

Appendix A



A.1 Planning Framework and Flood Risk Policy

A.1.1 Flood Risk Regulations 2009

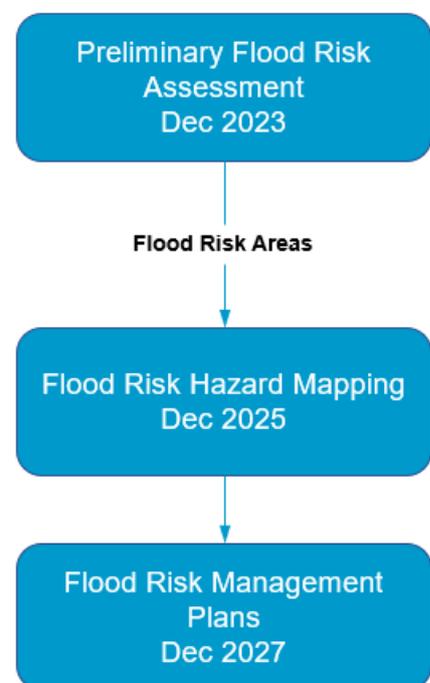
The Flood Risk Regulations (FRR) 2009 are the interpretation of the EU Floods Directive 2007 into England’s legislation. The FRR set out UK Government’s approach to managing flood risk and aim to improve the management of the risk that floods pose to human health, the environment, cultural heritage and economic activity. The FRR require LLFAs and the EA to produce Preliminary Flood Risk Assessments (PFRA) and Flood Risk Management Plans (FRMPs) over a repeating 6-year cycle with the aim of identifying significant Flood Risk Areas; preparing flood hazard and risk maps; and subsequent FRMPs. The second six-year cycle was completed in December 2021 and the third six-year cycle is currently underway at the time of writing. More information can be found on the EA website¹.

PFRA should cover the entire LLFA area for local flood risk accounting for ordinary watercourses, surface water and groundwater flooding. Where the PFRA identifies significant Flood Risk Areas using the national approach (and locally reviewed), the LLFA is then required to undertake flood risk hazard mapping and to produce a FRMP for the significant Flood Risk Area.

The EA is responsible for producing FRMPs for significant Flood Risk Areas that cover main rivers, the sea and reservoirs. However, the preferred approach is for the EA and LLFAs to work together to produce one FRMP for all sources of flood risk for the RBD. This arrangement is agreed between the EA and the LLFAs involved before work starts. A FRMP therefore has been completed by the EA for the Thames RBD. See Section A.1.4. FRMPs also meet the aims of the National Flood and Coastal Erosion Strategy for England.

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

Figure 1: Flood Risk Regulations



A.1.2 Gloucestershire Preliminary Flood Risk Assessment

An update to Gloucestershire’s 2011 PFRA was published in 2017 for the second 6-year cycle and can be accessed via:

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/698522/PFRA_Gloucestershire_County_Council_2017.pdf

The 2017 PFRA, used all relevant current flood risk data and information to update the 2011 version, and was agreed with the EA in December 2017. The PFRA methodology, based on the EA’s Final PFRA Guidance and DEFRA’s Guidance on selecting Flood Risk Areas, did not identify any additional Flood Risk Areas within Gloucestershire. There has been no change to the assessment of risk in the Cotswold District since the first cycle 2011 PFRA and the understanding of past flood risk has not changed. Future

¹ <https://www.gov.uk/government/publications/preliminary-flood-risk-assessments-and-flood-risk-areas/preliminary-flood-risk-assessments-and-flood-risk-areas>

flood risk is revised due to the creation of the Annual Implementation Plan in 2014, which is a process for prioritising areas requiring flood alleviation.

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 and help the EA and its partners to plan and agree the most effective way to manage flood risk in the future.

FRMPs were designed to replace the CFMPs following the implementation of the Flood Risk Regulations in 2009. However, the CFMPs are still considered a useful reference tool in flood risk management. The CFMPs contain useful information about how the catchments work, previous flooding and the sensitivity of the river systems to increased rainfall. The EA draws on the evidence and previous measures and proposals set out in the CFMPs to help develop the FRMPs for river basin districts.

CFMPs consider all types of inland flooding, from rivers, groundwater, surface water and tidal flooding. Shoreline management plans consider flooding from the sea.

CFMPs also include:

- the likely impacts of climate change,
- the effects of how we use and manage the land,
- how areas could be developed to meet our present day needs without compromising the ability of future generations to meet their own needs.

The CFMPs are grouped by river basin district. Cotswold District Council is covered by three CFMPs:

- Thames CFMP
- Bristol Avon CFMP
- Severn Tidal Tributaries CFMP

Thames Catchment Flood Management Plan²

The Thames catchment extends over almost 13,000 km² covering the majority of the Cotswold District, with a total population of approximately 13 million people. The upper sections of the catchment, including the Cotswold District, is characterised by rural landscapes and flat, wide floodplains. Flood risk within the Thames catchment is generally concentrated towards the more urban areas in major towns and cities; there are between 500 and 1,000 properties at risk from a 1% annual probability river flood in the Cotswold District.

Bristol Avon Catchment Flood Management Plan³

The area of the Bristol Avon catchment is approximately 2,220km² and covers an area in the south-west of the Cotswold District. The total population of the catchment is around 1 million people, although this is mostly concentrated to the urban area of Bristol. There are less than 25 properties predicted to be at risk from a 1% annual probability river flood in the section of the Cotswold District that lies within the Bristol Avon catchment.

Severn Tidal Tributaries Catchment Flood Management Plan⁴

The Severn Tidal Tributaries catchment covers around 1,000 km² and extends over a small area along the western boundary of the Cotswold District. The population of the

²https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/293903/Thames_Catchment_Flood_Management_Plan.pdf

³https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/294182/Bristol_Avon_Catchment_Flood_Management_Plan.pdf

⁴https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/289097/Severn_Tidal_Tributaries_Catchment_Management_Plan.pdf

catchment is estimated to be around 313,000 people, which are mostly concentrated to the city of Gloucester. There is a relatively low level of fluvial risk to the Cotswold District from the Severn Tidal Tributaries catchment, with less than 10 properties currently at risk of flooding from a 1% annual probability flood event.

A.1.4 Flood Risk Management Plans (FRMPs)

FRMPs are designed to set out the risk of flooding from all sources within each RBD and to detail how Risk Management Authorities (RMAs) will work with communities to manage flood risk over the 6-year cycle. FRMPs consider objectives for flood risk management (reducing the likelihood and consequences of flooding) and measures to achieve those objectives.

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. RBMPs are a requirement of The Water Environment Regulations 2003 (see Section A.2.3).

Updated EA guidance on how to prepare FRMPs is available online via:

<https://www.gov.uk/guidance/flood-risk-management-plans-frmps-how-to-prepare-them>

CDC lies mostly within the Thames RBD, however the north and south-west of the District is located within the Severn RBD.

Thames River Basin District Flood Risk Management Plan, 2015⁵

CDC is located largely within the Thames RBD which covers an area of approximately 16,000 km² and 14.8 million people live in the area, which are largely concentrated to Greater London and surrounding major towns and cities. The Thames RBD extends from its source in the rural limestone hills of the Cotswolds to the Thames estuary; with London at the heart of the RBD. The land use to the west and north of the Thames RBD is mainly arable, with some urban areas. The east is heavily urbanised. Watercourses range from highly modified artificial and straightened channels throughout the urban centres, to natural earth channels with extensive areas of rich flood plain habitat. The river basin district is predominantly urban, with more agricultural land located towards the west.

The Thames RBD comprises 17 river catchments; there are over 227,000 people at high risk of surface water flooding (more than a 1 in 30-year chance of being flooded in any year) and over 107,000 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 Thames RBD.

⁵ <https://www.gov.uk/government/publications/thames-river-basin-district-flood-risk-management-plan>

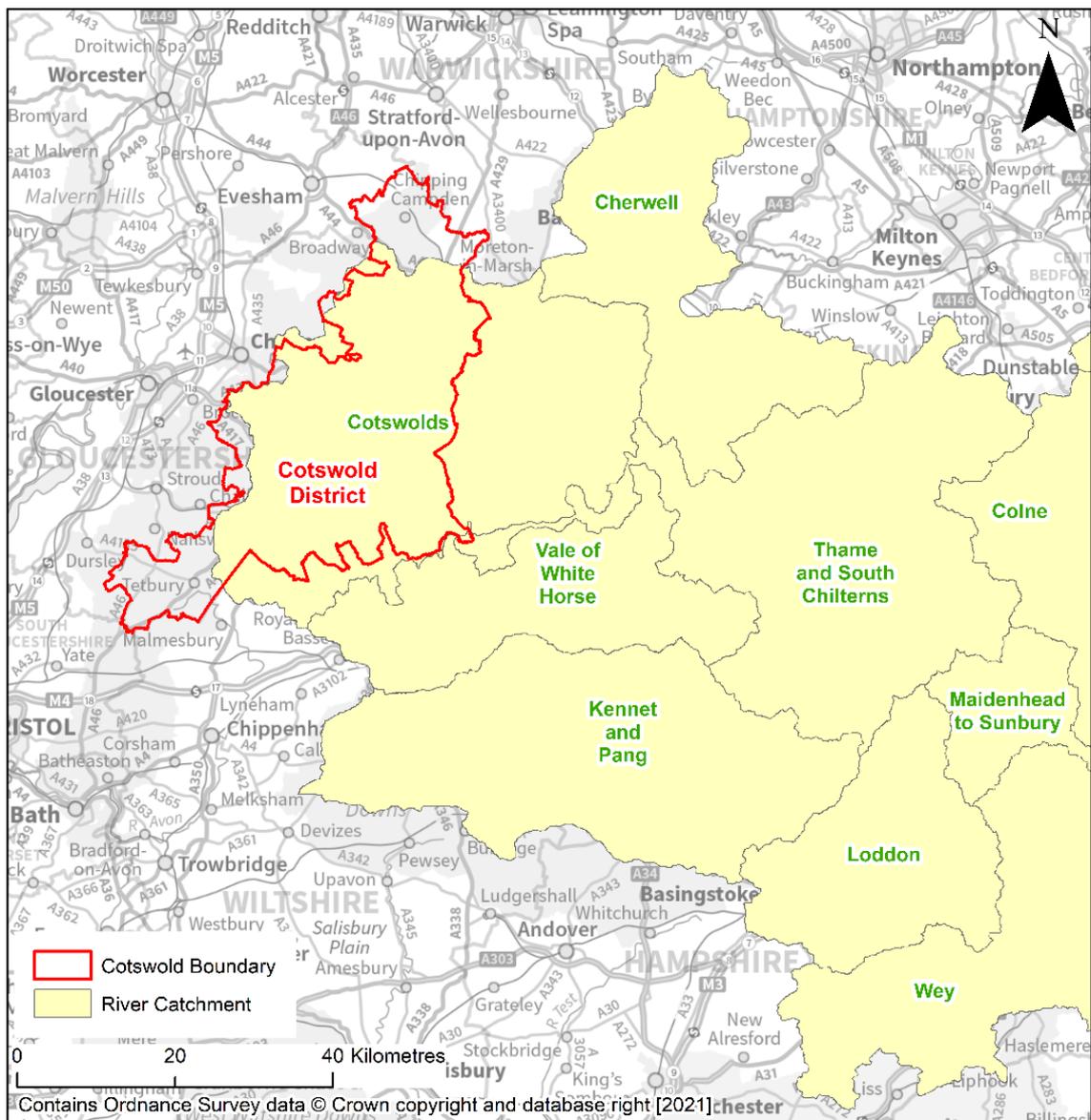


Figure 2: Overview of the major river catchments within the Thames RBD

The Cotswolds catchment comprises the largest proportion of the Cotswold District. The catchment extends over approximately 1,700 km² and part of the catchment lies within the Cotswolds Area of Outstanding Natural Beauty. The Rivers Evenlode and Windrush and their tributaries principally make up the catchment (see Figure 3). The channels that comprise the Cotswolds catchment are predominantly clay rivers, which have a relatively low gradient and exhibit a flashy flow regime. Thus, for much of its length the river channels have been extensively modified by historical dredging and straightening for land drainage purposes. The topography of the Cotswolds catchment is characterised by the hills within the Cotswolds AONB.

It is predominantly a rural catchment with land use dominated by agriculture, particularly arable farming. The catchment does contain a number of small urban centres, including Stow-on-the-Wold, Witney, Burford and Charlbury. There are a number of small villages that exist along river corridors throughout the catchment.

Within the catchment, approximately 6,350 people are at risk of flooding from rivers and the sea, representing almost 5% of the total catchment population. Just over 2,050 of non-residential properties are at risk of flooding in the Cotswolds catchment.

Almost 7% of the agricultural land in the catchment is at risk of flooding from rivers and the sea.

Figure 3 is an extract from the Thames RBD FRMP showing an overview of the Cotswolds catchment.

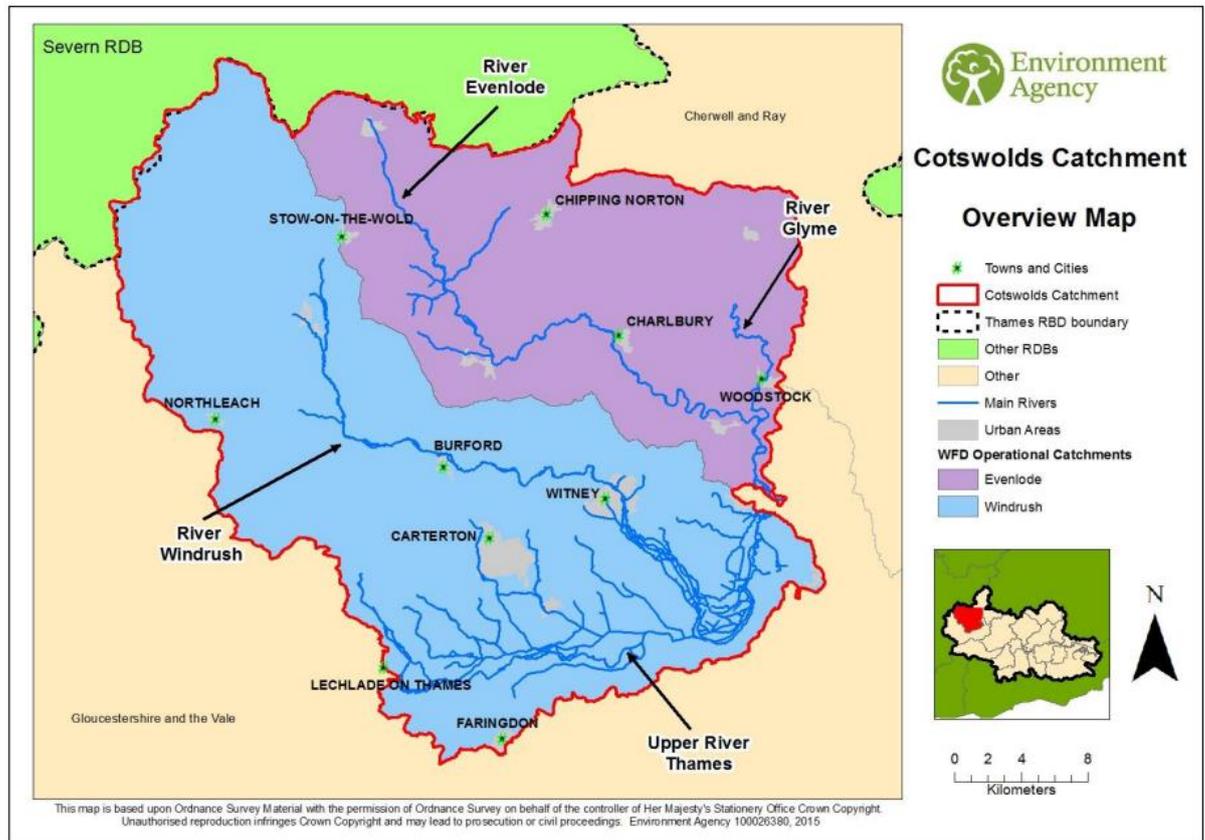


Figure 3: Cotswolds catchment (Thames RBD FRMP)

The Thames RBD FRMP summarised various measures to help manage flood risk in the Cotswolds catchment. Those that may apply within the Cotswold District include:

Protection from risk:

- Taking a catchment-based approach to enhance and expand the floodplain, biodiversity action plan (BAP) habitat and restore urban watercourses.
- Continue maintenance to ensure the standard of protection provided by flood defences are maintained.

Prevention of risk:

- Continue with the current regime of inspections and clearance set out in the system asset management plan (SAMP). Review the effectiveness of maintenance and seek to reduce costs where possible.
- Transfer skills and knowledge to the community so they can undertake maintenance through their riparian ownership responsibilities with support from the Environment Agency.
- Re-establish and enhance natural river corridors, where practicable, through new development in line with the Water Framework Directive.
- Undertake hydraulic modelling to better understand flood risk.

Preparation for risk:

- Work with local resilience forum (LRF) partners, to raise the resilience of communities, individuals and businesses.

- Review impacts of flood map changes and flood incident extents on flood alert and flood warning areas and re-map areas as appropriate.

Severn River Basin District Flood Risk Management Plan, 2015⁶

CDC is also partially located within the Severn RBD which covers an area of 21,500 km² and has a population of over 5.75 million people. The population is concentrated to the urban centres within the district, including Bristol, Cardiff and Coventry. The Severn RBD extends from its source in the uplands of Wales; to the mouth of the Bristol Channel to the south and the Midlands towards the east. The land use of the Severn RBD varies from the uplands of Wales, down through valleys and rolling hills of central England, to the lowlands and the Severn Estuary. Watercourses throughout the uplands of Wales are characterised by steep valleys with many reservoirs to regulate flooding; whereas towards the mouth of the Severn, channels are characterised by broader, flatter floodplains. The river basin district is rural, with land managed for agriculture and forestry.

The Severn RBD comprises 10 river catchments; there are about 32,600 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) and about 120,000 people are at medium to high risk of surface water flooding within the Severn RBD.

⁶ <https://www.gov.uk/government/publications/severn-river-basin-district-flood-risk-management-plan>

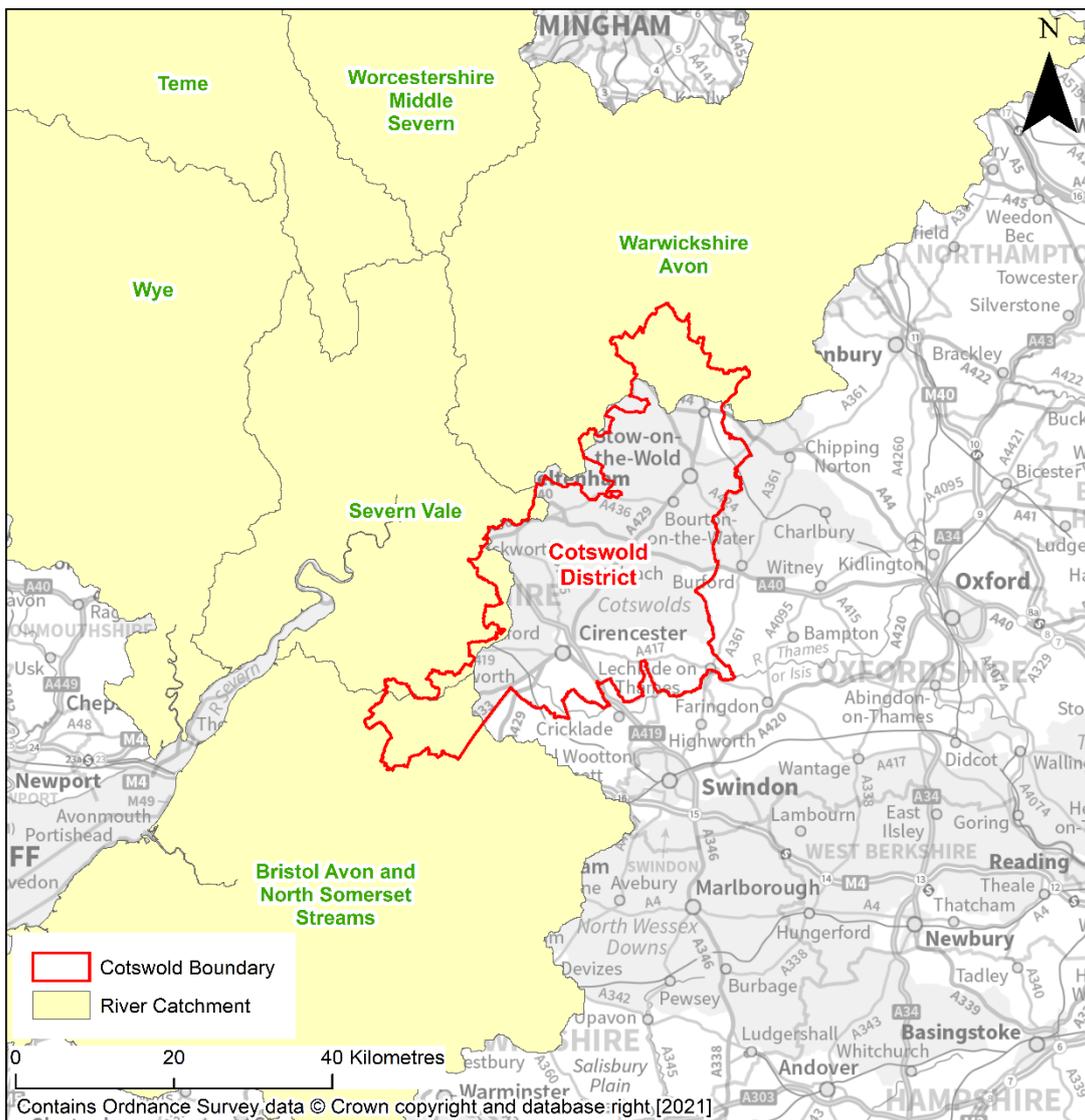


Figure 4: Overview of the major river catchments within the Severn RBD

The Warwickshire Avon catchment covers a small area to the north of the Cotswold District. The Severn Vale catchment comprises an area along the western border of the District, whilst the Bristol Avon and North Somerset Streams catchment covers a small area to the south west. They are mostly rural catchments with land use dominated by farming, with some areas of discontinuous urban fabric. The areas of the District falling within these catchments contain a couple of urban centres, notably Tetbury in the south, within the Bristol Avon catchment, and Chipping Campden in the Warwickshire Avon catchment to the north. There are a number of small villages that exist along river corridors throughout the catchment.

A.1.5 Flood & Water Management Act (FWMA)

The 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 local authorities 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.

The FWMA gives RMAs specific powers and duties for local flood risk management. A duty is something the RMA is legally obliged to do; a permissive power can be used at the RMA's discretion. All RMAs have a duty under Section 13 of the FWMA to cooperate with one another when exercising functions relating to flood and coastal erosion risk management. Table A.1-1 provides an overview of the key LLFA duties and powers under the FWMA.

FWMA duty / power	Description of duties and powers	LLFA status
Duty to produce a local strategy for flood risk management	The LLFA must develop, maintain, apply and monitor a local strategy for flood risk management in its area. The local strategy 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 should not be secondary to the national strategy; rather it will have distinct objectives to manage local flood risks important to local communities. The local strategy should be updated in line with the new national strategy.	Gloucestershire County Council's Local Flood Risk Management Strategy produced summer 2014 (see Section A6.1).
Duty to comply with the National Strategy	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
Duty to contribute to sustainable development	The LLFA has a duty to contribute towards the achievement of sustainable development.	Ongoing
Investigating flood incidents	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 its area. This duty includes identifying the relevant RMAs and their functions and how they intend to exercise those functions in response to a flood. The responding RMA must publish the results of its investigation and notify any other relevant RMAs.	Ongoing. CDC have provided their Internal Flooded Property Database.
Asset Register	The LLFA has a duty to maintain a register of structures or features, which it considers to have 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.	Ongoing. Gloucestershire County Council as LLFA have provided their asset register for CDC.
Duty to co-operate and Powers to Request Information	The LLFA must co-operate with other relevant authorities in the exercise of their flood and coastal erosion management functions. The LLFA has powers to request information as necessary (e.g., from Wessex Water, Severn Trent, or Thames water) under the FWMA.	Ongoing

FWMA duty / power	Description of duties and powers	LLFA status
Ordinary Watercourse Consents	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 and non-maintenance by riparian owners.	Ongoing
Works Powers	The FWMA provides the LLFA with powers to undertake works to manage flood risk from surface runoff, groundwater and ordinary watercourses, consistent with the LFRMS for the area.	Ongoing
Designation Powers	The FWMA provides the 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.	Ongoing
Emergency Planning	The LLFA is required to play a lead role in emergency planning and recovery after a flood event.	Gloucestershire Local Resilience Forum (Section 7 of main report)
Community Involvement	The 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.	Various ongoing (See Section 7 of main report)
SuDS	SuDS are a planning requirement for major planning applications of 10 or more residential units or equivalent commercial development schemes with sustainable drainage. The LLFA is a statutory planning consultee and it will be between the LPA and the LLFA to determine the acceptability of these proposed sustainable drainage schemes. Approvals must be given before the developer can commence construction, and sometime before the occupation of dwellings. Planning authorities should use planning conditions or obligations to make sure that arrangements are in place for ongoing maintenance of the SuDS over the lifetime of the development.	National Planning Policy and Defra's non-statutory technical standards should be followed. Gloucestershire SuDS Design & Maintenance Guide (2015) should be followed as local guidance.

Latest changes to FWMA legislation⁷

Table A.1-1: Key LLFA responsibilities under the FWMA

⁷ <http://www.legislation.gov.uk/ukpga/2010/29>

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 has updated the national flood and coastal erosion risk management strategy for England (see Section A.6.1) which looks 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 2022, 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.

The Plan states the need to mitigate and adapt to climate change by cutting greenhouse gas emissions; ensuring that all policies, programmes and investment decisions take into account the possible extent of climate change this century; and by implementing a sustainable and effective second National Adaptation Programme.

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.

25 Year Environment Plan

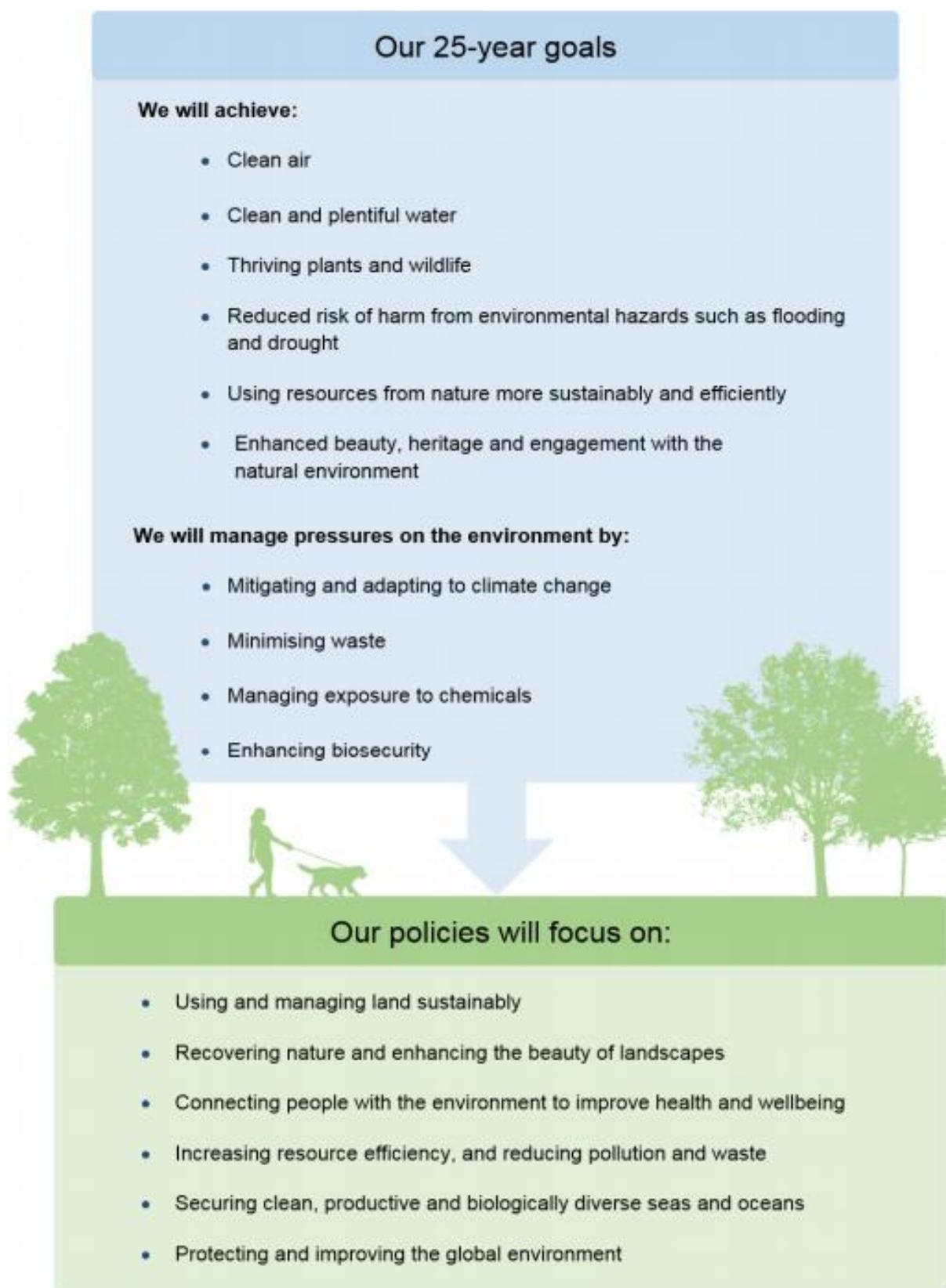


Figure 5: Main goals and policy areas the Plan is intended to help work towards

A.2.2 FCERM Governance framework

The FWMA requires the EA to 'develop, maintain, apply and monitor a strategy for flood and coastal erosion risk management in England'. The current national FCERM strategy was adopted on 25 September 2020. See Section A.6.1 for more details.

A.2.3 Water Framework Directive, Water Environment Regulations and River Basin Management Plans

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 RBMPs. As discussed, the CDC area is mostly covered by the Thames River Basin Management Plan⁸, managed by the EA and published in 2016, updated in 2018.

Water quality and flood risk can go hand in hand in that flood risk management activities can help to deliver habitat restoration techniques. The Thames RBMP includes such examples whereby land management techniques have been designed to reduce flood risk whilst also reducing sediment loss and improving water quality. 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 water⁹.

The second management cycle of the WFD¹⁰ has ended 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 the objectives and measures required to protect and improve the water environment over the following 20 years and aim to achieve WFD targets.

The RBMPs, like the FRMPs, 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 CDC 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 Thames RBMP that may be relevant to CDC highlight the need for:

- Tackling rural diffuse pollution of watercourses,
- Implementation of SuDS in new developments,
- Flood risk management scheme investment, particularly the use of Natural Flood Management,
- Habitat creation and fish passages,
- River restoration and wetland creation projects, which may also help to reduce flood risk.

8 <https://www.gov.uk/government/publications/thames-river-basin-district-river-basin-management-plan>

9 <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>

10 http://ec.europa.eu/environment/water/water-framework/info/timetable_en.htm

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 to developing an integrated approach to managing risk within whole catchments. Catchment partnerships are led by catchment host organisations. The partnerships work on a wide range of issues, including the water environment but also address other concerns that are not directly related to river basin management planning.

Catchment partnerships relevant to CDC include:

- Cotswold Rivers Trust
- Wiltshire Wildlife Trust
- Cotswold Water Park Trust
- Cotswold Canals Trust
- Ernest Cook Trust
- Gloucestershire Wildlife Trust
- Thames Water
- Farming & Wildlife Advisory Group South West

A.3.2 National Flood Resilience Review, 2016¹¹

The National Flood Resilience Review was established by Defra in September 2016, following Storm Desmond in 2015, to review how flood risk is assessed, how the likelihood of flooding can be reduced and to try and make the country as resilient as possible to flooding. The review aligns closely with Defra's work on integrated catchment-level management of the water cycle in the Government's 25-year Environment Plan.

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.

¹¹ https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/551137/national-flood-resilience-review.pdf

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

Neighbourhood Plans

Neighbourhood planning gives communities an opportunity to have a say in how development happens in their area. It gives communities a chance to influence development and what that looks like, protect green spaces and heritage. Once a plan has been approved with a referendum and then approved by the LPA it is made and becomes part of the Local Plan. The following areas have made neighbourhood plans and they must be taken into account when planning developments each the area:

- South Cerney Neighbourhood Plan - The referendum for the South Cerney neighbourhood plan was held on 2 December 2021 and passed with 90.9% voting in favour of the plan. South Cerney Made Plan May 2021
- Kemble and Ewen Neighbourhood Plan - The referendum for the Kemble and Ewen neighbourhood plan was held on 6 May 2021 and passed with 89% voting in favour of the plan.
- Preston Neighbourhood Plan - The referendum for the Preston neighbourhood plan was held on 6 May 2021 and passed with 88% voting in favour of the plan.
- Somerford Keynes and Shorncote Neighbourhood Plan - The referendum for the Somerford Keynes and Shorncote neighbourhood plan was held on 6 May 2021 and passed with almost 92% voting in favour of the plan.
- Lechlade on Thames - The referendum for the Lechlade on Thames neighbourhood plan was held on 13 October 2016 and passed with 88% voting in favour of the plan.
- Northleach with Eastington - The referendum for Northleach with Eastington was held in March 2019 and passed with 90.4% voting in favour of the plan.
- Tetbury and Tetbury Upton - The referendum for Tetbury and Tetbury was held in December 2017 and passed with 93.99% voting in favour of the plan.

Up to date information on Neighbourhood Plans in the District can be found online¹².

A.5 Planning policy

A.5.1 National Planning Policy Framework (NPPF)

The National Planning Policy Framework (NPPF) was published in March 2012 and received a significant revision in July 2018. The latest update took place in July 2021. The NPPF sets out Government's planning policies for England and how these are expected to be applied. The Framework is based on core principles of sustainability and forms the national policy framework in England. It must be taken into account in the preparation of local plans and is a material consideration in planning decisions. The NPPF is accompanied by a number of Planning Practice Guidance (PPG) notes.

The PPG documents will, where necessary, be updated in due course to reflect the changes in the latest version of the NPPF.

The key changes compared to the 2012 NPPF include:

- Strategic policies should also now consider the 'cumulative impacts in, or affecting, local areas susceptible to flooding' (para 160), rather than just to or from individual development sites (see Section 6.5 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 162) (see Section 6.6 of the main report and Appendices C and E),
- Natural Flood Management. 'Using opportunities provided by new development and improvements in green and other infrastructure to reduce the causes and impacts of flooding (making as much use as possible of natural flood management techniques as part of an integrated approach to flood risk management)' (para 161c) (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 169) (see Section 6.8 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 167e) (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>

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.

A.5.3 Local Plan

A Local Plan¹³ 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 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 plan making can be found online¹⁴.

Cotswold District Council Local Plan

The Cotswold District Local Plan 2011 to 2031 was formally adopted on 3 August 2018. National policy requires local plans to be kept up to date and a review of the Local Plan must be carried out within five years of adoption. CDC carried out a review of the local plan in 2020 and concluded that a partial update is required to account for new corporate objectives and other material considerations such as changes to the NPPF.

The Council is therefore working on updating the existing Local Plan which will encompass a set of further housing and employment land allocations.

Growth ambitions within Cotswold

The Cotswold District Local Plan presents a vision to develop 8,400 additional dwellings over the period of 2011-2031 to accommodate a projected population increase of 12.3% across the District over the same period. Cirencester will continue to be the focus for additional housing and employment growth, whilst supporting key opportunities for growth within Bourton-on-the-Water, Moreton-in-Marsh, Tetbury, Chipping Campden and Lechdale. The Local Plan strategy seeks to support forecasted job growth through a combination of specific land allocations and policies. A projected 24 hectares of B Class employment land will be developed across the District to support economic growth. Some of these areas are at risk of flooding from rivers, ordinary watercourses and surface water. In this respect, it is essential that the Council is able to take informed decisions when allocating land for development in the Cotswold Plan and on planning applications.

¹³ Town and Country Planning, England. The Town and Country Planning (Local Planning) (England) Regulations 2012

¹⁴ Guidance on plan-making. Department for Levelling Up, Housing and Communities and Ministry of Housing, Communities & Local Government, October 2021

A.5.4 Sustainability Appraisal

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 must 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.

CDC Sustainability Appraisal¹⁵

In 2020, a Sustainability Appraisal (SA) was undertaken to accompany the partial review of the recently adopted Local Plan. The SA considers and communicates the likely significant effects of an emerging plan, and the reasonable alternatives considered during the plan making process, assessed against key sustainability issues. It also suggests measures to minimise any negative effects of the plan. The partial review of the Local Plan sought to address the Climate Change Emergency, the rapidly transforming nature of the "traditional" high street and the need to maintain a five-year housing supply.

A.6 Flood risk management policy

A.6.1 National and Local Flood Risk Management Strategies

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 EA has a statutory duty to develop, maintain, apply, and monitor a strategy for England. The EA adopted the National Flood and Coastal Erosion Risk Management (FCERM) Strategy for England¹⁶ on 25 September 2020 and updated it in May 2021, 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 Strategy sets out the long-term delivery objectives the nation should take over the next 10 to 30 years as well as shorter term, practical measures RMA's should take working with partners and communities.

The FWMA requires RMA's (local 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.

The LLFA has a leadership role on local flood risk management in its area and must produce a local flood risk management strategy covering its local area. **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

¹⁵ <https://www.cotswold.gov.uk/media/pf4dif24/8101-sustainability-appraisal-jan-2017.pdf>

¹⁶ National Flood and Coastal Erosion Risk Management Strategy for England, Environment Agency, May 2021

of flood risk and plans and actions for managing risk, as set out under Section 9 of the FWMA.

Gloucestershire County Council Local Flood Risk Management Strategy 2014¹⁷

The most recent Gloucestershire County Council (GCC) LFRMS was published in Summer 2014 and sets out how GCC will manage the flood risk issues facing the county. The strategy covers the high risk of flooding from the River Thames and River Severn and their tributaries as well as addressing the local flood risk from smaller watercourses, surface water and sewers. The document emphasises how GCC will collaborate with RMAs, other stakeholders and local communities to address flood risk relating to fluvial, surface water runoff, groundwater and ordinary watercourses.

The LFRMS sets out six key strategy objectives that GCC are working towards which are:

1. To improve understanding of local flood risk;
2. To put plans in place to manage these risks;
3. To avoid inappropriate development and ensure new development does not increase flooding elsewhere;
4. To increase public awareness of flooding and encourage local communities to take action;
5. To ensure close partnership working and co-ordination with other risk management authorities in Gloucestershire, and;
6. To support the response to, and recovery from, flooding incidents.

As stated above, the local strategy should be in line with the national strategy therefore GCC should be looking to update its local strategy in the short term.

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.

The current Water Cycle Study for CDC was published in August 2015; however, an update is due to take place in the short term at the time of writing and the scope for this is due to be published.

Cotswold District Council Water Cycle Study August 2015¹⁸

The current 2015 WCS concluded that there were no issues that indicate that the planned scale, location, and timing of planned development is unachievable from the perspective of supplying water and wastewater services. The WCS identified where infrastructure upgrades are expected to be required to accommodate planned growth. Timely planning and provision of infrastructure upgrades will depend upon regular engagement between CDC, water companies, the EA and developers. As discussed, the WCS will be updated to account for the latest planned development.

A.6.3 Surface Water Management Plans (SWMP)

¹⁷ <https://www.gloucestershire.gov.uk/your-community/emergencies-and-your-safety/flooding-and-drainage/gloucestershire-county-councils-local-flood-risk-management-strategy-lfrms/>

¹⁸ <https://www.cotswold.gov.uk/media/k1mjkuls/6203-water-cycle-study-aug-2015.pdf>

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 document¹⁹, 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 6. 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.

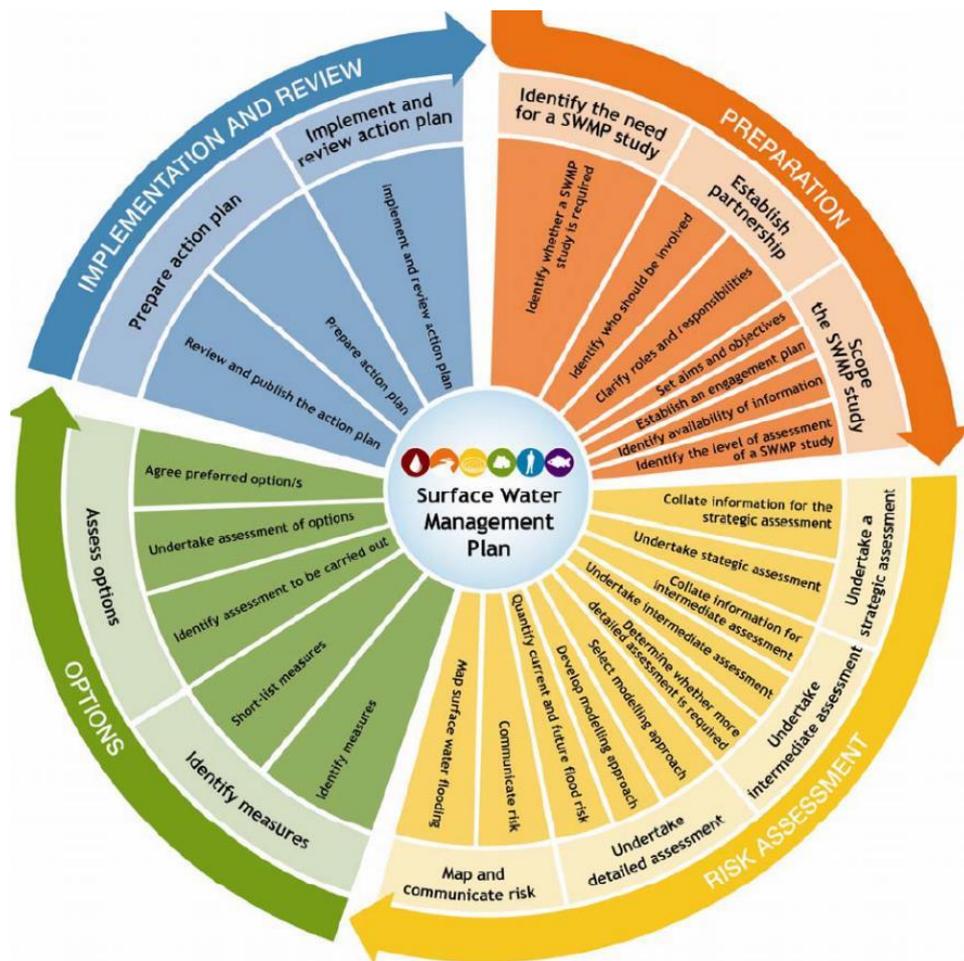


Figure 6: Defra wheel (taken from SWMP Technical Guidance)

There are currently no SWMP's that impact the Cotswold District.

A.6.4 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 122b of the NPPF 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 Infrastructure²⁰. 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.

CDC produced a Draft Green Infrastructure Strategy for consultation in March 2021.

Cotswold District Council Draft Green Infrastructure Strategy March 2021²¹

A Green Infrastructure Strategy was produced in March 2021 to cover the Cotswold District. The strategy identifies four strategic GI issues for CDC:

- Wellbeing and Access
- Water
- Wildlife
- Planning

Actions to incorporate GI into development have been considered at both the District and settlement scale, focusing on larger principal settlements where development is most likely to come forward. District level potential infrastructure include the creation of country parks, ensuring SuDS are included in new development and the implementation of biodiversity strategies. Settlement level infrastructure highlighted in the strategy includes the development of new open spaces/parks, small scale habitat improvements, the improvement of public footpaths around the District and flood alleviation schemes.

The Green Infrastructure strategy highlights two main policies of the Cotswold District Local Plan applicable to GI; EN2 and INF7:

- EN2 – Design of the Built and Natural Environment
- INF7 – Green Infrastructure

The implementation of the policies within the Local Plan will help to ensure that local GI requirements are met and that high quality developments are delivered.

20 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

21 <https://www.cotswold.gov.uk/media/vs4j4mf/1-draft-green-infrastructure-strategy-draft-for-consultation-june-2021.pdf>

A.6.5 Flood risk partnerships and partnership plans

CDC 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 Cotswold include:

- Gloucestershire Local Resilience Forum (GLRF) – see Section 7 of the main report;
- Gloucestershire County Council Community Risk Register – see Section 7 of the main report;
- English Severn and Wye Regional Flood and Coastal Committee (RFCC);
- Flood warning and awareness in partnership with the EA;
- Local flood plans – see Section 7 of the main report; and
- Key businesses and organisations.

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

A.7 Roles and responsibilities

The responsibilities for the Risk Management Authorities under the Flood & Water Management Act and Flood Risk Regulations, as summarised by Government²², 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;
- 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 permits and byelaws with the Environmental Permitting (England and Wales) Regulations 2016 and remaining Environment Agency North West Region byelaw prohibitions 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

- Must 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;
- Must 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 Wessex Water, Severn Trent and Thames Water as RMAs

- 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 (GCC) 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

- Has a responsibility for protecting their own property from flooding;
- 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.