on the comments received from the Environment Agency in regard to ‘blue infrastructure’. The suggested modifications to Policy 14 are as follows:-</p> <p>Policy 14, Part A to read: <i>“The existing green infrastructure <u>(and associated blue infrastructure)</u> network will be safeguarded from inappropriate development.”</i></p> <p>Policy 14, Part B to read: <i>“New development will be expected to retain, protect, and enhance Green Infrastructure (GI) assets <u>(and associated blue infrastructure)</u> by integrating GI into developments and contributing positively to the District’s green infrastructure network.”</i></p> <p>Insert new paragraph in Reasoned Justification for Policy 14 to read: <u>“Blue infrastructure i.e. ‘blue’ landscape elements are linked to water such as pools and wetland systems, artificial basins or watercourses. Along with green infrastructure they help form an interconnected network of environmental enhancements within and across catchments.”</u></p>

		Net gains for biodiversity are covered by Policy 11D of the Local Plan. See Policy 11D 'Protecting and Enhancing Biodiversity'.
Environment Agency (2018 response)	<p><u>Policy 15A – Water Conservation and Efficiency</u></p> <p>The EA note that a policy has been included to secure higher (more stringent) levels of water efficiency for residential development throughout the district.</p> <p>In line with the approach for justifying higher levels of water efficiency policies, the EA have recently produced mapping which show areas of water stress and/or catchments that are likely failing due to low flows. This is within appendix A of EA response for information/inclusion within the Water Cycle Study evidence. It should be noted that whilst this does not cover the whole area, it covers most of Wyre Forest district (covering the east of the district). WFDC may want to secure higher water efficiency throughout the district as proposed in the policy to help achieve this water resource reduction objective. Note – primary sources of evidence which might support higher water efficiency standards for new dwellings are detailed in appendix A of the EA 2018 consultation response. The EA map is collated based on the following sources: Water Stressed Areas Classification (2013), Water resource management plans produced by water companies, River Basin Management Plans. Please see 'Appendix A' – Map and note on Water Resource and Efficiency.</p>	<p>WFDC note the information provided by the EA in regard to Policy 15A, i. WFDC also note that the EA has stated that whilst areas of water stress and/or catchments “do not cover the whole area, it covers most of Wyre Forest district (covering the east of the district). WFDC may want to secure higher water efficiency throughout the district as proposed in the policy to help achieve this water resource reduction objective.”</p> <p>The policy will therefore help to secure higher levels of water efficiency for residential development throughout the district supported by the Water Cycle Study (WCS) and local water resources evidence/justification.</p>
Environment Agency (2018 response)	<p><u>Paragraph 15.5</u></p> <p>The EA consider that the text provided here is currently not entirely accurate. The EA would suggest to remove this line and suggest it is replaced with the following modification:</p> <p>“The Wyre Forest area covers surface and groundwater bodies that are either at risk of or have been impacted by abstraction. In areas such as this the Environment Agency is working with abstractors including water companies to reduce the impact of</p>	<p>WFDC is agreeable to making these suggested changes. The suggested modification to Paragraph 15.5 is as follows:-</p> <p><i>“The Water Resource Zone adjacent to the River Severn will be subject to the Environment Agency’s ‘Restoring Sustainable Abstraction’ programme towards the middle of the plan in 2024/5. This will include the revocation of abstraction licences for ground water supplies in some areas and increased abstraction in others with plans to be agreed between Severn Trent Water (STW) and the Environment Agency (EA). The Wyre Forest</i></p>

	<p>abstraction on the environment and bring it to more sustainable levels.”</p> <p>Similar to other local plans you should also consider inclusion of water efficiency policy for non-residential development.</p> <p>For non-residential, the EA would recommend that WFDC also include – “Ensuring/supporting developments that follow the water conservation hierarchy. Where standards currently exist for a particular non-domestic building type in BREEAM, maximum points should be scored on water and a minimum of 25% water savings for any other development.”</p> <p>BREEAM (BRE Environmental Assessment Method) is a widely used environmental assessment method for non-domestic buildings. It sets the standard for best practice in sustainable design and is used as a measure to describe a building’s environmental performance (http://www.breeam.com/index.jsp).</p>	<p><u>area covers surface and groundwater bodies that are either at risk of or have been impacted by abstraction. In areas such as this the Environment Agency is working with abstractors including water companies to reduce the impact of abstraction on the environment and bring it to more sustainable levels.”</u></p> <p>WFDC would be agreeable to the suggested amendment regarding ‘BREEAM’ as proposed by the EA.</p>
<p>Environment Agency (2018 response)</p>	<p><u>Policy 15B – Sewage Systems and Water Quality</u></p> <p>Policy currently says – “Strategies to help mitigate the impact of development on water quality will be required at planning application stage.”</p> <p>The EA would seek reference to the inclusion of Water Framework Directive (WFD) objectives. The EA would seek measures to improve water quality and water body status to help achieve good ecological status. The EA would expect the Council to help address WFD failures through its role as planner, issuing ordinary watercourse consents and as land manager. All watercourses in the district (and UK) are duty bound to reach Good Ecological Status or Potential (GES/GEP) by 2027. It is essential that WFD is fully integrated into the Local Plan process and that all future development helps to address the issues that currently prevent the watercourse from achieving GES/GEP.</p>	<p>WFDC is agreeable to making these suggested changes to Policy 15B – Sewage Systems and Water Quality.</p> <p>The suggested modification to Policy 15B is as follows:-</p> <p><i>“Proposals that would result in an unacceptable risk to the quality and / or quantity of a <u>watercourse or groundwater body</u> will not be permitted. Strategies to help mitigate the impact of development on water quality will be required at planning application stage. <u>Proposals should seek opportunities to improve water quality and help achieve good ecological Water Framework Directive (WFD) status.”</u></i></p> <p>The suggested modification to Paragraph 15.2 in the RJ is as follows:</p> <p><i>“Receiving <u>watercourses</u> and groundwater bodies covered by the European Union Water Framework Directive (2000) are subject to a basic requirement of ‘no deterioration’ and</i></p>

	<p>The EA suggest the policy be amended to include – “Proposals should seek opportunities to improve water quality and help achieve good ecological WFD status.”</p> <p>Reasoned Justification text (15.12) could include – “WFD data is available from the Environment Agency’s Catchment Data Explorer tool at: http://environment.data.gov.uk/catchment-planning/RiverBasinDistrict/9”</p> <p>With regard to the Water Cycle Study, the EA have previously confirmed to WFDC that the EA is satisfied with the evidence provided. The EA confirmed there are no likely barriers to growth from an environmental (water quality) waste water capacity perspective. The EA advised WFDC to contact Severn Trent Water Ltd to confirm any physical infrastructure constraints/requirements. The EA note the planning requirement within part iii of the policy.</p>	<p>the objective to achieve ‘good’ status potential by 2015 (or 2027 as specified). A plan led approach will allow the Council, STW and EA to identify any potential water quality issues. <u>reach Good Ecological Status or Potential (GES/GEP) by 2027. It is essential that all future development helps to address the issues that currently prevent the watercourse or groundwater body from achieving GES/GEP. Water Framework Directive (WFD) data is available from the Environment Agency’s Catchment Data Explorer tool at:</u> http://environment.data.gov.uk/catchment-planning/RiverBasinDistrict/9”</p> <p>WFDC notes that the EA was satisfied with the Water Cycle Study (WCS) published in 2018. The WCS was updated again in January 2020 following comments received from the EA to the Reg 19 consultation held in 2019 (see Appendix 5). Severn Trent Water was contacted as part of the WCS updates.</p> <p>The EA have since reviewed the WCS Addendum 2 (dated January 2020), in March/April 2020. The EA are satisfied with the revisions and support the conclusions. The following EA comment from previous still applies... “Where the WCS identified a potential constraint (amber or red) with sewage infrastructure or treatment capacity the Council should demonstrate that there is a solution (it may be already programmed, or could be a possible future infrastructure upgrade) to help improve the capacity issue and enable the development to go ahead. This will require early consultation with the Water Company. The outcome of this may inform a ‘phasing’ policy within the Plan where appropriate. It may also be necessary to include this within the Infrastructure Delivery Plan, to set out any key milestones for waste water infrastructure upgrades and improvements.”</p>
<p>Environment Agency (2018 response)</p>	<p><u>Policy 15C – Flood Risk Management</u></p> <p>The EA would support the Policy 15C subject to the following amendments.</p>	<p>WFDC is agreeable to making these suggested changes to Policy 15C – Flood Risk Management.</p> <p>The suggested modification to Policy 15C,</p>

	<p>Part ii – bullet point add – confirms “any opportunities for wider flood risk benefits” “Flood management and flood warning plan requirements”.</p> <p>Bullet point 5 of Policy 15cii) after ‘flood storage will be maintained’ could say ‘improved’ (where possible).</p> <p>Additional point within 15cii: Bullet point 3 could also include “Where necessary any flood proofing/resistance measures are incorporated into the design”.</p> <p>15Cii) Where appropriate, the FRA could recommend contributions towards new or existing flood defence infrastructure maintenance and/or improvement where necessary and flood warning contributions where development is reliant upon that service, in accordance with the NPPG tests for such obligations.</p> <p>Part iii appears to duplicate some text from within the NPPG (flood risk). This could be made more locally specific by amending it/adding the following: “iii) Consideration of wider benefits and opportunities, including from cumulative impact assessment, to help ensure development will be safe, and reduce floor risk in the catchment where possible.”</p> <p>Amend Part v) so it reads: A minimum 8m access strip is provided adjacent to watercourses for maintenance purposes. It should be appropriately landscaped for biodiversity benefits. The width of the strip may be reduced for smaller ‘Ordinary’ watercourses, i.e. to separate out from those EA Main River ones.</p>	<p>part ii) is as follows:-</p> <p><i>“ii) Submit a site specific Flood Risk Assessment (FRA), which confirms:</i></p> <ul style="list-style-type: none"> • <i>The wider hydrological context of the site.</i> • <i>The development is safe from flooding for its lifetime, taking into account all forms of flooding. This shall include safe access and egress.</i> • <i>Finished ground floor levels will be set a minimum of 600mm above the 1% annual probability (1 in 100 year) river flood level plus climate change allowance. <u>Where necessary any flood proofing/resistance measures are incorporated into the design.</u></i> • <i>Finished ground floor levels will be set no lower than the modelled 1% annual probability (1 in 100 year) surface water flood level plus climate change allowance.</i> • <i>The development will not increase the risk of flooding elsewhere, and proposals will detail how existing flood flow paths on the site will be accommodated, how the amount of flood storage will be maintained <u>and improved (where possible)</u>, and how surface water runoff will be addressed.</i> • <i><u>Any opportunities for wider flood risk benefits.</u></i> • <i><u>Flood management and flood warning requirements.</u></i> • <i>The development layout is informed by the management of residual flood risk and the drainage strategy for the site, which incorporates sustainable drainage systems (SuDS) as set out in Policy 15D.”</i> <p>The suggested modification to Policy 15C, part iii) is as follows:-</p> <p><i>“The development will be safe for its lifetime account of the vulnerability of its users, without increasing flood risk elsewhere, and, where possible, will reduce overall flood risk in the area and beyond. <u>Consideration of</u></i></p>
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		<p><u>wider benefits and opportunities, including from cumulative impact assessment, to help ensure development will be safe and reduce flood risk in the catchment where possible.</u></p> <p>The suggested modification to Policy 15C, part v) is as follows:-</p> <p><i>“A minimum 8m access strip is provided adjacent to watercourses for maintenance purposes. It should be appropriately landscaped for biodiversity benefits. The width of the strip may be reduced for smaller ordinary watercourses, where agreed by the Local Planning Authority.”</i></p>
<p>Environment Agency (2018 response)</p>	<p><u>Policy 16B – Pollution and Land Instability</u></p> <p>Para 16.3 – Similarly where developments are subject to an Environmental Permit from the Environment Agency the EA would encourage pre-application discussions.</p> <p>Could also say “We would encourage the parallel (twin) tracking) of an Environmental Permit application with the planning application to provide reasonable degree of certainty on the land use planning impacts and pollution control measures.”</p> <p>Could say that “These applications should provide an appropriate level of detail to inform a reasonable degree of certainty on the planning application and to ensure the principle of the development and use of the land is acceptable with cross reference to performing constraints”.</p> <p><u>Para 16.6</u> – the EA would support the inclusion of the need for developers to consider the EA Groundwater Protection position statements in relation to protection of groundwater. (recommend put a link to it in the reasoned justification 16.6).</p>	<p>WFDC notes these suggestions from EA for Policy 16B.</p> <p>WFDC would be agreeable to these suggested amendments to Policy 16B as proposed by the EA.</p>
<p>Environment Agency (2018 response)</p>	<p><u>Policy 28B – Chalets, Caravans, Mobile Homes</u></p> <p>The EA support the policies set out for Chalets, Caravans, Mobile Homes, as well as conforming to flood risk management</p>	<p>WFDC welcomes the support from the EA for Policy 28B.</p>

	policies set out in the document and NPPF.	
Environment Agency (2018 response)	<p><u>SFRA (Flood Risk)</u></p> <p>Sites OC/12 and OC/13 do not seem to be detailed within table 13-1 in the SFRA report.</p> <p>Policy 32.2 point 4 – it appears that (0.24ha) falls within a flood zone, however there is no detail on how this site has been assessed, or what modelling has been undertaken. The EA flood map for planning shows no flood zone for the Hoo brook at this site. The site is not documented in the Detailed Site Summary Table. The EA would seek clarity on the above to inform the deliverability of this site and further development requirements.</p> <p>Site OC/13a & OC/13n (Land at Stone Hill & Land at Stone Hill North). The EA note that this is a large development with an Ordinary Watercourse (Hoo Brook) which flows across the site from east to west. Some smaller watercourses/ditched don't appear to have been picked up in the SFRA appraisal?</p>	<p>The Strategic Flood Risk Assessment was updated in 2019 to incorporate these issues highlighted by the EA. The SFRA 2019 was consulted on during the Sept/Oct 2019 reg 19 consultation. The 2019 version of the SFRA can be viewed here: https://www.wyreforestdc.gov.uk/planning-and-buildings/planning-policy/local-plan-review/local-plan-review-evidence-base/local-plan-review-evidence-base-flood-risk,-water-management-and-climate-change.aspx</p> <p>OC/12 and OC/13 have a L2 assessment. Table 13.1 in the SFRA refers to sites at risk of surface water flooding only, hence why they are not shown in this table.</p> <p>Sites OC/12 has had 2D generalised Jflow modelling undertaken and is included in the L2 assessment from 2018, and in the site screening table 12-1.</p> <p>Site OC/13a & OC/13n have had 2D generalised Jflow modelling where possible – 2D techniques are not suitable for picking up all tiny drains. Developers should assess in more detail at site-specific stage. Main risk has been picked up in the L2 though.</p>
Environment Agency (2018 response)	<p><u>Sites within Flood Zone 3 and 2</u></p> <p>For site allocations which include areas of Flood Zones 2 and/or 3, the EA would seek clarification that the Council are satisfied there is sufficient land available within Flood Zone 1 to accommodate the proposed development (i.e. number of houses or hectares (ha) of employment land). There is some uncertainty in relation to some sites.</p> <p>The EA would recommend that you cross reference/include specific FRA requirements and circumstances local to the site within the related site allocation policy text, i.e. “the design of the site will need to satisfactorily address flood risk...”</p> <p>There are several sites which are allocated brownfield sites within high risk Flood</p>	<p>WFDC considers that the site allocations policies in Section C have considered specific FRA requirements where appropriate. However, additional text is suggested for Policy 30.23 (BHS/10) to cover this point. Additional criteria suggested as follows:</p> <p><u>“ 6. The design of any redevelopment of the site will need to satisfactorily address any potential flood risk.”</u></p> <p>Additional text is also suggested as follows for OC/12 and OC/13:</p> <p>OC/12 – Insert additional text at paragraph 32.5 of Local Plan as follows: <u>“The Hoo Brook forms the northern and western boundaries to the site and its flood zone affects part of the site. A detailed site specific FRA will be required to inform the developable area and</u></p>

	<p>Zones, and some are partially protected by Flood Alleviation Schemes. Such developments should consider FRA overtopping and breach scenarios – flood proofing resilience and sequential approach, no ground floor accommodation.</p>	<p><u>ensure a safe and sustainable development. Opportunities to help improve flood storage and flood flow conveyance, linked to blue infrastructure enhancements, shall be implemented where possible.</u></p> <p>OC/13 – Insert additional text after 4th sentence in paragraph before Policy 32.3 of Local Plan as follows: <u>“This area will be left undeveloped together with land alongside the western boundary which will be designated as a new linear wetland nature reserve. A detailed site specific FRA will be required to inform the developable areas and ensure a safe and sustainable development. Opportunities to help improve flood storage and flood flow conveyance, linked to blue and green infrastructure enhancements, will be implemented where possible.”</u></p> <p>Regarding the EA’s last point, text has been added to the SFRA to support in paragraphs 9.3.3 and 7.1.1. The SFRA was updated in 2019 and consulted on during the Sept/Oct 2019 Local Plan pre-submission consultation (reg 19).</p>
<p>Environment Agency (2018 response)</p>	<p><u>Site BR/BE/1</u></p> <p>The EA notes that the majority of this site is within the floodplain, with 52% within Flood zone 3B (where such development should not normally be permitted), but note it is brownfield regeneration. The EA recommend adding an additional point to Policy 34.1 as follows:</p> <p>“1. Proposals for this site should address and aim to reduce and provide betterment to flood risk. Part of this site is located in flood zone 3 (defended by demountable barriers) and flood zone 2 (undefended). There should be no habitable rooms at ground floor level. Contributions to flood defence maintenance/improvements, flood warning, may be required.</p> <p>7. A site-specific FA should determine levels with Climate Change allowances and take into account defence overtopping scenarios.”</p>	<p>WFDC is agreeable to making these suggested changes to Policy 34.1 (BR/BE/1). Suggested modifications as follows:</p> <ol style="list-style-type: none"> 1. <i>Proposals for this site should address and <u>aim to reduce and provide betterment to mitigate against</u> flood risk. Part of this site is located in flood zone 3 (defended by demountable barriers) and flood zone 2 (undefended). There should be no habitable rooms at ground floor level. <u>Contributions to flood defence maintenance / improvements and flood warning may be required.</u></i> 7. <u>A site-specific FRA should determine levels with Climate Change allowances and take into account defence overtopping scenarios.</u>
<p>Environment Agency</p>	<p><u>Site BHS/39 – 0.04ha</u></p>	<p>WFDC is agreeable to making these suggested changes to Policy 30.8 (BHS/39)</p>

(2018 response)	The EA agree this site needs a further site specific FRA – whole site in Flood Zone 2 however is inundated in a 1 in 100 year plus 35%. If any residential dwellings are proposed the EA would expect them to be located above ground floor, and the FRA to detail possibility of overtopping, flood management and warning, contributions to defence maintenance and warning.	and the supporting paragraph 30.21. Suggested modifications as follows: 1. <i>Proposals should take account of any flood risk and a site specific Flood Risk Assessment is required.</i> Additional text appended to paragraph 30.21 as follows: <u>“The Flood Risk Assessment should detail the possibility of overtopping, flood management and warning and contributions to defence maintenance.”</u>
Environment Agency (2018 response)	<u>FHN/11</u> The EA note the site benefits from the Kidderminster Flood Alleviation scheme, any FRA must take into account climate changes impact and any breach scenarios / contributions.	WFDC is agreeable to making these suggested changes to paragraph 30.34. Suggested modification as follows: <u>“Any Flood Risk Assessment must take into account climate change impact and any breach scenarios/contributions.”</u>
Environment Agency (2018 response)	<u>WA/BE/3 Catchem’s End</u> The EA note this site is partially located in Flood Zone 3, and have a flood embankment, control gate and trash screen assets further upstream of the Riddings Brook. The EA may seek contributions from developers to the existing defence / embankment for the ridings brook, this would be to help for general maintenance work of the embankment and trash screen. The EA support Policy 34.3, point 8. The opportunity to open up Riddings Brook should be investigated.	WFDC welcomes the support from the EA for Policy 34.3 point 8.
Environment Agency (2018 response)	<u>BHS/17</u> The EA note that the majority of this site is within Flood Zone 3 and 2, related to conversion of the carpet factory building, but you are saying it is not suitable for residential conversion?	WFDC consider that the Rock Works building may not be suitable for residential conversion as it has limited natural daylight. For this reason it is proposed as an employment allocation through the Local Plan.
Environment Agency (2018 response)	<u>MI/36 Firs View Yard, Wilden Lane</u> Policy 33.17, point 3 – the EA support this statement, the number of pitches should be restricted and no new Caravans classified as High vulnerable are to be permitted in the floodplain.	WFDC welcomes the support from the EA for Policy 33.17 point 3.

Environment Agency (2018 response)	<u>BHS/10</u> Policy 30.56 – the EA support the opportunity for River corridor enhancements here, as well as the addition of and flood risk reduction benefits. The EA support Policy 30.24 points 1, 4.	WFDC welcomes the support from the EA for Policy 30.24 points 1 & 4.
Environment Agency (2018 response)	<u>OC/6</u> This is a 10ha site, mainly within Flood Zone 1, with an ordinary watercourse along the Southern Boundary of the site. Any blue infrastructure habitat enhancements would be welcomed at this site. The EA support point 5, 8, 9 of Policy 32.3.	WFDC welcomes the support from the EA for Policy 32.3 points 5, 8 & 9.

Table 4 below shows the matters that both parties agree on from the 2019 consultation (Regulation 19).

Table 4: Matters that both parties agree on from the 2019 consultation (Regulation 19)

	Issues raised by the Environment Agency (EA) to the 2019 consultation (Reg 19)	WFDC Response
Environment Agency (2019 response)	<p><u>Policy AM36.11 – Land off Station Drive, Blakedown, WFR/CB/3</u></p> <p>The EA note site WFR/CB/3 is allocated for car parking and residential development (50 dwellings).</p> <p><u>Flood Risk:-</u></p> <p>Based on the EA Flood Map for Planning (Rivers and Sea) the northern boundary of the site, is partially located within Flood Zones 2 and 3 of an ‘unnamed’ tributary (classified as an Ordinary Watercourse) of the Blakedown Brook.</p> <p>Based on EA records, the watercourse does not benefit from detailed site specific hydraulic modelling. The EA Flood Map in this location is informed by National generalised JFlow modelling of the River Stour (2011).</p> <p>Paragraph 155 of the NPPF states: <i>“inappropriate development in areas of flooding should be avoided by directing development away from areas at highest risk, but where development is necessary, making it safe without increasing flood risk</i></p>	<p>WFDC notes the comments made by the EA and is agreeable to making the following changes:</p> <p>Policy AM36.11 criteria 5 – additional text. <u>“Much of the Local Wildlife Site falls within Flood Zone 2 and 3.”</u></p> <p>Additional text added to paragraph AM36.21 as follows: <u>“Although the northern end of the site falls within Flood Zone 2 and 3, this area will be left undeveloped as it is protected by its designation as a Local Wildlife Site. A detailed site specific FRA will be required (at the planning stage) to inform the developable areas and ensure a safe and sustainable development. Opportunities to help improve flood storage and flood flow conveyance, linked to blue and green infrastructure enhancements, will be implemented where possible.”</u></p>

	<p><i>elsewhere.”</i></p> <p>The Plan should apply a sequential, risk-based approach to the location of development – taking into account the current and future impacts of climate change. The Council should be satisfied that there is sufficient developable area on site, bearing in mind site size and quantum of development, whilst avoiding Flood Zones 2 and 3. In the absence of detailed site specific modelled flood risk information, or a site specific FRA, to confirm an appropriate climate change allowance the Council may wish to utilise the current Flood Zone 2 extent to indicate the likely, nominal, Flood Zone 3 with climate change extent.</p> <p>Some assessment is necessary in the Plan, to confirm that the site is developable. This includes safe occupation and that there will be no impact on third parties. The Council should seek opportunities for enhancement, including perhaps the removal of watercourse modifications within the locality of the site which may benefit from biodiversity and improve the local flood risk regime.</p> <p>Based on indicative scale of development, detailed modelling is likely to be required at the planning application stage to verify the design flood extents, developable areas and ensure that the development will be sustainable.</p> <p>Whilst Policy AM36.11 makes no reference to the areas of Flood Zone 2 and 3 present within the site allocation which is an omission, the EA note point 5 refers to the Churchill and Blakedown Valleys Local Wildlife Site adjoining the site to the north and the requirement for buffering embankment and woodland retained as open space. The LWS on site appears to coincide with the areas of Flood Zones 2 and 3.</p>	
<p>Environment Agency (2019 response)</p>	<p><u>Policy AM36.11 – Land off Station Drive, Blakedown, WFR/CB/3</u></p> <p>The EA note site WFR/CB/3 is allocated for</p>	<p>WFDC has updated the Water Cycle Study (WCS) following these comments from the EA. The updated WCS can be viewed in Appendix 5 of this SofCG and includes the</p>

	<p>car parking and residential development (50 dwellings).</p> <p><u>Waste Water Infrastructure</u></p> <p>The site does not appear to have been assessed within the Water Cycle Study (WCS) and therefore it is unclear whether the proposed housing growth can be accommodated in consideration of waste water infrastructure. Information on local treatment works and their ability to accommodate housing and employment growth are included within the WCS. The EA recommend the Council identifies the receiving sewage treatment works and whether the housing can be accommodated without impacting upon the receiving treatment works. The Council should look at physical capacity issues (e.g. network pipes) in consultation with the Water Company; and environmental capacity (quality of treated effluent) issues.</p> <p>Where there is an identified constraint (amber or red) the Council should demonstrate that there is a solution (it may be already programmed, or could be a possible future infrastructure upgrade) to help improve the capacity issue and enable the development to go ahead. This will require consultation with the Water Company. The outcome of this may inform a 'phasing' policy within the Plan where appropriate. It may also be necessary to include this within the Infrastructure Delivery Plan, to set out any key milestones for waste water infrastructure upgrades and improvements. The evidence produced should give a reasonable degree of certainty to all parties, helping demonstrate development is deliverable, and importantly ensure that the plan is 'sound'.</p>	<p>site WFR/CB/3, Land off Station Drive, Blakedown. For site WFR/CB/3, the WCS concludes that capacity constraints exist at the site. The WCS recommends that hydraulic modelling is carried out at the planning application stage in order to understand the impact. The report also concludes that WFR/CB/3 is within 800m of a WwTW and may require an odour assessment as part of the planning application process.</p> <p>In March/April 2020, the EA have reviewed the 2nd addendum to the WCS (dated 22 January 2020) in relation to the additional proposed sites.</p> <p>The summary provided within the addendum is considered reasonable by the EA regarding the need for some further assessment. The EA are satisfied with the WCS revisions and support the overall conclusions. This includes the fact that for 'water quality' the wastewater demand at all of the WwTW in the study area is still less than that assessed in the 2017 WCS once the Addendum 2 sites are considered so the conclusions of the water quality assessment are unchanged.</p> <p>The following EA comment from previous correspondence still applies <i>"Where the WCS identified a potential constraint (amber or red) with sewage infrastructure or treatment capacity the Council should demonstrate that there is a solution (it may be already programmed, or could be a possible future infrastructure upgrade) to help improve the capacity issue and enable the development to go ahead. This will require early consultation with the Water Company. The outcome of this may inform a 'phasing' policy within the Plan where appropriate. It may also be necessary to include this within the Infrastructure Delivery Plan, to set out any key milestones for waste water infrastructure upgrades and improvements."</i></p> <p>It should be noted that one of the additional sites WFR/CB/3 is likely to require additional</p>
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		<p>assessment (modelling of sewer network capacity, and an odour assessment). The WCS suggests that this could be carried out at the planning application but the EA would reiterate that the Council engage with Severn Trent Water to inform deliverability and certainty on improvements to accommodate development.</p> <p>In addition the EA support the WCS recommendation to give due consideration to sites in proximity of designated environmentally sensitive sites including the additional site WFR/WC/21 close to Stourvale Marsh SSSI.</p>
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7) Matters that parties disagree on

There are no matters that parties disagree on.

8) Other Strategic Matters

There are no other strategic matters relevant to this Statement of Common Ground.

9) Governance Arrangements

The governance arrangements are key to the effectiveness and implementation of the Statement of Common Ground. The table below sets out the requirements for the authorities involved.

Local Authority	Method of Approval
Wyre Forest District Council	SofCG to be signed off by Corporate Director for Economic Prosperity and Place
Environment Agency	

10) Timetable for agreement

The table below sets out the timetable arrangement for the Statement of Common Ground to be agreed.

Local Authority	Timetable for approval
Wyre Forest District Council	- SofCG to be signed off by Corporate Director for Economic Prosperity and Place
Environment Agency	- February – April 2020

11) Conclusions

The parties agree that:

- i) WFDC has fulfilled its Duty to Cooperate with the Environment Agency.
- ii) The Environment Agency is satisfied that all matters raised in its representations to the WFDC Local Plan Review (2016-2036) have been addressed by WFDC's responses.
- iii) The Environment Agency is agreeable to the suggested modifications as set out within this SofCG.
- iv) The parties will continue to work positively together, including with other authorities where relevant on strategic cross boundary issues.

12) Signatories

This Statement of Common Ground has been agreed and signed by the following:-

<u>Environment Agency</u>	<u>Wyre Forest District Council</u>
Name: MARK DAVIES	Name: _____ Mike Parker
Position: PLANNING SPECIALIST	Position: _Corporate Director: Economic Prosperity & Place
Date agreed: 29 April 2020	Date agreed: ___29 th April 2020_____
Signature: 	Signature:  _____

13) Appendices

- Appendix 1 – Environment Agency response to the WFDC re-opening of Pre-Submission consultation (Sept / Oct 2019)
- Appendix 2 – Environment Agency response to the WFDC Pre-Submission Consultation (Nov/Dec 2018)
- Appendix 3 – Environment Agency response to the WFDC Preferred Options consultation (June – August 2017)
- Appendix 4 – Environment Agency response to the WFDC Issues & Options consultation (2015)
- Appendix 5 – Water Cycle Study: 2nd Addendum (January 2020)

Wyre Forest District Council
Planning Policy
Wyre Forest
House Finepoint Way
Kidderminster
Worcestershire
DY11 7WF

Our ref: SV/2015/108466/CS-
04/SB1-L01
Your ref: HS/HET/RLPPS
Date: 14 October 2019

F.A.O: Helen Smith

Dear Madam

**Wyre Forest District Local Plan Review – Pre-Submission Publication
Consultation (Regulation 19)**

Thank you for notifying us of the re-opening of the Pre-Submission Publication Consultation of the Wyre Forest District Local Plan Review.

We commented on the earlier October 2018 Regulation 19 consultation, in our letter dated 14 December 2019 (reference SV/2015/108466/CS-03/SB1-L01, enclosed).

Further to the 'Amendments to Pre-Submission Publication (July 2019)' Report we would reiterate the comments made within our October 2018 consultation response and offer the following additional comments also:

Policy AM36.11 Land off Station Drive, Blakedown WFR/CB/3

We note the above site is allocated for car parking and residential development (~50 dwellings).

Flood Risk

Based on our Flood Map for Planning (Rivers and Sea) the northern boundary of the site (as shown in Appendix B – Map E), is partially located within Flood Zones 2 and 3 of an 'unnamed' tributary (classified as an Ordinary Watercourse) of the Blakedown Brook.

Based on our records, the watercourse does not benefit from detailed site specific hydraulic modelling. Our Flood Map in this location is informed by National generalised JFlow modeling of the River Stour (2011).

Paragraph 155 of the National Planning Policy Framework (NPPF) states: *'Inappropriate development in areas of flooding should be avoided by directing development away from areas at highest risk, but where development is necessary, making it safe without increasing flood risk elsewhere'*.

Your Plan should apply a sequential, risk-based approach to the location of development – taking into account the current and future impacts of climate change. Your Council should be satisfied that there is sufficient developable area on site, bearing in mind site size and quantum of development, whilst avoiding Flood Zones 2 and 3. In the absence of detailed site specific modelled flood risk information, or a site specific FRA, to confirm an appropriate climate change allowance you may wish to utilise the current Flood Zone 2 extent to indicate the likely, nominal, Flood Zone 3 with climate change extent.

Some assessment is necessary in your Plan, to confirm that the site is developable. This includes safe occupation and that there will be no impact on third parties. You should seek opportunities for enhancement, including perhaps the removal of watercourse modifications within the locality of the site which may benefit biodiversity and improve the local flood risk regime.

Based on indicative scale of development, detailed modelling is likely to be required at the planning application stage to verify the design flood extents, developable areas and ensure that the development will be sustainable.

Whilst the Policy AM36.11 makes no reference to the areas of Flood Zone 2 and 3 present within the site allocation which is an omission, we note point 5 refers to the Churchill and Blakedown Valleys Local Wildlife Site adjoining the site to the north and the requirement for buffering embankment and woodland retained as open space. The LWS on site appears to coincide with the areas of Flood Zones 2 and 3.

Waste Water Infrastructure

The site does not appear to have been assessed within the Water Cycle Study (WCS) and therefore it is unclear whether the proposed housing growth can be accommodated in consideration of waste water infrastructure. Information on local treatment works and their ability to accommodate housing and employment growth are included within the WCS. We recommend your Council identifies the receiving sewage treatment works and whether the housing can be accommodated without impacting upon the receiving treatment works. You should look at physical capacity issues (e.g. network pipes) in consultation with the Water Company; and environmental capacity (quality of treated effluent) issues.

Where there is an identified constraint (amber or red) you should demonstrate that there is a solution (it may be already programmed, or could be a possible future infrastructure upgrade) to help improve the capacity issue and enable the development to go ahead. This will require consultation with the Water Company. The outcome of this may inform a 'phasing' policy within your plan where appropriate. It may also be necessary to include this within the Infrastructure Delivery Plan, to set out any key milestones for waste water infrastructure upgrades and improvements. The evidence you produce should give a reasonable degree of certainty to all parties, helping demonstrate development is deliverable, and importantly ensure that your plan is 'sound'.

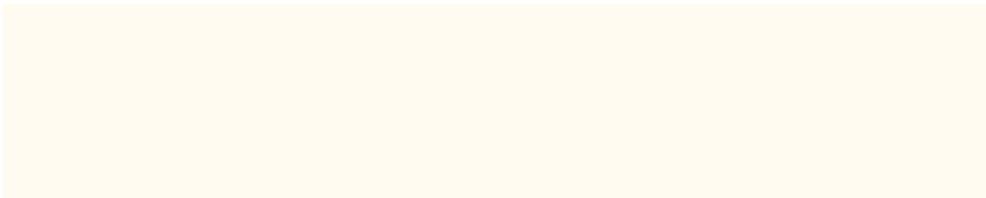
Note: Government Guidance states that sufficient detail should be provided to give clarity to all parties on when infrastructure upgrades will be provided, looking at the needs and costs (what and how much). The National Planning Practice Guidance

(NPPG) refers to “ensuring viability and deliverability – pursuing sustainable development requires careful attention to viability and costs in plan making and decision making”. Plans should be “deliverable”.

I trust that the above confirms our position and assists your Council at this time.

Yours faithfully

Mrs Tessa Jones
Senior Planning Advisor



Ms Helen Smith
Wyre Forest District Council
Planning Policy
Wyre Forest House Finepoint Way
Kidderminster
Worcestershire
DY11 7WF

Our ref: SV/2015/108466/CS-03/SB1-L01
Your ref: HS/HET/FP-LPPRESUB
Date: 14 December 2018

F.A.O – Helen Smith

Wyre Forest District Local Plan Review (October 2018) – Pre-submission Consultation

Thank you for your consultation on the above – for completeness, throughout the duration of the Local Plan Review we have provided comment on the various stages: Issues and Options - dated 16 October 2015 (letter reference SV/2015/108466/CS-01/IS1-L01), Preferred Options - dated 28 July 2017 (letter reference SV/2015/108466/CS-02/PO1-L01) and 15 September 2017, (letter reference SV/2015/108466/CS -02/PO1-L02). In response to the pre-submission consultation we would offer the following comments.

Strategic and Development Management Policies:

Policy 11F – Regenerating the Waterways

We note the above policy has been updated in line with our recommendations, and it now refers to Policy 15C as well as the inclusion of some further wording, we support this update.

Policy 12 – Strategic Infrastructure

We support your integrated approach to strategic infrastructure. We particularly note the reference to the potential provision of a contribution towards infrastructure such as flood alleviation schemes (new or maintenance of existing), flood warning provision for example relevant to our remit. We have suggested that, for some specific sites which may be reliant upon flood warning and/or contribute to flood defence infrastructure, you include some reference to such within the policy/reasoned justification.

Policy 14 – Green Infrastructure (GI)

We support your approach to incorporating, protection/enhancement of GI within the Locality – we would encourage GI that would help to enhance and maintain habitat for those species protected under the Conservation of Habitats and Species Regulations 2010.

Within Policy 14 we would recommend the addition of the need to enhance blue infrastructure:

We would seek appropriate blue infrastructure i.e. ‘blue’ landscape elements are linked to water such as pools, pond and wetland systems, artificial basins or watercourses. Along with green infrastructure they help form an interconnected network of environmental enhancements within and across catchments. We would

Environment Agency
Hafren House Welshpool Road, Shelton, Shrewsbury, SY3 8BB.
Customer services line: 03708 506 506
www.gov.uk/environment-agency

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also welcome identification of opportunities for and measures to secure net gains for biodiversity, and other environmental improvements, in line with the NPPF recent revisions.

Note – Please see current government consultation on ‘net gains key issues’ which is seeking to pursue a broader Environmental Net Gain approach.
<https://consult.defra.gov.uk/land-use/net-gain/>

Policy 15A – Water Conservation and Efficiency

We note that you have included a policy to secure higher (more stringent) levels of water efficiency for residential development throughout the district.

In line with the approach for justifying higher levels of water efficiency policies, we have recently produced mapping which show areas of water stress and/or catchments that are likely failing due to low flows. This is within appendix A for your information/inclusion within your Water Cycle Study evidence. It should be noted that whilst this does not cover the whole area, it covers most of your district (covering the east of the district). You may want to secure higher water efficiency throughout the district as proposed in your policy to help achieve this water resource reduction objective. Note - **primary sources of evidence which might support higher water efficiency standards for new dwellings** are detailed in appendix A. Our map is collated based on the following sources: [Water Stressed Areas Classification \(2013\)](#), Water resource management plans produced by water companies, [River Basin Management Plans](#).

Please see [‘Appendix A’ – Map and note on Water Resource and Efficiency](#).

Section 15.5

We consider that the text provided here is currently not entirely accurate. We would suggest to remove this line and suggest you replace it with the following:

“The Wyre Forest area covers surface and groundwater bodies that are either at risk of or have been impacted by abstraction. In areas such as this the Environment Agency is working with abstractors including water companies to reduce the impact of abstraction on the environment and bring it to more sustainable levels”.

Similar to other local plans you should also consider inclusion of a water efficiency policy for non-residential development.

For non-residential, we would recommend that you could also include –
“Ensuring/supporting developments that follow the water conservation hierarchy. Where standards currently exist for a particular non-domestic building type in BREEAM, maximum points should be scored on water and a minimum of 25% water savings for any other development”;

BREEAM (BRE Environmental Assessment Method) is a widely used environmental assessment method for non-domestic buildings. It sets the standard for best practice in sustainable design and is used as a measure to describe a building’s environmental performance (<http://www.breeam.com/index.jsp>).

Policy 15B – Sewerage Systems and Water Quality

Policy currently says – “Strategies to help mitigate the impact of development on water quality will be required at planning application stage”.

We would seek reference to the inclusion of Water Framework Directive (WFD) objectives. We would seek measures to improve water quality and water body status to help achieve good ecological status. We would expect your Council to help address WFD failures through its role as planner, issuing ordinary watercourse consents and as land manager. All watercourses in the district (and UK) are duty bound to reach Good Ecological Status or Potential (GES/GEP) by 2027. It is essential that WFD is fully integrated into the Local Plan process and that all future development helps to address the issues that currently prevent the watercourse from achieving GES/GEP.

We suggest the policy be amended to include – “Proposals should seek opportunities to improve water quality and help achieve good ecological WFD status”.

Reasoned Justification text (15.12) could include - “WFD data is available from the Environment Agency’s Catchment Data Explorer tool at: <http://environment.data.gov.uk/catchment-planning/RiverBasinDistrict/9>”

With regard to the Water Cycle Study, we have previously confirmed to you that we are satisfied with the evidence provided. We confirmed there are no likely barriers to growth from an environmental (water quality) waste water capacity perspective. We advised you to contact Severn Trent Water Ltd to confirm any physical infrastructure constraints/requirements. We note the phasing requirement within part iii of the policy.

Policy 15c – Flood Risk Management

We would support the Policy 15c subject to the following amendments.

Part ii - bullet point add – confirms “any opportunities for wider flood risk benefits”
“Flood management and flood warning plan requirements”

Bullet Point 5 of Policy 15cii) after ‘flood storage will be maintained’ could say “improved” (where possible).

Additional point within 15cii: Bullet point 3 could also include “Where necessary any flood proofing/resistance measures are incorporated into the design”.

15Cii) Where appropriate, the FRA could recommend contributions towards new or existing flood defence infrastructure maintenance and/or improvement where necessary and flood warning contributions where development is reliant upon that service, in accordance with the NPPG tests for such obligations.

Part iii appears to duplicate some text from within the NPPG (flood risk). You could make it more locally specific by amending it/adding the following:

iii) Consideration of wider benefits and opportunities, including from cumulative impact assessment, to help ensure development will be safe, and reduce flood risk in the catchment where possible.

Amend Part v) so it reads: A minimum 8 m access strip is provided adjacent to watercourses for maintenance purposes. It should be appropriately landscaped for biodiversity benefits. The width of the strip may be reduced for smaller ‘**Ordinary**’ watercourses, i.e. to separate out from those EA Main River ones.

Policy 16B – Pollution and Land Instability

16.3 Similarly where developments are subject to an Environmental Permit from the Environment Agency we would encourage pre-application discussions.

You could also say “We would encourage the parallel (twin) tracking) of an Environmental Permit application with the planning application to provide reasonable degree of certainty on the land use planning impacts and pollution control measures”.

You could say that “These applications should provide an appropriate level of detail to inform a reasonable degree of certainty on the planning application and to ensure the principle of the development and use of the land is acceptable with cross reference to permitting constraints”.

16.6 - we would support the inclusion of the need for developers to consider our Groundwater Protection position statements in relation to protection of groundwater. (recommend put a link to it in the reasoned justification 16.6).

Policy 28B – Chalets, Caravans, Mobile Homes

We support the policies set out for *Chalets, Caravans, Mobile Homes*, as well as conforming to flood risk management policies set out in the document and NPPF.

Proposed Allocations

We note that allocations have been assessed against relevant technical evidence, including the Water Cycle Study (discussed above) and level 1 and 2 SFRA.

SFRA (Flood Risk):

We note some further work has been undertaken since our previous response on the draft SFRA.

For information, it should also be noted that revised climate change allowances have recently been published. Please see attached **briefing note**. However this does not change the current allowances assessed for fluvial or rainfall, but they may change in the new year (2019).

Policy recommendations 4.6 and 7.4 of the SFRA - Defences in Bewdley –

As an update (for your information), we are currently looking at a scheme to improve the efficiency of the defences at Bewdley called - Invest to Save – the scheme aims to make efficiency improvements to the flood defences making them more reliable etc. This is to be done through a combination of: installation 4 flood gates, 123m of glass panels, lockable clamps, change from demountable to 2.1m high posts, to 2-post sections.

It should be noted that the proposed scheme does not change the defence level, the defence alignment or the standard of defence provided to Bewdley. The existing standard of defence will reduce as a consequence of climate change, and the proposed scheme will not change the rate of this.

Assessment of un-modelled watercourses

Further to previous comments, we sought some additional assessment be undertaken in regard to the site allocations OC/11, OC/12 and OC/13, picked up as

having potential Flood Risk issues from ordinary (un-modelled) watercourses with catchments less than 3km².

13.2 of the SFRA states that the above sites are in table 13-1 however site OC/12 and OC/13 do not seem to be detailed within the table (13-1).

7.2 – We support the policy included which details Residual flood risk and risk of overtopping etc, as well as potential increase in frequency of such due to climate change.

In accordance with our previous recommendations, it is clear that further work has been undertaken in regards to site allocation OC/11. Page 58 of the 'Level 2 detailed Site Summary Tables', the results show the majority (86%) of the site is located within Flood Zone 1. Further to this we note Policy 30.19 in the Local plan document states that development at this site must submit a site specific FRA. We would agree with the recommendation set out in Policy 30.19 and the majority of the site is likely to be developable – we would support point 5&7 of the Policy.

Policy 32.2, site OC/12, was picked up as a site adjacent to an ordinary watercourse with a catchment less than 3km², thus we recommended further assessment at this site to inform flood risk. The Ordinary Watercourse (Hoobrook) flows through the south of the site.

We note Policy 32.2 point 4. It appears that (0.24Ha) falls within a Flood zone, however there is no detail on how this site has been assessed, or what modeling has been undertaken. Our flood map for planning shows no Flood zone for the Hoo Brook at this site. The site is not documented in the Detailed Site Summary Table. We would seek clarity on the above to inform the deliverability of this site and further development requirements.

Site OC/13a & OC/13n (Land at Stone Hill & Land at Stone Hill North). We note that this is a large development with an Ordinary Watercourse (Hoo Brook) which flows across the site from east to west. Some smaller watercourses/ditched don't appear to have been picked up in the SFRA appraisal?

Although the site is primarily in Flood Zone 1 here we would seek flood risk reduction/betterment. We would support the ecological enhancements in Policy 32.3, points 5,8,9.

Point 9. Could be amended to include: The Hoo Brook and its tributaries will require an ecological buffer to protect existing wildlife, as well appropriate 'blue infrastructure' enhancements including flood storage reduction measures where possible.

We acknowledge point q which states –

q. Further detailed hydraulic modelling will be required to confirm actual floodplain extents. The brook along the western boundary currently discharges into a culvert under the A448. Improvements to the watercourse should be sought as part of any road proposals to improve species migration between the nature reserve and the wet woodland corridor.

Sites within Flood Zone 3 and 2:

For site allocations which include areas of Flood Zones 2 and/or 3, we would seek clarification that your Council are satisfied there is sufficient land available within Flood Zone 1 to accommodate the proposed development (i.e. number of houses or

hectares (ha) of employment land). There is some uncertainty in relation to some sites.

We would recommend that you cross reference/include specific FRA requirements and circumstances local to the site within the related site allocation policy text i.e. “the design of the site will need to satisfactorily address flood risk...”

We have not assessed/cross referenced all of the sites in your SFRA summary table with the site allocation document but provided some comments below to highlight the above and assist an improved policy document.

There are several sites which are allocated brownfield sites within high risk Flood Zones, and some are partially protected by Flood Alleviation Schemes. Such developments should consider FRA overtopping and breach scenarios – flood proofing resilience and sequential approach, no ground floor accommodation.

Site BR/BE/1

We note that the majority of this site is within the floodplain, with 52% within Flood zone 3B (where such development should not normally be permitted), but we note it is brownfield regeneration.

Policy 34.1 - we would add an additional point:

1. Proposals for this site should address and aim to reduce and provide betterment to flood risk. Part of this site is located in flood zone 3 (defended by demountable barriers) and flood zone 2 (undefended). There should be no habitable rooms at ground floor level. Contributions to flood defence maintenance/improvements, flood warning, may be required.

7. A site-specific FRA should determine levels with Climate Change allowances and take into account defence overtopping scenarios.

Site BHS/39 – 0.04ha

We agree this site needs a further site specific FRA – whole site in Flood Zone 2 however is inundated in a 1 in 100 year plus 35%.

If any residential dwellings are proposed we would expect them to be located above ground floor, and the FRA to detail possibility of overtopping, flood management and warning, contributions to defence maintenance and warning.

FHN/11 –

We note the site benefits from the Kidderminster Flood Alleviation scheme, any FRA must take into account climate changes impact and any breach scenarios/ contributions.

WA/BE/3 Catchem’s End –

We note this site is partially located in Flood Zone 3, we have a flood embankment, control gate and trash screen assets further upstream of the Riddings Brook. We may seek contributions from developers to the existing defence / embankment for the ridings brook, this would be to help for general maintenance work of the embankment and trash screen.

We would support Policy 34.3, point 8. The opportunity to open up Riddings Brook should be investigated.

BHS/17

We note that the majority of this site is within Flood Zone 3 and 2, related to conversion of the carpet factory building, but you are saying it is not suitable for

residential conversion?

MI/36 Firs View Yard, Wilden Lane

Policy 33.17 3. We would support this statement, the number of pitches should be restricted and no new Caravans classified as High vulnerable are to be permitted in the floodplain.

BHS/10

30.56 policy – we would support the opportunity for River corridor enhancements here, as well as the addition of and flood risk reduction benefits. We support Policy 30.23 points 1,4.

OC/6 – This is a 10ha site, mainly within Flood Zone 1, with an ordinary watercourse along the Southern Boundary of the site. Any blue infrastructure habitat enhancements would be welcomed at this site. We would support point 5,8,9 of Policy 32.3.

Policy 9. Could be amended to included: The Hoo Brook and its tributaries will require an ecological buffer to protect existing wildlife, as well appropriate 'blue infrastructure' enhancements.

The site is affected by smaller ordinary watercourses and ditches which need to be considered in combination (cumulative impact assessment) with OC/13.

A meeting may be beneficial to discuss this which would likely form part of our cost recovery service outside of a formal statutory consultation.

Yours faithfully

Mr. Alex Thompson
Planning Advisor



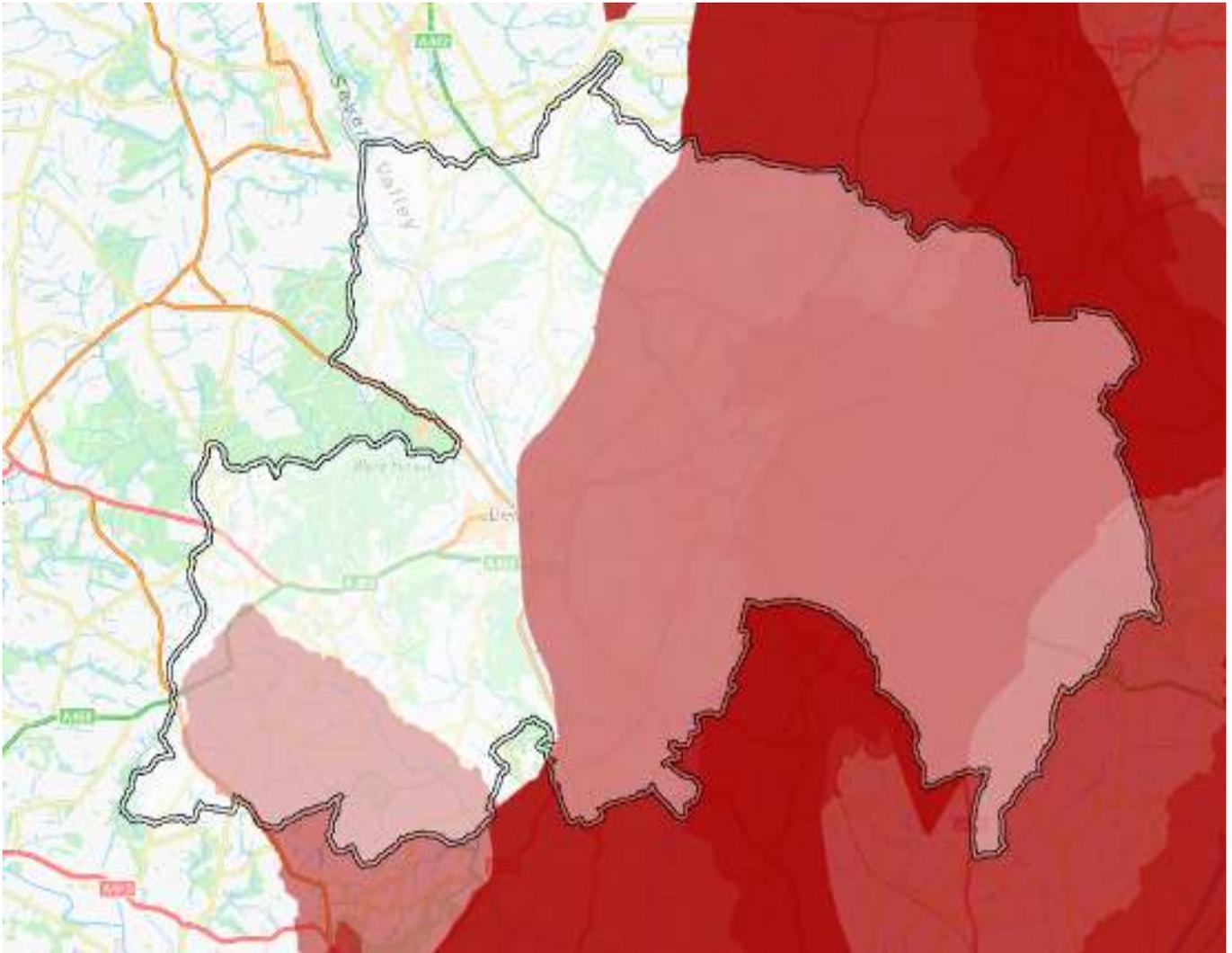
Appendix A:

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Wyre Forest – Water Resource evidence for local plan

Evidence to help justify/support higher water efficiency standards for new dwellings



WFD Cycle 2 - Hydrological regime DNSG (SW)

#	Waterbody ID	Waterbody Name	Overall Waterbody Status	Hydrological Regime	Area(km ²)
1	GB109054044530	Hoo Bk - source to conf R Stour	Moderate	Does Not Support Good	19.73
2	GB109054044570	Blakedown Bk - source to conf R Stour	Poor	Does Not Support Good	18.42
3	GB109054044460	Hartlebury Bk - source to conf R Severn	Poor	Does Not Support Good	4.21

WFD Cycle 2 - Quantitative Classification Poor (GW)

#	Waterbody ID	Waterbody name	Overall Waterbody Classification	Overall Quantitative Classification	Area(km ²)
1	GB40901G300800	Worcestershire Middle Severn - PT Sandstone	Poor	Poor	109.76

WRGIS_Boundaries - AP Licensing Strategy at Q95

#	RNAPID	CAMSLEDGER	LIC_CRIT	HOF_RELIAB	COLOUR_Q95	DOC_LINK	Area(km ²)
1	AP9, Wards Bridge	Worcestershire Middle Severn	No d/s AP10. restricted water available for licensing	See AP10	Water not available	https://www.gov.uk/government/collections/water-abstraction-licensing-strategies-cams-process	17.12
2	AP10, Harford Hill	Worcestershire Middle Severn	Critical AP. Restricted water available for licensing	HOF4 - 70 MI/d. 3.7 ml/d available	Water not available	https://www.gov.uk/government/collections/water-abstraction-licensing-strategies-cams-process	4.08

WMD Serious Damage

#	WB_ID	WB_Name	SD_Risk	Use	Area(km ²)
1	GB40901G300800	Worcestershire Middle Severn - PT Sandstone	High - SD Actual (GW)	<i>No Data</i>	109.76
2	GB109054044570	Blakedown Bk - source to conf R Stour	Medium - SD Risk (SW)	Groundwater abstraction	18.42
3	GB109054044210	Dick Bk - source to conf R Severn	Medium - SD Risk (SW)	Surface water abstraction	18.11
4	GB109054044460	Hartlebury Bk - source to conf R Severn	Medium - SD Risk (SW)	<i>No Data</i>	4.21

NOTES

We have used the planning guidance (<https://www.gov.uk/guidance/housing-optional-technical-standards>) as the basis of identifying areas in which we should request Local Authorities push for tighter water efficiency in the local plans.

The guidance states 'primary sources of evidence which might support a tighter water efficiency standard for new dwellings are:

-The Environment Agency [Water Stressed Areas Classification \(2013\)](#) which identifies areas of serious water stress where household demand for water is (or is likely to be) a high proportion of the current effective rainfall available to meet that demand.

-Water resource management plans produced by water companies

- [River Basin Management Plans](#) which describe the river basin district and the pressure that the water environment faces. These include information on **where water resources are contributing to a water body being classified as 'at risk' or 'probably at risk' of failing to achieve good ecological status, due to low flows or reduced water availability'**.

1. The Environment Agency [Water Stressed Areas Classification \(2013\)](#) which identifies areas of serious water stress where household demand for water is (or is likely to be) a high proportion of the current effective rainfall available to meet that demand':

The map (figure 2 in the report linked above) indicates that parts of Severn Trent Water and South Staffs Water supply areas which fall in to the West Midlands area, have been classified as being under Serious Water Stress. It is worth noting that even if housing developments fall outside of the water stressed areas they may well receive their water supply from a water stressed area. **Severn Trent Water** has been given a final classification of 'Moderate Water Stress', but it can be seen from the report and map that their patch contains areas of Serious Water Stress. South Staffordshire Water have been given a final classification of 'Moderate Water Stress', but their patch contains areas of Serious Water Stress.

2. Water resource management plans produced by water companies:

Only water companies which have a final classification of 'Serious Water Stress' can apply compulsory metering, but all water companies are required to address water efficiency in their WRMP.

Severn Trent Water's Draft WRMP states that they are committed to helping customers use less water through water efficiency activities and education. They intend to reduce their overall consumption by around 45Ml/d through water efficiency measures. Proactive and targeted metering is planned and the scale of their demand / supply challenge means there are grounds for exploring with the EA and Defra if compulsory metering would be appropriate.

South Staffs Water have been given a final classification of 'Moderate Water Stress', but their patch contains areas of Serious Water Stress. Their WRMP states that they will carry out a programme of water efficiency initiatives, including incentivising developers to build more water efficient homes including rainwater harvesting and greywater recycling. They are committed to reducing Per Capita Consumption by 1l/p/d over the AMP7 period.

3. [River Basin Management Plans](#) which describe the river basin district and the pressure that the water environment faces. These include information on **where water resources are contributing to a water body being classified as ‘at risk’ or ‘probably at risk’ of failing to achieve good ecological status, due to low flows or reduced water availability.** In addition to these primary data sources, locally specific evidence may also be available, for example collaborative ‘water cycle studies’ may have been carried out in areas of high growth.

To address this test we have mapped the following evidence onto our water resource evidence map:

- WFD Cycle 2, surface water bodies where the hydrological regime does not support good ecological potential, this is taken from the WFD classification in CPS.
- Serious damage water bodies both locally and nationally defined.

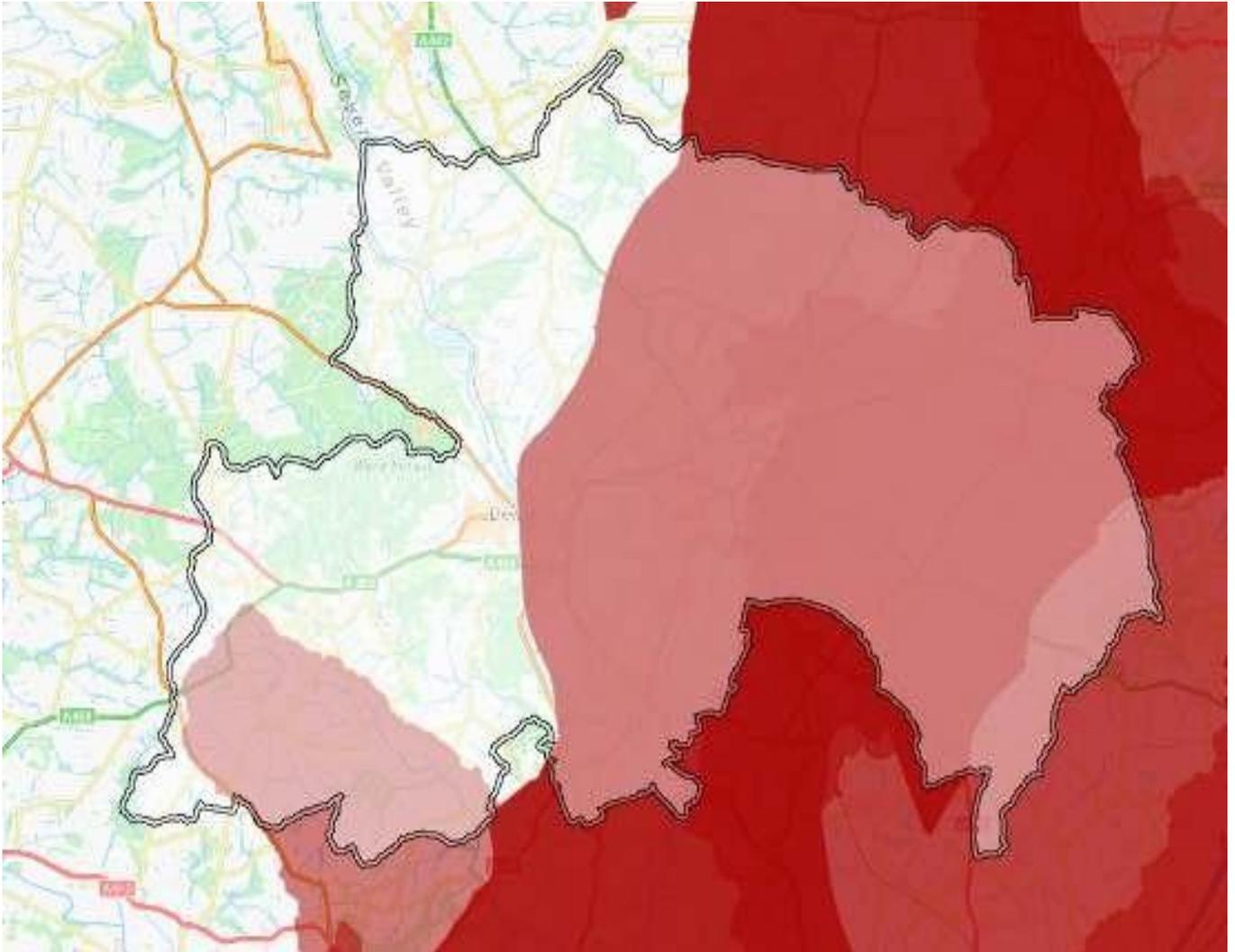
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- WFD Cycle 2, GW quantitative classification of poor, suggested by the GW body resources Balance assessment finalised for reporting in RBMP in consultation with area, 2015 classification.
- WR GIS Boundaries – AP Licencing Strategy water not available at Q95, this indicates the water availability at Low Flows at an assessment point scale and is taken from our RAM ledgers (QA Jul 2015).
- WR GIS GW Body quantitative status and risks, - shows the water bodies classed as poor from the risk assessment of all 4 GW tests (GWDTE, Saline and other intrusion, dependent SW status and resource balance).



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WR GIS GW Body quantitative status and risks, - shows the water bodies classed as poor from the risk assessment of all 4 GW tests (GWDTE, Saline and other intrusion, dependent SW status and resource balance).

Wyre Forest District Local Plan Pre-Submission Publication 2018

OFFICE USE ONLY:

Representor number:

Representation number:

Plan reference:

Tests of soundness:

Consultation Response Form

1st November – 17th December 2018

This form has two parts: **Part A** Personal Details and **Part B** Your Representation

To help present your comments in the best way for the inspector to consider them, the Planning Inspectorate has issued this standard comment form for you to complete and return. We ask that you use this form because it structures your response in the way in which the inspector will consider comments at the public examination. Using the form to submit your comments also means that you can register your interest in speaking at the examination.

Please read the guidance notes carefully before completing the form.

Please fill in a separate part B for each issue/representation you wish to make.

Any additional sheets must be clearly referenced. This form can be submitted electronically. If hand writing, please write clearly in blue or black ink.

Consultation response forms can be completed and submitted online at

www.wyreforestdc.gov.uk/localplanreview

Representations must be received by 5:00pm on 17th December 2018.

Representations received after this time will not be considered duly made.

Part A

(Please complete in full. In order for the Inspector to consider your representations you must provide your name and postal address)

Personal Details		Agent's Details (if applicable)
Title	Mr	
First Name	Alex	
Last Name	Thompson	
Organisation	Environment Agency	
Job title	Planning Advisor	
Address – line 1	Hafren House	
Address – line 2	Welshpool Road	
Address – line 3	Shrewsbury	
Address – line 4		
Address – line 5		
Postcode	SY3 8BB	
E-mail Address		
Telephone Number		

Part B - Please use a separate sheet for each representation

Your representation should cover all the information, evidence and supporting information necessary to support/justify the representation and the suggested change, as there will not normally be a subsequent opportunity to make further representations following this publication stage.

After this stage, further submission will only be at the request of the Inspector, based on the matters and issues he/she identifies for examination.

Name or Organisation - Environment Agency

3. To which part of the Local Plan does this representation relate?

Paragraph

Policy

14, 15a,b,c, 16b

Other:

(e.g. Policies map, table, figure, key diagram)

4. Do you consider the Local Plan is:

- | | | |
|--|------------------------------|-------------------------------|
| 4.1 Legally Compliant | Yes <input type="checkbox"/> | No <input type="checkbox"/> |
| 4.2 Sound | Yes <input type="checkbox"/> | No x <input type="checkbox"/> |
| 4.3 Complies with the Duty to co-operate | Yes <input type="checkbox"/> | No <input type="checkbox"/> |

5. If you do not consider the Local Plan is sound, please specify on what grounds

- | | |
|---------------------------------|----------------------------|
| Positively Prepared | <input type="checkbox"/> |
| Justified | x <input type="checkbox"/> |
| Effective | x <input type="checkbox"/> |
| Consistent with National Policy | x <input type="checkbox"/> |

Please tick as appropriate

6. Please give details of why you consider the Local Plan is not legally compliant or is unsound or fails to comply with the Duty to co-operate. Please be as precise as possible.

Additions and Policy word changes regarding the policies stated – see attached consultation response.

7. Please set out what modification(s) you consider necessary to make the Local Plan legally compliant or sound, having regard to the Matter you have identified at 6 above where this relates to soundness. (NB Please note that any non-compliance with the Duty to co-operate is incapable of modification at examination). You will need to say why this modification will make the Local Plan legally compliant or sound. It will be helpful if you are able to put forward your suggested revised wording of any policy or text. Please be as precise as possible.

Again please see attached response for further comments and suggestions to make the policies more effective.

8. If your representation is seeking a modification, do you consider it necessary to participate at the oral part of the examination?

No I do not wish to participate at the oral examination. x

Yes I would like to participate at the oral examination.

9. If you wish to participate at the oral part of the examination, please outline why you consider this to be necessary:

Please note the Inspector will determine the most appropriate procedure to adopt to hear those who have indicated that they wish to participate at the oral part of the examination.

Data Protection

The information you provide on the form will be stored on a database used solely in connection with the Local Plan.

Representations will be available to view on the council's website, but address, signature and contact details will not be included. However, as copies of representations must be made available for public inspection, they cannot be treated as confidential and will be available for inspection in full. Copies of all representations will also be provided to the Planning Inspectorate as part of the submission of the Wyre Forest District Local Plan. By submitting this form you are agreeing to these conditions.

Please see the Councils Data Protection and Privacy statement:

www.wyreforestdc.gov.uk/the-council/data-protection-and-privacy.aspx

If you are submitting this form electronically you will need to agree to our data protection policy. Please tick here if you agree. x

Signature A. Thompson

Date 14/12/18

Please return the completed form via email by **no later than 5:00pm on 17 December 2018**

Email: **LPR@wyreforestdc.gov.uk**

Or in writing to: Planning Policy, Wyre Forest District Council, Wyre Forest House, Finepoint Way, Kidderminster, DY11 7WF

Consultation response forms can be completed and submitted online at:

www.wyreforestdc.gov.uk/localplanreview

Ms Helen Smith
Wyre Forest District Council
Planning Policy
Wyre Forest House Finepoint Way
Kidderminster
Worcestershire
DY11 7WF

Our ref: SV/2015/108466/CS-03/SB1-L01
Your ref: HS/HET/FP-LPPRESUB
Date: 14 December 2018

F.A.O – Helen Smith

Wyre Forest District Local Plan Review (October 2018) – Pre-submission Consultation

Thank you for your consultation on the above – for completeness, throughout the duration of the Local Plan Review we have provided comment on the various stages: Issues and Options - dated 16 October 2015 (letter reference SV/2015/108466/CS-01/IS1-L01), Preferred Options - dated 28 July 2017 (letter reference SV/2015/108466/CS-02/PO1-L01) and 15 September 2017, (letter reference SV/2015/108466/CS -02/PO1-L02). In response to the pre-submission consultation we would offer the following comments.

Strategic and Development Management Policies:

Policy 11F – Regenerating the Waterways

We note the above policy has been updated in line with our recommendations, and it now refers to Policy 15C as well as the inclusion of some further wording, we support this update.

Policy 12 – Strategic Infrastructure

We support your integrated approach to strategic infrastructure. We particularly note the reference to the potential provision of a contribution towards infrastructure such as flood alleviation schemes (new or maintenance of existing), flood warning provision for example relevant to our remit. We have suggested that, for some specific sites which may be reliant upon flood warning and/or contribute to flood defence infrastructure, you include some reference to such within the policy/reasoned justification.

Policy 14 – Green Infrastructure (GI)

We support your approach to incorporating, protection/enhancement of GI within the Locality – we would encourage GI that would help to enhance and maintain habitat for those species protected under the Conservation of Habitats and Species Regulations 2010.

Within Policy 14 we would recommend the addition of the need to enhance blue infrastructure:

We would seek appropriate blue infrastructure i.e. ‘blue’ landscape elements are linked to water such as pools, pond and wetland systems, artificial basins or watercourses. Along with green infrastructure they help form an interconnected network of environmental enhancements within and across catchments. We would

Environment Agency
Hafren House Welshpool Road, Shelton, Shrewsbury, SY3 8BB.
Customer services line: 03708 506 506
www.gov.uk/environment-agency

Cont/d..

also welcome identification of opportunities for and measures to secure net gains for biodiversity, and other environmental improvements, in line with the NPPF recent revisions.

Note – Please see current government consultation on ‘net gains key issues’ which is seeking to pursue a broader Environmental Net Gain approach.

<https://consult.defra.gov.uk/land-use/net-gain/>

Policy 15A – Water Conservation and Efficiency

We note that you have included a policy to secure higher (more stringent) levels of water efficiency for residential development throughout the district.

In line with the approach for justifying higher levels of water efficiency policies, we have recently produced mapping which show areas of water stress and/or catchments that are likely failing due to low flows. This is within appendix A for your information/inclusion within your Water Cycle Study evidence. It should be noted that whilst this does not cover the whole area, it covers most of your district (covering the east of the district). You may want to secure higher water efficiency throughout the district as proposed in your policy to help achieve this water resource reduction objective. Note - **primary sources of evidence which might support higher water efficiency standards for new dwellings** are detailed in appendix A. Our map is collated based on the following sources: [Water Stressed Areas Classification \(2013\)](#), Water resource management plans produced by water companies, [River Basin Management Plans](#).

Please see [‘Appendix A’ – Map and note on Water Resource and Efficiency](#).

Section 15.5

We consider that the text provided here is currently not entirely accurate. We would suggest to remove this line and suggest you replace it with the following:

“The Wyre Forest area covers surface and groundwater bodies that are either at risk of or have been impacted by abstraction. In areas such as this the Environment Agency is working with abstractors including water companies to reduce the impact of abstraction on the environment and bring it to more sustainable levels”.

Similar to other local plans you should also consider inclusion of a water efficiency policy for non-residential development.

For non-residential, we would recommend that you could also include –
“Ensuring/supporting developments that follow the water conservation hierarchy. Where standards currently exist for a particular non-domestic building type in BREEAM, maximum points should be scored on water and a minimum of 25% water savings for any other development”;

BREEAM (BRE Environmental Assessment Method) is a widely used environmental assessment method for non-domestic buildings. It sets the standard for best practice in sustainable design and is used as a measure to describe a building’s environmental performance (<http://www.breeam.com/index.jsp>).

Policy 15B – Sewerage Systems and Water Quality

Policy currently says – “Strategies to help mitigate the impact of development on

Cont/d..

water quality will be required at planning application stage”.

We would seek reference to the inclusion of Water Framework Directive (WFD) objectives. We would seek measures to improve water quality and water body status to help achieve good ecological status. We would expect your Council to help address WFD failures through its role as planner, issuing ordinary watercourse consents and as land manager. All watercourses in the district (and UK) are duty bound to reach Good Ecological Status or Potential (GES/GEP) by 2027. It is essential that WFD is fully integrated into the Local Plan process and that all future development helps to address the issues that currently prevent the watercourse from achieving GES/GEP.

We suggest the policy be amended to include – “Proposals should seek opportunities to improve water quality and help achieve good ecological WFD status”.

Reasoned Justification text (15.12) could include - “WFD data is available from the Environment Agency’s Catchment Data Explorer tool at:
<http://environment.data.gov.uk/catchment-planning/RiverBasinDistrict/9>”

With regard to the Water Cycle Study, we have previously confirmed to you that we are satisfied with the evidence provided. We confirmed there are no likely barriers to growth from an environmental (water quality) waste water capacity perspective. We advised you to contact Severn Trent Water Ltd to confirm any physical infrastructure constraints/requirements. We note the phasing requirement within part iii of the policy.

Policy 15c – Flood Risk Management

We would support the Policy 15c subject to the following amendments.

Part ii - bullet point add – confirms “any opportunities for wider flood risk benefits”
“Flood management and flood warning plan requirements”

Bullet Point 5 of Policy 15cii) after ‘flood storage will be maintained’ could say
“improved” (where possible).

Additional point within 15cii: Bullet point 3 could also include “Where necessary any flood proofing/resistance measures are incorporated into the design”.

15Cii) Where appropriate, the FRA could recommend contributions towards new or existing flood defence infrastructure maintenance and/or improvement where necessary and flood warning contributions where development is reliant upon that service, in accordance with the NPPG tests for such obligations.

Part iii appears to duplicate some text from within the NPPG (flood risk). You could make it more locally specific by amending it/adding the following:

iii) Consideration of wider benefits and opportunities, including from cumulative impact assessment, to help ensure development will be safe, and reduce flood risk in the catchment where possible.

Amend Part v) so it reads: A minimum 8 m access strip is provided adjacent to watercourses for maintenance purposes. It should be appropriately landscaped for biodiversity benefits. The width of the strip may be reduced for smaller ‘**Ordinary**’

watercourses, i.e. to separate out from those EA Main River ones.

Policy 16B – Pollution and Land Instability

16.3 Similarly where developments are subject to an Environmental Permit from the Environment Agency we would encourage pre-application discussions.

You could also say “We would encourage the parallel (twin) tracking) of an Environmental Permit application with the planning application to provide reasonable degree of certainty on the land use planning impacts and pollution control measures”.

You could say that “These applications should provide an appropriate level of detail to inform a reasonable degree of certainty on the planning application and to ensure the principle of the development and use of the land is acceptable with cross reference to permitting constraints”.

16.6 - we would support the inclusion of the need for developers to consider our Groundwater Protection position statements in relation to protection of groundwater. (recommend put a link to it in the reasoned justification 16.6).

Policy 28B – Chalets, Caravans, Mobile Homes

We support the policies set out for *Chalets, Caravans, Mobile Homes*, as well as conforming to flood risk management policies set out in the document and NPPF.

Proposed Allocations

We note that allocations have been assessed against relevant technical evidence, including the Water Cycle Study (discussed above) and level 1 and 2 SFRA.

SFRA (Flood Risk):

We note some further work has been undertaken since our previous response on the draft SFRA.

For information, it should also be noted that revised climate change allowances have recently been published. Please see attached **briefing note**. However this does not change the current allowances assessed for fluvial or rainfall, but they may change in the new year (2019).

Policy recommendations 4.6 and 7.4 of the SFRA - Defences in Bewdley –

As an update (for your information), we are currently looking at a scheme to improve the efficiency of the defences at Bewdley called - Invest to Save – the scheme aims to make efficiency improvements to the flood defences making them more reliable etc. This is to be done through a combination of: installation 4 flood gates, 123m of glass panels, lockable clamps, change from demountable to 2.1m high posts, to 2-post sections.

It should be noted that the proposed scheme does not change the defence level, the defence alignment or the standard of defence provided to Bewdley. The existing standard of defence will reduce as a consequence of climate change, and the proposed scheme will not change the rate of this.

Assessment of un-modelled watercourses

Cont/d..

Further to previous comments, we sought some additional assessment be undertaken in regard to the site allocations OC/11, OC/12 and OC/13, picked up as having potential Flood Risk issues from ordinary (un-modelled) watercourses with catchments less than 3km².

13.2 of the SFRA states that the above sites are in table 13-1 however site OC/12 and OC/13 do not seem to be detailed within the table (13-1).

7.2 – We support the policy included which details Residual flood risk and risk of overtopping etc, as well as potential increase in frequency of such due to climate change.

In accordance with our previous recommendations, it is clear that further work has been undertaken in regards to site allocation OC/11. Page 58 of the 'Level 2 detailed Site Summary Tables', the results show the majority (86%) of the site is located within Flood Zone 1. Further to this we note Policy 30.19 in the Local plan document states that development at this site must submit a site specific FRA. We would agree with the recommendation set out in Policy 30.19 and the majority of the site is likely to be developable – we would support point 5&7 of the Policy.

Policy 32.2, site OC/12, was picked up as a site adjacent to an ordinary watercourse with a catchment less than 3km², thus we recommended further assessment at this site to inform flood risk. The Ordinary Watercourse (Hoobrook) flows through the south of the site.

We note Policy 32.2 point 4. It appears that (0.24Ha) falls within a Flood zone, however there is no detail on how this site has been assessed, or what modeling has been undertaken. Our flood map for planning shows no Flood zone for the Hoo Brook at this site. The site is not documented in the Detailed Site Summary Table. We would seek clarity on the above to inform the deliverability of this site and further development requirements.

Site OC/13a & OC/13n (Land at Stone Hill & Land at Stone Hill North). We note that this is a large development with an Ordinary Watercourse (Hoo Brook) which flows across the site from east to west. Some smaller watercourses/ditched don't appear to have been picked up in the SFRA appraisal?

Although the site is primarily in Flood Zone 1 here we would seek flood risk reduction/betterment. We would support the ecological enhancements in Policy 32.3, points 5,8,9.

Point 9. Could be amended to included: The Hoo Brook and its tributaries will require an ecological buffer to protect existing wildlife, as well appropriate 'blue infrastructure' enhancements including flood storage reduction measures where possible.

We acknowledge point q which states –

q. Further detailed hydraulic modelling will be required to confirm actual floodplain extents. The brook along the western boundary currently discharges into a culvert under the A448. Improvements to the watercourse should be sought as part of any road proposals to improve species migration between the nature reserve and the wet woodland corridor.

Sites within Flood Zone 3 and 2:

For site allocations which include areas of Flood Zones 2 and/or 3, we would seek clarification that your Council are satisfied there is sufficient land available within Flood Zone 1 to accommodate the proposed development (i.e. number of houses or hectares (ha) of employment land). There is some uncertainty in relation to some sites.

We would recommend that you cross reference/include specific FRA requirements and circumstances local to the site within the related site allocation policy text i.e. "the design of the site will need to satisfactorily address flood risk..."

We have not assessed/cross referenced all of the sites in your SFRA summary table with the site allocation document but provided some comments below to highlight the above and assist an improved policy document.

There are several sites which are allocated brownfield sites within high risk Flood Zones, and some are partially protected by Flood Alleviation Schemes. Such developments should consider FRA overtopping and breach scenarios – flood proofing resilience and sequential approach, no ground floor accommodation.

Site BR/BE/1

We note that the majority of this site is within the floodplain, with 52% within Flood zone 3B (where such development should not normally be permitted), but we note it is brownfield regeneration.

Policy 34.1 - we would add an additional point:

1. Proposals for this site should address and aim to reduce and provide betterment to flood risk. Part of this site is located in flood zone 3 (defended by demountable barriers) and flood zone 2 (undefended). There should be no habitable rooms at ground floor level. Contributions to flood defence maintenance/improvements, flood warning, may be required.
7. A site-specific FRA should determine levels with Climate Change allowances and take into account defence overtopping scenarios.

Site BHS/39 – 0.04ha

We agree this site needs a further site specific FRA – whole site in Flood Zone 2 however is inundated in a 1 in 100 year plus 35%.

If any residential dwellings are proposed we would expect them to be located above ground floor, and the FRA to detail possibility of overtopping, flood management and warning, contributions to defence maintenance and warning.

FHN/11 –

We note the site benefits from the Kidderminster Flood Alleviation scheme, any FRA must take into account climate changes impact and any breach scenarios/ contributions.

WA/BE/3 Catchem's End –

We note this site is partially located in Flood Zone 3, we have a flood embankment, control gate and trash screen assets further upstream of the Riddings Brook. We may seek contributions from developers to the existing defence / embankment for the ridings brook, this would be to help for general maintenance work of the embankment and trash screen.

We would support Policy 34.3, point 8. The opportunity to open up Riddings Brook

Cont/d..

should be investigated.

BHS/17

We note that the majority of this site is within Flood Zone 3 and 2, related to conversion of the carpet factory building, but you are saying it is not suitable for residential conversion?

MI/36 Firs View Yard, Wilden Lane

Policy 33.17 3. We would support this statement, the number of pitches should be restricted and no new Caravans classified as High vulnerable are to be permitted in the floodplain.

BHS/10

30.56 policy – we would support the opportunity for River corridor enhancements here, as well as the addition of and flood risk reduction benefits. We support Policy 30.23 points 1,4.

OC/6 – This is a 10ha site, mainly within Flood Zone 1, with an ordinary watercourse along the Southern Boundary of the site. Any blue infrastructure habitat enhancements would be welcomed at this site. We would support point 5,8,9 of Policy 32.3.

Policy 9. Could be amended to included: The Hoo Brook and its tributaries will require an ecological buffer to protect existing wildlife, as well appropriate 'blue infrastructure' enhancements.

The site is affected by smaller ordinary watercourses and ditches which need to be considered in combination (cumulative impact assessment) with OC/13.

A meeting may be beneficial to discuss this which would likely form part of our cost recovery service outside of a formal statutory consultation.

Yours faithfully

Mr. Alex Thompson
Planning Advisor

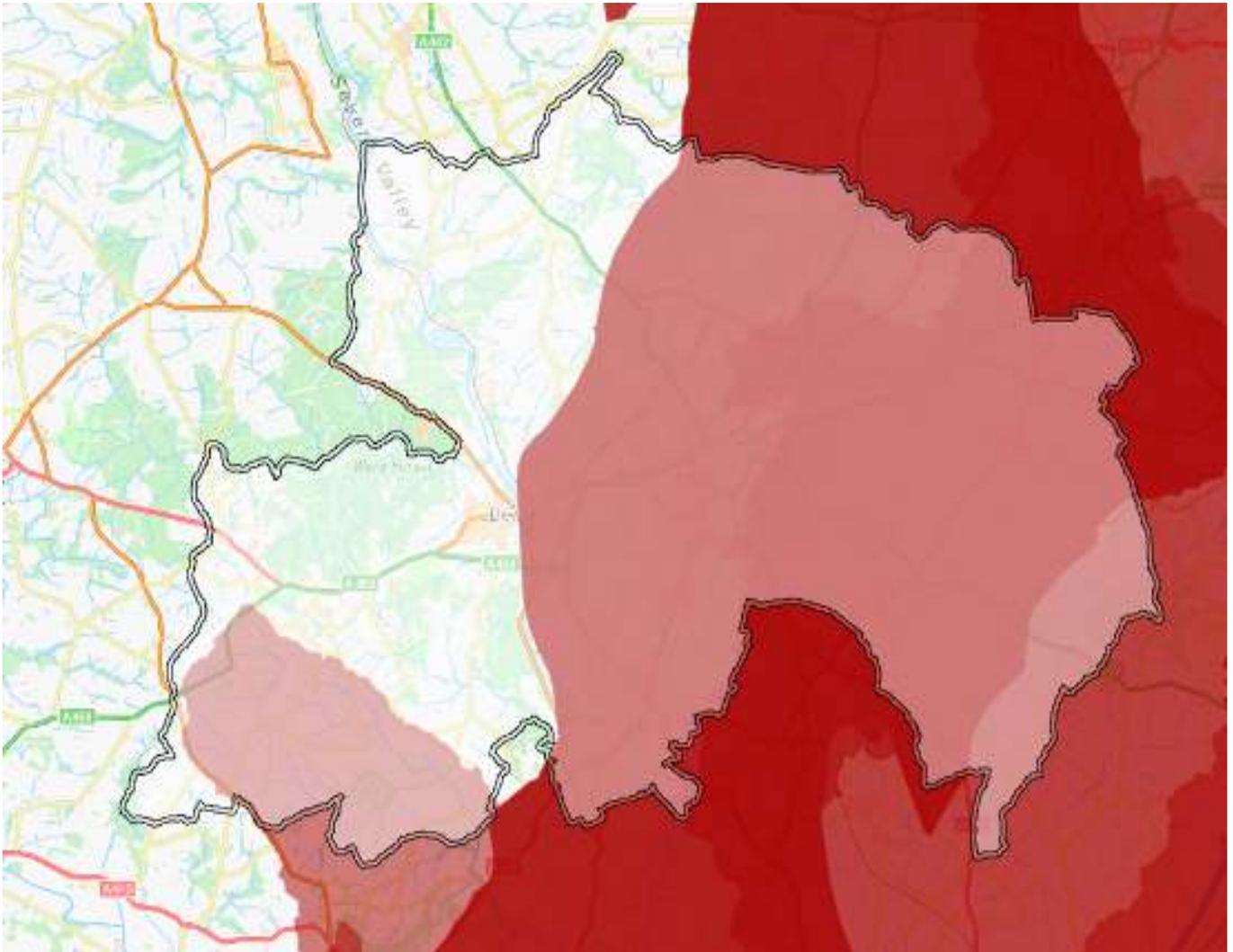


Appendix A:



Wyre Forest – Water Resource evidence for local plan

Evidence to help justify/support higher water efficiency standards for new dwellings



WFD Cycle 2 - Hydrological regime DNSG (SW)

#	Waterbody ID	Waterbody Name	Overall Waterbody Status	Hydrological Regime	Area(km ²)
1	GB109054044530	Hoo Bk - source to conf R Stour	Moderate	Does Not Support Good	19.73

Cont/d..

2	GB109054044570	Blakedown Bk - source to conf R Stour	Poor	Does Not Support Good	18.42
3	GB109054044460	Hartlebury Bk - source to conf R Severn	Poor	Does Not Support Good	4.21

WFD Cycle 2 - Quantitative Classification Poor (GW)

#	Waterbody ID	Waterbody name	Overall Waterbody Classification	Overall Quantitative Classification	Area(km ²)
1	GB40901G300800	Worcestershire Middle Severn - PT Sandstone	Poor	Poor	109.76

WRGIS_Boundaries - AP Licensing Strategy at Q95

#	RNAPID	CAMSLEDGER	LIC_CRIT	HOF_RELIAB	COLOUR_Q95	DOC_LINK	Area(km ²)
1	AP9, Wards Bridge	Worcestershire Middle Severn	No d/s AP10. restricted water available for licensing	See AP10	Water not available	https://www.gov.uk/government/collections/water-abstraction-licensing-strategies-cams-process	17.12
2	AP10, Harford Hill	Worcestershire Middle Severn	Critical AP. Restricted water available for licensing	HOF4 - 70 MI/d. 3.7 ml/d available	Water not available	https://www.gov.uk/government/collections/water-abstraction-licensing-strategies-cams-process	4.08

WMD Serious Damage

#	WB_ID	WB_Name	SD_Risk	Use	Area(km ²)
1	GB40901G300800	Worcestershire Middle Severn - PT Sandstone	High - SD Actual (GW)	No Data	109.76
2	GB109054044570	Blakedown Bk - source to conf R Stour	Medium - SD Risk (SW)	Groundwater abstraction	18.42
3	GB109054044210	Dick Bk - source to conf R Severn	Medium - SD Risk (SW)	Surface water abstraction	18.11
4	GB109054044460	Hartlebury Bk - source to conf R Severn	Medium - SD Risk (SW)	No Data	4.21

Cont/d..

NOTES

We have used the planning guidance (<https://www.gov.uk/guidance/housing-optional-technical-standards>) as the basis of identifying areas in which we should request Local Authorities push for tighter water efficiency in the local plans.

The guidance states 'primary sources of evidence which might support a tighter water efficiency standard for new dwellings are:

-The Environment Agency [Water Stressed Areas Classification \(2013\)](#) which identifies areas of serious water stress where household demand for water is (or is likely to be) a high proportion of the current effective rainfall available to meet that demand.

-Water resource management plans produced by water companies

- [River Basin Management Plans](#) which describe the river basin district and the pressure that the water environment faces. These include information on **where water resources are contributing to a water body being classified as 'at risk' or 'probably at risk' of failing to achieve good ecological status, due to low flows or reduced water availability'**.

1. The Environment Agency [Water Stressed Areas Classification \(2013\)](#) which identifies areas of serious water stress where household demand for water is (or is likely to be) a high proportion of the current effective rainfall available to meet that demand':

The map (figure 2 in the report linked above) indicates that parts of Severn Trent Water and South Staffs Water supply areas which fall in to the West Midlands area, have been classified as being under Serious Water Stress. It is worth noting that even if housing developments fall outside of the water stressed areas they may well receive their water supply from a water stressed area. **Severn Trent Water** has been given a final classification of 'Moderate Water Stress', but it can be seen from the report and map that their patch contains areas of Serious Water Stress. South Staffordshire Water have been given a final classification of 'Moderate Water Stress', but their patch contains areas of Serious Water Stress.

2. Water resource management plans produced by water companies:
Only water companies which have a final classification of 'Serious Water Stress' can apply compulsory metering, but all water companies are required to address water efficiency in their WRMP.

Severn Trent Water's Draft WRMP states that they are committed to helping customers use less water through water efficiency activities and education. They intend to reduce their overall consumption by around 45Ml/d through water efficiency measures. Proactive and targeted metering is planned and the scale of their demand / supply challenge means there are grounds for exploring with the EA and Defra if compulsory metering would be appropriate.

Cont/d..

South Staffs Water have been given a final classification of ‘Moderate Water Stress’, but their patch contains areas of Serious Water Stress. Their WRMP states that they will carry out a programme of water efficiency initiatives, including incentivising developers to build more water efficient homes including rainwater harvesting and greywater recycling. They are committed to reducing Per Capita Consumption by 1l/p/d over the AMP7 period.

3. [River Basin Management Plans](#) which describe the river basin district and the pressure that the water environment faces. These include information on **where water resources are contributing to a water body being classified as ‘at risk’ or ‘probably at risk’ of failing to achieve good ecological status, due to low flows or reduced water availability.** In addition to these primary data sources, locally specific evidence may also be available, for example collaborative ‘water cycle studies’ may have been carried out in areas of high growth.

To address this test we have mapped the following evidence onto our water resource evidence map:

- WFD Cycle 2, surface water bodies where the hydrological regime does not support good ecological potential, this is taken from the WFD classification in CPS.
- Serious damage water bodies both locally and nationally defined.

Serious damage definition: Waterbodies classed as actual serious damage are band 3 non-compliant under WFD; in a water body which is at less than good ecological status; and have a RNAG (Reason for Not Achieving Good) that implicates flow and abstraction.

- WFD Cycle 2, GW quantitative classification of poor, suggested by the GW body resources Balance assessment finalised for reporting in RBMP in consultation with area, 2015 classification.
- WR GIS Boundaries – AP Licencing Strategy water not available at Q95, this indicates the water availability at Low Flows at an assessment point scale and is taken from our RAM ledgers (QA Jul 2015).
- WR GIS GW Body quantitative status and risks, - shows the water bodies classed as poor from the risk assessment of all 4 GW tests (GWDTE, Saline and other intrusion, dependent SW status and resource balance).

UKCP18 and sea level rise: a summary of the results

In November 2018 Defra released a new set of UK Climate Projections (UKCP18). This briefing provides a summary of the UKCP18 sea level rise projections.

What does UKCP18 show?

- The UKCP18 projections show that sea levels around the UK are expected to continue to rise compared to the historical baseline (1981-2000), up to and beyond the end of the 21st century.
- The pattern of sea level rise is not uniform around the UK. Sea levels rise more in the south and less in the north due to a pattern of land movements where Scotland is rising and southern England sinking.
- For the south east of England, sea levels are expected to increase by between 0.3 and 0.7 m under the low emission scenario and by between 0.5 and 1.15 m under the high emission scenario by 2100.
- For the north east, sea levels are expected to increase by between 0.1 m and 0.5 m under the low emission scenario and by between 0.3 m and 0.9 m under the high emission scenario by 2100.
- Exploratory scenarios show that sea levels continue to rise beyond 2100. By 2300, the south east of England can expect an increase in sea level of between 0.5 m to 2.2 m under the low emissions scenario and between 1.4 m and 4.3 m under the high emissions scenario.
- The probability of experiencing a high water level will increase as the mean sea level rises. A high water level that currently has only a 0.01% chance of occurring in any one year could happen every year by 2300.

How do these findings differ from previous understanding?

- Increases in sea level under UKCP18 are greater than those expected under UKCP09. In UKCP09, global sea levels were expected to rise by between 0.2 to 0.5 m by 2100 under the medium emissions scenario. In UKCP18, under the same emissions scenario global sea levels are expected to increase by between 0.4 to 0.8 m by 2100.
- This increase in sea level estimates is consistent with results from the International Panel on Climate Change's (IPCC) fifth assessment, published in 2013.
- This increase is not unexpected and has been factored into adaptation planning.

How does this relate to existing guidance?

Under UKCP18 the highest levels of sea level rise range from 0.9 to 1.15 m around the coast by 2100. Existing Environment Agency guidance allows for sea level rise in the range of 0.7 to 1.0 m by 2100. The range in our allowances is similar to the UKCP18 upper estimates because a precautionary position was taken towards the UKCP09 sea level estimates following publication of the IPCC fifth assessment. UKCP09 also provided a plausible upper estimate of sea level rise called H++ that gave a range of possible sea level rise from 0.9 to 1.9m by 2100. This is still valid under UKCP18.

Sustainable Places and FCRM Strategy will be providing updated guidance. In the meantime they have developed interim advice on using the existing guidance.

For further details on '[Flood risk assessments: climate change allowances](#)', please contact [Caroline Sutton](#) of the Sustainable Places Team, and for '[Adapting to climate change: advice for FCERM Authorities](#)' please contact [Andrew Eden](#) of the FCRM Strategic Overview Team.

For further details on the science, please contact [Stuart Allen](#) of the Climate Change Research Team.

11th December 2018

Wyre Forest District Local Plan Pre-Submission Publication 2018

OFFICE USE ONLY:
Representor number:
Representation number:
Plan reference:
Tests of soundness:

Consultation Response Form

1st November – 17th December 2018

This form has two parts: **Part A** Personal Details and **Part B** Your Representation

To help present your comments in the best way for the inspector to consider them, the Planning Inspectorate has issued this standard comment form for you to complete and return. We ask that you use this form because it structures your response in the way in which the inspector will consider comments at the public examination. Using the form to submit your comments also means that you can register your interest in speaking at the examination.

Please read the guidance notes carefully before completing the form.

Please fill in a separate part B for each issue/representation you wish to make.

Any additional sheets must be clearly referenced. This form can be submitted electronically. If hand writing, please write clearly in blue or black ink.

Consultation response forms can be completed and submitted online at
www.wyreforestdc.gov.uk/localplanreview

Representations must be received by 5:00pm on 17th December 2018.

Representations received after this time will not be considered duly made.

Part A

(Please complete in full. In order for the Inspector to consider your representations you must provide your name and postal address)

Personal Details		Agent's Details (if applicable)
Title	Mr	
First Name	Alex	
Last Name	Thompson	
Organisation	Environment Agency	
Job title	Planning Advisor	
Address – line 1	Hafren House	
Address – line 2	Welshpool Road	
Address – line 3	Shrewsbury	
Address – line 4		
Address – line 5		
Postcode	SY3 8BB	
E-mail Address		
Telephone Number		

Part B - Please use a separate sheet for each representation

Your representation should cover all the information, evidence and supporting information necessary to support/justify the representation and the suggested change, as there will not normally be a subsequent opportunity to make further representations following this publication stage.

After this stage, further submission will only be at the request of the Inspector, based on the matters and issues he/she identifies for examination.

Name or Organisation

3. To which part of the Local Plan does this representation relate?

Paragraph

Policy – site allocation policies

Other:

(e.g. Policies map, table,
figure, key diagram)

4. Do you consider the Local Plan is:

- | | | |
|--|------------------------------|-------------------------------|
| 4.1 Legally Compliant | Yes <input type="checkbox"/> | No <input type="checkbox"/> |
| 4.2 Sound | Yes <input type="checkbox"/> | No x <input type="checkbox"/> |
| 4.3 Complies with the Duty to co-operate | Yes <input type="checkbox"/> | No <input type="checkbox"/> |

5. If you do not consider the Local Plan is sound, please specify on what grounds

- | | |
|---------------------------------|----------------------------|
| Positively Prepared | <input type="checkbox"/> |
| Justified | x <input type="checkbox"/> |
| Effective | x <input type="checkbox"/> |
| Consistent with National Policy | x <input type="checkbox"/> |

Please tick as appropriate

6. Please give details of why you consider the Local Plan is not legally compliant or is unsound or fails to comply with the Duty to co-operate. Please be as precise as possible.

Details within the site allocation policies, require additional comment/changes – we recommend you reconsider/look at all sites - see attached consultation response.

We would recommend that you cross reference/include specific FRA requirements and circumstances local to the site within the related site allocation policy text i.e. “the design of the site will need to satisfactorily address flood risk...”

We have not assessed/cross referenced all of the sites in your SFRA summary table with the site allocation document but provided some comments below to highlight the above and assist an improved policy document.

7. Please set out what modification(s) you consider necessary to make the Local Plan legally compliant or sound, having regard to the Matter you have identified at 6 above where this relates to soundness. (NB Please note that any non-compliance with the Duty to co-operate is incapable of modification at examination). You will need to say why this modification will make the Local Plan legally compliant or sound. It will be helpful if you are able to put forward your suggested revised wording of any policy or text. Please be as precise as possible.

Again please see attached response for further comments and suggestions.

8. If your representation is seeking a modification, do you consider it necessary to participate at the oral part of the examination?

No I do not wish to participate at the oral examination. x

Yes I would like to participate at the oral examination.

9. If you wish to participate at the oral part of the examination, please outline why you consider this to be necessary:

Please note the Inspector will determine the most appropriate procedure to adopt to hear those who have indicated that they wish to participate at the oral part of the examination.

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Please see the Councils Data Protection and Privacy statement:

www.wyreforestdc.gov.uk/the-council/data-protection-and-privacy.aspx

If you are submitting this form electronically you will need to agree to our data protection policy. Please tick here if you agree. x

Signature A. Thompson

Date 14/12/18

Please return the completed form via email by **no later than 5:00pm on 17 December 2018**

Email: **LPR@wyreforestdc.gov.uk**

Or in writing to: Planning Policy, Wyre Forest District Council, Wyre Forest House, Finepoint Way, Kidderminster, DY11 7WF

Consultation response forms can be completed and submitted online at:

www.wyreforestdc.gov.uk/localplanreview

Sent: 28 July 2017 15:56
To: Helen Smith; LPR Consultation
Subject: WFLPD Preferred Options and Technical Consultation on the IDP
Attachments: SV-2015-108466-OT-06-PO1 - WFIDP Technical Consultation (Summer 2017).pdf;
SV-2015-108466-CS-02-PO1 - WFDLPR Preferred Options Consultation.pdf

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Dear Helen,

Please find attached the Environment Agency's consultation responses to the Preferred Options consultation and the Technical Consultation on the IDP.

I note your response to my email regarding our review of the final Water Cycle Study and will do our best to get our additional comments to you as soon as possible.

Kind regards,
Tessa

Tessa Jones BSc (Hons), MSc, MRTPI

*Planning Advisor
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 722 4381 (Jabber - 51700) / 02030251700

 tessa.jones@environment-agency.gov.uk

 Riversmeet House, Northway Lane, Tewkesbury, Gloucestershire, GL20 8JG

Please note: the Environment Agency have updated their climate change allowances for planners. See [Flood risk assessments: climate change allowances](#).

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Wyre Forest District Council
Planning Policy
Wyre Forest House
Finepoint Way
Kidderminster
Worcestershire
DY11 7WF

Our ref: SV/2015/108466/CS-
02/PO1-L01

Your ref:

Date: 28 July 2017

F.A.O: Helen Smith

Dear Madam

Wyre Forest District Local Plan Review (June 2017) - Preferred Options Consultation

Thank you for consulting us on the Preferred Options Consultation in relation to the Wyre Forest District Local Plan Review (LPR), which we received on 15 June 2017. We note this consultation has been sent in parallel with a consultation on the draft Wyre Forest Infrastructure Delivery Plan, to which we will provide separate comments.

For completeness, we previously commented on the Sustainability Appraisal (SA) Scoping Report and the Issues and Options consultation in our letters dated 22 June and 16 October 2015, respectively. Furthermore, we also commented on draft versions of the Level 1 and 2 Strategic Flood Risk Assessment (SFRA) and Water Cycle Study (WCS) in our letters dated 16 November 2016 and 9 February 2017, respectively.

As you are aware, due to resource we have not been able to fully review the final version of the Water Cycle Study (May 2017) and will provide additional comments by the 15 September 2017 and trust that they will be still be accepted and of use to you at the time.

To assist, we have ordered our response according to the structure in the LPR and would offer the following comments:

Strategic and Development Management Policies:

Policy 11E – Regenerating the Waterways

We note Part A of Policy 11E refers to conformity with WFDC Policy 11E. However, should this refer to Section 15 and the Water Management Policies? In any case, we would encourage the join up of this policy with policy 15 so that any regeneration of waterways also includes enhancement in terms of wider water management. The policy wording could perhaps be amended so that it reads 'Rivers are to be enhanced in accordance with Green Infrastructure, Biodiversity and Water Management Policies.' This will ensure that water quality, flood risk betterment and effective water resource management can be considered and delivered as part of any waterway regeneration scheme.

Policy 12 – Strategic Infrastructure

We would encourage an integrated approach to infrastructure delivery, as set out in Policy 12, whilst maximising opportunities for providing flood risk management benefits as part of wider infrastructure works.

Environment Agency
Newtown Industrial Estate (Riversmeet House) Northway Lane, Tewkesbury, Gloucestershire, GL20 8JG.
Customer services line: 03708 506 506
www.gov.uk/environment-agency

Cont/d..

Policy 15A – Water Conservation and Efficiency

We note the recommendations set out in Table 4-7 of the WCS include “Using planning policy to require the 110l/person/day water consumption target permitted by National Planning Policy Guidance in water-stressed areas.” Paragraph 10.1.2 of the WCS acknowledges all site allocations are located within an area considered to be under ‘moderate’ water stress which could be used to justify the tighter (‘optional’) water efficiency standards in this instance i.e. beyond the minimum building regulation requirements.

We note reference is made to the higher water efficiency targets within the reasoned justification to policy 15A (paragraph 15.6). However, in light of the above you may wish to include this within the policy itself. The following wording might assist ‘meet a water efficiency target of 110 litres per person per day’.

We appreciate you must demonstrate that there is both a need for the standards and show consideration of the viability implications of adopting the standards. In relation to viability, we would refer to the study which DCLG commissioned in 2014 relating to an updated cost impact assessment to support the standards proposed in the Housing Standards Review.

For water efficiency, the cost of achieving 110l/p/day (which has been adopted as the tighter ‘optional standard’) was revised down from previous estimates, and assessed as between an additional £0 - £9 per dwelling, compared to achieving the baseline Building Regulations standard (125l/p/d). See page 5 of the following report:

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/353387/021c_Cost_Report_11th_Sept_2014_FINAL.pdf

As outlined previously, we may be able to provide a separate summary document, including a location plan of each of the over abstracted wetlands and surface water catchments in the District, to help further inform the above.

Policy 15B – Sewerage Systems and Water Quality

We note the WCS includes a review of the existing waste water infrastructure and identifies that whilst capacity is available for the majority of sites in both options, there are some sites that would require infrastructure and/or treatment upgrades.

We note further assessment is required for both options to assess and determine infrastructure and treatment upgrades or the provision of new infrastructure to prevent major constraints to growth. As detailed above, we are still considering the findings of the WCS and will make further comments in due course. However, we recommend should the findings of the WCS and the further assessment identify a need for phasing of delivery, this is referenced in the policy, perhaps in section iii.

Policy 15C – Flood Risk Management

We support the inclusion of Policy 15C.

In accordance with paragraph 50 of the Flood Risk and Coastal Change section of the National Planning Practice Guidance (NPPG), we recommend section ii, fourth bullet point, not only makes reference to developments not increasing flood risk elsewhere but also includes reference to opportunities for reducing flood risk overall.

We also advise that the supporting text is amended in light of the above to acknowledge that whilst Policy 15C ensures individual developments do not increase the risk of flooding, it is also important that the cumulative impact of growth within the LPR does not increase the risk of flooding and where appropriate provides betterment. Opportunities to deliver flood risk management infrastructure to address the impacts of growth will therefore be sought as an integral part of implementing the LPR.

We note the policy requires appropriate allowances for climate change to be used in Flood Cont/d..

Risk Assessments (FRAs), referencing the latest Government's Climate Change Allowances guidance. For completeness, to assist planners and developers we have produced a local Climate Change Guide which could be referenced in the policy instead.

Policy 16A – Pollution and Land Instability

The Wyre Forest district overlies a principal aquifer of regional strategic importance in terms of water supply and there are a number of Source Protection Zones (SPZs) to protect public water resources. Given the potential for land contamination on brownfield sites, we generally support remediation of such in the interests of reducing the impact to controlled waters.

In light of the above, we welcome the inclusion of policy 16A. However, for clarity section B of the policy could include reference to the need for site investigation, remediation and validation to demonstrate that land contamination issues have been fully addressed.

Reference should be made to our [Groundwater protection position statements](#) in the supporting text, to help provide appropriate control measures, especially in areas designated as SPZ1.

Whilst we would assess the impact on controlled waters, you may wish to seek the views of Worcestershire Regulatory Services in relation to human health considerations.

Policy 28B – Chalets, Caravans, Mobile Homes

We support the wording of this policy on the basis of flood risk management issues and safety concerns in line with NPPG and the National Planning Policy Framework (NPPF).

Proposed Allocations

We note there are two Options proposed to accommodate the necessary development within the District during the Plan period, with common sites in both referenced as Core Sites.

We have previously recommended that an appropriate evidence base is used to inform the location of site allocations, to help inform a sound flood risk Sequential Test (ST), inform your sequential approach; and to ensure development is deliverable. The WCS should be used to help inform the appropriateness and deliverability of development sites.

Paragraph 29.4 confirms all sites have been assessed against national and local policy and technical evidence, including the Level 1 and 2 SFRA and WCS.

Strategic Flood Risk Assessment (February, 2017)

Within our previous correspondence, we commented that the draft Level 1 and 2 SFRA appeared to be broadly compliant with national planning guidance. However, in light of the minor issues highlighted previously we would offer the following comments on the final version of the Level 1 and 2 SFRA.

Flood Risk:

We previously queried discrepancies between the flood zones (2 and 3) and the 1 in 100 year event plus climate change outline in the level 2 Detailed Site Summary maps. The draft SFRA attributed this to differences between generalised and detailed modelling techniques. However, on the basis that the extent of some of these flood outlines including climate change were smaller than the Flood Zone 3 shown on our Flood Map for Planning (Rivers and Sea) we requested more information to clarify the source of this information including its implications for reliability and planning.

We note section 5 of the SFRA has been updated and describes the nature and limitations of the generalised 2D modelling used to determine impacts of climate change, including the effect on conveyance and backing up of flood water through structures such as culverts and

bridges. On this basis the SFRA advises detailed modelling may be required to inform site specific FRAs for sites shown to be within Flood Zones 2 and 3 produced using these generalised techniques. In this regard, we advise that a caveat is included for each of the site allocations to which this relates.

We also previously identified a lack of information and detail on existing flood defences and the effect of climate change on residual risk. We note section 4.6 of the SFRA has been updated to include a description of the effect climate change will have on existing defences for Kidderminster and Bewdley. Broadly we note flood defences are likely to overtop, increasing the extent and depths of flooding. The SFRA confirms detailed, site specific FRAs should determine the extent of flood risk impacts on developments with regards to issues such as the setting of appropriate finished floor levels.

Section 4.6 also notes the effects of climate change on allocated sites in Kidderminster, Spennells, Bewdley and Stourport-on-Severn; including a reference to sites BHS/11, BHS/16 and FHN/9 in Kidderminster (as highlighted previously) which benefit from the Kidderminster Flood Alleviation Scheme (FAS). The SFRA acknowledges that these sites benefit from reduced flood risk and has clarified potential impacts of climate change on defences and allocated sites including breaching scenarios. Furthermore, the SFRA has confirmed residual risk should be addressed in more detail in a site-specific FRAs, including an acknowledgement (where applicable) that Bewdley Beales Corner defences trial phase will be coming to an end in 2020. Similar to above, we also advise that a caveat is included for each of the site allocations to which this relates.

We note section 7 includes further detailed assessment of climate change, including implications for development and residual risk (section 7.2 and 7.2.1 refers). We note the SFRA has used modelled outputs to give an indication of the risk of flooding above existing defence standards of protection and the extent to which this could be increased due to climate change. Confirmation is also provided for the elements of a proposal that should be considered when a site is vulnerable to residual risk. This includes the vulnerability of receptors and the structural safety of dwellings or structures that could be adversely affected.

One area of Wyre Forest where we have some modelling concerns is the River Stour at its confluence with the River Severn. The modelling to date is correct but has not assessed modelling scenarios where the River Stour is in flood and there are high levels in the River Severn. There are some allocated sites at this location. This is something that should also be investigated in site specific FRAs to ensure safe development.

There is now a good incorporation of the latest climate change for planning figures released in 2016 and the Detailed Site Summary tables are comprehensive and the document seeks flood risk betterment.

However, based on our information, there are a number of site allocations adjacent to ordinary watercourses. Table 12-1 in the SFRA includes ordinary watercourses with catchments less than 3km² adjacent or through the site as a constraint. However, sites OC/11, OC/12 and OC/13 have not been identified to meet this criteria. You should be carrying out further assessment at these sites to inform flood risk.

Based on our Flood Map for Planning (Rivers and Sea), site WA/BE/3 has a Main River located through the site, with associated areas of Flood Zone 2 and 3. However Table 12-1 states 100% of the site is located within Flood Zone 1. Based on our Flood Map for Planning, this site should have been carried through to Level 2 Assessment.

For site allocations which include areas of Flood Zones 2 and/or 3, we recommend your Council are satisfied there is sufficient land available within Flood Zone 1 to accommodate the proposed development (i.e. number of houses or hectares (ha) of employment land)).

Water Cycle Study (May, 2017)

As outlined previously, it is imperative that a robust WCS is in place to inform a 'sound' Plan that fully recognises the timings and costs associated with infrastructure planning in the water environment. Securing effective water resource policies and allocating development in appropriate areas, with adequate infrastructure in place (or planned), is an important element of the strategic planning remit.

As outlined above, we have not been able to fully review the final version of the WCS at this time and will provide additional comments in due course.

In the meantime, we are aware of issues with mains foul drainage connection in Clows Top and note the Core Housing Site in this location; reference BR/RO/01 – Land at Clows Top. This is with Severn Trent Water Ltd. (STWL) to agree a potential scheme. However, for information we have previously raised concerns on the appropriateness of a non-mains foul drainage option in this location.

Additional Comments on Site Allocations:

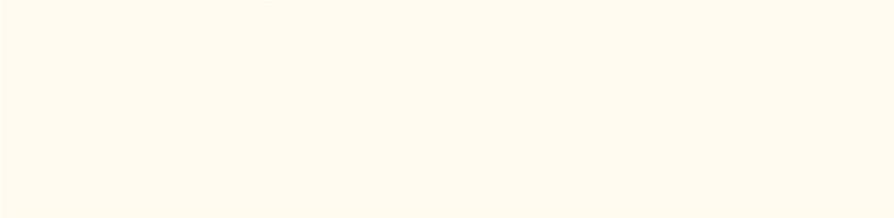
With reference to Policy 16A – Pollution and Land Instability, we have previously recommended that potential site allocations are assessed with regard to the previous use of the site and with sufficient detail to ensure the site is appropriate and viable for remediation. We note Allocation FPH/1 (Former British Sugar Settling Ponds, Wilden Lane, Kidderminster) is partially located over an area identified as a historic landfill and site LI/6/7 (Lickhill Road North) appears to be partially located upon Lickhill landfill.

As outlined previously we would expect a review of groundwater vulnerability and SPZs (particularly SPZ 1) and information on Water Framework Directive (WFD) to further inform your consideration.

I trust that the above is of use to you at this time.

Yours faithfully

Mrs Tessa Jones
Senior Planning Advisor



Sent: 15 September 2017 14:29
To: Helen Smith
Cc: Wyre Forest Planning Policy; Davies, Mark
Subject: EA's additional comments on the WFDC LPR - Preferred Options Consultation
Attachments: SV-2015-108466-CS-02-PO1-L02 - WFLPR Preferred Options (June 2017). 2.pdf

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Hi Helen,

Further to my earlier email, please find attached our additional comments in respect of the above following our review of the Water Cycle Study.

I am going on maternity leave today, so should you wish to discuss our additional comments please do not hesitate to contact us via our team email address SHWGplanning@environment-agency.gov.uk

Many thanks,
Tessa

Tessa Jones BSc (Hons), MSc, MRTPI

*Planning Advisor
Sustainable Places
Shropshire, Herefordshire, Worcestershire and Gloucestershire
Environment Agency – West Midlands Area*

 Riversmeet House, Northway Lane, Tewkesbury, Gloucestershire, GL20 8JG

Please note: the Environment Agency have updated their climate change allowances for planners. See [Flood risk assessments: climate change allowances](#).

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Wyre Forest District Council
Planning Policy
Wyre Forest House
Finepoint Way
Kidderminster
Worcestershire
DY11 7WF

Our ref: SV/2015/108466/CS-
02/PO1-L02

Your ref:

Date: 15 September 2017

F.A.O: Helen Smith

Dear Madam

Wyre Forest District Local Plan Review (June 2017) – Preferred Options Consultation

Further to our previous comments made in response to the above consultation, dated 28 July 2017 (letter reference SV/2015/108466/CS-02/PO1-L01) and following our full review of the Water Cycle Study (WCS) (Final Version, May 2017), we would offer the following additional comments.

For completeness, we previously commented on a draft version of the WCS in our letter dated 9 February 2017.

Overall we are satisfied that the final version of the WCS considers all necessary aspects, in a good level of detail. The majority of amendments suggested previously have been addressed. However, whilst there are some minor recommendations outstanding, we do not feel that they fundamentally affect the findings of the overall report.

We note table 10-1 of the WCS highlights some physical wastewater infrastructure capacity constraints in red. However, whilst this does not appear to imply a significant barrier to development, we trust Severn Trent Water Limited will confirm following their further assessment. On this basis we have no significant cause for concern in relation to environmental infrastructure matters, related to water quality, as a result of the proposed development growth. We therefore consider the evidence base document robust enough to inform the Plan.

The revisions to the water quality (WQ) modelling appear to have been satisfactorily completed.

The revisions to the WCS sections of the report are welcomed and considered appropriate.

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Cont/d..

In section 6.1.8 of the report, reference is made to the phosphate (P) treatment trials due to be completed in 2017. It states... *“it is anticipated that a future annual mean of 0.1mg/l may be achievable. This statement is accurate at the time of writing.”* However, we have now set a technically achievable limit (TAL) that will be applied in Asset Management Period 7. *“Following a review of the P technology trials data the current Technically Achievable Limit (TAL) is tightened from 0.5 mg/l (as an average) to 0.25 mg/l (as an average) total phosphorus for the purposes of PR19 planning and permitting”*. This does not change the conclusions / wording in section A.8 but the wording in section A.10.8 and 6.1.8 could be amended. Although TAL is 0.25 is it could still be possible to achieve the required P limit; so this should not prove a barrier to proposed growth

The Water Framework Directive (WFD) section of the report refers to the requirement to achieve good ecological status by 2015, this is true except where alternative objectives or timescales have been set.

We note in section A.8, Table 7 that the WwTW P data has been amended following our previous comments. However in Table 7 the WwTW future growth P concentration is still reported as 4.94. We question whether this should have been updated to reflect the current observed P concentration of 0.63 (as in table 8). Note this has not impacted on the River Quality Planning (RQP) result.

We would also question whether the BOD River target in table 13 should be ‘high’ rather than ‘good’ status.

We note strong recommendations are made to utilise SuDS for surface water drainage from development, and we support this approach.

We also support the fact that all aspects of sewerage network constraints, sewage treatment works capacity and related issues such as odour and flood risk from increased waste water discharges have been considered. Given the limited differences between the housing options there is not a clear favourite, it is therefore particularly important that the developers and your Council engage with Severn Trent Water Limited as the appropriate water company at an early stage, but this is clear from the final report.

I trust that the above is of use to you at this time. Please do not hesitate to contact me, or another member of my team, on the details below, should you wish to discuss the above further.

Yours faithfully

Mrs Tessa Jones
Senior Planning Advisor



F.A.O: Planning Policy Manager
Wyre Forest District Council
Economic Prosperity and Place
Directorate
Wyre Forest House
Finepoint Way
Kidderminster
DY11 7WF

Our ref: SV/2015/108466/CS-01/IS1-L01

Your ref: RB/HET/FP-LPRIO

Date: 16 October 2015

Dear Mrs Rebecca Brown

WYRE FOREST DISTRICT LOCAL PLAN REVIEW – ISSUES AND OPTIONS CONSULTATION

Thank you for referring the above consultation, which we received on 1 September 2015. We have reviewed the Local Plan Review Issues and Options document and wish to provide the following comments for consideration at this stage of the Local Plan review.

For completeness, we commented on the Sustainability Appraisal (SA) Scoping Report on 22 June 2015 (letter ref. SV/2015/108466/SE-01/SP1-L01).

Evidence Base (Question 1):

The Local Plan review needs to be supported by an appropriate evidence base and, specific to our own remit, an up to date Strategic Flood Risk Assessment (SFRA) and Water Cycle Study (WCS). The importance of an up to date and robust evidence base is supported by the National Planning Policy Framework (NPPF). Paragraph 158 of the NPPF requires you to use a “*proportionate evidence base*” and ensure that “*the Local Plan is based on adequate, up-to-date and relevant evidence about the economic, social and environmental characteristics and prospects of the area.*”

Due to the proposed growth beyond the adopted Core Strategy, we acknowledge your commitment to undertaking the necessary updates to the evidence base, especially the WCS and SFRA. However, within the evidence base studies listed in the Report, there is currently no reference to groundwater, source protection zones (SPZs) or the Water Framework Directive (WFD). These could be included within the scope of the above. For example, within the WCS update, we’d expect a review of groundwater vulnerability and SPZs and information on WFD.

The SA/Strategic Environmental Assessment (SEA) process with reference to the River Basin Management Plan (RBMP) and WCS /other evidence will inform key issues,

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Cont/d..

opportunities and constraints; and in turn inform the need/scope of the local plans water policies, where necessary. Where the Local Plan proposes locations for development that might have impacts on water bodies then it should contain local policy that requires WFD assessment of any proposed schemes.

With regard to the WCS, we would welcome a meeting to discuss waste water infrastructure and the potential impacts of development growth.

It is imperative that a robust WCS is in place to inform a 'sound' Plan that fully recognises the timings and costs associated with infrastructure planning in the water environment. Securing effective water resource policies and allocating development in appropriate areas, with adequate infrastructure in place (or planned), is an important element of the strategic planning remit.

With reference to the SFRA, we are expecting revised climate change allowances to be published in Autumn 2015. These are presently in draft but would update the figures within Table 2 of the current 'Climate change allowances for planners' (September 2013) guide, as referenced in paragraph 7-068-20140306 of the National Planning Practice Guidance (NPPG).

The table below is for 'peak river flows' within the Severn River Basin district, and for your information at this time to enable consideration of a range of allowances in the development of the SFRA to allow the inclusion of an appropriate climate change allowance to reflect individual development's lifetime and vulnerability.

Severn Peak River Flows:	2015-39	2040-2069	2070-2115
Total potential change anticipated			
Upper end	25%	40%	70%
Higher central	15%	25%	35%
Central	10%	20%	25%

We would be happy to discuss the scope of the SFRA going forwards, with you and the North Worcestershire Water Management team (Lead Local Flood Authority (LLFA)) looking at all sources of flooding.

Groundwater Vulnerability (Question 10):

The Wyre Forest district overlies a principal aquifer of regional strategic importance in terms of water supply and there are a number of SPZs to protect public water resources. Given the potential for land contamination on brownfield sites, we generally support remediation of such in the interests of reducing the impact to controlled waters.

We would support a Policy that seeks to protect and enhance the quality of natural resources and also makes reference to assessing and remediating contaminated land. We would recommend that you include a reference to protecting the water environment i.e. through an appropriate level of site investigation, remediation and validation for previously developed land where there has been a previous potentially contaminative

use. You could include: “...demonstrate that land contamination issues have been fully addressed. Development proposals on contaminated land should demonstrate that it is capable of appropriate remediation without compromising development viability or the delivery of sustainable development.”

The above is in accordance with paragraph 109 of the NPPF, to protect ‘controlled waters’ which states: “...preventing both new and existing development from contributing to or being put at unacceptable risk from, or being adversely affected by unacceptable levels of soil, air, water or noise pollution or land instability; and...”

We would also recommend that you assess potential site allocations with regard to the previous use of the site and with sufficient detail to ensure the site is **appropriate and viable for remediation**.

Paragraph 121 of the NPPF states that “*Planning policies and decisions should also ensure that: the site is suitable for its new use taking account of ground conditions and land instability, including from natural hazards or former activities such as mining, pollution arising from previous uses and any proposals for mitigation including land remediation or impacts on the natural environment arising from that remediation*”.

Whilst we would assess the impact on controlled waters we would recommend that you seek the views of Worcestershire Regulatory Services in relation to human health considerations.

Developer Contributions (Question 11) and Funding Infrastructure (Question 54):

A Community Infrastructure Levy (CIL) Charging Schedule offers the potential to secure monies from development to delivery new infrastructure. This could include water management infrastructure e.g. new flood alleviation schemes or upgrades to existing flood defences; contributions towards flood warning service; and to meet environmental infrastructure requirements including new or improved waste water treatment facilities. We are happy to provide you with further information to assist this process.

Broad Options for Site Allocations (Questions 12-18):

In consideration of the identified housing need in the report, we recommend that the evidence base is used to inform the location of site allocations, to help inform a sound sequential test, inform your sequential approach; and to ensure development is deliverable.

The WCS should be used to help inform the appropriateness and deliverability of development sites.

Gypsy and Traveller Accommodation (Question 25):

Notwithstanding the three proposed options for providing gypsy and traveller accommodation, it is important that all sites are supported by evidence in the same way as other sites within the Plan. This should include evidence on flood risk, using the SFRA update, as it is important that you undertake a Sequential Test (see paragraphs 100 – 104 of the NPPF) when considering sites for gypsy and travellers. The Sequential Test, which seeks to avoid locating development in flood risk locations, is particularly important in this instance as flood risk can present particular problems and greater risk for developments of a less permanent nature, such as caravans and mobile homes. Indeed the NPPG sets out the vulnerability of different uses (at sub-section 25 of the flood risk section), and non-permanent caravans etc. are considered ‘Highly Vulnerable’, as opposed to other buildings used for dwelling houses which are ‘More

Vulnerable'. This is an important consideration in determining appropriate locations for these developments.

The sites should also have some regard to water infrastructure and foul drainage, linked to the WCS. Given the small scale nature of sites for gypsy and traveller, it is unlikely that they would have an impact on sewage infrastructure capacity, and hence would not need consideration in further WCS documents. However foul drainage matters should be considered, as wherever possible sites should be connecting to the mains sewer in the interests of protecting the water environment. Where sites are less permanent, such as caravan sites and mobile homes, we recognise that mains connection may not always be practicable. In these instances a package treatment plant would be the next best available option. I have enclosed a copy of our foul drainage assessment form for information (this is our local standing advice used for planning applications, but it may provide useful advice for foul drainage considerations at this stage of the Local Plan review also).

Chalet Provision (Question 34):

Similar to above, notwithstanding the three proposed options for providing chalet provision, where sites are proposed for chalets, consideration of the flood risk Sequential Test, which seeks to avoid locating development in flood risk locations, is particularly important in this instance as flood risk can present particular problems and greater risk for developments of a less permanent nature, such as chalets and mobile homes. A reference to this in the policy wording would be welcomed.

We would recommend that you consider an option for 'managed retreat' i.e. to help remove existing chalets from unsustainable locations within the floodplain to lower risk sites, in accordance with paragraph 100 of the NPPF.

Horsiculture (Question 37):

The SA Scoping report acknowledged the pressure from horsiculture on the biodiversity of the district. This land use can lead to issues of soil compaction and play a significant role in increasing surface water runoff, sedimentation of watercourses due to poor overwintering facilities, resulting in pollution events. As advised within our previous response, policy should be developed which safeguards locally and nationally valuable habitats and protects watercourses, contributing to WFD objectives. Reference to our Rural Sustainable Drainage Systems (RSuDS) should be included (<https://www.gov.uk/government/publications/rural-sustainable-drainage-systems>) as design guidance for these schemes.

Section 11: Tackling Climate Change and its Impacts:

Flood Risk (Questions 55 and 56)

Local Plans should be prepared in accordance with the flood risk policy set out in the NPPF and NPPG. In particular, paragraphs [17](#), [94](#), [99-104](#) of the NPPF and the [Flood Risk and Coastal Change](#) section of the NPPG.

We note Section 11.6 of the report identifies three options for addressing flood risk. We would expect policies and site allocations within the Plan to ensure no inappropriate development is located in areas at high risk of flooding, whilst ensuring development in areas at risk of flooding will be safe without increasing flood risk elsewhere.

In addition the Plan should contribute to reducing flood risk for existing communities. The SFRA should identify the risk of flooding from all sources and under the Duty to Cooperate work to manage and resolve any cross-boundary risks.

In accordance with paragraph 100 of the NPPF, Local Plans should use opportunities from new development to reduce the causes and impacts of flooding and where climate change is expected to increase flood risk so that some existing development may not be sustainable in the long-term, seeking opportunities to facilitate the relocation of development, including housing, to more sustainable locations. This would accord with Option C proposed.

We would welcome discussion on local flood risk policy that may need to be updated. It is also unclear if you are still intending on producing a local flood risk development guidance document. This was discussed as part of previous Local Plan stages.

Water Efficiency (Question 57)

With regards to the water efficiency targets set out in the Housing Standards Review, we recommend that your Council identify higher water stress areas within the district to inform whether the optional higher target is appropriate in the district. Based upon the Housing Standards Review document and recent advice in the NPPG, primary sources of evidence which might support higher water efficiency standards for new dwellings are:

- The Environment Agency [Water Stressed Areas Classification \(2013\)](#) which identifies areas of serious water stress where household demand for water is (or is likely to be) a high proportion of the current effective rainfall available to meet that demand.
- Water resource management plans produced by water companies
- [River Basin Management Plans \(RBMP\)](#) - which describe the river basin district and the pressure that the water environment faces. These include information on where water resources are contributing to a water body being classified as 'at risk' or 'probably at risk' of failing to achieve good ecological status, due to low flows or reduced water availability.

In addition to these primary data sources, and to help inform the water efficiency targets, locally specific evidence may also be available, for example the WCS and information taken from our RBMP WFD data:

<https://www.gov.uk/government/publications/cams-worcestershire-middle-severnabstraction-licensing-strategy>

Please refer to our email of 6th August 2015, which references the Catchment Data Explorer Tool, where WFD data, including information about catchments and the waterbodies in them can be obtained.

I trust that the above comments are of interest at this time.

Yours sincerely

Mrs Tessa Jones
Senior Planning Advisor

Foul Drainage Assessment Form

Planning Guide for use only in EA Shropshire, Herefordshire, Worcestershire & Gloucestershire Area

Key Principles:

The utilisation of non-mains drainage as part of your planning proposal will only be allowed in exceptional circumstances and you must provide evidence that a connection to the sewer is not practicable.

Government guidance contained within paragraph 20 of subsection 2 of the Water Supply Wastewater and Water Quality section of the Planning Practice Guidance (PPG), gives a hierarchy of drainage options that should be considered and discounted in the following order:

1. **Connection to the public sewer;**
2. **Package sewage treatment plant (PTP)** (This could either be adopted in due course by the sewerage company or owned and operated under a [new appointment or variation](#));
3. **Septic tank** (discharging to soakaway);

Requirement H1 of the Building Regulations (Approved Document H - Drainage and Waste Disposal - 2002 Edition incorporating 2010 amendments) has a similar hierarchy. The document is available at: <http://www.planningportal.gov.uk/buildingregulations/approveddocuments/parth/approved>

Key Points to Consider:

- **This foul drainage assessment should be submitted with the planning application, detailing how foul drainage will be safely disposed of from the proposed development, through consideration of a number of factors. A map showing the location of the proposed disposal mechanisms (incl. treatment plants with point of discharge/soakaway, septic tanks and soakaways) and where relevant porosity test results must be provided. The application may be considered invalid or recommended for refusal without this information.**
- Paragraph 20 in subsection 2 of the Water Supply Wastewater and Water Quality section of the PPG states “When drawing up wastewater treatment proposals for any development, **the first presumption is to provide a system of foul drainage discharging into a public sewer** to be treated at a public sewage treatment works (those provided and operated by the water and sewerage companies). This should be done in consultation with the sewerage company of the area.”
- It also states that “Where a connection to a public sewage treatment plant is not feasible (in terms of cost and/or practicality) [a package sewage treatment](#) plant can be considered.”
- The relevant sewerage utility company should be contacted to confirm that connection to the foul drainage sewerage system is available. If there are capacity issues a bilateral or unilateral S106 obligation may include contributions to upgrade the system to accommodate the development.
- If a mains foul sewer connection is not feasible, a PTP is considered the next most sustainable option. Some development types warrant the use of a septic tank rather than a PTP, an example of this would be a holiday let/s where effluent volumes would be more intermittent than a residential use or where there is an isolated single dwelling, preventing effective operation of the PTP. Additionally, isolated single dwellings may be best served by septic tank and soakaway, subject to appropriate justification. Where connection to the public sewer is considered unfeasible, it is recommended you provide a minimum of two quotes from independent contractors to ascertain the cost of connection to the sewer, with comparable costings for the installation of a non-mains drainage system. This will not be required where developments are located an excessive distance from the sewer or where there are overriding physical constraints preventing connection. When considering the relative costs of connection to the mains or a non-mains system, it is recommended that a ‘correction figure’ of between £4000-£8000 per property be added to the cost of non-mains systems, in order to account for the maintenance and environmental impacts of providing a non-mains system. This figure will vary depending on the scale and nature of development. The total costs of each system will then be compared and the non-mains system permitted only if it is considered to be financially unfeasible to connect to the foul sewer.
- If it is proposed to utilise alternative or a combination of foul sewage treatment and disposal techniques including reed beds, these may be acceptable only where a mains sewer connection is not available. Full details of these should be provided with the planning application.

A. MAINS SEWER

Are you proposing a connection to the mains foul sewer?

Y/N

If YES, a map showing the nearest mains connection point (check with your local sewerage undertaker) should be submitted, with confirmation of capacity. If mains connection is available and has confirmed capacity no further question need be answered.

If NO because of capacity issues you should discuss a S106 obligation with utility company/LPA.

If NO because of physical constraints and you have provided quotations for connection to the mains sewer and non-mains system or have valid overriding reasons for not connecting to the sewer (as outlined in the 'key points to consider' on page one), go to part B.

If you are yet to obtain the necessary quotations, there is insufficient information to assess the drainage proposals. You should seek this information prior to the submission of a planning application.

B. NON-MAINS

Are you proposing a development which is intended to be permanently occupied, for example residential dwellings (not including a single isolated dwelling) or commercial/industrial building?

If YES, please complete part B1 with the consideration of a package sewage treatment plant (PTP) with discharge to watercourse or soakaway.

If NO, please complete part B2 with consideration of a septic tank discharging to soakaway.

B1. Private means of sewage disposal from development with permanent/ non seasonal occupation

Discharge to watercourse

1. Are you proposing to discharge to a watercourse / stream from the proposed development?

If YES, go to point 2.

If NO, go to point 7 regarding a ground soakaway.

2. Is the watercourse / receiving waters a SSSI designated by Natural England, or important for water quality reasons? e.g. a salmonid or cyprinid fisheries designation*

If YES, it is unacceptable to discharge foul effluent to the watercourse and a soakaway should be considered. Go to point 7.

If NO, go to point 3.

3. Will the treatment plant be sited at least 7 metres from the habitable part of any new or existing building?

If YES, go to point 4.

If NO, the proposal is NOT ACCEPTABLE and should be reconsidered.

4. Will the treatment plant be sited at least 10 metres from any watercourse, permeable drain or land drain?

If YES, go to point 5.

If NO, the proposal is NOT ACCEPTABLE and should be reconsidered.

5. Will the treatment plant be sited at least 50 metres from any point of abstraction from the ground for a drinking supply (including your own or your neighbour's supplies), lake, pond or other water feature?

If YES, go to point 6.

If NO, the proposal is NOT ACCEPTABLE and should be reconsidered.

6. Based upon your answers, and submission of scaled details of the drainage system, and constraints/water features at this stage, a package treatment plant discharging to the watercourse would be acceptable in principle, subject to the following important note:

Under the Environmental Permitting Regulations (2010) an Environmental Permit *may be required from the Environment Agency for the discharge of treated effluent to a watercourse. This permit may be withheld.* The applicant should liaise with the Environment Agency in order to obtain a permit to discharge and provide sufficient detail to enable the Council to subsequently discharge relevant foul drainage conditions imposed on the planning permission.

Discharge to soakaway

7. Will the treatment plant and ground soakaway be sited at least 10 metres from any watercourse, permeable drain or land drain and at least 1.0 metres above the maximum water table level?

If YES, go to point 8.

If NO the proposal is NOT ACCEPTABLE, and should be reconsidered.

8. Will the treatment plant and ground soakaway be sited at least 50 metres from any point of abstraction from the ground for a drinking supply (including your own or your neighbour's supplies), lake, pond or other water feature, and outside any Inner Groundwater Protection Zone (Source Protection Zone 1)?

If YES, go to point 9.

If NO, the proposal is NOT ACCEPTABLE, and should be reconsidered.

NOTE: *Where discharge would be within 250metres of such an abstraction, a risk assessment may be required by the Environment Agency as part of an Environmental Permit application. (Pre-Permitting application discussion is advised at this stage).*

9. Will the treatment plant ground soakaway be at least 15 metres from any building?

If YES, go to point 10.

If NO, the proposal is NOT ACCEPTABLE, and should be reconsidered.

10. Will the treatment plant be at least 7 metres from the habitable part of any new or existing building?

If YES, go to point 11.

If NO, the proposal is NOT ACCEPTABLE, and should be reconsidered.

11. Are porosity test results submitted, which fall within the acceptable range of between 15 and 100 seconds Vp (percolation value) (see Porosity Test Advice Note on page 5)?

If YES, go to point 12.

If NO, reconsider location of soakaway, go to part B1 "Discharge to watercourse" or otherwise go to part B3.

12. Based upon your answers, and submission of scaled details of the drainage system, constraints/water features and porosity tests at this stage, a package treatment plant discharging to a soakaway would be acceptable in principle, subject to the following important note:

Under the Environmental Permitting Regulations (2010) an Environmental Permit *may be required from the Environment Agency for the discharge of treated effluent to ground. This permit may be withheld.* The applicant should liaise with the Environment Agency in order to obtain a permit and provide sufficient detail to subsequently enable the Council to discharge relevant foul drainage conditions imposed on the planning permission.

B2. Private means of sewage disposal from development utilising septic tank

1. Will the septic tank and ground soakaway be at least 10 metres from any watercourse, permeable drain or land drain and at least 1.0 metres above the maximum water table level?

If YES, go to point 2.

If NO, the proposal is NOT ACCEPTABLE, and should be reconsidered.

2. Will the septic tank and ground soakaway be sited at least 50 metres from any point of abstraction from the ground for a drinking supply (including your own or your neighbour's supplies), lake, pond or other water feature, and outside any Inner Groundwater Protection Zone (Source Protection Zone 1)?

If YES, go to point 3.

If NO, the proposal is NOT ACCEPTABLE, and should be reconsidered.

NOTE: *Where discharge would be within 250metres of such an abstraction, a risk assessment may be required by the Environment Agency as part of an Environmental Permit application. (Pre-Permit application discussion is advised at this stage).*

3. Will the septic tank ground soakaway be at least 15 metres from any building?

If YES, go to point 4.

If NO, the proposal is NOT ACCEPTABLE and should be reconsidered.

4. Will the septic tank be at least 7 metres from the habitable part of any new or existing building?

If YES, go to point 5.

If NO, the proposal is NOT ACCEPTABLE and should be reconsidered.

5. Are porosity test results submitted, which fall within the acceptable range of between 12 and 100 seconds Vp (percolation value) (see Porosity Test Advice Note on page 5)?

If YES, go to point 6.

If NO, reconsider location of soakaway, or otherwise go to point B3.

6. **Based upon your answers, and submission of scaled details of the drainage system, constraints/water features and porosity tests at this stage a septic tank discharging to a soakaway would be acceptable in principle, subject to the following important note:**

Under the Environmental Permitting Regulations (2010) an Environmental Permit *may be required from the Environment Agency for the discharge of treated effluent to ground. This permit may be withheld.* The applicant should liaise with the Environment Agency in order to obtain a permit and provide sufficient detail to subsequently discharge relevant foul drainage conditions imposed on the planning permission.

B3. Discharge to ground where soakaway porosity test results not within acceptable range.

Reference should also be made to ‘Approved document H 2002 Edition incorporating 2010 amendments’, Section H2, to consider alternative systems of soakaway design, which upon consideration may mean that, whilst the porosity test result is not within the required range, an enhanced system would be acceptable. Details should be submitted to demonstrate this is acceptable.

Can an enhanced system be implemented?

If YES, go to point B1. 12; or B2. 6 (above).

If NO, the proposal is NOT ACCEPTABLE and should be reconsidered, go to B4.

B4. Private means of sewage disposal incorporating a combination of treatments including reed beds

A bespoke assessment may need to be undertaken for proposals incorporating a combination of alternative foul sewage disposal methods such as reed beds. Within this assessment the locational constraints outlined in part B1 and B2 should be considered in order to determine whether the disposal method is suitable. This should be submitted with details of the systems to be utilised, to the Council with your planning application. Under the Environmental Permitting Regulations (2010) an Environmental Permit *may be required from the Environment Agency for such proposals. This permit may be withheld.*

ADVICE NOTES

PLANNING ADVICE FOR NON-MAINS SEWAGE

1. **Contravention of recognised practices** – the assessment must consider any evidence that the proposal may cause, in respect of environmental damage, in the light of: any statute, regulation, directive (e.g. Groundwater), bye law, water quality objective, or authoritative standard (e.g. British Standard, Environment Agency’s ‘Policy and Practice for the Protection of Groundwater’).
2. **Adverse effect on water sources/resources** – the assessment must consider information in the area, such as geological formations which may allow pollution of: rivers / streams ditches/ surface waters including riparian owners downstream, groundwater, public, private (boreholes and abstractions) and agricultural water supply, water features (wells, lakes, ponds).
3. **Health hazard or nuisance** – the assessment must consider any risk to public health or nuisance.
4. **Damage to controlled waters** – the assessment must consider any risk of pollution to controlled waters.
5. **Damage to environment and amenity** – the assessment must consider any risk of pollution (from effluent) to: any land with environmental or amenity value, Site of Special Scientific Interest (SSSI), Area of Outstanding Natural Beauty (AONB) or candidate Special Area of Conservation (cSAC), public open space.
6. **Overloading existing capacity of the area** – the assessment must provide evidence regarding the consideration of on any risk of ponding, sewage flooding, or pollution or nuisance from the scale of the proposal or any existing capacity problems.
7. **Absence of suitable outlets** – the assessment must provide evidence to show that there is a suitable watercourse or adequate land for soakage to accommodate the disposal of effluent. The location of the treatment plant, or septic tank, as well as the route of discharge (soakaway location and design, or route of pipe to watercourse).
8. **Unsuitable soakage characteristics** – the assessment must include the full results of percolation (porosity) tests carried out in accordance with BS 6297. *See porosity note below.*
9. **High Water table** – the assessment must provide details of any ‘rest water levels’ in trial holes, which may indicate that the water table is high.

10. **Rising groundwater levels** – the assessment must detail any ground water levels that have been rising consistently and which may interfere with the effluent dispersal and may cause damage to other land or property.
11. **Flooding** – the assessment must consider flood risk. If the system is located with Flood Zone 3 (1% annual probability flooding), a known flood risk area (historic flooding) or surface water problem area, then there may be a risk of environmental or amenity damage.

ENVIRONMENTAL PERMIT - for discharge to surface waters (watercourse) or groundwater:

You may require an Environmental Permit from the Environment Agency. The Applicant should apply on line at: <https://www.gov.uk/environmental-permit-how-to-apply/overview> or contact the Environment Agency for an Environmental Permit application form and further details on 08708 506506. The granting of planning permission does not guarantee the granting of a permit under the Environmental Permitting Regulations 2010. There are 2 permit types that can be applied for or an Exemption that can be registered: <https://www.gov.uk/permits-you-need-for-septic-tanks>

1. Exemptions - for discharges of sewage less than 2 cubic metres a day to ground or 5 cubic metres a day discharging to a watercourse. The Exemption needs to be Registered with the Environment Agency. To qualify for an Exemption a number of conditions must be met. For further information see: <https://www.gov.uk/environmental-permit-how-to-apply/register-as-exempt>
2. Standard Rules Permit – normally applies for discharges of treated sewage greater than 5 cubic metres a day (discharging to a watercourse) but less than 20 cubic metres a day. There are exceptions – e.g. within 1km of a European Habitats site. Check on <https://www.gov.uk/environmental-permit-how-to-apply/standard-permit>
3. Bespoke Permit – for discharges of treated sewage greater than 2 cubic metres a day to ground and greater than 20 cubic metres a day to watercourse. To check see: <https://www.gov.uk/environmental-permit-how-to-apply/bespoke-permit>

POROSITY TESTS

You should refer to **Building Regulations Section H2** (Approved Document H 2002 Edition incorporating 2010 amendments) with regard to the general requirements for construction of non-mains sewerage systems. **Sections 1.33 to 1.38** deal with the test requirements for trial holes and percolation tests .

Porosity tests must detail a satisfactory Vp (percolation value) result (12 - 100 seconds Vp). However, if the results are not within the suggested range, either due to the ground conditions being too fast (meaning that effluent would be reaching underlying groundwater) or too slow (leading to effluent ponding on the surface), the following should be noted:

Porosity test values may be reconsidered for treated effluent under BS6297.

Reference should be made to The Building Regulations Approved document H, Section H2 (2002 Edition incorporating 2010 amendments), to consider alternative systems of soakaway design, which upon consideration may mean that, whilst the porosity test result is not satisfactory, the enhanced system would be acceptable.

FURTHER ADVICE AND CONTACTS

The views of your Local Authority, Environmental Health Officer and Building Control Officer should also be sought to ensure that any proposal submitted is feasible.

The relevant Environment Agency Land and Water or Biodiversity team may also be contacted (03708 506506), to provide assistance with the provision of the above information e.g. salmonid and cyprinid fishery designations. In relation to point B1. 2*, you are advised to contact Natural England and the local planning authority to ascertain whether there are any significant nature conservation designations /SSSIs relevant to the proposal.

The GOV.UK website provides Environment Agency advice and guidance:

<https://www.gov.uk/government/organisations/environment-agency>

It also provides links to the 'Flood Zone Maps', as well as information on Groundwater and Source Protection Zones:

http://maps.environment-agency.gov.uk/wiyby/wiybyController?ep=maptopics&lang=_e

Last updated: October 2014

Contact: Environment Agency, Sustainable Places Team, Shropshire Herefordshire Worcestershire & Gloucestershire Area.
shwgplanning@environment-agency.gov.uk

Severn Peak River Flows: Total Potential Change Anticipated	2015-39	2014-69	2070-2115
Upper End	25%	40%	70%
Higher Central	15%	25%	35%
Central	10%	20%	25%

Foul Drainage Assessment Form

Planning Guide for use only in EA Shropshire, Herefordshire, Worcestershire & Gloucestershire Area

Key Principles:

The utilisation of non -mains drainage as part of your planning proposal will only be allowed in exceptional circumstances and you must provide evidence that a connection to the sewer is not practicable.

Government guidance contained within paragraph 20 of subsection 2 of the Water Supply Wastewater and Water Quality section of the Planning Practice Guidance (PPG), gives a hierarchy of drainage options that should be considered and discounted in the following order:

1. **Connection to the public sewer;**
2. **Package sewage treatment plant (PTP)** (This could either be adopted in due course by the sewerage company or owned and operated under a [new appointment or variation](#));
3. **Septic tank** (discharging to soakaway);

Requirement H1 of the Building Regulations (Approved Document H - Drainage and Waste Disposal - 2002 Edition incorporating 2010 amendments) has a similar hierarchy . The document is available at: <http://www.planningportal.gov.uk/buildingregulations/approveddocuments/part8/approved>

Key Points to Consider:

- **This foul drainage assessment should be submitted with the planning application, detailing how foul drainage will be safely disposed of from the proposed development, through consideration of a number of factors. A map showing the location of the proposed disposal mechanisms (incl. treatment plants with point of discharge/soakaway, septic tanks and soakaways) and where relevant porosity test results must be provided. The application may be considered invalid or recommended for refusal without this information.**
- Paragraph 20 in subsection 2 of the Water Supply Wastewater and Water Quality section of the PPG states “ When drawing up wastewater treatment proposals for any development, **the first presumption is to provide a system of foul drainage discharging into a public sewer** to be treated at a public sewage treatment works (those provided and operated by the water and sewerage companies). This should be done in consultation with the sewerage company of the area.”
- It also states that “ Where a connection to a public sewage treatment plant is not feasible (in terms of cost and/or practicality) [a package sewage treatment](#) plant can be considered.”
- The relevant sewerage utility company should be contacted to confirm that connection to the foul drainage sewerage system is available. If there are capacity issues a bilateral or unilateral S106 obligation may include contributions to upgrade the system to accommodate the development.
- If a mains foul sewer connection is not feasible , a PTP is considered the next most sustainable option. Some development types warrant the use of a septic tank rather than a PTP, an example of this would be a holiday let/s where effluent volumes would be more intermittent than a residential use or where there is an isolated single dwelling, preventing effective operation of the PTP. Additionally, isolated single dwellings may be best served by septic tank and soakaway, subject to appropriate justification. Where connection to the public sewer is considered unfeasible, it is recommended you provide a minimum of two quotes from independent contractors to ascertain the cost of connection to the sewer, with comparable costings for the installation of a non -mains drainage system. This will not be required where developments are located an excessive distance from the sewer or where there are overriding physical constraints preventing connection. When considering the relative costs of connection to the mains or a non-mains system, it is recommended that a ‘correction figure’ of between £4000 -£8000 per property be added to the cost of non -mains systems, in order to account for the maintenance and environmental impacts of providing a non-mains system. This figure will vary depending on the scale and nature of development. The total costs of each system will then be compared and the non -mains system permitted only if it is considered to be financially unfeasible to connect to the foul sewer.
- If it is proposed to utilise alternative or a combination of foul sewage treatment and disposal techniques including reed beds, these may be acceptable only where a mains sewer connection is not available. Full details of these should be provided with the planning application.

A. MAINS SEWER

Are you proposing a connection to the mains foul sewer?

Y/N

If YES, a map showing the nearest mains connection point (check with your local sewerage undertaker) should be submitted, with confirmation of capacity. If mains connection is available and has confirmed capacity no further question need be answered.

If NO because of capacity issues you should discuss a S106 obligation with utility company/LPA.

If NO because of physical constraints and you have provided quotations for connection to the mains sewer and non-mains system or have valid overriding reasons for not connecting to the sewer (as outlined in the ‘key points to consider’ on page one), go to part B.

If you are yet to obtain the necessary quotations, there is insufficient information to assess the drainage proposals. You should seek this information prior to the submission of a planning application.

B. NON-MAINS

Are you proposing a development which is intended to be permanently occupied, for example residential dwellings (not including a single isolated dwelling) or commercial/industrial building?

If YES, please complete part B1 with the consideration of a package sewage treatment plant (PTP) with discharge to watercourse or soakaway.

If NO, please complete part B2 with consideration of a septic tank discharging to soakaway.

B1. Private means of sewage disposal from development with permanent/ non seasonal occupation

Discharge to watercourse

1. Are you proposing to discharge to a watercourse / stream from the proposed development?

If YES, go to point 2.

If NO, go to point 7 regarding a ground soakaway.

2. Is the watercourse / receiving waters a SSSI designated by Natural England, or important for water quality reasons? e.g. a salmonid or cyprinid fisheries designation*

If YES, it is unacceptable to discharge foul effluent to the watercourse and a soakaway should be considered. Go to point 7.

If NO, go to point 3.

3. Will the treatment plant be sited at least 7 metres from the habitable part of any new or existing building?

If YES, go to point 4.

If NO, the proposal is NOT ACCEPTABLE and should be reconsidered.

4. Will the treatment plant be sited at least 10 metres from any watercourse, permeable drain or land drain?

If YES, go to point 5.

If NO, the proposal is NOT ACCEPTABLE and should be reconsidered.

5. Will the treatment plant be sited at least 50 metres from any point of abstraction from the ground for a drinking supply (including your own or your neighbour’s supplies), lake, pond or other water feature?

If YES, go to point 6.

If NO, the proposal is NOT ACCEPTABLE and should be reconsidered.

6. Based upon your answers, and submission of scaled details of the drainage system, and constraints/water features at this stage, a package treatment plant discharging to the watercourse would be acceptable in principle, subject to the following important note:

Under the Environmental Permitting Regulations (2010) an Environmental Permit may be required from the Environment Agency for the discharge of treated effluent to a watercourse. This permit may be withheld. The applicant should liaise with the Environment Agency in order to obtain a permit to discharge and provide sufficient detail to enable the Council to subsequently discharge relevant foul drainage conditions imposed on the planning permission.

Discharge to soakaway

7. Will the treatment plant and ground soakaway be sited at least 10 metres from any watercourse, permeable drain or land drain and at least 1.0 metres above the maximum water table level?

If YES, go to point 8.

If NO the proposal is NOT ACCEPTABLE, and should be reconsidered.

8. Will the treatment plant and ground soakaway be sited at least 50 metres from any point of abstraction from the ground for a drinking supply (including your own or your neighbour's supplies), lake, pond or other water feature, and outside any Inner Groundwater Protection Zone (Source Protection Zone 1)?

If YES, go to point 9.

If NO, the proposal is NOT ACCEPTABLE, and should be reconsidered.

NOTE: *Where discharge would be within 250metres of such an abstraction, a risk assessment may be required by the Environment Agency as part of an Environmental Permit application. (Pre-Permitting application discussion is advised at this stage).*

9. Will the treatment plant ground soakaway be at least 15 metres from any building?

If YES, go to point 10.

If NO, the proposal is NOT ACCEPTABLE, and should be reconsidered.

10. Will the treatment plant be at least 7 metres from the habitable part of any new or existing building?

If YES, go to point 11.

If NO, the proposal is NOT ACCEPTABLE, and should be reconsidered.

11. Are porosity test results submitted, which fall within the acceptable range of between 15 and 100 seconds Vp (percolation value) (see Porosity Test Advice Note on page 5)?

If YES, go to point 12.

If NO, reconsider location of soakaway, go to part B1 "Discharge to watercourse" or otherwise go to part B3.

12. Based upon your answers, and submission of scaled details of the drainage system, constraints/water features and porosity tests at this stage, a package treatment plant discharging to a soak away would be acceptable in principle, subject to the following important note:

Under the Environmental Permitting Regulations (2010) an Environmental Permit *may be required from the Environment Agency for the discharge of treated effluent to ground. This permit may be withheld.* The applicant should liaise with the Environment Agency in order to obtain a permit and provide sufficient detail to subsequently enable the Council to discharge relevant foul drainage conditions imposed on the planning permission.

B2. Private means of sewage disposal from development utilising septic tank

1. Will the septic tank and ground soakaway be at least 10 metres from any watercourse, permeable drain or land drain and at least 1.0 metres above the maximum water table level?

If YES, go to point 2.

If NO, the proposal is NOT ACCEPTABLE, and should be reconsidered.

2. Will the septic tank and ground soakaway be sited at least 50 metres from any point of abstraction from the ground for a drinking supply (including your own or your neighbour's supplies), lake, pond or other water feature, and outside any Inner Groundwater Protection Zone (Source Protection Zone 1)?

If YES, go to point 3.

If NO, the proposal is NOT ACCEPTABLE, and should be reconsidered.

NOTE: *Where discharge would be within 250metres of such an abstraction, a risk assessment may be required by the Environment Agency as part of an Environmental Permit application. (Pre-Permit application discussion is advised at this stage).*

3. Will the septic tank ground soakaway be at least 15 metres from any building?

If YES, go to point 4.

If NO, the proposal is NOT ACCEPTABLE and should be reconsidered.

4. Will the septic tank be at least 7 metres from the habitable part of any new or existing building?

If YES, go to point 5.

If NO, the proposal is NOT ACCEPTABLE and should be reconsidered.

5. Are porosity test results submitted, which fall within the acceptable range of between 12 and 100 seconds Vp (percolation value) (see Porosity Test Advice Note on page 5)?

If YES, go to point 6.

If NO, reconsider location of soakaway, or otherwise go to point B3.

6. **Based upon your answers, and submission of scaled details of the drainage system, constraints/water features and porosity tests at this stage a septic tank discharging to a soakaway would be acceptable in principle, subject to the following important note:**

Under the Environmental Permitting Regulations (2010) an Environmental Permit *may be required from the Environment Agency for the discharge of treated effluent to ground. This permit may be withheld.* The applicant should liaise with the Environment Agency in order to obtain a permit and provide sufficient detail to subsequently discharge relevant foul drainage conditions imposed on the planning permission.

B3. Discharge to ground where soakaway porosity test results not within acceptable range.

Reference should also be made to 'Approved document H 2002 Edition incorporating 2010 amendments', Section H2, to consider alternative systems of soakaway design, which upon consideration may mean that, whilst the porosity test result is not within the required range, an enhanced system would be acceptable. Details should be submitted to demonstrate this is acceptable.

Can an enhanced system be implemented?

If YES, go to point B1. 12; or B2. 6 (above).

If NO, the proposal is NOT ACCEPTABLE and should be reconsidered, go to B4.

B4. Private means of sewage disposal incorporating a combination of treatments including reed beds

A bespoke assessment may need to be undertaken for proposals incorporating a combination of alternative foul sewage disposal methods such as reed beds. Within this assessment the locational constraints outlined in part B1 and B2 should be considered in order to determine whether the disposal method is suitable. This should be submitted with details of the systems to be utilised, to the Council with your planning application. Under the Environmental Permitting Regulations (2010) an Environmental Permit *may be required from the Environment Agency for such proposals. This permit may be withheld.*

ADVICE NOTES

PLANNING ADVICE FOR NON-MAINS SEWAGE

1. **Contravention of recognised practices** – the assessment must consider any evidence that the proposal may cause, in respect of environmental damage, in the light of: any statute, regulation, directive (e.g. Groundwater), bye law, water quality objective, or authoritative standard (e.g. British Standard, Environment Agency's 'Policy and Practice for the Protection of Groundwater').
2. **Adverse effect on water sources/resources** – the assessment must consider information in the area, such as geological formations which may allow pollution of: rivers / streams ditches/ surface waters including riparian owners downstream, groundwater, public, private (boreholes and abstractions) and agricultural water supply, water features (wells, lakes, ponds).
3. **Health hazard or nuisance** – the assessment must consider any risk to public health or nuisance.
4. **Damage to controlled waters** – the assessment must consider any risk of pollution to controlled waters.
5. **Damage to environment and amenity** – the assessment must consider any risk of pollution (from effluent) to: any land with environmental or amenity value, Site of Special Scientific Interest (SSSI), Area of Outstanding Natural Beauty (AONB) or candidate Special Area of Conservation (cSAC), public open space.
6. **Overloading existing capacity of the area** – the assessment must provide evidence regarding the consideration of on any risk of ponding, sewage flooding, or pollution or nuisance from the scale of the proposal or any existing capacity problems.
7. **Absence of suitable outlets** – the assessment must provide evidence to show that there is a suitable watercourse or adequate land for soakage to accommodate the disposal of effluent. The location of the treatment plant, or septic tank, as well as the route of discharge (soakaway location and design, or route of pipe to watercourse).
8. **Unsuitable soakage characteristics** – the assessment must include the full results of percolation (porosity) tests carried out in accordance with BS 6297. *See porosity note below.*
9. **High Water table** – the assessment must provide details of any 'rest water levels' in trial holes, which may indicate that the water table is high.

10. **Rising groundwater levels** – the assessment must detail any ground water levels that have been rising consistently and which may interfere with the effluent dispersal and may cause damage to other land or property.
11. **Flooding** – the assessment must consider flood risk. If the system is located within Flood Zone 3 (1% annual probability flooding), a known flood risk area (historic flooding) or surface water problem area, then there may be a risk of environmental or amenity damage.

ENVIRONMENTAL PERMIT - for discharge to surface waters (watercourse) or groundwater:

You may require an Environmental Permit from the Environment Agency. The Applicant should apply online at: <https://www.gov.uk/environmental-permit-how-to-apply/overview> or contact the Environment Agency for an Environmental Permit application form and further details on 08708 506506. The granting of planning permission does not guarantee the granting of a permit under the Environmental Permitting Regulations 2010. There are 2 permit types that can be applied for or an Exemption that can be registered : <https://www.gov.uk/permits-you-need-for-septic-tanks>

1. Exemptions - for discharges of sewage less than 2 cubic metres a day to ground or 5 cubic metres a day discharging to a watercourse. The Exemption needs to be Registered with the Environment Agency. To qualify for an Exemption a number of conditions must be met. For further information see: <https://www.gov.uk/environmental-permit-how-to-apply/register-as-exempt>
2. Standard Rules Permit – normally applies for discharges of treated sewage greater than 5 cubic metres a day (discharging to a watercourse) but less than 20 cubic metres a day. There are exceptions – e.g. within 1km of a European Habitats site. Check on <https://www.gov.uk/environmental-permit-how-to-apply/standard-permit>
3. Bespoke Permit – for discharges of treated sewage greater than 2 cubic metres a day to ground and greater than 20 cubic metres a day to watercourse. To check see : <https://www.gov.uk/environmental-permit-how-to-apply/bespoke-permit>

POROSITY TESTS

You should refer to **Building Regulations Section H2** (Approved Document H 2002 Edition incorporating 2010 amendments) with regard to the general requirements for construction of non -mains sewerage systems. **Sections 1.33 to 1.38** deal with the test requirements for trial holes and percolation tests .

Porosity tests must detail a satisfactory Vp (percolation value) result (12 - 100 seconds Vp). However, if the results are not within the suggested range, either due to the ground conditions being too fast (meaning that effluent would be reaching underlying groundwater) or too slow (leading to effluent ponding on the surface), the following should be noted:

Porosity test values may be reconsidered for treated effluent under BS6297.

Reference should be made to The Building Regulations Approved document H, Section H2 (2002 Edition incorporating 2010 amendments), to consider alternative systems of soakaway design, which upon consideration may mean that, whilst the porosity test result is not satisfactory, the enhanced system would be acceptable.

FURTHER ADVICE AND CONTACTS

The views of your Local Authority, Environmental Health Officer and Building Control Officer should also be sought to ensure that any proposal submitted is feasible.

The relevant Environment Agency Land and Water or Biodiversity team may also be contacted (0 3708 506506), to provide assistance with the provision of the above information e.g. salmonid and cyprinid fishery designations. In relation to point B1. 2*, you are advised to contact Natural England and the local planning authority to ascertain whether there are any significant nature conservation designations /SSSIs relevant to the proposal.

The GOV.UK website provides Environment Agency advice and guidance:

<https://www.gov.uk/government/organisations/environment-agency>

It also provides links to the 'Flood Zone Maps', as well as information on Groundwater and Source Protection Zones:

http://maps.environment-agency.gov.uk/wiyby/wiybyController?ep=maptopics&lang=_e

Last updated: October 2014

Contact: Environment Agency, Sustainable Places Team, Shropshire Herefordshire Worcestershire & Gloucestershire Area.
shwgplanning@environment-agency.gov.uk

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Client	Wyre Forest District Council
Day, Date and Time	22 January 2020
Author	Richard Pardoe
Reviewer / Sign-off	Paul Eccleston
Subject	2 nd Addendum to WCS Phase 2 to include three additional sites not previously reviewed

1 Introduction

The Wyre Forest District Council Water Cycle Study (WCS) was published in May 2017. In August 2018 an addendum was published assessing the impact of further sites identified during the Local Plan consultation process. It also summarised changes in legislation since the original study such as the publication of the updated National Planning Policy Framework (NPPF) in July 2018.

The purpose of this 2nd addendum to the 2017 Water Cycle Study is to provide an assessment of three additional sites identified in the Local Plan.

2 Additional sites

Three sites have been identified and are summarised in Table 2.1 below, two residential sites and one employment site.

Table 2.1 Summary of newly identified sites

Reference	Address	Size (ha)	Proposed Use
WFR/WC/21	Land off Mill Lane, Wolverley	0.99 ha	10 dwellings
WFR/CB/3	Land off Station Drive, Blakedown	2.74 ha	Station car parking for 170 spaces + 50 dwellings
LI/13	Land off Zortech Avenue, Kidderminster	1.96 ha	Employment Assumed mixed B type - est. 183 FTE

Site information was not available for the employment site LI/13 so in order to estimate water demand, a developable area of 60%, and a mixed B employment use was assumed giving an indicative number of employees of 183.

In addition to these three additional sites, there has also been a change to the location of a Travelling Showpeople site since the original study was published. The proposed use of two sites, LI/10 and LI/12 has therefore been swapped, with LI/10 now being an employment site, and LI/12 now being a Travelling Showpeople site.

The Water Cycle Study published in 2017 assessed two preferred options for future development that were included in the Local Plan. This identified a total of 77 sites in either or both of the options.

Figure 2-1 shows the location of the development sites identified in the 2017 Study and first addendum. Highlighted within the red boxes are the three new sites, and two sites that have swapped use.

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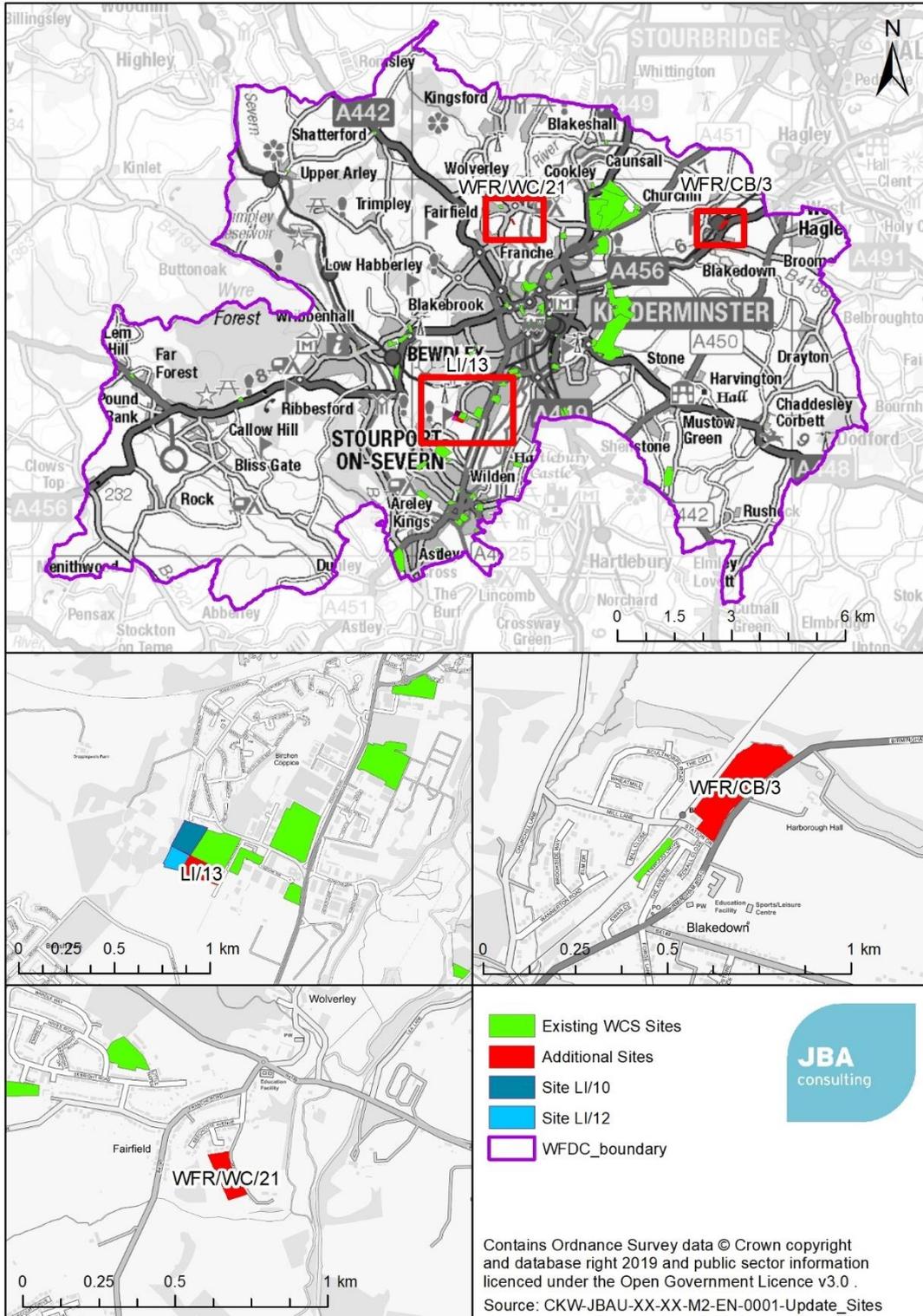


Figure 2-1 Location of newly identified sites



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3 Legislation and Policy Framework

3.1 National Planning Policy Framework

The first addendum noted the revised National Planning Policy Framework (NPPF) that was published in July 2018. Since then a further update was published in February 2019¹, but the changes were not significant from the July 2018 version for policy areas relevant to the WCS.

3.2 Drainage and Wastewater Management Plans

The UK Water Industry Research (UKWIR) “21st Century Drainage” programme has brought together water companies, governments, regulators, local authorities, academics and environmental groups to consider how planning can help to address the challenges of managing drainage in the future. These challenges include climate change, population growth, urban creep and meeting the Water Framework Directive.

The group recognised that great progress has been made by the water industry in its drainage and wastewater planning over the last few decades, but that, in the future, there needs to be greater transparency and consistency of long-term planning. The Drainage and Wastewater Management Plan (DWMP) framework² sets out how the industry intends to approach these goals, with the objective of the water companies publishing plans by the end of 2022, in order to inform their business plans for the 2024 Price Review.

DWMPs will be prepared for wastewater catchments or groups of catchments and will encompass surface water sewers within those areas which do not drain to a treatment works. The framework defines drainage to include all organisations and all assets which have a role to play in drainage, although, as the plans will be water company led, it does not seek to address broader surface water management within catchments.

LPAs and LLFAs are recognised as key stakeholders and will be invited to join, alongside other stakeholders, the Strategic Planning Groups (SPGs) organised broadly along river basin district catchments.

DWMPs cannot inform this study as the process is only just commencing. In the future however, DWMPs will provide more transparent and consistent information on sewer flooding risks and the capacity of sewerage networks and treatment works, and this should be taken into account in SFRAs, Water Cycle Studies, as well as in site-specific FRAs and Drainage Strategies.

1 National Planning Policy Framework, Ministry of Housing, Communities and Local Government (2019). Accessed online at: <https://www.gov.uk/government/publications/national-planning-policy-framework--2> on: 19/12/2019

2 A framework for the production of Drainage and Wastewater Management Plans, UK Water Industry Research (2018). Accessed online at: <http://www.water.org.uk/wp-content/uploads/2018/12/Water-UK-DWMP-Framework-Report-Main-Document.pdf> on: 19/12/2019.

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4 Methodology

4.1 Approach

The three additional sites were provided by Wyre Forest District Council in GIS format. These were compared to the sites used in the 2017 WCS and the 1st addendum and a new forecast for water and wastewater demand created, which allowed the impact of the additional sites on the original conclusions to be estimated. Severn Trent Water were contacted to inform them of the new sites and to seek comments on their likely impact.



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5 Results

5.1 Water Resources

The original study in 2017 water resources were given a green assessment across all sites. This remained unchanged in addendum one where there was a reduction in overall water demand from the 2017 forecast.

The three additional sites increase the total water demand in the Wyre Forest by 0.034MI/d an increase of 1.8% on the Addendum 1 forecast. The impact of this on water resources in the Wyre Forest, and the Severn Trent Water (STW) Strategic Grid Water Resource Zone is negligible.

The conclusion from the 2017 Water Cycle Study remains unchanged.

5.2 Water Supply

The 2017 WCS concluded:

"Severn Trent Water's Water Resource Management Plan already considers the supply and demand issues for the next 25 years. However, the water supply network is a highly pressurized system and detailed modelling is required to determine whether additional demand will require capacity upgrades. As development occurs within the Wyre Forest District, Severn Trent Water modelling teams can then undertake detailed modelling but because infrastructural improvements and local reinforcements can usually be undertaken within 18 months to 2 years, water capacity is not expected to be a constraint to development."

The first addendum reduced the demand compared with the original study in most locations with the exception of the Lea Castle development north of Kidderminster. The three new sites represent a slight increase from the addendum 2 forecast, however the impact of this is likely to be negligible.

The conclusion from the 2017 Water Cycle Study remains unchanged.

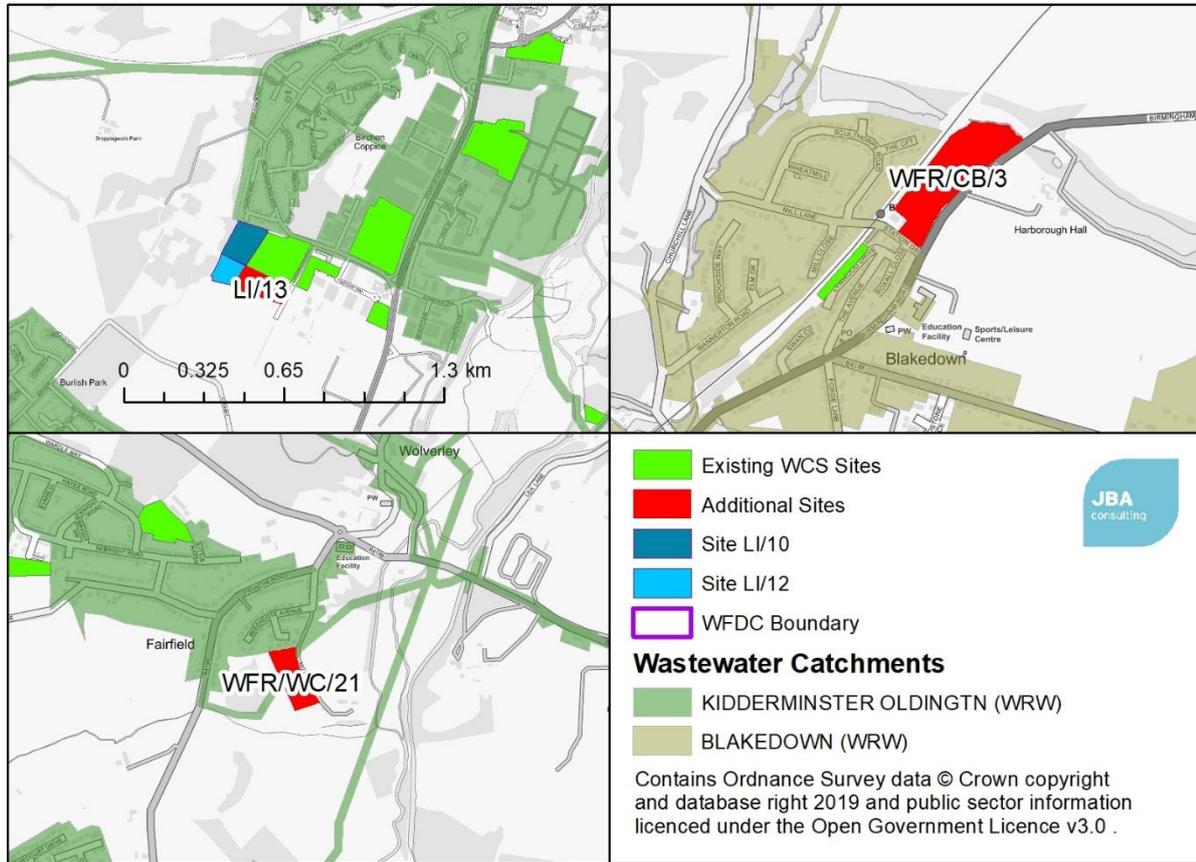
5.3 Wastewater collection

Figure 5-1 shows the location of the three additional sites within the wastewater catchments of Kidderminster Oldington and Blakedown Wastewater Treatment Works (WwTWs).

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Source: CKW-JBAU-XX-XX-M2-EN-0002-WwTW_Catchments

Figure 5-1 Location of the additional sites within wastewater catchments

STW provided comments on the likely impact on both foul and surface water sewer infrastructure. These are summarised on Table 5.1 and Table 5.2 below.

In the case of WFR/CB/3, capacity constraints in the network downstream of the site have been identified by STW. It is recommended that hydraulic modelling is undertaken to better understand the capacity constraints.

As well as housing, WFR/CB/3 is also proposed to provide parking for 170 cars. Runoff from such a site could be significant and should be managed appropriately using a suitable SuDS technique such as permeable paving identified by STW in their assessment. The recent update to the Level 2 SFRA suggested that infiltration techniques may be suitable for this site, however site investigations should be carried out to confirm suitability. Conveyance features may also be used to link into the watercourse to the north.

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Table 5.1 STW comments on sewer network capacity

Site Reference	Sewer network comments	Potential impact on sewerage infrastructure
WFR/WC/21	Due to the size of this development and providing surface water is managed sustainably onsite through SuDS significant issues are not anticipated.	Low
WFR/CB/3	Site will drain to 150mm diameter sewer to the south of the site. There are capacity constraints in the downstream network and hydraulic modelling is recommended to determine the full impact from this site.	Medium
LI/13	Site would drain to 225mm diameter sewer to north of the site. Due to the size of the development and providing surface water is managed sustainably using SuDS, significant issues are not expected.	Low

Table 5.2 STW comments on surface water sewerage

Site Reference	Likely surface water outfall	Surface water comments	Potential impact on surface water sewerage infrastructure
WFR/WC/21	Explore options to discharge to watercourse to the south of the site	SW should be managed sustainably on site using SuDS, or discharged to nearby watercourse	Low
WFR/CB/3	Watercourse to north of the site	SW should be managed sustainably on-site using SuDS. Permeable paving should be explored for the car park. There is a watercourse to the north of the site. No SW should be connected into the foul network.	Low
LI/13	Surface Water Sewer is located to the north of the site.	SW should be managed sustainably on-site using SuDS, connection to the SW sewer to the north is available.	Low

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STW also provided additional comments on sewer network capacity:

"Where subsequent detailed modelling indicates capacity improvements are required such work will be phased to align with development occupancy with capacity improvement works will be funded by Severn Trent Water. However, whilst Severn Trent have a duty to provide additional capacity to accommodate planned development, we also have a requirement to manage our assets efficiently to minimise our customers' bills. Consequently, to avoid potential inefficient investment we generally do not provide additional capacity until there is certainty that the development is due to commence. Where development proposals are likely to require additional capacity upgrades to accommodate new development flows it is highly recommended that potential developers contact Severn Trent as early as possible to confirm flow rates and intended connection points. This will ensure provision of additional capacity can be planned into our investment programme to ensure development is not delayed."

There are capacity constraints in the sewer network for site WFR/CB/3. It is therefore recommended that hydraulic modelling is undertaken to determine the impact of this site. This should be carried out at the planning application stage.

5.4 Wastewater Treatment Flow Capacity Assessment

The 2017 WCS concluded that Kidderminster WwTW would require additional investment to increase capacity in order to accommodate the planned growth. The forecast water and wastewater demand were updated based on the final site list in Addendum 1 (final forecast), and this has been further updated in Addendum 2 to include the additional sites. This is summarised below in Table 5.3 and the increase in flow from these new sites represents an increase of 0.01% on the Addendum 1 forecast.

Table 5.3 Comparison of wastewater flows between 2017 WCS and latest forecast

WwTW	WwTW Permitted DWF (MI/d)	2017 WCS Forecast DWF (MI/d)	Final Forecast DWF (MI/d)	Addendum 2 forecast	Addendum 2 % Increase
Blakedown	0.433	0.672	0.531	0.534	0.01%
Kidderminster	26.504	30.790	24.065	24.085	0.01%

The wastewater demand is still less than that predicted in the original study, and so **the conclusions from the 2017 WCS therefore still apply.**

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5.5 Odour Assessment

The sites were assessed for their proximity to WwTW and the results are summarised in Table 5.4 below.

Table 5.4 Development sites closer than 800m to a WwTW

Site Ref.	WwTW	Distance from WwTW (m)	Encroachment closer to WwTW than existing urban area?
WFR/CB/3	Blakedown	750m	No

WFR/CB/3 is less than 800m from the nearest WwTW, however it does not encroach closer than the existing urban area. The other two sites are more than 800m from the nearest treatment works and are unlikely to suffer from nuisance odour.

An odour assessment, funded by the developer, is recommended as part of the planning application process for WFR/CB/3.

5.6 Water Quality

The 2017 WCS concluded that the proposed growth was not predicted to lead to any class deterioration, or deteriorations of quality greater than 10% for any determinand³. As the predicted wastewater demand at all of the WwTW in the study area is still less than that assessed in the 2017 WCS once the Addendum 2 sites are considered, **the conclusions of the water quality assessment are unchanged.**

As well as housing, WFR/CB/3 is also proposed to provide parking for 170 cars. Runoff from this site could contain pollutants such as oil or heavy metals and any SuDS design needs to provide for capture and treatment of pollutants. This is usually facilitated via a SuDS Management Train of a number of components in series that provide a range of treatment processes delivering gradual improvement in water quality and providing an environmental buffer for accidental spills or unexpected high pollutant loadings from the site.

National standards on the management of surface water are outlined within the Defra Non-statutory Standards for Sustainable Drainage Systems⁴, with local guidance specified by Wyre Forest District Council⁵. The CIRIA C753 SuDS Manual⁶ and Guidance for the

³ A determinand is measurement of a particular property of the water environment. For a Water Cycle Study, the determinands assessed are ammonia concentration, biochemical oxygen demand and phosphate concentration.

⁴ Sustainable Drainage Systems, Non-statutory technical standards for sustainable drainage systems, DEFRA (2015) Accessed online at:

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/415773/sustainable-drainage-technical-standards.pdf on: 12/09/2019

⁵ Sustainable Drainage Design and Evaluation Guide, Wyre Forest District Council (2018). Accessed online at: <https://www.wyreforestdc.gov.uk/media/3586203/Wyre-Forest-SuDS-DESIGN-EVALUATION.PDF> on: 19/12/2019

⁶ CIRIA Report C753 The SuDS Manual, CIRIA (2015). Accessed online at:

https://www.ciria.org/Memberships/The_SuDs_Manual_C753_Chapters.aspx on: 12/09/2019

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Construction of SuDS⁷ provide the industry best practice guidance for design and management of SuDS.

5.7 Flood Risk

Flood risk to the sites from rivers or from surface water should be assessed using information from the Strategic Flood Risk Assessment and the latest mapping from the Environment Agency.

Flood risk from additional foul flow due to planned growth was assessed in the 2017 WCS. Additional foul flows from WwTW less than 5% of the Q30 storm flow for the receiving watercourse are considered to have a low risk of increasing flood risk. The 2017 WCS predicted flows that were 0.1% or less of the Q30 flow, and on the basis that wastewater demand is reduced at every WwTW compared to the 2017 WCS assessment after consideration of the Addendum 2 sites, **the conclusion of the flood risk assessment is unchanged.**

5.8 Environmental constraints and opportunities

The 2017 WCS identified a number of sites that lay within or close to sites with environmental designations and it was recommended that a further environmental assessment is undertaken on these sites. This recommendation would also apply to WFR/WC/21 which is 300m from Stourvale Marsh SSSI.

⁷ Guidance on the Construction of SuDS (C768), CIRIA (2017), Accessed online at: <https://www.ciria.org/ItemDetail?iProductcode=C768&Category=BOOK> on: 12/09/2019

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6 Summary and Conclusion

This addendum to the 2017 WCS assesses the three additional sites identified in the local plan process. One of the sites is likely to require additional assessment (modelling of sewer capacity, and an odour assessment) as part of the planning process. The changes in use between sites LI/10 and LI/12 do not have an impact on any of the WCS assessments.

Table 6.1 Impact on conclusions of 2017 WCS

Assessment	Conclusion
Water resources	2017 conclusion is unchanged
Water supply	2017 conclusion is unchanged
Wastewater collection	Capacity constraints exist at site WFR/CB/3. It is recommended that hydraulic modelling is carried out at the planning application stage in order to understand the impact.
Wastewater treatment flow capacity	2017 conclusion is unchanged
Odour	WFR/CB/3 is within 800m of a WwTW and may require an odour assessment as part of the planning process.
Water quality	2017 conclusion is unchanged
Flood risk	2017 conclusion is unchanged
Environmental opportunities and constraints	WFR/WC/21 is 300m from a SSSI and may require a more detailed assessment of impact.

Appendix A – New sites identified in addendum reports

Site Reference	Source	Site Name	Water Resources Assessment	Water Supply Infrastructure Assessment	STW Capacity Assessment	STW Odour Assessment	Fluvial Flood Risk	Pluvial Flood Risk	Additional Flood Risk
AKR/10	Addendum Site	Queens Road Areley Kings	Green	Green	Red	Green	Not assessed	Not assessed	Green
AKR/18	Addendum Site	land at yew Tree Walk	Green	Green	Green	Green	Not assessed	Not assessed	Green
AS/20	Addendum Site	LAND NORTH OF BERNIE CROSSLAND WALK	Green	Green	Green	Green	Not assessed	Not assessed	Green
AS/3	Addendum Site	Chester Road Service Station	Green	Green	Green	Green	Not assessed	Not assessed	Green
BHS/10	Addendum Site	Frank Stone Building	Green	Green	Green	Green	Not assessed	Not assessed	Green
BHS/17	Addendum Site	Rock Works	Green	Green	Green	Green	Not assessed	Not assessed	Green
BHS/38	Addendum Site	Fire Station, Castle Road, Kidderminster	Green	Green	Green	Green	Not assessed	Not assessed	Green
BHS/39	Addendum Site	Boucher Building	Green	Green	Green	Green	Not assessed	Not assessed	Green
BR/BE/1	Addendum Site	Bewdley Fire Station	Green	Green	Green	Green	Not assessed	Not assessed	Green
BR/RO/2	Addendum Site	LEM HILL NURSERIES	Green	Green	Amber	Green	Not assessed	Not assessed	Green
FHN/11	Addendum Site	BT Mill Street	Green	Green	Green	Green	Not assessed	Not assessed	Green
FPH/15	Addendum Site	Severn Grove	Green	Green	Green	Green	Not assessed	Not assessed	Green
FPH/19	Addendum Site	164 & 165 Sutton Park Road	Green	Green	Green	Green	Not assessed	Not assessed	Green
FPH/29	Addendum Site	Vosa Site, Worcester Road	Green	Green	Green	Green	Not assessed	Not assessed	Green
FPH/5	Addendum Site	Ambulance Station, Stourport Road, Kidderminster	Green	Green	Green	Green	Not assessed	Not assessed	Green

Site Reference	Source	Site Name	Water Resources Assessment	Water Supply Infrastructure Assessment	STW Capacity Assessment	STW Odour Assessment	Fluvial Flood Risk	Pluvial Flood Risk	Additional Flood Risk
LI/10	Addendum Site	Rear of Ceramaspeed	Green	Green	Amber	Green	Not assessed	Not assessed	Green
LI/11	Addendum Site	Land west of former school site, Coniston Crescent	Green	Green	Amber	Green	Not assessed	Not assessed	Green
LI/12	Addendum Site	Former Burlish Golf Course Clubhouse	Green	Green	Amber	Green	Not assessed	Not assessed	Green
MI/10	Addendum Site	Four Acres Caravan Park	Green	Green	Green	Green	Not assessed	Not assessed	Green
MI/11	Addendum Site	Sandy Lane Titton, Stourport	Green	Green	Green	Green	Not assessed	Not assessed	Green
MI/21	Addendum Site	Land off Wilden Top Road	Green	Green	Green	Green	Not assessed	Not assessed	Green
MI/24	Addendum Site	Land adjacent Rock Tavern Wilden	Green	Green	Green	Green	Not assessed	Not assessed	Green
MI/33	Addendum Site	Wilden Lane Industrial Estate	Green	Green	Green	Green	Not assessed	Not assessed	Green
MI/34	Addendum Site	Oakleaf, Finepoint	Green	Green	Amber	Green	Not assessed	Not assessed	Green
MI/36	Addendum Site	Firs View Yard, Wilden Lane	Green	Green	Green	Amber	Not assessed	Not assessed	Green
MI/38	Addendum Site	Stourport High School, land off Coniston Crescent	Green	Green	Amber	Green	Not assessed	Not assessed	Green
MI/7	Addendum Site	Land off Worcester Road	Green	Green	Green	Green	Not assessed	Not assessed	Green
OC/6	Addendum Site	Land East of Offmore Farm	Green	Green	Red	Green	Not assessed	Not assessed	Green
WA/KF/3	Addendum Site	Land at Low Habberley Phase 1	Green	Green	Amber	Green	Not assessed	Not assessed	Green
WA/UA/1	Addendum Site	Land at Shatterford	Green	Green	Green	Green	Not assessed	Not assessed	Green
WA/UA/6	Addendum Site	Red Lion Car Park Bridgnorth Road	Green	Green	Amber	Green	Not assessed	Not assessed	Green

Site Reference	Source	Site Name	Water Resources Assessment	Water Supply Infrastructure Assessment	STW Capacity Assessment	STW Odour Assessment	Fluvial Flood Risk	Pluvial Flood Risk	Additional Flood Risk
WFR/CB/2	Addendum Site	Station Yard, Blakedown	Green	Green	Green	Amber	Not assessed	Not assessed	Green
WFR/CC/8	Addendum Site	Land at Fold Farm	Green	Green	Green	Amber	Not assessed	Not assessed	Green
WFR/ST/9	Addendum Site	Cursley Distribution Park	Green	Green	Green	Green	Not assessed	Not assessed	Green
WFR/WC/10	Addendum Site	Kimberlee Avenue	Green	Green	Amber	Green	Not assessed	Not assessed	Green
WFR/WC/12	Addendum Site	LAWNSWOOD	Green	Green	Amber	Green	Not assessed	Not assessed	Green
WFR/WC/22	Addendum Site	Land off Lowe Lane	Green	Green	Amber	Green	Not assessed	Not assessed	Green
WFR/WC/23	Addendum Site	Hayes Road	Green	Green	Green	Green	Not assessed	Not assessed	Green
WFR/WC/33	Addendum Site	LEA CASTLE EXTENSION WEST	Green	Green	Amber	Green	Not assessed	Not assessed	Green
WFR/WC/34	Addendum Site	LEA CASTLE AXBOROUGH LANE	Green	Green	Amber	Green	Not assessed	Not assessed	Green
WFR/WC/36	Addendum Site	Former Rock Tavern Car Park, Kinver Lane, Caunsall	Green	Green	Amber	Green	Not assessed	Not assessed	Green
WFR/WC/37	Addendum Site	Land at Caunsall Road	Green	Green	Green	Green	Not assessed	Not assessed	Green
WFR/WC/21	2 nd Addendum	Land off Mill Lane, Wolverley	Green	Green	Green	Green	Not assessed	Not assessed	Green
WFR/CB/3	2 nd Addendum	Land off Station Drive, Blakedown	Green	Green	Amber	Amber	Not assessed	Not assessed	Green
LI/13	2 nd Addendum	Land off Zortech Avenue, Kidderminster	Green	Green	Green	Green	Not assessed	Not assessed	Green

Note: 2017 WCS sites were assessed for Fluvial and Pluvial flood risk as part of the Strategic Flood Risk Assessment process. The addendum sites have not undergone this process.

Appendix B – Original 77 sites identified in 2017 WCS with additional addendum sites at bottom of table

Site Reference	Source	Site Name	Water Resources Assessment	Water Supply Infrastructure Assessment	STW Capacity Assessment	STW Odour Assessment	Fluvial Flood Risk	Pluvial Flood Risk	Additional Flood Risk
AKR/1	2017 WCS	Bridge Street Basins	Green	Green	Green	Green	Green	Green	Green
AKR/15	2017 WCS	Rectory Lane, Areley Kings	Green	Green	Amber	Green	Green	Green	Green
AKR/2	2017 WCS	Cheapside	Green	Green	Green	Green	Green	Green	Green
AKR/20	2017 WCS	Carpets of Worth, Stourport on Severn	Green	Green	Green	Green	Red	Green	Green
AKR/7	2017 WCS	Swan Hotel and Working Men's Club	Green	Green	Green	Green	Red	Amber	Green
AKR14	2017 WCS	Pearl Lane, Areley Kings	Green	Green	Red	Green	Green	Green	Green
AS/1	2017 WCS	Comberton Place	Green	Green	Green	Green	Green	Green	Green
AS/10	2017 WCS	Land rear of Spennells / Easter Park	Green	Green	Red	Green	Green	Green	Green
AS/5	2017 WCS	Victoria Carpets Sports Ground, Spennells Valley Road, Kidderminster	Green	Green	Green	Green	Red	Red	Green
AS/6	2017 WCS	FORMER LEA STREET SCHOOL SITE	Green	Green	Green	Green	Green	Green	Green
BHS/11	2017 WCS	WFDC Depot, Green Street, Kidderminster	Green	Green	Green	Green	Red	Red	Green
BHS/16	2017 WCS	Park Lane Canalside	Green	Green	Green	Green	Red	Amber	Green
BHS/18	2017 WCS	County Buildings and Blakebrook School Bewdley Road, Kidderminster	Green	Green	Green	Green	Green	Amber	Green
BHS/2	2017 WCS	Bromsgrove Street Area	Green	Green	Green	Green	Green	Green	Green
BHS/26	2017 WCS	Coopers Arms. Kidderminster	Green	Green	Green	Green	Green	Green	Green
BR/BE/6	2017 WCS	land off Highclere	Green	Green	Amber	Green	Green	Green	Green
BR/RO/1	2017 WCS	Clows Top	Green	Green	N/A	Green	Green	Green	Green
BR/RO/21	2017 WCS	Alton Nurseries, Bewdley	Green	Green	Green	Green	Green	Green	Green
BR/RO/26	2017 WCS	Land to rear of Walnut Cottage	Green	Green	Green	Green	Green	Green	Green
BR/RO/4	2017 WCS	Land adj Tolland bungalow, Far Forest	Green	Green	Amber	Green	Green	Green	Green
BR/RO/6	2017 WCS	Land behind Orchard House, Far Forest	Green	Green	Amber	Green	Green	Green	Green
BR/RO/7	2017 WCS	New Road, Far Forest (South)	Green	Green	Amber	Green	Green	Green	Green
BR/RO/7	2017 WCS	New Road, Far Forest (North)	Green	Green	Amber	Green	Green	Green	Green
BW/1	2017 WCS	Churchfields Business Park	Green	Green	Green	Green	Green	Green	Green
BW/2	2017 WCS	Limekiln Bridge	Green	Green	Green	Green	Green	Amber	Green
BW/3	2017 WCS	Sladen School, Hurcott Road, Kidderminster	Green	Green	Green	Green	Green	Green	Green

Site Reference	Source	Site Name	Water Resources Assessment	Water Supply Infrastructure Assessment	STW Capacity Assessment	STW Odour Assessment	Fluvial Flood Risk	Pluvial Flood Risk	Additional Flood Risk
BW/4	2017 WCS	Hurcott ADR	Green	Green	Amber	Green	Green	Green	Green
BW/6	2017 WCS	Yew Tree Inn, Chester Road North, Kidderminster	Green	Green	Green	Green	Green	Amber	Green
FHN/9	2017 WCS	78 Mill Street, Kidderminster	Green	Green	Green	Green	Red	Green	Green
FPH/1	2017 WCS	Former British Sugar Settling Ponds, Wilden Lane, Kidderminster (Option A)	Green	Green	Green	Green	Green	Green	Green
FPH/1	2017 WCS	Former British Sugar Settling Ponds, Wilden Lane, Kidderminster (Option B)	Green	Green	Green	Amber	Green	Green	Green
FPH/10	2017 WCS	British Sugar Site Phase 2	Green	Green	Green	Green	Green	Green	Green
FPH/10	2017 WCS	British Sugar - Phase 2 (north)	Green	Green	Green	Green	Green	Green	Green
FPH/17	2017 WCS	Dowles Road Community Centre	Green	Green	Green	Green	Green	Green	Green
FPH/18	2017 WCS	NAYLOR'S FIELD	Green	Green	Green	Green	Green	Green	Green
FPH/23	2017 WCS	British Sugar Phase 1 plot D	Green	Green	Green	Amber	Green	Green	Green
FPH/24	2017 WCS	ROMWIRE	Green	Green	Amber	Amber	Green	Red	Green
FPH/25	2017 WCS	Incinerator Site, Stourport Road, Kidderminster	Green	Green	Green	Green	Green	Green	Green
FPH/26	2017 WCS	Land adj Summerfield, Kidderminster	Green	Green	Green	Amber	Green	Amber	Green
FPH/27	2017 WCS	Land at Worcester Road, Kidderminster	Green	Green	Green	Green	Green	Green	Green
FPH/28	2017 WCS	Land at Hoo Brook	Green	Green	Green	Green	Green	Green	Green
FPH/6	2017 WCS	Oasis Factory, Goldthorn Road, Kidderminster	Green	Green	Green	Green	Green	Amber	Green
FPH/8	2017 WCS	Land adj. SDF, Stourport Road, Kidderminster	Green	Green	Green	Amber	Green	Amber	Green
FPH/9	2017 WCS	Foley Drive	Green	Green	Green	Amber	Green	Amber	Green
LI/1	2017 WCS	Ceramaspeed	Green	Green	Amber	Green	Green	Amber	Green
LI/2	2017 WCS	Wyre Forest Golf Club	Green	Green	Green	Green	Green	Green	Green
LI/5	2017 WCS	Land at Burlish Crossing	Green	Green	Amber	Green	Green	Amber	Green
LI/6/7/8	2017 WCS	Land at Lickhill Road North (Bradley Paddocks and Field adj 17 Lickhill Road)	Green	Green	Green	Green	Green	Amber	Green
MI/1	2017 WCS	County Buildings, Stourport	Green	Green	Green	Green	Green	Amber	Green
MI/18	2017 WCS	North of Wilden Lane Industrial Estate	Green	Green	Green	Green	Green	Green	Green
MI/26	2017 WCS	Ratio Park, Finepoint	Green	Green	Green	Amber	Amber	Green	Green
MI/28	2017 WCS	35 Mitton Street, Stourport	Green	Green	Green	Green	Green	Red	Green

Site Reference	Source	Site Name	Water Resources Assessment	Water Supply Infrastructure Assessment	STW Capacity Assessment	STW Odour Assessment	Fluvial Flood Risk	Pluvial Flood Risk	Additional Flood Risk
MI/29	2017 WCS	Chichester Caravans, Vale Road, Stourport on Severn	Green	Green	Green	Green	Red	Amber	Green
MI/3	2017 WCS	Parsons Chain	Green	Green	Green	Green	Green	Red	Green
MI/5	2017 WCS	Baldwin Road	Green	Green	Green	Green	Green	Green	Green
MI/6	2017 WCS	Steatite Way, Stourport	Green	Green	Amber	Green	Red	Amber	Green
MI17	2017 WCS	Land Rear of Stourport Manor	Green	Green	Green	Green	Green	Amber	Green
OC/11	2017 WCS	Stourminster School, Comberton Road, Kidderminster	Green	Green	Green	Green	Green	Amber	Green
OC/12	2017 WCS	Comberton Lodge Nursery, Comberton Road, Kidderminster	Green	Green	Green	Green	Red	Amber	Green
OC/13	2017 WCS	Land at Stone Hill (South)	Green	Green	Red	Green	Green	Green	Green
OC/13	2017 WCS	Land at Stone Hill (North)	Green	Green	Red	Green	Amber	Amber	Green
OC/4	2017 WCS	Land rear of Baldwin Road, Kidderminster	Green	Green	Amber	Green	Green	Green	Green
OC/4	2017 WCS	Land rear of Baldwin Road (East part of site), Kidderminster	Green	Green	Amber	Green	Green	Green	Green
OC/5	2017 WCS	Land adjacent to Hodge Hill Farm	Green	Green	Amber	Green	Green	Amber	Green
WA/BE/1	2017 WCS	Stourport Road (triangle), Bewdley	Green	Green	Green	Green	Amber	Green	Green
WA/BE/3	2017 WCS	Catchems End, Bewdley	Green	Green	Green	Green	Green	Green	Green
WA/BE/5	2017 WCS	Land South of Habberley Road, Bewdley (The Gardens)	Green	Green	Green	Green	Green	Red	Green
WA/UA/4	2017 WCS	Allotments, Upper Arley	Green	Green	Green	Amber	Green	Green	Green
WFR/CB/7	2017 WCS	Land Off Birmingham Road, Kidderminster (south)	Green	Green	Amber	Green	Green	Green	Green
WFR/ST/1	2017 WCS	Captains and The Lodge, Bromsgrove Road, Stone	Green	Green	Amber	Green	Green	Amber	Green
WFR/ST/2	2017 WCS	LAND OFF STANKLYN LANE	Green	Green	Red	Green	Green	Green	Green
WFR/ST/3	2017 WCS	Land North of Stone Hill,	Green	Green	Red	Green	Green	Green	Green
WFR/WC/15	2017 WCS	Lea Castle Hospital	Green	Green	Amber	Green	Green	Green	Green
WFR/WC/15	2017 WCS	Part of Lea Castle, Kidderminster	Green	Green	Amber	Green	Green	Green	Green
WFR/WC/16	2017 WCS	Land south of Wolverley Road and Park Gate Lane, Kidderminster	Green	Green	Amber	Green	Green	Green	Green
WFR/WC/18	2017 WCS	Sion Hill School	Green	Green	Amber	Green	Green	Amber	Green
WFR/WC/32	2017 WCS	East of Lea Castle	Green	Green	Amber	Green	Green	Green	Green

Site Reference	Source	Site Name	Water Resources Assessment	Water Supply Infrastructure Assessment	STW Capacity Assessment	STW Odour Assessment	Fluvial Flood Risk	Pluvial Flood Risk	Additional Flood Risk
AKR/10	Addendum Site	Queens Road Areley Kings	Green	Green	Red	Green	Not assessed	Not assessed	Green
AKR/18	Addendum Site	land at yew Tree Walk	Green	Green	Green	Green	Not assessed	Not assessed	Green
AS/20	Addendum Site	LAND NORTH OF BERNIE CROSSLAND WALK	Green	Green	Green	Green	Not assessed	Not assessed	Green
AS/3	Addendum Site	Chester Road Service Station	Green	Green	Green	Green	Not assessed	Not assessed	Green
BHS/10	Addendum Site	Frank Stone Building	Green	Green	Green	Green	Not assessed	Not assessed	Green
BHS/17	Addendum Site	Rock Works	Green	Green	Green	Green	Not assessed	Not assessed	Green
BHS/38	Addendum Site	Fire Station, Castle Road, Kidderminster	Green	Green	Green	Green	Not assessed	Not assessed	Green
BHS/39	Addendum Site	Boucher Building	Green	Green	Green	Green	Not assessed	Not assessed	Green
BR/BE/1	Addendum Site	Bewdley Fire Station	Green	Green	Green	Green	Not assessed	Not assessed	Green
BR/RO/2	Addendum Site	LEM HILL NURSERIES	Green	Green	Amber	Green	Not assessed	Not assessed	Green
FHN/11	Addendum Site	BT Mill Street	Green	Green	Green	Green	Not assessed	Not assessed	Green
FPH/15	Addendum Site	Severn Grove	Green	Green	Green	Green	Not assessed	Not assessed	Green
FPH/19	Addendum Site	164 & 165 Sutton Park Road	Green	Green	Green	Green	Not assessed	Not assessed	Green
FPH/29	Addendum Site	Vosa Site, Worcester Road	Green	Green	Green	Green	Not assessed	Not assessed	Green
FPH/5	Addendum Site	Ambulance Station, Stourport Road, Kidderminster	Green	Green	Green	Green	Not assessed	Not assessed	Green

Site Reference	Source	Site Name	Water Resources Assessment	Water Supply Infrastructure Assessment	STW Capacity Assessment	STW Odour Assessment	Fluvial Flood Risk	Pluvial Flood Risk	Additional Flood Risk
LI/10	Addendum Site	Rear of Ceramaspeed	Green	Green	Amber	Green	Not assessed	Not assessed	Green
LI/11	Addendum Site	Land west of former school site, Coniston Crescent	Green	Green	Amber	Green	Not assessed	Not assessed	Green
LI/12	Addendum Site	Former Burlish Golf Course Clubhouse	Green	Green	Amber	Green	Not assessed	Not assessed	Green
MI/10	Addendum Site	Four Acres Caravan Park	Green	Green	Green	Green	Not assessed	Not assessed	Green
MI/11	Addendum Site	Sandy Lane Titton, Stourport	Green	Green	Green	Green	Not assessed	Not assessed	Green
MI/21	Addendum Site	Land off Wilden Top Road	Green	Green	Green	Green	Not assessed	Not assessed	Green
MI/24	Addendum Site	Land adjacent Rock Tavern Wilden	Green	Green	Green	Green	Not assessed	Not assessed	Green
MI/33	Addendum Site	Wilden Lane Industrial Estate	Green	Green	Green	Green	Not assessed	Not assessed	Green
MI/34	Addendum Site	Oakleaf, Finepoint	Green	Green	Amber	Green	Not assessed	Not assessed	Green
MI/36	Addendum Site	Firs View Yard, Wilden Lane	Green	Green	Green	Amber	Not assessed	Not assessed	Green
MI/38	Addendum Site	Stourport High School, land off Coniston Crescent	Green	Green	Amber	Green	Not assessed	Not assessed	Green
MI/7	Addendum Site	Land off Worcester Road	Green	Green	Green	Green	Not assessed	Not assessed	Green
OC/6	Addendum Site	Land East of Offmore Farm	Green	Green	Red	Green	Not assessed	Not assessed	Green
WA/KF/3	Addendum Site	Land at Low Habberley Phase 1	Green	Green	Amber	Green	Not assessed	Not assessed	Green
WA/UA/1	Addendum Site	Land at Shatterford	Green	Green	Green	Green	Not assessed	Not assessed	Green

Site Reference	Source	Site Name	Water Resources Assessment	Water Supply Infrastructure Assessment	STW Capacity Assessment	STW Odour Assessment	Fluvial Flood Risk	Pluvial Flood Risk	Additional Flood Risk
WA/UA/6	Addendum Site	Red Lion Car Park Bridgnorth Road	Green	Green	Amber	Green	Not assessed	Not assessed	Green
WFR/CB/2	Addendum Site	Station Yard, Blakedown	Green	Green	Green	Amber	Not assessed	Not assessed	Green
WFR/CC/8	Addendum Site	Land at Fold Farm	Green	Green	Green	Amber	Not assessed	Not assessed	Green
WFR/ST/9	Addendum Site	Cursley Distribution Park	Green	Green	Green	Green	Not assessed	Not assessed	Green
WFR/WC/10	Addendum Site	Kimberlee Avenue	Green	Green	Amber	Green	Not assessed	Not assessed	Green
WFR/WC/12	Addendum Site	LAWNSWOOD	Green	Green	Amber	Green	Not assessed	Not assessed	Green
WFR/WC/22	Addendum Site	Land off Lowe Lane	Green	Green	Amber	Green	Not assessed	Not assessed	Green
WFR/WC/23	Addendum Site	Hayes Road	Green	Green	Green	Green	Not assessed	Not assessed	Green
WFR/WC/33	Addendum Site	LEA CASTLE EXTENSION WEST	Green	Green	Amber	Green	Not assessed	Not assessed	Green
WFR/WC/34	Addendum Site	LEA CASTLE AXBOROUGH LANE	Green	Green	Amber	Green	Not assessed	Not assessed	Green
WFR/WC/36	Addendum Site	Former Rock Tavern Car Park, Kinver Lane, Causall	Green	Green	Amber	Green	Not assessed	Not assessed	Green
WFR/WC/37	Addendum Site	Land at Causall Road	Green	Green	Green	Green	Not assessed	Not assessed	Green
WFR/WC/21	2 nd Addendum	Land off Mill Lane, Wolverley	Green	Green	Green	Green	Not assessed	Not assessed	Green
WFR/CB/3	2 nd Addendum	Land off Station Drive, Blakedown	Green	Green	Amber	Amber	Not assessed	Not assessed	Green
LI/13	2 nd Addendum	Land off Zortech Avenue, Kidderminster	Green	Green	Green	Green	Not assessed	Not assessed	Green



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