

# Appendix A



## A Planning Framework and Flood Risk Policy

### A.1.1 EA Floods Directive & the Flood Risk Regulations

The European Floods Directive (2007) sets out the EU's approach to managing flood risk and aims to improve the management of the risk that floods pose to human health, the environment, cultural heritage and economic activity. The Directive was translated into English law by the Flood Risk Regulations which require LLFAs and the EA to produce Flood Risk Management Plans (FRMPs).

The Directive puts in place a six-year cycle of producing Preliminary Flood Risk Assessments (PFRAs) with the aim of identifying significant Flood Risk Areas, of which one was identified in Bradford City Centre; preparing flood hazard and risk maps; and preparing FRMPs. The first six-year cycle was completed in December 2015 and the second six-year cycle is currently underway.

PFRAs should cover the entire LLFA area for local flood risk (focusing on ordinary watercourses, surface water and groundwater flooding). Where significant Flood Risk Areas are identified using the national approach (and locally reviewed), the LLFA is then required to undertake flood risk hazard mapping and to produce FRMPs. FRMPs are also completed for each RBD in England and Wales by the EA.

The FRMP should consider objectives for flood risk management (reducing the likelihood and consequences of flooding) and measures to achieve those objectives. Significant Flood Risk Areas were not identified in Bradford therefore the LLFA was not required to produce a FRMP. A FRMP was however completed by the EA for the Humber RBD. See Section A.1.4.

The EA has implemented one of the exceptions for creating PFRAs, etc. for Main Rivers and coastal flooding, as they already have mapping (i.e. EA Flood Map for Planning (Rivers and Sea), Risk of Flooding from Rivers and Sea Map) and plans (i.e. CFMPs, SMPs) in place to deal with this. The EA has therefore focused their efforts on assisting LLFAs through this process

### A.1.2 Bradford preliminary flood risk assessments 2011 and 2017<sup>1</sup>

The first cycle PFRA for CBMDC was submitted to the EA in June 2011. The PFRA provides a high-level overview of local flood risk, from sources including surface water, groundwater, ordinary watercourses and canals.

The second cycle PFRA, reviewed during 2017, used all relevant current flood risk data and information to update the 2011 version, and was agreed with the EA in December 2017.

The update, using the PFRA methodology, based on the EA's Final PFRA Guidance and DEFRA's Guidance on selecting Flood Risk Areas, did identify a Flood Risk Area within Bradford City Centre. The 2017 PFRA also recognised the need for a long-term strategic approach to managing flood risk across the district and thus the Bradford Flood Programme Board was developed. The Board discusses key strategic flood risk investment and resilience projects within the Bradford district.

**Figure A-1: EU Floods Directive**



<sup>1</sup> CBMDC PFRA: <https://www.bradford.gov.uk/media/4760/preliminary-flood-risk-assessment-bradford-metropolitan-district-council-2017.pdf>

### A.1.3 Catchment Flood Management Plans (CFMPs)

The CFMPs were carried out by the EA in 2009 and were designed to establish flood risk management policies which will deliver sustainable flood risk management for the long term. The CFMPs were used by the EA to help direct resources to where there are areas of greatest risk.

The CFMPs contain useful information about how the catchments work, previous flooding and the sensitivity of the river systems to increased rainfall. The EA draw on the evidence and previous measures and proposals set out in the CFMPs to help develop the FRMPs for RBDs. Bradford is included within the Aire CFMP<sup>2</sup> and the Ouse CFMP<sup>3</sup>.

### A.1.4 Flood Risk Management Plans (FRMPs)

Following on from the CFMPs, completed in 2009, FRMPs are designed to set out the risk of flooding from rivers, sea, surface water, groundwater and reservoirs within each RBD and to detail how RMAs will work with communities to manage flood risk up to 2021 for the current cycle, at the time of writing. Both the River Basin Management Plans (RBMP) and FRMPs have been developed by the EA in tandem to ensure that flood defence schemes can provide wider environmental benefits during the same six-year cycle. Both flood risk management and river basin planning form an important part of a collaborative and integrated approach to catchment planning for water. Each EU member country must produce FRMPs as set out in the EU Floods Directive 2007.

#### Humber RBD FRMP, 2016

CBMDC is within the Humber RBD which covers an area of approximately 26,000 km<sup>2</sup> and contains 11.7 million people. The Humber RBD extends from the North York Moors in the north to Birmingham in the south, and from the Pennines in the west to the North Sea.

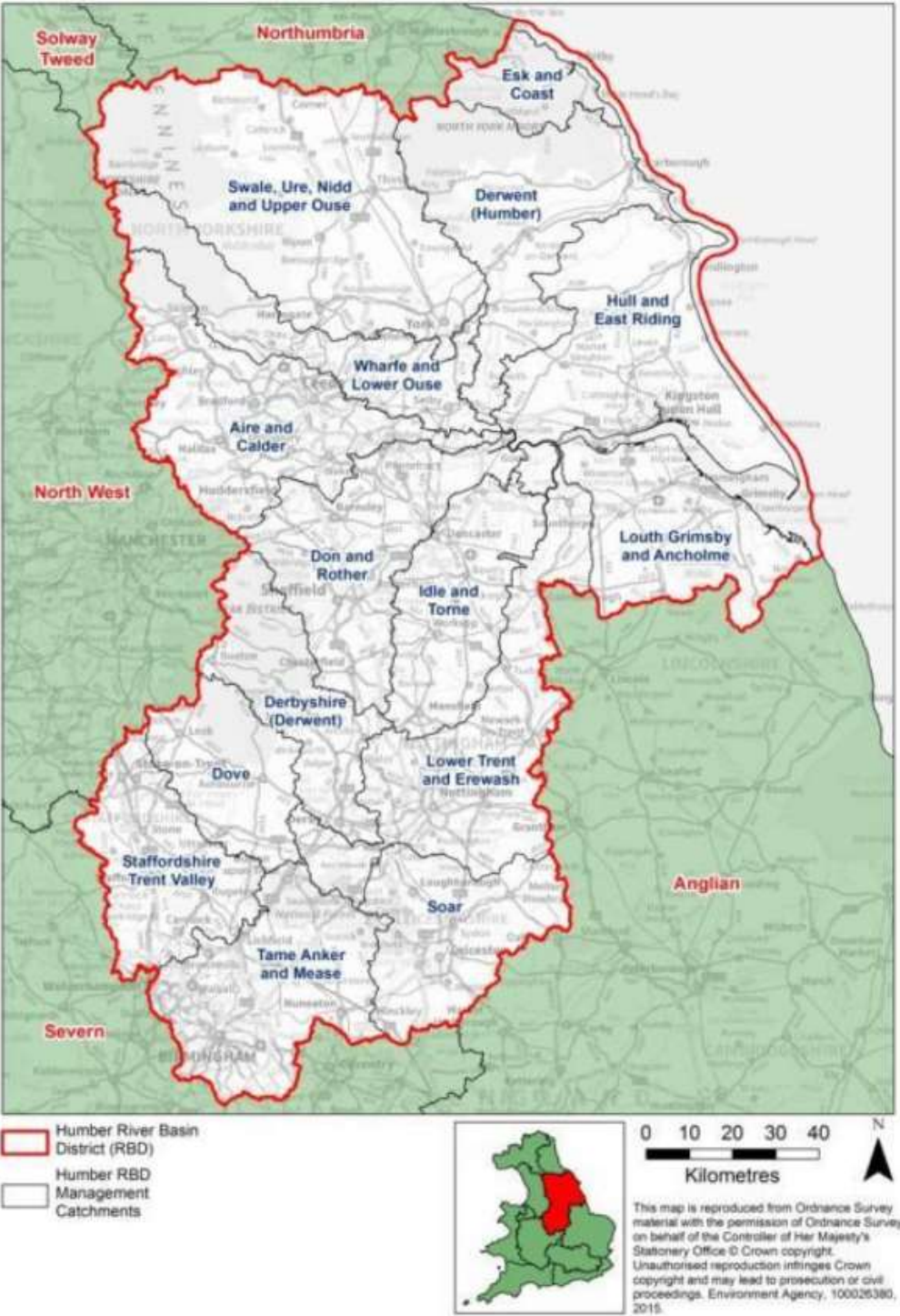
The Humber RBD comprises 15 river catchments; there are almost 78,000 people at high risk of surface water flooding (more than a 1 in 30-year chance of being flooded in any year) and just over 58,000 people at high risk of flooding from rivers and sea (more than a 1 in 30-year chance of being flooded in any one year) within the Humber RBD<sup>4</sup>. Figure A-2 is an extract from the Humber RBD FRMP showing all the catchments within the RBD. Figure A-2 is a map showing the catchments that area associated with the Bradford District.

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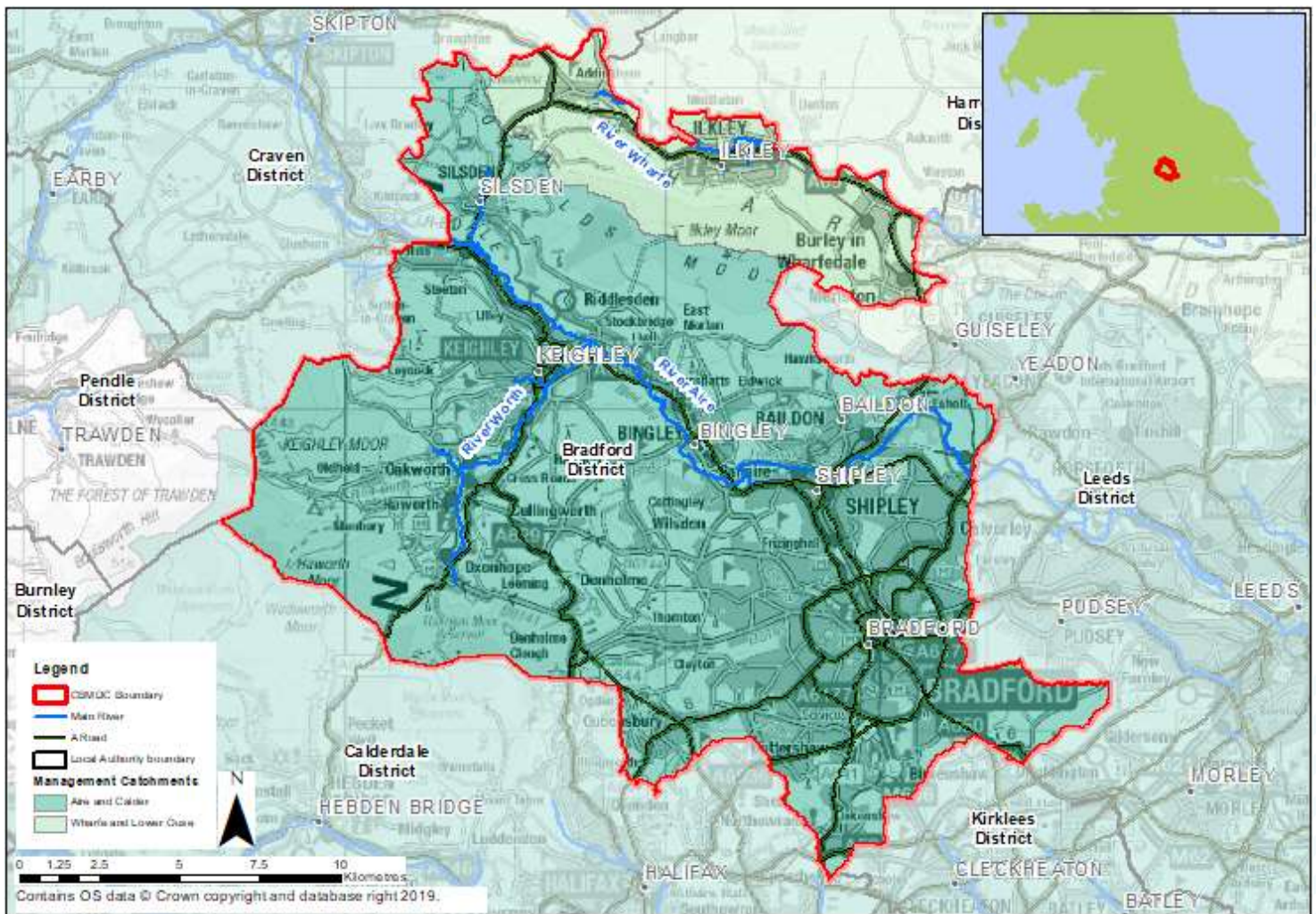
<sup>2</sup>[https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/289346/River\\_Aire\\_Catchment\\_Flood\\_Management\\_Plan.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/289346/River_Aire_Catchment_Flood_Management_Plan.pdf)

<sup>3</sup>[https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/289228/River\\_Ouse\\_Catchment\\_Flood\\_Management\\_Plan.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/289228/River_Ouse_Catchment_Flood_Management_Plan.pdf)

<sup>4</sup> Humber River Basin District Flood Risk Management Plan 2015-2021: summary, March 2016



**Figure A-2: Catchments within the Humber RBD**



**Figure A-3: Catchments associated with the CBMDC district**

### Aire and Calder management catchment

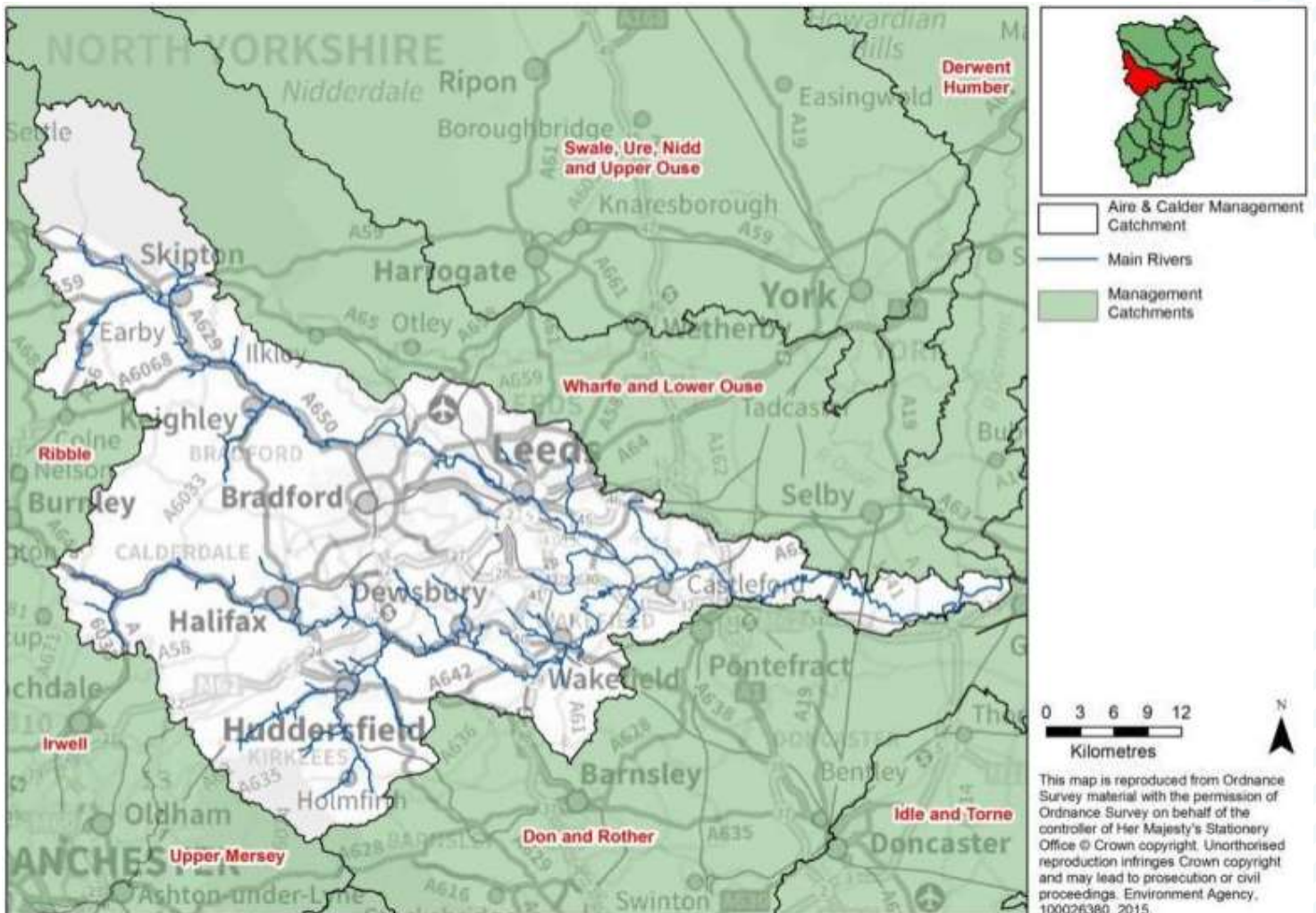
The Aire and Calder management catchment is large (2,064km<sup>2</sup>) and varied. The middle and lower reaches are dominated by the industrial towns of West Yorkshire. In contrast, much of the upper reaches are a landscape of high, sparsely populated uplands with strings of villages and small towns nestling in the narrow valley floors.

Agricultural land accounts for a large proportion of the catchment with two large cities lying within the catchment, Leeds and Bradford. In excess of 3.5 million people live in the catchment. The largest rivers are the Aire and Calder, with the Calder joining the River Aire near Castleford. The River Calder flows for approximately 70km from its source Heald Moor (near Todmorden) to its confluence with the River Aire near Castleford. The River Aire flows for 148km from its source in the Yorkshire Dales (near Malham) to its confluence with the River Ouse near Goole.

Within the management catchment, approximately 80,000 people and nearly 16,000 non-residential properties are at risk of flooding from rivers and the sea. The varied landscape within the Aire and Calder catchment gives rise to differing fluvial response to rainfall. The upper reaches of the Calder can experience rapidly responding rivers where the onset of localised flooding can be very quick and have significant impacts. The lower reaches of the Aire are slower to respond, but levels can remain high. Other

sources of flooding from ordinary watercourses, groundwater and sewers can also pose a risk in this catchment.

Figure A-4 is an extract from the Humber RBD FRMP showing an overview of the Aire and Calder Management Catchment.



**Figure A-4: Aire and Calder management catchment (Humber RBD FRMP)**

The Humber RBD FRMP summarised various measures to help manage flood risk in the Aire and Calder catchment. Those that may apply within the CBMDC boundary include:

Protection from risk:

- The ongoing development and delivery of a prioritised programme of projects
- Opportunities to incorporate flood risk measures as part of proposed environmental improvement projects. The environmental improvement projects proposed include working in partnership on creating habitats and improving SSSIs
- The maintenance and inspection of existing assets such as culverts, river banks and river defences
- Ensuring the environmental consequences of implementing Local FRM Strategies is assessed within catchment-wide flood risk planning.

#### Prevention of risk:

- Programme of modelling projects to improve flood risk knowledge of areas with existing modelled data, create new models for areas with little known current modelled information, improve the Environment Agency's flood forecasting and warning service and inform future scheme development as appropriate
- Providing input to Local Development Plans and planning consultations
- Working with RMAs and other organisations to ensure that local policies and flood risk programmes contribute to and complement other catchment initiatives
- Recording of Drainage and Flood Assets and carrying out flood investigations
- Implementing a responsive, reactive maintenance regime based on flood risk.

#### Preparation for risk:

- Carrying out engagement campaigns within Rapid Responsive Catchments to raise the awareness of the dangers of flash flooding and where possible encourage the development of personal flood plans
- Ensuring communities understand the benefits of registering to the Environment Agency's Flood Warning Service and encouraging uptake of registrations
- Providing support and updates to the LRF Response Plans
- Develop a pilot monitoring and warning system for groundwater flood risk with a view to deployment at appropriate key locations across the county
- Working with partners to manage the flood risk to critical infrastructure across the catchment.

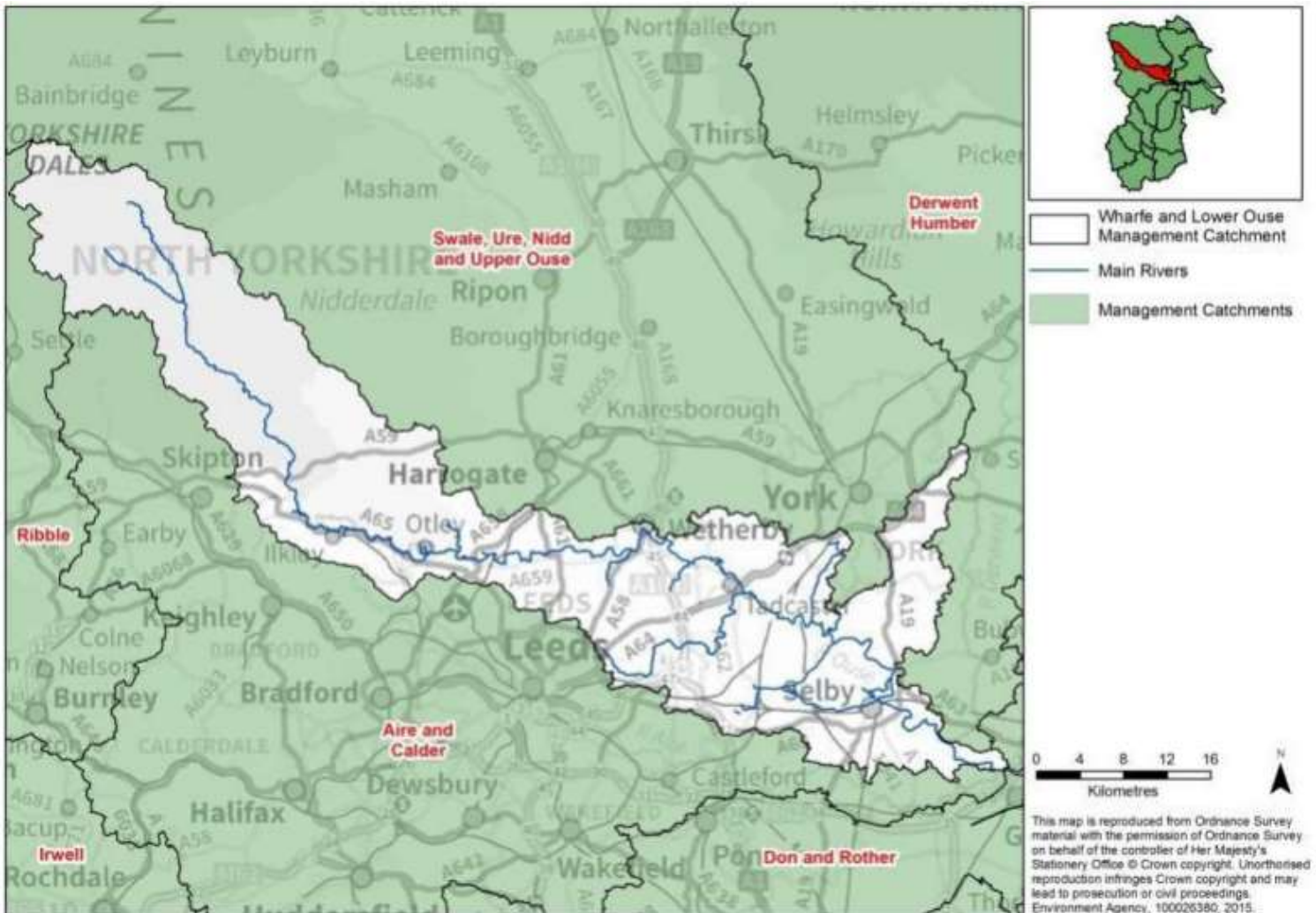
### **Wharfe and Lower Ouse catchment**

The catchment is approximately 1,200km<sup>2</sup> and is mainly rural, with a population of approximately 260,000. Agriculture accounts for 95% of the landmass in this catchment which is significantly important to the local economy as nearly 50% of this is classified as between grade 1 and 3: excellent to moderate quality productive land. The upper reaches of the River Wharfe are mainly rural whereas the lower reaches including the Lower Ouse have been engineered over the years.

The flood risks are both from fluvial and tidal sources influenced river flooding, generated by heavy rainfall in the upper catchment and tide locked rivers downstream (however, tidal sources do not relate to the CBMDC area). In this catchment 17% of the total population, approximately 34,000 people and around 6,000 non-residential properties are at risk of flooding from rivers and the sea.

Downstream on the River Wharfe, the area is generally low lying with wide floodplains. Downstream the Wharfe Valley broadens out and is a significant transport corridor with large settlements having developed.

Figure A-5 is an extract from Humber RBD FRMP showing an overview of the Wharfe and Lower Ouse catchment.



**Figure A-5: Wharfe and Lower Ouse management catchment (Humber RBD FRMP)**

The Humber RBD FRMP summarised various measures to help manage flood risk in the Wharfe and Lower Ouse catchment. Those that may apply within the CBMDC boundary include:

Protection from risk:

- The maintenance of existing assets such as culverts, river banks and river defences
- The ongoing development and delivery of a prioritised programme of projects
- The delivery of projects which complement the objectives of the "Upper Wharfe SSSI Restoration plan". The vision of the plan is to return the river to ecological health.

Prevention of risk:

- Create optional catchment plans
- Work to identify sustainable flood risk and drainage solutions on strategic planning and strategic development sites.

Preparation for risk:

- Providing support to LRF Response Plans



- Develop a pilot monitoring and warning system for groundwater flood risk
- Develop Flood Risk Management Toolkit to support local communities
- Create community emergency plans in collaboration with the Emergency Planning Unit.

### A.1.5 Flood & Water Management Act (FWMA)

The Flood & Water Management Act (FWMA) was established in April 2010. It aims to improve both flood risk management and the way we manage our water resources.

The FWMA has created clearer roles and responsibilities and helped to define a more risk-based approach to dealing with flooding. This included the creation of a lead role for LAs, as LLFAs, designed to manage local flood risk (from surface water, groundwater and ordinary watercourses) and to provide a strategic overview role of all flood risk for the EA.

The content and implications of the FWMA provide considerable opportunities for improved and integrated land use planning and flood risk management by LAs and other key partners. The integration and synergy of strategies and plans at national, regional and local scales, is increasingly important to protect vulnerable communities and deliver sustainable regeneration and growth. Table A-1 provides an overview of the key LLFA responsibilities under the FWMA.

FWMA responsibility	Description of duties and powers	LLFA status
<b>Local Flood Risk Management Strategy (LFRMS)</b>	The LLFA has a duty to develop, maintain, apply and monitor a local strategy for flood risk management in its area. The local strategies will build on information such as national risk assessments and will use consistent risk-based approaches across different LA areas and catchments. The local strategy will not be secondary to the national strategy; rather it will have distinct objectives to manage local flood risks important to local communities.	Final version produced December 2016 (see Section A.6.3)
<b>Duty to contribute to sustainable development</b>	The LLFA has a duty to contribute towards the achievement of sustainable development.	Ongoing
<b>Duty to comply with national strategy</b>	The LLFA has a duty to comply with national flood and coastal risk management strategy principles and objectives in respects of its flood risk management functions.	Ongoing
<b>Investigating flood incidents</b>	The LLFA, on becoming aware of a flood in its area, has (to the extent it considers necessary and appropriate) to investigate and record details of "locally significant" flood events within their area. This duty includes identifying the RMAs and their functions and how they intend to exercise those functions in response to a flood. The responding risk management authority must publish the results of its investigation and notify any other relevant risk management authorities.	Ongoing
<b>Asset register</b>	A LLFA has a duty to maintain a register of structures	The Asset Register

FWMA responsibility	Description of duties and powers	LLFA status
	<p>or features, which it considers having a significant effect on flood risk, including details on ownership and condition as a minimum. The register must be available for inspection and the Secretary of State will be able to make regulations about the content of the register and records.</p>	<p>is an on-going project with watercourse inspections being carried out when conditions are appropriate.</p>
<p><b>Duty to co-operate and powers to request information</b></p>	<p>The LLFA must co-operate with other relevant authorities in the exercise of their flood and coastal erosion management functions.</p>	<p>Ongoing</p>
<p><b>Ordinary watercourse consents</b></p>	<p>The LLFA has a duty to deal with enquiries and determine watercourse consents where the altering, removing or replacing of certain flood risk management structures or features that affect flow on ordinary watercourses is required. It also has provisions or powers relating to the enforcement of unconsented works.</p>	<p>Ongoing</p>
<p><b>Works powers</b></p>	<p>The Act provides a LLFA with powers to undertake works to manage flood risk from surface runoff, groundwater and on ordinary watercourses, consistent with the local flood risk management strategy for the area.</p>	<p>Ongoing</p>
<p><b>Designation powers</b></p>	<p>The Act provides a LLFA with powers to designate structures and features that affect flooding or coastal erosion. The powers are intended to overcome the risk of a person damaging or removing a structure or feature that is on private land and which is relied on for flood or coastal erosion risk management. Once a feature is designated, the owner must seek consent to alter, remove, or replace it.</p>	<p>Ongoing</p>
<p><b>Emergency planning</b></p>	<p>A LLFA is required to play a lead role in emergency planning and recovery after a flood event.</p>	<p>West Yorkshire Resilience Forum (see Section 7.1.1 of the main report)</p>
<p><b>Community involvement</b></p>	<p>A LLFA should engage local communities in local flood risk management issues. This could include the training of community volunteers, the development of local flood action groups and the preparation of community flood plans, and general awareness raising around roles and responsibilities plans.</p>	<p>Various ongoing - CBMDC Emergency Management Plan (see Section 7.1.3 of the main report) - West Yorkshire Community Risk Register (see Section 7.1.2)</p>
<p><b>Planning Requirements for SuDS</b></p>	<p>Sustainable Drainage Systems (SuDS) are a planning requirement for major planning applications of 10 or more residential units or equivalent commercial</p>	<p>Core Strategy Policy EN7 currently requires developers</p>

<b>FWMA responsibility</b>	<b>Description of duties and powers</b>	<b>LLFA status</b>
	<p>development schemes with sustainable drainage. The LLFA is now a statutory planning consultee and it will be between the LPA and the LLFA to determine the acceptability of these proposed sustainable drainage schemes subject to exemptions and thresholds. Approval must be given before the developer can commence construction. Planning authorities should use planning conditions or obligations to make sure that arrangements are in place for ongoing maintenance of any SuDS over the lifetime of the development.</p>	<p>to assess the feasibility of implementing and maintaining SuDS in a manner that is integral to site design, achieves high water quality standards and maximises habitat value. The exact requirements of this will be reviewed as part of the CSPR.</p>

**Latest changes to FWMA legislation<sup>5</sup>**

**Table A-1: Key LLFA duties under the FWMA**

**A.2 Flood and water focused policies and plans**

**A.2.1 25 Year Environment Plan**

This Plan sets out government action to help the natural world regain and retain good health. It aims to deliver cleaner air and water in our cities and rural landscapes, protect threatened species and provide richer wildlife habitats. It calls for an approach to agriculture, forestry, land use and fishing that puts the environment first. The Plan also sets out how government will tackle the effects of climate change, considered to perhaps be the most serious long-term risk to the environment given higher land and sea temperatures, rising sea levels, extreme weather patterns and ocean acidification. The Plan aims to show that government will work with nature to protect communities from flooding, slowing rivers and creating and sustaining more wetlands to reduce flood risk and offer valuable habitats.

Focusing on flood risk, government will look to update the national flood and coastal erosion risk management strategy, looking to strengthen joint delivery across organisations. In terms of funding, government will look at current partnership arrangements ahead of a review of funding needs beyond 2021, seeking to attract more non-public sector investment, and make sure all relevant agencies are able to respond quickly and effectively to support communities if and when flooding does occur. The Plan states that the EA will use its role in statutory planning consultations to seek to make sure that new developments are flood resilient and do not increase flood risk.

For flood mitigation, government will focus on using more natural flood management solutions; increasing the uptake of SuDS, especially in new development; and improving the resilience of properties at risk of flooding and the time it takes them to recover should flooding occur.

<sup>5</sup> <http://www.legislation.gov.uk/ukpga/2010/29>

25 Year Environment Plan



**Figure A-6: Main goals and policy areas the Plan is intended to help work towards**

## A.2.2 Water Framework Directive & Water Environment Regulations

The purpose of the Water Framework Directive (WFD), which was transposed into English Law by the Water Environment Regulations (2003), is to deliver improvements across Europe in the management of water quality and water resources through River Basin Management Plans (RBMP). The CBMDC area is covered by the Humber RBD River Basin Management Plan, managed by the EA and published in 2015. Water quality and flood risk can go hand in hand in that flood risk management activities can help to deliver habitat restoration techniques. The EA is responsible for monitoring and reporting on the objectives of the WFD on behalf of Government. They work with Government, Ofwat, local government, non-governmental organisations (NGOs) and a wide range of other stakeholders including local businesses, water companies, industry and farmers to manage water<sup>6</sup>.

The second management cycle of the WFD<sup>7</sup> has begun and the second RBMPs were completed in 2015, building upon the first set completed in 2009. RBMPs are designed to address the pressures facing the water environment in the river basin management plan districts and the actions that will address them. The plans describe required objectives and measures to protect and improve the water environment over the next 20 years and aim to achieve WFD targets from 2015 onwards to 2021.

The RBMPs, like the CFMPs, are important documents relevant to the development of the SFRA. The SFRA should take into account the wider catchment flood cell aims and objectives and understand how it can potentially contribute to the achievement of them.

The main responsibility for CBMDC is to work with the EA to develop links between river basin management planning and the development of local authority plans, policies and assessments. In particular, the general programme of actions (measures) within the RBMPs highlight the need for:

- Strategic working with Yorkshire Water Services to seek partnership opportunities for improved infrastructure management e.g. reduced Combined Sewer Overflows (CSOs)
- Water Cycle Studies to promote water efficiency in new development through Local Plans
- Surface Water Management Plan implementation
- Consideration of the WFD objectives (achieving good status or potential as appropriate) in the spatial planning process, including LDDs and Sustainable Community Strategies, and
- Promotion of the wide scale use of SuDS in new development.

## A.3 Other related plans and policies

### A.3.1 Catchment partnerships

The Catchment Based Approach (CaBA) embeds collaborative working at a river catchment scale to deliver cross cutting improvements to our water environments. The CaBA partnerships drive cost-effective practical delivery on the ground, resulting in multiple benefits including reduced flood risk and resilience to climate change.

Catchment partnerships are groups of organisations with an interest in improving the environment in the local area and are led by a catchment host organisation. The partnerships work on a wide range of issues, including the water environment but also

<sup>6</sup> <https://www.gov.uk/government/publications/2010-to-2015-government-policy-water-quality/2010-to-2015-government-policy-water-quality#appendix-4-planning-for-better-water>

<sup>7</sup> [http://ec.europa.eu/environment/water/water-framework/info/timetable\\_en.htm](http://ec.europa.eu/environment/water/water-framework/info/timetable_en.htm)

address other concerns that are not directly related to river basin management planning. Government is also working to strengthen or establish partnerships in the areas most affected by the December 2015 floods, caused by Storm Desmond, to encourage a more integrated approach to managing risk across all catchments.

The National Resilience Review will align closely with Defra's work on integrated catchment-level management of the water cycle in the Government's 25-year Environment Plan. Government's aspirations for the next cycle of planning (now to 2021) is for more integrated catchment planning for water, where Flood and Coastal Risk Management, nature conservation and land management are considered together.

Catchment partnerships<sup>8</sup> relevant to CBMDC include:

- The Aire and Calder Catchment Partnership hosted by The Aire Rivers Trust
- The Wharfe and Lower Ouse Catchment Partnership hosted by Yorkshire Dales River Trust

## **A.4 Planning legislation**

### **A.4.1 Housing and Planning Act, 2016**

The Act provides the statutory framework to build more homes that people can afford, expand home ownership, and improve housing management. The Act places a duty on local authorities to promote the development of starter homes, custom and self-build homes. The Act simplifies and speeds up the neighbourhood planning process to support communities that seek to meet local housing and other development needs through neighbourhood planning. In addition, the Act seeks to ensure that every area has a Local Plan and gives the Secretary of State further powers to intervene if Local Plans are not effectively delivered.

The Secretary of State must also carry out a review of planning legislation, government planning policy and local planning policies, concerning sustainable drainage in relation to the development of land in England.

### **A.4.2 Localism Act, 2011**

The Localism Act was given Royal Assent in November 2011 with the purpose of shifting power from Central Government back to local councils, communities and individuals. The Government abolished Regional Spatial Strategies, providing the opportunity for councils to re-examine the local evidence base and establish their own local development requirements for employment, housing and other land uses through the plan making process.

Additionally, this act places a duty to cooperate on local authorities, including statutory bodies and other groups, in relation to the planning of sustainable development. This duty to cooperate requires local authorities to:

*"...engage constructively, actively and on an ongoing basis in any process by means of which development plan documents are prepared so far as relating to a strategic matter." (Provision 110).*

This act, together with the Neighbourhood Planning (General) Regulations 2012, also provides new rights to allow Parish or Town Councils to deliver additional development through neighbourhood planning (Neighbourhood Plans). This means local people can help decide where new homes and businesses should go and what they should look like. Local planning authorities can provide technical advice and support as neighbourhoods draw up their proposals. Neighbourhood Plans have a number of conditions and requirements as set out in the NPPF. Reference should also be made to

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<sup>8</sup><https://www.gov.uk/government/publications/catchment-partnerships-in-operation-list-and-map>

Paragraph 061-064 of the FRCC-PPG for information on neighbourhood planning and flood risk.

## A.5 Planning policy

### A.5.1 National Planning Policy Framework (NPPF)

The National Planning Policy Framework (NPPF), published in March 2012, was updated July 2018 and February 2019 and is based on core principles of sustainability. It forms the national policy framework in England and is accompanied by a number of Planning Practice Guidance (PPG) notes. It must be taken into account in the preparation of local plans and is a material consideration in planning decisions.

**The PPG documents will, where necessary, be updated in due course to reflect the changes in the revised NPPF.**

Section 14 Paragraph 156 and 157 of the NPPF (2019) states that Local Plans...

*“...should be supported by a Strategic Flood Risk Assessment and develop policies to manage flood risk from all sources, taking account of advice from the Environment Agency and other relevant flood risk management bodies, such as Lead Local Flood Authorities and Internal Drainage Boards. Local Plans should apply a sequential, risk-based approach to the location of development to avoid, where possible, flood risk to people and property and manage any residual risk, taking account of the impacts of climate change, by applying the Sequential Test, if necessary applying the Exception Test, safeguarding land from development that is required for current and future flood management, using opportunities offered by 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”.*

The Sequential Test must be performed when considering the placement of future development and for planning application proposals. The Sequential Test is used to direct all new development (through the site allocation process) to locations at the lowest probability of flooding. Development should not be allocated or permitted if there are reasonably available sites appropriate for the proposed development in areas with a lower risk of flooding.

#### **The key changes in the NPPF (2019) compared to the 2012 NPPF include:**

- Strategic policies should also now consider the ‘cumulative impacts in, or affecting, local areas susceptible to flooding’ (para 156), rather than just to or from individual development sites (see Section 6.10 of the main report);
- Future risk from climate change. The ‘sequential approach should be used in areas known to be at risk now or in the future from any form of flooding’ (para 158) (see Sections 6.12.1, 6.12.2 of the main report);
- Natural Flood Management. ‘Using opportunities provided by new development to reduce the causes and impacts of flooding (where appropriate through the use of natural flood management techniques)’ (para 157c) (see Section 5.7.4 of the main report
- SuDS. ‘Major developments should incorporate sustainable drainage systems unless there is clear evidence that this would be inappropriate’ (para 165) (see Section 6.13 of the main report) and;
- Emergency planning. Emergency plans are required as part of an FRA that includes the inclusion of safe access and egress routes (para 163e) (see Section 7 of the main report).

As explained, the FRCC-PPG sits alongside the NPPF and sets out detailed guidance on how this policy should be implemented.

### **A.5.2 Flood Risk and Coastal Change Planning Practice Guidance (FRCC-PPG)**

At the time of writing, the current FRCC-PPG was published on 6 March 2014 and is available online via:

<https://www.gov.uk/guidance/flood-risk-and-coastal-change>

**Following the revision of the NPPF, Government will, where necessary be updating the FRCC-PPG to reflect the changes discussed above in Section A.5.1. It is advised that any hyperlinks within the FRCC-PPG that direct users to the previous 2012 NPPF should be disregarded.**

Whilst the NPPF concentrates on high level national policy, the FRCC-PPG is more detailed. The practice guidance advises on how planning can take account of the risks associated with flooding and coastal change in plan making and the development management process. This is in respect of local plans, SFRAs, the sequential and exception tests, permitted development, site-specific flood risk, Neighbourhood Planning, flood resilience and resistance techniques and the vulnerability of development to make development safe from flooding. As discussed, the FRCC-PPG may in the future be updated in places to reflect the revised NPPF.

### **A.5.3 Local plan**

A Local plan<sup>9</sup> is a statutory document prepared in consultation with the local community. It is designed to promote and deliver sustainable development. Local Plans have to set out a clear vision, be kept up to date and to set out a framework for future development of the local area, addressing needs and opportunities in relation to housing, the economy, community facilities and infrastructure as well as safeguarding the environment and adapting to climate change and securing good design.

Local plans set the context for guiding decisions and development proposals and along with the NPPF, set out a strategic framework for the long-term use of land and buildings, thus providing a framework for local decision making and the reconciliation of competing development and conservation interests.

The aim of a Local Plan is to ensure that land use changes proceed coherently, efficiently, and with maximum community benefit. Local plans should indicate clearly how local residents, landowners, and other interested parties might be affected by land use change. They are subject to regular periods of intensive public consultation, public involvement, negotiation and approval. The Local Plan should be the starting point when considering planning applications.

The NPPF requires that the evidence base for the Local Plan must clearly set out what is intended over the lifetime of the plan, where and when this will occur and how it will be delivered. The NPPF states that Local Plans should be supported by a SFRA and should take account of advice provided by the EA and other flood risk management bodies. This SFRA should be used to ensure that when allocating land or determining planning applications, development is located in areas at lowest risk of flooding. Policies with the view to manage, mitigate and design appropriately for flood risk should be written into the Local Plan, informed by both this SFRA and the Sustainability Appraisal.

Government guidance on Local Plans can be found via:

<https://www.gov.uk/guidance/local-plans--2>

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<sup>9</sup> Town and Country Planning, England. The Town and Country Planning (Local Planning) (England) Regulations 2012



### CBMDC local plan

The Core Strategy and AAPs produced for the Bradford district are now adopted documents as of July 2018; these documents form part of the new Local Plan for the district.

- Core Strategy Development Plan Document (July 2017)<sup>10</sup>
- Shipley and Canal Road Corridor (SCRC) Area Action Plan (December 2017)
- Bradford City Centre Area Action Plan (BCCAAP) (December 2017)

The Core Strategy<sup>11</sup> is the most important of these documents as it sets the strategy and framework within which all subsequent development plan documents are made. It also includes the spatial vision for how different parts of the district will change by 2030.

Relative to flood risk, the strategic policies state the need to:

- Apply the flood risk sequential approach to direct development to areas of lowest flood risk (Policy HO7);
- Promote and provide authorised sites for gypsies and travellers which would not be located within any known high flood risk areas (Policy HO12);
- Manage flood risk pro-actively and will not permit development in areas shown as functional floodplain within the SFRA, with the exception of water compatible uses and essential infrastructure (Policy EN7).

Policy EN7 (extracted from the adopted CBMDC Core Strategy) sets out the Council's approach to managing flood risk through the Local Plan. The Council are currently undertaking a Core Strategy Partial Review (CSPR) in which the Council undertook a Regulation 18 consultation on the scope of the review. As a consequence of the review and changes within the national policy and updated local evidence, Policy EN7 may require minor revisions.

<sup>10</sup><https://www.bradford.gov.uk/Documents/planningStrategy/Adopted%20Core%20Strategy/04/1%20Consultation%20document/Core%20Strategy%20Full%20Version//Core%20Strategy%20Full%20Version.pdf>

<sup>11</sup> <https://www.bradford.gov.uk/planning-and-building-control/planning-policy/core-strategy-dpd/?Folder=10%20Adoption%5CAccepted+core+strategy>

### **Core Strategy Policy EN7: Flood Risk**

A. The Council will manage flood risk pro-actively and in assessing proposals for development will:

1. Integrate sequential testing into all levels of plan-making
2. Require space for the storage of flood water within Flood Zones 2 and 3a
3. Ensure that any new development in areas of flood risk is appropriately resilient and resistant
4. Safeguard potential to increase flood storage provision and improve defences within the Rivers Aire and Wharfe corridors
5. Manage and reduce the impacts of flooding within the beck corridors, in a manner that enhances their value for wildlife
6. Adopt a holistic approach to flood risk in the Bradford Beck corridor in order to deliver sustainable regeneration in LDDs and in master planning work
7. Require that all sources of flooding are addressed, that development proposals will only be acceptable where they do not increase flood risk elsewhere and that any need for improvements in drainage infrastructure is taken into account
8. Seek to minimise run-off from new development; for Greenfield sites run off should be no greater than the existing Greenfield overall rates
9. Require developers to assess the feasibility of implementing and maintaining SuDS in a manner that is integral to site design, achieves high water quality standards and maximises habitat value
10. Use flood risk data to inform decisions made about Green Infrastructure

Only support the use of culverting for ordinary watercourses, and additional flood defence works that could have adverse impacts on the environment, in exceptional circumstances.

B. The Council will not permit development in areas shown as functional floodplain in the Bradford SFRA, with the exception of water compatible uses and essential infrastructure.

#### **A.5.4 Sustainability Appraisals (SA)**

The Sustainability Appraisal (SA) is a key component of the Local Plan evidence base, ensuring that sustainability issues are addressed during the preparation of local plans. The SA is a technical document which has to meet the requirements of the Strategic Environmental Assessment Directive 2001/42/EC which assesses and reports on a plan's potential impact on the environment, economy, and society. The SA carries out an assessment of the draft policies at various stages throughout the preparation of the Local Plan, and does this by testing the potential impacts, and consideration of alternatives are tested against the plan's objectives and policies. This ensures that the potential impacts from the plan on the aim of achieving sustainable development are considered, in terms of the impacts, and that adequate mitigation and monitoring mechanisms are implemented.

#### **CBMDC Sustainability Appraisal**

The Sustainability Appraisal is an integral part of the preparation of the Core Strategy with each relevant stage of the Core Strategy development having been accompanied by a SA. The 2017 Core Strategy has been adopted by CBMDC with the Core Strategy

Partial Review (CSPR) now being undertaken; a new SA will be carried out to support the CSPR.

## **A.6 Flood risk management policy**

### **A.6.1 CBMDC Strategic Flood Risk Assessments (SFRA)**

#### **Level 1, 2008<sup>12</sup>**

In 2008, a Level 1 SFRA was commissioned by CBMDC with the last update being issued in February 2014. This SFRA was originally prepared in accordance with the now superseded PPS25 and its Practice Guidance, with consideration being taken of the NPPF (2012) for the latest update. The study analysed current and future flooding issues in order to support the LPA assessment of future development sites, including providing data to inform the application of the Sequential Test.

A number of conclusions were drawn from the report which are still relevant within this update, including:

- Regularly review and update the SFRA due to climate change projections and changes in national guidance.

#### **Level 2, 2014<sup>13</sup>**

In 2014, a Level 2 SFRA was commissioned by CBMDC as a follow on from the Level 1 SFRA that was last updated that year. The council was developing Area Action Plans (AAPs) for two priority regeneration areas: Bradford City Centre (BCC) and the Shipley and Canal Road Corridor (SCRC). This SFRA was carried out to form part of the evidence base that informs and supports policies and proposals contained within the two AAPs and was prepared in accordance with the now superseded NPPF (2012) and the FRCC- PPG.

### **A.6.2 Water Cycle Studies (WCS)**

The purpose of a WCS is to investigate whether the local water environment has the capacity to support planned levels of growth and provide a comprehensive and robust evidence to support Local Plan production.

To achieve this, the WCS investigates the capability of the water and sewerage suppliers to provide the services to enable housing and economic growth and identify key risks to the timing of housing delivery and impacts on customers and the local environment. A WCS is certainly useful in the Local Plan Examination, where there is large growth and urban expansion planned within a local authority area.

There is currently no water cycle study in place for the CBMDC area.

### **A.6.3 National and Local Flood Risk Management Strategies**

As presented in Figure 4-1 in Section 4.1 of the main report, the FWMA establishes how flood risk will be managed within the framework of National Strategies for England and Local Strategies for each LLFA area.

The National Strategy for England has been developed by the EA with the support and guidance of Defra. Currently under review at the time of writing, the National Strategy sets out principles for how flood risk should be managed and provides strategic information about different types of flood risk and which organisations are responsible for their effective management. The FWMA requires risk management authorities (Local

<sup>12</sup>[https://www.bradford.gov.uk/Documents/EvidenceBase/Strategic%20Flood%20Risk%20Assessment%20\(SFRA\)//Draft%20Level%2001%20SFRA%20February%202014.pdf](https://www.bradford.gov.uk/Documents/EvidenceBase/Strategic%20Flood%20Risk%20Assessment%20(SFRA)//Draft%20Level%2001%20SFRA%20February%202014.pdf)

<sup>13</sup><https://www.bradford.gov.uk/documents/citycentreactionplan/2%20publication%20draft/evidence%20base/strategic%20flood%20risk%20assessment%20level%202.pdf>

authorities, EA, sewerage companies and highways authorities) to work together and act consistently with the National Strategy in carrying out their flood and coastal erosion risk management functions effectively, efficiently and in collaboration with communities, businesses and infrastructure operators to deliver more effective flood risk management.

LLFAs have responsibility for developing a LFRMS for their area covering local sources of flooding (see Table A-1). **The local strategy produced must be consistent with the National Strategy.** The local strategy should set out the framework for local flood risk management functions and activities and should raise awareness of local organisations with responsibilities for flood risk management in the area. The strategy should also facilitate partnership arrangements to ensure co-ordination between local organisations and an assessment of flood risk and plans and actions for managing risk, as set out under Section 9 of the FWMA.

The following link provides links to guidance for RMAs and local authorities on various subjects of flood risk management, including tools to support LLFAs in developing their LFRMS.

<https://www.gov.uk/guidance/flood-risk-management-information-for-flood-risk-management-authorities-asset-owners-and-local-authorities>

#### **Bradford District Local Flood Risk Management Strategy (LFRMS) (2016)**

The CBMDC LFRMS sets out how the Council will manage flood risk, from surface water runoff, groundwater, main rivers and ordinary watercourses for which the Council has responsibility as LLFA, and other types of flooding where local agents can play a supporting role to lead agencies.

The LFRMS has six objectives which aim to form the policy on flood risk for the CBMDC:

- Improve understanding of flood risk
- Reduce the impact of flooding on a priority basis
- Communicate flood risk to partners and stakeholders
- Carry out targeted maintenance on a priority basis
- Ensure appropriate development
- Improve flood response and post flood recovery

The LFRMS is developed and maintained by Bradford Council:

<https://www.bradford.gov.uk/media/4008/bradford-lfrms-final.pdf>

**The local strategy should be reviewed and updated in 2020 as it must remain consistent with the national strategy which is due for publication in early 2020. This is a requirement under the FWMA 2010.**

#### **Review of the LFRMS**

It is recommended that Bradford's LFRMS is updated in 2020 to take account of the:

- Revised (consultation) and final National Flood and Coastal Erosion Risk Management Strategy, noting the increasing emphasis on planning for adapting to climate change that runs through the new national strategy;
- The revised government policy statement on Flood and Coastal Erosion Risk Management due 2019;
- Revised flood risk datasets, including those collated for this SFRA that have emerged since 2016;
- Lessons learnt from severe surface water flooding events since 2016; and
- Revised approaches to flood risk management, partnership working and funding that have emerged since 2016.

The review should ensure:

- The views of all relevant stakeholders are taken into account;
- The flood risk evidence base is updated for all sources of flooding and presented in such a way that it can be used to prioritise actions across the District and to help justify funding for further appraisal work where this is deemed necessary;
- The objectives and actions from the previous 2016 LFRMS are reviewed against the progress that has been made in local flood risk management work in the District;
- A revised action plan is specific, achievable and fundable, with measurable success factors and that this can be aligned with the wider work the Council does i.e. in terms of managing open space, highways, etc.;
- A Strategic Environmental Assessment and Habitats Regulations Assessment are undertaken, if these are scoped in and appropriate; and
- The revised LFRMS is subject to public consultation.

#### **A.6.4 Surface Water Management Plans (SWMP)**

In June 2007, widespread flooding was experienced in the UK. The Government review of the 2007 flooding, chaired by Sir Michael Pitt recommended that...

*"...Local Surface Water Management Plans (SWMPs) ...coordinated by local authorities, should provide the basis for managing all local flood risk."*

The Government's SWMP Technical Guidance document<sup>14</sup>, 2011, defines a SWMP as:

- *A framework through which key local partners with responsibility for surface water and drainage in their area, work together to understand the causes of surface water flooding and agree the most cost-effective way of managing surface water flood risk.*
- *A tool to facilitate sustainable surface water management decisions that are evidence based, risk based, future proofed and inclusive of stakeholder views and preferences.*
- *A plan for the management of urban water quality through the removal of surface water from combined systems and the promotion of SuDS.*

As a demonstration of its commitment to SWMPs as a structured way forward in managing local flood risk, Defra announced an initiative to provide funding for the highest flood risk authorities to produce SWMPs.

Defra's framework for carrying out a SWMP is illustrated by the SWMP wheel diagram, as shown in Figure A-7. The first three phases involve undertaking the SWMP study, whilst the fourth phase involves producing and implementing an action plan which is devised based on the evidence gained from the first three phases.

At the time of writing, there is no surface water management plan in place for the Bradford District.

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<sup>14</sup> Surface Water Management Plan Technical Guidance - <https://www.gov.uk/government/publications/surface-water-management-plan-technical-guidance>



**Figure A-7: Defra wheel (taken from SWMP Technical Guidance)**

### A.6.5 Critical Drainage Areas (CDAs)

Certain locations known to be susceptible to localised flooding can be defined as Critical Drainage Areas (CDAs) and are based on areas of surface water flood risk and where the sewer network may be at capacity. There are currently no CDAs within the Bradford District; however, work at a local level may identify locations susceptible to localised flooding where such advice might be applied in the future (see Section 5.3.3 of the main report).

### A.6.6 Green Infrastructure assessments

Open space, or Green Infrastructure (GI), should be designed and managed as a multifunctional resource capable of delivering a wide range of environmental and quality of life benefits for local communities and should be provided as an integral part of all new development, alongside other infrastructure such as utilities and transport networks.

Open space can provide many social, economic and environmental benefits close to where people live and work including:

- Places for outdoor relaxation and play;
- Space and habitat for wildlife with access to nature for people;
- Environmental education;
- Local food production – in allotments, gardens and through agriculture;

- Improved health and well-being – lowering stress levels and providing opportunities for exercise;
- Climate change adaptation – for example flood alleviation and cooling urban heat islands.

Paragraph 118b of the NPPF (2019) explains that open space can perform many functions, including flood risk mitigation, and that Local Plans should account for increased flood risk, resulting from climate change, through the planning of Green Infrastructure. GI can have an important role to play in reducing the likelihood of flooding by providing space for flood storage, reducing runoff and increasing infiltration, whilst also providing other benefits as stated above.

Alongside GI should be the implementation of SuDS, specifically within potential development sites, where possible. The suitability of GI and SuDS can be informed by this SFRA through utilisation of open space for water in the areas of greatest flood risk, which would be key to helping deliver sustainable development. Examples include:

- Restoration of natural character of floodplains;
- Reduction of downstream flood risk;
- Preserving of areas of existing natural floodplain; and
- Introduction of new areas and enhancing existing areas of greenspace whilst incorporating sustainable drainage within new development.

The Town and Country Planning Association together with the Wildlife Trusts produced a guidance document for Green Infrastructure<sup>15</sup>. The guidance states that local plans should identify funding sources for GI and provision should be made for GI to be adequately funded as part of a development's core infrastructure. For new developments, GI assets can be secured from a landowner's 'land value uplift' and as part of development agreements. LPAs may include capital for the purchase, design, planning and maintenance of GI within the Community Infrastructure Levy (CIL) programme.

### **CBMDC's Green Infrastructure strategy<sup>16</sup>**

A GI strategy has not been formally produced for CBMDC as a whole; however, a GI study was produced in 2014 which will form part of the local planning policy for Green Infrastructure within Bradford District; the Area Action Plans for both Bradford City Centre and Shipley and Canal Road Corridor were supported by a GI study<sup>17</sup>. The Council are updating its open space evidence as part of the Core Strategy Partial Review (CSPR).

Significant GI assets which are located within the Bradford district but outside the AAP boundaries include:

- the Leeds Liverpool Canal, the River Aire and the Aire and Calder Canal greenspace which links into Leeds;
- the Dales Way link and Sustrans Route 66 NCR;
- a number of Heritage features (including Saltaire World Heritage Site and Undercliffe cemetery); and

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<sup>15</sup> Planning for a Healthy Environment - Good Practice Guidance for Green Infrastructure and Biodiversity, Published by the Town and Country Planning Association and The Wildlife Trusts, July 2012

<sup>16</sup> CBMDC Green Infrastructure Study, 2014:

<https://www.bradford.gov.uk/documents/citycentreactionplan/2%20publication%20draft/evidence%20base/green%20infrastructure%20study.pdf>

<sup>17</sup><https://www.bradford.gov.uk/Documents/CityCentreActionPlan/2%20Publication%20draft/Evidence%20base/Green%20infrastructure%20study.pdf>

- significant areas of scenic countryside (the Moors to the west and north, including Haworth Moor with its literary associations).

Strategic Core Policy 6 (SC6) relates to Green Infrastructure where it acknowledges the GI provides a 'common thread' that links other important issues within the Core Strategy such as climate change, flood issues, sustainable housing and transport, tourism and health. SC6 identifies opportunities to improve GI via key areas of change including the Bradford SCRC Urban Eco-settlement, Leeds-Liverpool Canal Corridor and key beck corridors.

The Infrastructure Delivery Plan<sup>18</sup> for Bradford City Centre AAP states that the GI study for Bradford City Centre (2014) identified the main aims as:

- Help applicants, developers and planners to ensure that proposals for development make the most of potential opportunities to improve existing GI and create new GI for the overall benefit of the City Centre/ Shipley Road corridor.
- Develop a long-term vision and strategic framework to support the delivery of GI across the City Centre.
- Help identify issues of implementation including those relating to delivery and funding, enabling the economic value of GI assets to be incorporated into the decision-making process.

#### **A.6.7 Flood risk partnerships and partnership plans**

CBMDC has been involved in the development of several partnerships designed to provide collaboration between public agencies, businesses and the community. Partnerships and plans that affect the district include:

- West Yorkshire Local Resilience Forum – see Section 7.1.1 of the main report
- Bradford District Resilience Forum
- West Yorkshire Community Risk Register – see Section 7.1.2 of the main report
- CBMDC Emergency Management Plan
- Yorkshire Regional Flood and Coastal Committee, (YRFCC)
- West Yorkshire Flood Risk Management Partnership (WYFRMP)
- Key businesses and organisations – CBMDC has ongoing relations with major land owners, employers and organisations such as the Canal and River Trust, National Trust, Natural England, Highways England and Network Rail.

See Section 7 of the main report on Emergency Planning for more information.

### **A.7 Roles and responsibilities**

The responsibilities for the RMAs under the FWMA and FRR, as summarised by Government<sup>19</sup>, are summarised below.

#### **A.7.1 EA as a RMA**

- Has a strategic overview role for all forms of flooding;
- Provides and operates flood warning systems;
- Carries out work to manage flood risk from the sea and main rivers;

<sup>18</sup> CBMDC Bradford City Centre Area Action Plan Infrastructure Delivery Plan (IDP), 2015: <https://www.bradford.gov.uk/Documents/CityCentreActionPlan/2%20Publication%20draft/Evidence%20base/Infrastructure%20delivery%20plan.pdf>

<sup>19</sup> <https://www.gov.uk/government/collections/flood-and-coastal-erosion-risk-management-authorities>



- Carries out works in estuaries to secure adequate outfalls for main rivers;
- Carries out surveys to inform FCERM works and has the right to enter private land to carry out such works;
- Issues consent for works on or near main rivers, and works affecting watercourses, flood and sea defences and other structures protected by its byelaws;
- Designates structures and features of the environment that affect flood or coastal erosion risk;
- Has the power to request information from any partner in connection with its risk management functions;
- Must exercise its flood or coastal erosion risk management functions in a manner consistent with the National Strategy and Local Strategies;
- Must be consulted on Local Strategies, if affected by the strategy, by the LLFA;
- Must help advise on sustainable development.

#### **A.7.2 LPA as a RMA**

- Has a duty to act in a manner that is consistent with the National Strategy and have regard to Local Strategies;
- Must be consulted on Local Strategies, if affected by the strategy, by the LLFA;
- Has a duty to be subject to scrutiny from the LLFA;
- Has a duty to cooperate and share information with other RMAs.

#### **A.7.3 LLFA as a RMA**

- Has a duty to develop, maintain, apply and monitor a strategy for local flood risk management. This must be consulted on with all RMAs, the public and all other partners with an interest in local flood risk, and must comply with the National Strategy;
- Should prepare and maintain a preliminary flood risk assessment, flood hazard maps, flood risk maps and flood risk management plans;
- Is required to coordinate and share information on local flood risk management between relevant authorities and partners;
- Is empowered to request information from others when it is needed in relation to its flood risk management functions;
- Has a duty to investigate significant flooding incidents in its area where it considers it necessary or appropriate;
- Has a duty to establish and maintain a record of structures within its area that it considers having a significant impact on local flood risk;
- Is empowered to designate structures and features that affect flooding;
- Has powers to undertake works to manage flood risk from surface runoff, groundwater and ordinary watercourses;
- Must exercise its flood and coastal erosion risk management functions in a manner consistent with the National Strategy and the Local Strategy;
- Can carry out work that may cause flooding or coastal erosion in the interests of nature conservation, preservation of cultural heritage or people's enjoyment of the environment or cultural heritage;

- Can acquire land in or outside of their district for use in flood risk management if necessary;
- Is permitted to agree the transfer of responsibilities for risk management functions (except the production of a local strategy) to other RMAs;
- Can take the lead on preparing SWMPs;
- Must aim to contribute to sustainable development;
- Should consider flooding issues that require collaboration with neighbouring LLFAs and other RMAs.

#### **A.7.4 Yorkshire Water Services as a RMA**

- Has a duty to act in a manner that is consistent with the National Strategy and have regard to Local Strategies;
- Must be consulted on Local Strategies, if affected by the strategy, by the relevant LLFA;
- Has a duty to be subject to scrutiny from LLFAs;
- Has a duty to cooperate and share information with other RMAs;
- Is responsible for managing the risks of flooding from water and foul or combined sewer systems providing drainage from buildings and yards.

#### **A.7.5 Highways Authority (CBMDC) and Highways England as RMAs**

- Have a duty to act in a manner that is consistent with the National Strategy and have regard to local strategies when:
  - Carrying out highway drainage works,
  - Filling in roadside ditches,
  - Diverting or carrying out works on part of a watercourse;
- Have responsibility for ensuring effective drainage of local roads in so far as ensuring drains and gullies are maintained;
- Must be consulted on Local Strategies, if affected by the Strategy, by the LLFA;
- Have a duty to be subject to scrutiny from LLFAs.

#### **A.7.6 The local community**

- Must be consulted on Local Strategies by the LLFA;
- Has a key role in ensuring local strategies are capable of being successfully delivered within the community. They should actively participate in this process and be engaged by the LLFA.

#### **A.7.7 Riparian owners**

A riparian owner is someone who owns land or property alongside a river or other watercourses. A watercourse is any natural or artificial channel through which water flows including through a culvert, ditch, cut, dyke, sluice or private sewer.

Riparian owners have statutory responsibilities, including:

- Maintaining watercourses;
- Allowing the flow of water to pass without obstruction;
- Controlling invasive alien species

Further guidance for riverside property owners can be found via:

<https://www.gov.uk/guidance/owning-a-watercourse>

#### **A.7.8 Developers**

Have a vital role in ensuring effective local flood risk management by avoiding development in areas at risk of flooding. Local Strategies should form a key element of local planning guidance, along with consultation of this SFRA.