

Flood and Water Management Act 2010

Local Flood Risk Management Strategy

Appendices

Final

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Local Flood Risk Management Strategy

Appendices

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A1 Legislation and Policies

A1.1 Key legislation and policies:

A number of key policy and legislative drivers underpin Somerset County Council's new role as a Lead Local Flood Authority (LLFA). This Appendix outlines regulations, policy and legislation to which Somerset County Council and the other Risk Management Authorities must adhere to.

The Flood Risk Regulations (2009) came into force in December 2009 and transpose the EU Floods Directive into law for England and Wales. The Flood Risk Regulations required a **Preliminary Flood Risk Assessment** to be produced which identifies areas where significant numbers of people are at risk of surface, ground and ordinary water course flooding. Where such areas exist the regulations also require the production of hazard and risk maps and flood management plans. Within Somerset, there are no areas that satisfy the national criteria for defining such areas, not because there is no risk, but because of the largely rural nature of the county and lack of large urban areas. The Preliminary Flood Risk Assessment for Somerset was completed in June 2011 and will be reviewed in 2016.

The Preliminary Flood Risk Assessment is a high level screening exercise that brings together, from a number of sources, easily available information on past and potential flooding to enable judgments to be made about local flood risk. The assessment of past flooding was obtained from a number of sources, but the process of analysing past flooding revealed some inadequacies in the collection of data on flooding incidents which will be addressed through this strategy. However the information generated through it has been used to inform this strategy.

The Pitt Review Following the widespread flooding of summer 2007 an independent review was undertaken by Sir Michael Pitt on behalf of the Government. The final report entitled "*Learning Lessons from the 2007 Floods*" called for urgent and fundamental changes to the way the country was adapting to the likelihood of more frequent and intense periods of rainfall. Focus centred on surface-water flooding - a main cause of damage during the 2007 floods. The report outlined 92 recommendations, of which 21 were specifically related to Local Authorities and their responsibilities. Of particular interest was the recommendation that Local Authorities should play a major role in the management of local flood risk, taking the lead in tackling local flooding and co-ordinating all relevant agencies.

The Flood and Water Management Act 2010 gained royal assent in April 2010 and provides legislation for the management of risks associated with flooding and coastal erosion.

The Act aimed to improve the management of water resources and create a more comprehensive and risk based regime for managing the risk of flooding from all sources. The Act gave the Environment Agency a strategic overview role in regard to flood and coastal erosion risk management and maintained its responsibility for fluvial, coastal and reservoir flood risk. County Council or Unitary local authorities were identified as Lead Local Flood Authorities with responsibility for local flood risk i.e. flooding from surface-water, groundwater

and ordinary watercourses. The Act also provided duties and powers to aid partnership working, improve information sharing between Risk Management Authorities and help achieve sustainable outcomes from flood risk activities. Other changes included: Regional Flood Defence Committees becoming Regional Flood and Coastal Committees, powers were introduced to designate structures and features that affect flooding, and measures were introduced for the approval and adoption of sustainable drainage systems. The key roles and responsibilities of Risk Management Authorities under the Act are outlined in full in Appendix 2.

The NFCERM Strategy (available online at environment-agency.gov.uk/research/policy) provides an overarching framework for future action by all Risk Management Authorities (as defined by the FWMA) to tackle flood and coastal erosion risk in England. This Strategy aims to make sure that Defra, the Environment Agency, local authorities, water companies, internal drainage boards and other flood and coastal erosion risk management partners work together to:

- maintain and over time improve standards of protection against flood and coastal erosion risks where it is affordable to do so;
- increase the overall level of investment in flood and coastal erosion risk management to supplement central government expenditure;
- help householders, businesses and communities better understand and manage any flood and coastal erosion risks that they face;
- ensure fast and effective responses to, and recovery from, flood events when they do occur;
- give priority to investment in actions that benefit those communities which face greatest risk and are least able to afford to help themselves;
- encourage and support local innovation and decision making within the framework of river catchments and coastal cells; and,
- achieve environmental gains alongside economic and social gains, consistent with the principles of sustainable development.

The Land Drainage Act (1991) outlines the duties and powers to manage land drainage for a number of bodies including the Environment Agency, Internal Drainage Boards, local authorities, navigation authorities and riparian owners. In addition to permissive powers for land drainage, there are also further duties with respect to recreation and the environment. Schedule 2 of the FWMA amended the Land Drainage Act. This gave SCC a new responsibility for consenting works upon ordinary watercourses. Internal Drainage Boards have retained the responsibility for consenting works within their districts.

The National Planning Policy Framework has recently been developed by the Department of Communities and Local Government. It is designed to streamline existing planning policy and reduce the amount of planning guidance.

It states that local planning authorities should adopt proactive strategies to mitigate and adapt to climate change, taking full account of flood risk, coastal change and water supply and demand considerations. It outlines that inappropriate development in areas at risk of flooding should be avoided by

directing development away from areas at highest risk, but where development is necessary, making it safe without increasing the risk of flooding elsewhere.

Coast Protection Act (1949) This provides the legal framework for the protection of the coast against erosion and encroachment by the sea within the boundaries set out in Schedule 4 of the Act. It gives Maritime District Authorities (e.g. Sedgemoor and West Somerset District Councils) and the Environment Agency powers to undertake coast protection works on their frontage.

The Civil Contingencies Act aims to deliver a single framework for civil protection in the UK and sets out the actions that need to be taken in the event of a flood. Emergency Services, NHS and primary care trusts, the Environment Agency and Local Authorities have a responsibility as category one general responders under the Act and as such must adhere to its provisions and take action in response to a flood event.

A1.2 Other legislation:

Flood and coastal risk management is affected by a range of other legislation, the most significant of which are listed below:

- The Water Resources Act
- The Climate Change Act (2008)
- The Conservation of Habitats and Species Regulations (2001)
- The Strategic Environmental Assessment (SEA) Directive (2001)
- The Water Framework Directive
- Marine and Coastal Access Act

A1.3 Regional and local plans:

- **River Basin Management Plan South West River Basin District (December 2009)** – the plan for the delivery of the Water Framework Directive in the Region. Its focus is to improve the ecological qualities of water bodies (sea, rivers, streams, ponds, etc).
- **Catchment Flood Management Plans** are high level strategic plans through which the Environment Agency, working with key decision-makers within a river catchment, identify and agree policies for sustainable flood risk management. There are seven plans covering the river catchments across Somerset:
 - Parrett
 - North and Mid Somerset
 - West Somerset
 - Exe
 - East Devon
 - Dorset Stour

- Bristol Avon
- **Shoreline Management Plans** are strategic plans for the long-term management of the coast. The Hartland Point to Anchor Head SMP incorporates the entire Somerset coastline.
- **Strategic Flood Risk Assessments** are undertaken by District/Borough Councils as part of the strategic planning process and their Local Development Frameworks/Local Plan. A county wide SFRA is also produced by the County Council for Minerals and Waste developments.

A2 The Risk Management Authorities and Functions

A2.1 The key players in flood and coastal management in Somerset

There are a number of key organisations who together manage flood and coastal erosion risks in Somerset and are defined as risk management authorities in the Flood and Water Management Act. These are:

- Somerset County Council, as the Lead Local Flood Authority, is responsible for taking the lead in managing flood risk from local sources. This includes surface water, groundwater and ordinary watercourses and also where there is an interaction between these sources and main rivers or the sea. The county council also has other related roles in emergency planning and road drainage – detailed in sections below.
- The Environment Agency is responsible for managing flood risk from main rivers, reservoirs and the sea, and also has a strategic overview role over all flood and coastal erosion risk management. It also has a key role in providing flood warnings to the public and protecting and improving the environment and promoting sustainable development.
- The five District or Borough Councils within Somerset who, in addition to their planning role have powers to undertake flood risk management work on ordinary water courses outside of Internal Drainage Board areas and create byelaws. Sedgemoor and West Somerset District Councils are maritime authorities responsible for managing risks from coastal erosion in their areas.
- The Somerset Drainage Boards Consortium manages and administers the affairs of the internal drainage boards in Somerset. Internal Drainage Boards were set up in areas of special drainage need with the primary function to manage water levels in their areas to minimise flood risk and supply water to people, property and agriculture.
- Wessex Water and South West Water are water and sewerage companies, responsible for the provision of foul and surface water sewerage across Somerset and providing water to the majority of the county. Bristol Water provides water, mainly in the north east of the county.
- Somerset County Council as highway authority for the non-trunk road network is responsible for managing flood risk on roads and highways within the county.
- The Highways Agency responsible for managing flood risk on trunk roads within the county. These include the M5 Motorway and the A303.

A2.2 Functions of the Risk Management Authorities

Flooding can come from a number of different sources and under recent legislation the responsibility for managing the risk from these different sources falls with different Risk Management Authorities. The sections below provide more information about all the powers and responsibilities that these organisations have, however flood risk management is not something that can be left solely in the hands of certain organisations and forgotten by everyone else. Households, businesses and landowners have their part to play too. The organisations are not be able to prevent all floods or solve all concerns. That is why the powers and responsibilities of Somerset's citizens are also recorded in this section.

A2.3 Powers and Responsibilities Common to all Risk Management Authorities

All of these authorities have the following duties and powers:

- Duty to be subject to scrutiny from the lead local flood authority's democratic processes.
- Duty to co-operate with other risk management authorities in the exercise of their flood and coastal erosion risk management functions, including sharing flood risk management data.
- Power to take on flood and coastal erosion functions from another risk management authority when agreed by both sides.
- In exercising its flood and coastal erosion risk management functions, an English risk management authority must act in a manner which is consistent with the national and local strategies and guidance, with the exception of water companies that must have regard to the strategies and guidance.

Co-operation between these risk management authorities will take place through the Somerset Strategic Flood Management Partnership.

A2.4 Powers and Duties of Somerset County Council

The main responsibilities of Somerset County Council are as:-

- Lead Local Flood Authority
- SuDS Approval Body
- Emergency Planning Authority
- Highways Authority
- Historical and Natural Environment
- Planning Authority

A2.4.1 As Lead Local Flood Authority

The Flood and Water Management Act 2010 identified Somerset County Council as the Lead Local Flood Authority for the county of Somerset. This

gives the county council a strategic role in overseeing the management of local flood risk and with this role come the following duties and powers:

- Develop, maintain, apply and monitor a strategy for local flood risk management;
- Strategic leadership of local risk management authorities;
- Powers to request information from any person in connection with the authority's flood and coastal erosion risk management functions;
- A duty to investigate and publish reports on flooding incidents as appropriate, to identify which authorities have relevant flood risk management functions and what they have done or intend to do;
- A duty to maintain a register of structures or features (asset register) which have a significant effect on flood risk in their area, in the view of the lead local flood authority;
- Decision making responsibility for whether third party works on ordinary watercourses that may affect water flow can take place. Internal drainage boards also have this role on ordinary watercourses within their areas;
- Permissive power to serve notice requiring riparian owners to undertake the necessary works to maintaining flow of an ordinary watercourse, outside an Internal Drainage Board Area. Failure to comply with such a notice may result in the Council undertaking the work and recharging the owner the costs of so doing. This power has been delegated to Sedgemoor District Council, Taunton Deane Borough Council and West Somerset District Council within their areas.
- A duty to aim to contribute towards the achievement of sustainable development in the exercise of flood or coastal erosion risk management functions and to have regard to the Ministerial guidance on this topic.
- Power to do works to manage flood risk from surface runoff or groundwater;
- Power to designate structures and features that affect flooding.

A2.4.1.1 Investigation of Flood Incidents

The decision whether or not to investigate a flood is at the discretion of the Lead Local Flood Authority and the comprehensiveness of the investigation will be adjusted to reflect the clarity of the responsible authority, the significance of the incident and the resources available. In the event of very widespread, significant flooding affecting large areas of Somerset, our ability to investigate every incident in detail is likely to be severely limited.

The investigations will examine which authorities have an involvement in a flood incident, and a report will outline their responsibility or actions, if any. Investigations will involve consultation with the relevant risk management authorities, landowners and private organisations involved, all of whom we expect to cooperate with us and provide comments.

The aim is for Flood Investigation Reports to bring all useful information together in one place, providing an understanding of situations, outlining possible sources of flooding and in some circumstances, potential long-term solutions. Further recommendations may also be made to highlight potential flood risk management actions. Reports will provide a clear and thorough understanding of flooding situations, but our duty to investigate does not guarantee that problems will be resolved and the council cannot force other authorities into action. Decisions about next steps must be made by the parties involved.

Flood Investigation Reports will be available on the Somerset website (www.somerset.gov.uk/floodrisk) as soon as practicable after the incident being reported to Somerset County Council. There are cases where this may be an extended timeframe (e.g. if widespread flooding occurred across the County).

A2.4.1.2 Register of Structures or Features

Flood Risk Assets are structures or features which are considered to have an effect on flood risk. An example could be an embankment protecting properties and therefore decreasing flood risk. Somerset County Council is required to ensure there are records of all significant assets available for use by risk management authorities and for inspection by the public at all reasonable times. It will take many years before this register is sufficiently comprehensive to be of real value in flood risk management. Steps are underway to develop a register within the county council and to link up existing registers held by other authorities.

There has often been much confusion over the ownership and maintenance responsibility of local flood risk assets. The Asset Register is a way to address this problem and ensure that residents are aware of assets in their area and have information to enable them to contact the assets' owners when there are problems.

There are no set criteria for what defines an asset as significant but the most important consideration is the consequence of its failure. Future flood risk mapping and the flood history at a site will be used to analyse the consequences of its failure and to determine the 'significance' of each flood risk asset.

New sustainable drainage assets will be recorded via the SuDS approval process and asset data may also be captured through local studies, such as Surface Water Management Plans and flood investigations

A2.4.1.3 Designation of Assets

Once the relevant clauses of the Flood and Water Management Act have been commenced, Somerset County Council, the Environment Agency, Internal Drainage Boards and the District Councils will all be 'designating authorities'. That is, they may 'designate' features or structures where the following four conditions are satisfied:

- 1) The designating authority thinks the existence or location of the structure or feature affects
 - a. a flood risk, or

- b. a coastal erosion risk.
- 2) The designating authority has flood or coastal erosion risk management functions in respect of the risk which is affected
- 3) The structure or feature is not designated by another authority
- 4) The owner of the structure or feature is not a designating authority.

If an asset becomes 'designated' its owner cannot alter or remove it without first consulting the designating risk management authority. The aim of designating flood risk assets is to safeguard them against unchecked works which could increase flood risk in the area. Designating of features or structures is not something that will be done regularly but only when there are concerns about the asset.

All proposals for designation will be discussed by the Somerset Strategic Flood Management Partnership in order to ensure consistency across the designating authorities.

Note: designation of an asset does not mean there is a duty on anyone to maintain it in its current condition.

A2.4.1.4 Consenting work to Ordinary Watercourses

If riparian owners or other bodies wish to culvert an ordinary watercourse or insert any obstruction, consent is required from the County Council, except within Internal Drainage Board areas. The Environment Agency was responsible for this but it transferred to the Lead Local Flood Authority in April 2012.

Details of the consenting process are available on the counties website. (<http://www.somerset.gov.uk/consent>)

A2.4.2 As SuDS Approval Body

Sustainable Drainage Systems (SuDS) are a crucial mechanism in ensuring that development can take place without causing drainage problems for existing development. SuDS retain surface water runoff within the development and stop it running off at fast rates, causing flooding downstream. They also provide an opportunity to ensure that water quality and amenity are considered with the same importance as managing volumes of water. In this respect, sustainability and consideration of biodiversity and natural habitat issues can become an integral part of the design and development process.

Flood and Water Management Act 2010 assigns Somerset County Council the role of a SuDS Approval Body (SAB) which must:

- Approve all construction work which has drainage implications
- Adopt all SuDS schemes associated with surface water emanating from more than one property
- Ensure that all adopted SuDS Schemes are properly maintained

When this aspect of the Act is enacted (expected October 2014) full details of how this will be implemented will be agreed with partners and publicised widely.

A2.4.3 In Emergency Planning

Somerset Local Authorities CCU is the operational unit of the Somerset Local Authorities' Civil Contingencies Partnership tasked to co-ordinate and deliver the duties laid on local authorities' by the Civil Contingencies Act 2004. Its responsibilities in flood response are as follows:

- produce and maintain the Somerset Multi Agency Flood Plan;
- receive and respond to severe weather warnings and flood warnings from the Met Office and Environment Agency;
- when required ensure that the Somerset Multi Agency Flood Plan is activated;
- mobilise the Somerset local authorities' response and co-ordinate the response of the voluntary agency support to flood incidents in Somerset, including recovery;
- promote community resilience within Somerset local communities affected by flooding;
- provide business continuity advice to local businesses that could be at risk from flooding; and
- co-ordinate the provision of mutual aid to other local authorities outside of Somerset affected by flooding.

Key operational and policy documents that influence flood and water management	
Civil Contingencies Act 2004	Statutory
Reservoirs Act 1975 (as amended by Water Act 2003)	Statutory
SW Region Regional Resilience Forum: Generic Regional Emergency Response Plan	Non-statutory
Avon and Somerset Local Resilience Forum: Multi-agency Response	Non-statutory
Avon and Somerset Local Resilience Forum: Multi-Agency Flood Plan (Strategic)	Non-statutory

A2.4.4 As Highway Authority

All routine, environmental and structural maintenance works on the highway network are managed through the Highways Management Team. The Team consists of five area offices, one in each of the Districts, and a core team located in County Hall, Taunton. All highway-related service requests are managed through the Team together with highway service delivery. Specifically to surface water drainage, this includes cyclic gully emptying, jetting works, new drainage, surveys and so on.

There are over 2000 highway bridges owned and maintained by SCC and about twenty kilometres of highway retaining walls. It is becoming increasingly evident that a number of structures maintainable by the County Council contribute to flooding problems. This may be due to reasons such as bridge or culvert aperture size, bridge location, geography, and so on.

Key operational and policy documents that influence flood and water management	
Highways Act 1980	Statutory
Traffic Management Act 2004	Statutory
The Design Manual for Roads and Bridges (DMRB)	Non-statutory
Code of Practice for the Management of Highway Structures	Non-statutory
Well-maintained Highways – Code of Practice	Non-statutory
Somerset Highways Biodiversity Action Plan	Non-statutory
Transport Asset Management Plan (TAMP)	Non-statutory

A2.4.5 In connection with the Historic Environment

The historic environment comprises historic landscape, built environment and buried archaeological deposits. The County Council's Archaeological section advises on planning and other land management decisions such as flooding to avoid or mitigate damage to the historic environment.

It maintains the Historic Environment Record which is the most complete record of all historic environment assets within Somerset and using this knowledge to advise the on the impact of proposed schemes including, for instance, flood storage areas, swales, and SuDS.

A2.4.6 As a Planning Authority

Somerset County Council is a Planning Authority with responsibilities similar to District and Borough Councils planning functions, albeit restricted to minerals and waste related developments and the determination of county council planning applications, which affect Flood Risk Management in two key ways:

- 1) Considering flooding concerns in developing local minerals and waste plans
- 2) Working with the SuDS Approval Body in ensuring that planning applications and drainage applications are complementary – namely the determination of Minerals and Waste planning applications and the county council's own developments (schools, roads etc).

A2.5 Powers and Responsibilities of the Environment Agency

The Environment Agency has both a national strategic role and local operational roles when it comes to flood and coastal erosion risk management.

A2.5.1 National Strategic Role

The Environment Agency is required to publish the National Strategy which provides a national framework for all forms of flood and coastal erosion risk management. It aims to deliver a risk-based approach whilst allowing local responsibility and decision-making where appropriate. Like the local strategy, it looks to define and understand the roles and responsibilities of risk management authorities and to provide information to communities at risk and know what they need to do

The National Strategy identifies the following strategic actions for the Environment Agency:

- Use strategic plans like the Catchment Flood Management Plan and the Shoreline Management Plan to set the direction for Flood and Coastal Erosion Risk Management
- Support the creation of Flood Risk Regulations reports by collating and reviewing the assessments, plans and maps that Lead Local Flood Authorities produce.
- Providing the data, information and tools to inform government policy and aid risk management authorities in delivering their responsibilities.
- Support collaboration, knowledge-building and sharing of good practice including provision of capacity-building schemes such as trainee schemes and officer training.
- Facilitate the Regional Flood and Coastal Committees (RFCCs) and support their decisions in allocating funding for flood defence and flood resilience schemes (See 2.5.5).
- Report and monitor on flood and coastal erosion risk management.
- Provide grants to risk management authorities to support the implementation of their incidental flooding or environmental powers.

A2.5.2 Local Operational Role

The Environment Agency's Local Operational Role includes emergency planning and managing flooding from main rivers, reservoirs and the sea.

A2.5.2.1 Main Rivers

Main Rivers are watercourses shown on the Environment Agency's statutory Main River map. The Environment Agency has permissive powers to carry out works for maintenance and improvement on Main Rivers. This can include any structure or appliance for controlling or regulating flow of water into or out

of the channel. The overall responsibility for maintenance of Main Rivers, however, lies with the riparian owner.

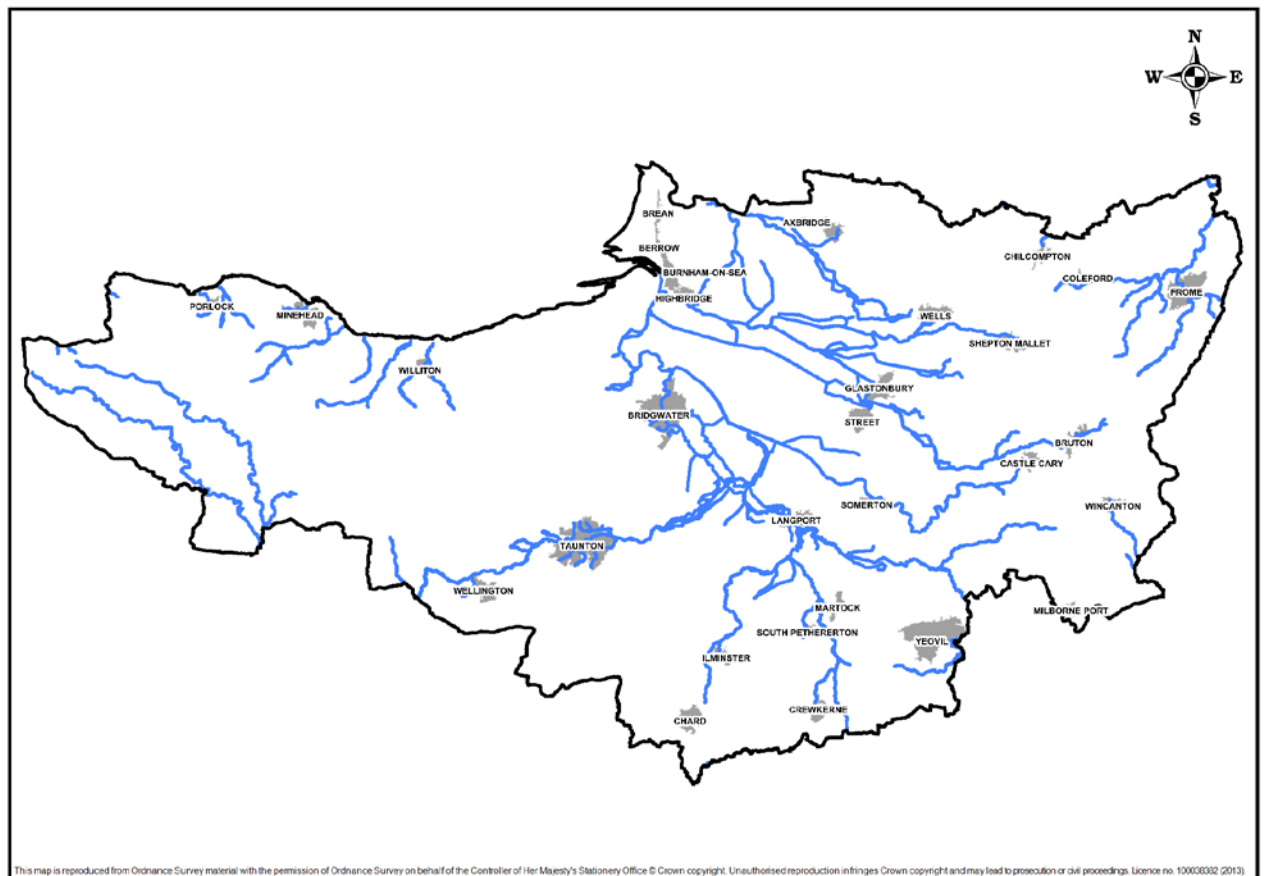


Figure 2-1 Designated Main Rivers in Somerset

A2.5.2.2 Coastal Flooding

The Environment Agency is the lead organisation responsible for all flood and erosion risk management around the coastline of England, including tidal flood risk. The Environment Agency leads in the development of Shoreline Management Plans and works with partner organisations, including local authorities to put them into practical action. The Environment Agency supports this by giving Grant-in-Aid funding for coastal defence schemes and overseeing the work carried out.

A2.5.2.3 Reservoirs

The Environment Agency enforces the Reservoirs Act 1975, which is the safety legislation for reservoirs in the United Kingdom. The Environment Agency is responsible as the Enforcement Authority in England and Wales for reservoirs that are greater than 10,000m³. As Enforcement Authority the Environment Agency must ensure flood plans are produced for specified reservoirs. However responsibility for carrying out work to manage reservoir safety lies with the reservoir owner/operator who should produce the flood plans. The Environment Agency is also responsible for establishing and

maintaining a register of reservoirs, and making this information available to the public.

A2.5.2.4 Coastal Erosion Risk Management Authority

The Environment Agency is a coastal erosion risk management authority with the power to protect land against coastal erosion and to control third party activities on the coast. This includes the construction of private defences or the removal of beach material.

A2.5.3 Emergency Planning

The Environment Agency contributes to the development of multi-agency flood plans, which are developed by local resilience forums to help the organisations involved in responding to a flood to work better together. It also contributes to the National Flood Emergency Framework for England which includes guidance on developing and assessing these plans. It works with the Met Office to provide forecasts and warnings of flooding from rivers and the sea in England. The Environment Agency and other asset operating authorities also have a role in proactive operational management of their assets and systems to reduce risk during a flood incident.

A2.5.4 Planning process

Environment Agency also has a regulatory role in consenting works carried out by others in or adjacent to water courses and sea/tidal defences to ensure that they have regard to flood risk and do not cause unnecessary environmental damage.

It is also responsible for providing advice to planning authorities in development and flood risk; providing fluvial and coastal flood warnings; monitoring flood and coastal erosion risks and supporting emergency responders when floods occur.

A2.5.5 Regional Flood and Coastal Committee

The RFCC is a committee established by the Environment Agency under the Flood and Water Management Act 2010 that brings together members appointed by Lead Local Flood Authorities (LLFAs) and independent members with relevant experience. They take forward much of the work previously carried out by Regional Flood Defence Committees (RFDCs), with an extended remit to include coastal erosion. The purpose of the RFCC is:

- To ensure there are coherent plans for identifying, communicating and managing flood and coastal erosion risks across catchments and shorelines
- To promote efficient, targeted and risk-based investment in flood and coastal erosion risk management that optimises value for money and benefits for local communities
- To provide a link between the Environment Agency, LLFAs, other risk management authorities, and other relevant bodies to engender mutual understanding of flood and coastal erosion risks in its area.

They will play an important local role in guiding the Environment Agency's flood and coastal activities, approving programmes of work for their areas and continuing to raise local levies under existing arrangements to fund local priorities. The local levy can be used to fund all forms of flood management work, including surface water whereas the RFDCs were restricted to tidal and watercourse flooding.

A2.6 Powers and responsibilities of District and Borough councils

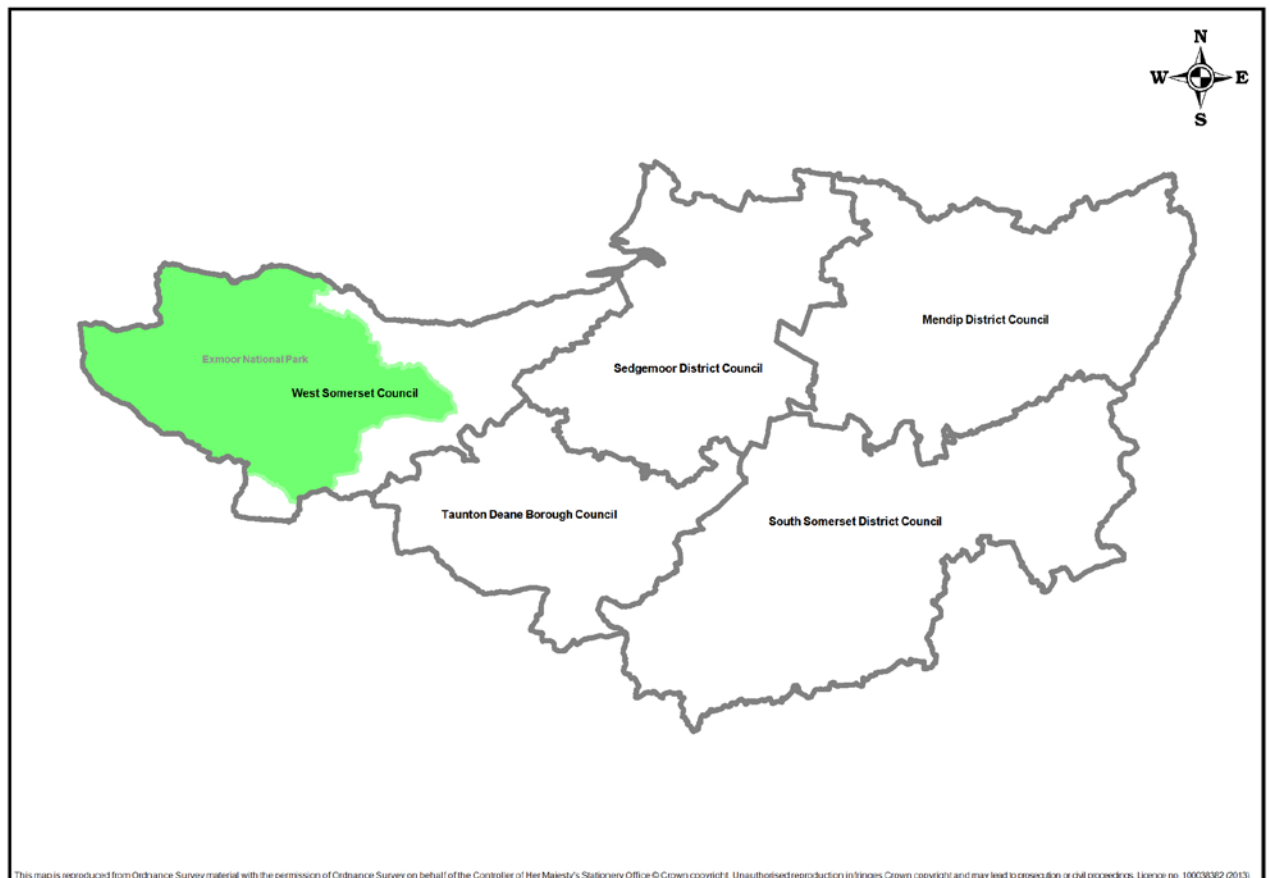


Figure 2-2 District and Borough Councils in Somerset

Outlined below are the flood risk management roles and responsibilities of district and borough councils. The key areas where they have responsibilities can be identified as follows:

- Responsibilities under the Flood and Water Management Act 2010
- Responsibilities under the Land Drainage Act 1991
- Responsibilities as a Planning Authority
- Responsibilities for maintenance of public spaces
- Responsibilities as a coastal erosion risk management authority
- Responsibilities for emergency planning

A2.6.1 Responsibilities under the Flood and Water Management Act

District and Borough councils have the general responsibilities under the Flood Water Management Act. They also have the following new responsibilities

- Power to designate structures and features that affect flooding or coastal erosion;
- Duty to act consistently with local and national strategies;

A2.6.2 Responsibilities under the Land Drainage Act

District and Borough councils have no duties (except when it is a landowner) under the Land Drainage Act. They do however have a number of permissive powers, which they can employ but are under no obligation to use. These include:

- Permissive powers to maintain or improve existing works or to construct new works in order to help mitigate flood risk from ordinary watercourses
- Advise the Lead Local Flood Authority on land drainage consent applications

A2.6.3 Responsibilities as a Planning Authority

District and Borough councils' planning function affects Flood Risk Management in three key ways:

NB. These same functions apply to the Exmoor National Park Authority as the planning authority for its area.

- Considering flooding concerns in developing local plans
- Working alongside developers and the SuDS Approval Body in ensuring that planning applications and drainage applications are complementary
- Considering flood risk assessments submitted in support of applications on which the Environment Agency do not require to be consulted

When considering flooding concerns in developing local plans the Planning Authority needs to do the following:

- Produce a Strategic Flood Risk Assessment which considers not just fluvial and coastal flooding but also local flood risk issues.
- Develop a Local Development Framework (LDF) that carefully considers flood and coastal erosion risks. This is a statutory planning document which planners can then use to object to inappropriate development in the floodplain. Consequently the LDF should embed the Strategic Flood Risk Assessment (SFRA), the Preliminary Flood Risk Assessment and Surface Water Management Plans (where applicable). This should allow

the LDF to assess and record the flood risks for new developments and steer development to areas of lowest flood risk. Equally in maritime districts, there is requirement to assess risks from coastal erosion and permanent tidal inundation and where appropriate designate coastal risk management zones where permanent development will not be permitted.

- Planning authorities should only approve development where it can be demonstrated that the proposal satisfies all the following criteria: (a) it does not increase the overall risk of all forms of flooding in the area through the layout and form of the development and the use of appropriate SuDS; (b) it will be adequately protected from flooding; (c) it is and will remain safe for people for the life time of the development and (d) it includes water efficiency measures such as rainwater harvesting or use of local land drainage water where practicable.
- Promote development in hazard free areas through embedding the sequential approach referred to in the National Planning Policy Framework into the LDF.
- Safeguard land for critical infrastructure.
- Develop action plans, where necessary, to support sustainable spatial planning and ensure all plans are integrated and firmly linked to local strategies.
- Ensure that neighbourhood plans fully consider flood risk issues.

Co-operation between the Planning Authority and the SuDS Approval Body requires the planning authority to:

- Alert developers and land owners at the master planning stage of the need to consult with the SuDS Approval Body about drainage issues on the site
- Ensure that requests for outline planning permission are discussed with the SuDS Approval Body
- Ensure that when a planning application arrives, the attached drainage application is immediately sent on to the SuDS Approval Body (subject to change depending on DEFRA application system proposals).
- Adopt local guidance that applies higher standards than the National SuDS Standards, where necessary.

A2.6.4 Responsibilities for maintenance of public spaces

District and Borough councils are responsible for maintenance of some parks and public spaces and have responsibility for street cleaning. Good maintenance practices can help to reduce flood risk, for instance by ensuring that drainage channels are kept clear and that rubbish and leaves are not tidied into watercourses. For new public spaces which are under the control of a management company, these activities should be included in the management contract.

District and Borough councils may also be riparian owners of both ordinary and main watercourses and as such should carry out the duties imposed on riparian owners by the Land Drainage Act. They should maintain all assets in their ownership.

Some councils have adopted SuDS systems as part of their public open spaces and these councils will be responsible for their maintenance. Where appropriate, new SuDS in public open space will also be maintained by District and Borough councils.

A2.6.5 Responsibilities as a coastal erosion risk management authority

Coastal erosion risk management authorities are identified by the Act as those districts councils that have a coastal erosion risk management function. In Somerset, Sedgemoor and West Somerset District Councils are coastal erosion risk management authorities. Responsibilities include:

- Shoreline Management Planning in conjunction with the Environment Agency.
- Delivery of coastal erosion risk management activities.
- Working alongside the Environment Agency to develop and maintain coastal flood and erosion risk information.
- Maintain a register of assets and other features that help to manage coastal risks.
- Implement, manage, maintain and monitor shoreline management plans to understand and manage coastal flood and erosion risks.
- Assist communities in planning for the future and taking appropriate steps to adapt to changing coastal erosion risks.

A2.6.6 Responsibilities as an Emergency Planning authority

District councils are part of the Somerset Local Authorities' Civil Contingencies Partnership.

A2.7 Powers and Responsibilities of Internal Drainage Boards (IDBs)

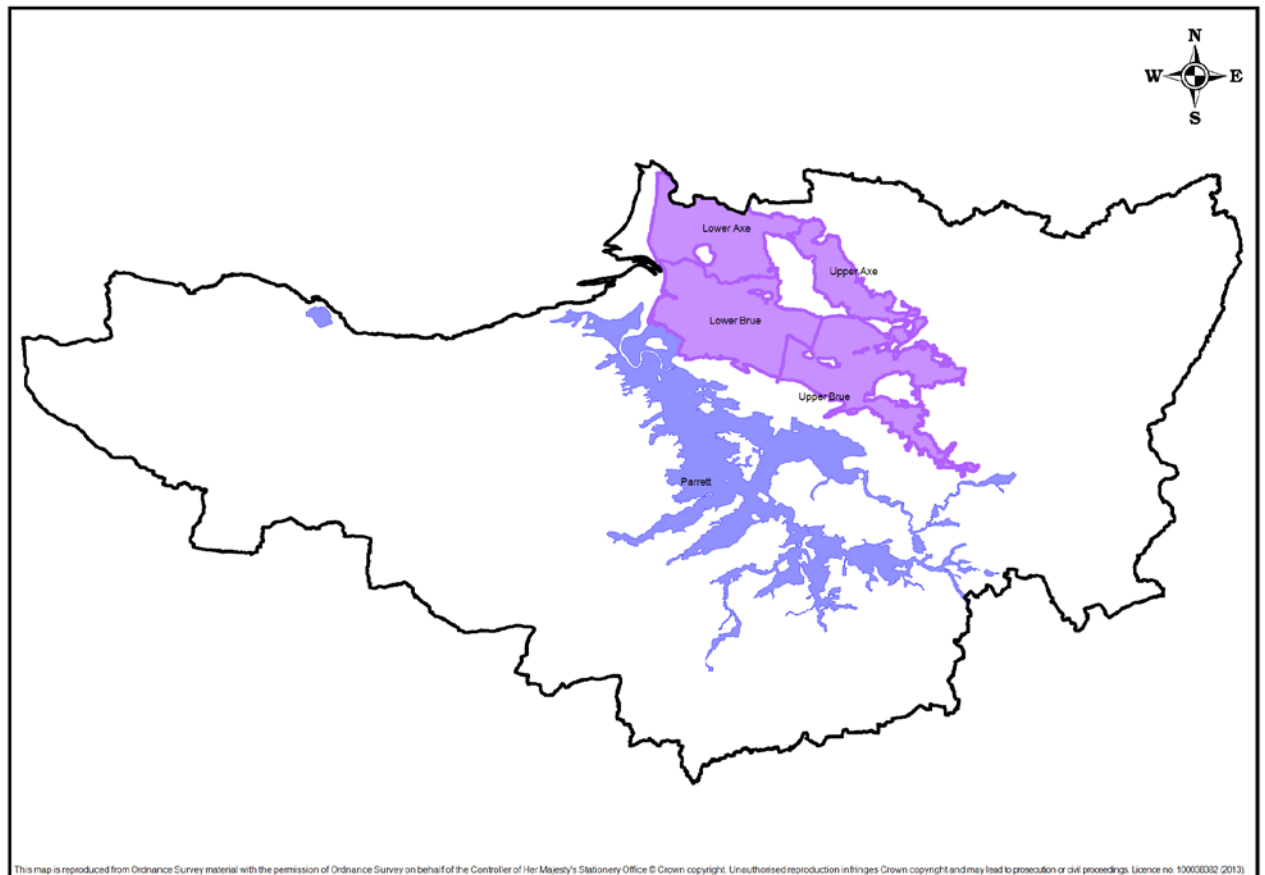


Figure 2-3 Internal Drainage Board Areas

An Internal Drainage Board (IDB) is a public sector operating authority, empowered under the Land Drainage Act 1991 in areas of special drainage need in England & Wales to carefully manage water levels within defined drainage districts for land drainage, flood risk management, irrigation and environmental benefit. The five Drainage boards in Somerset are jointly managed by the Somerset Drainage Boards Consortium.

IDBs operate in water catchment areas not county or district council boundaries, and undertake routine maintenance of drainage channels, ordinary watercourses, pumping stations, and other critical water control infrastructure under permissive powers, the overall responsibility for maintenance being with the riparian owner. Principle operations include weed cutting, de-silting, tree management, mowing of bank-side vegetation and structural inspection, repair and replacement of fixed water control assets.

IDBs can also bring forward water level management schemes through the Regional Flood and Coastal Committees, and will work with lead local flood authorities and local communities to shape schemes which respond to local flood risk priorities.

A2.7.1 Emergency Action Planning

During periods of high rainfall and tidal surge events resources are deployed to take action checking sensitive locations, removing restrictions and where possible reducing the risk of flooding to people and residential property, vital community infrastructure, commercial properties, agricultural land and ecologically sensitive sites. IDBs liaise with flood risk management partners on the developing situation within their districts in order that Lead Local Flood Authorities can execute an appropriate level of response. IDB resources will assist where possible in any post-flood remedial and clearance operations and co-operate with partners in undertaking assessment of significant flooding incidents to determine if new works can be undertaken to reduce the effect of future flooding events.

A2.7.2 Development Control

One of the principle services that IDBs provide is consenting works carried out by others in or adjacent to water courses within their operational district. This is done by reasonable application of the Board's Byelaws and the Land Drainage Act 1991, to ensure that any development has regard to secure the efficient working of the drainage system now and in the future and does not cause unnecessary adverse environmental impact as a consequence.

A2.7.3 Planning guidance

Associated with the powers to regulate water level management activities within their operational area, IDBs provide comments to local planning authorities on developments in their district and when asked, make recommendations on measures required to manage flood risk and to provide adequate drainage solutions.

A2.8 Responsibilities of Water Companies

There are two types of water companies working in Somerset. Bristol Water, mainly located in the north east of the county is a water supply company, while Wessex Water and South West Water are water and sewerage undertakers.

A2.8.1 Water Supply Companies

Water supply companies are not Risk Management Authorities and do not have the same obligations to co-operate and be subject to scrutiny by Lead Local Flood Authority committees. However the Reservoirs Act 1975 has been amended to state the following:

- All undertakers with reservoirs over 10,000m³ must register their reservoirs with the Environment Agency as they are subject to regulation
- All undertakers must prepare a reservoir flood plan
- All incidents at reservoirs must be reported

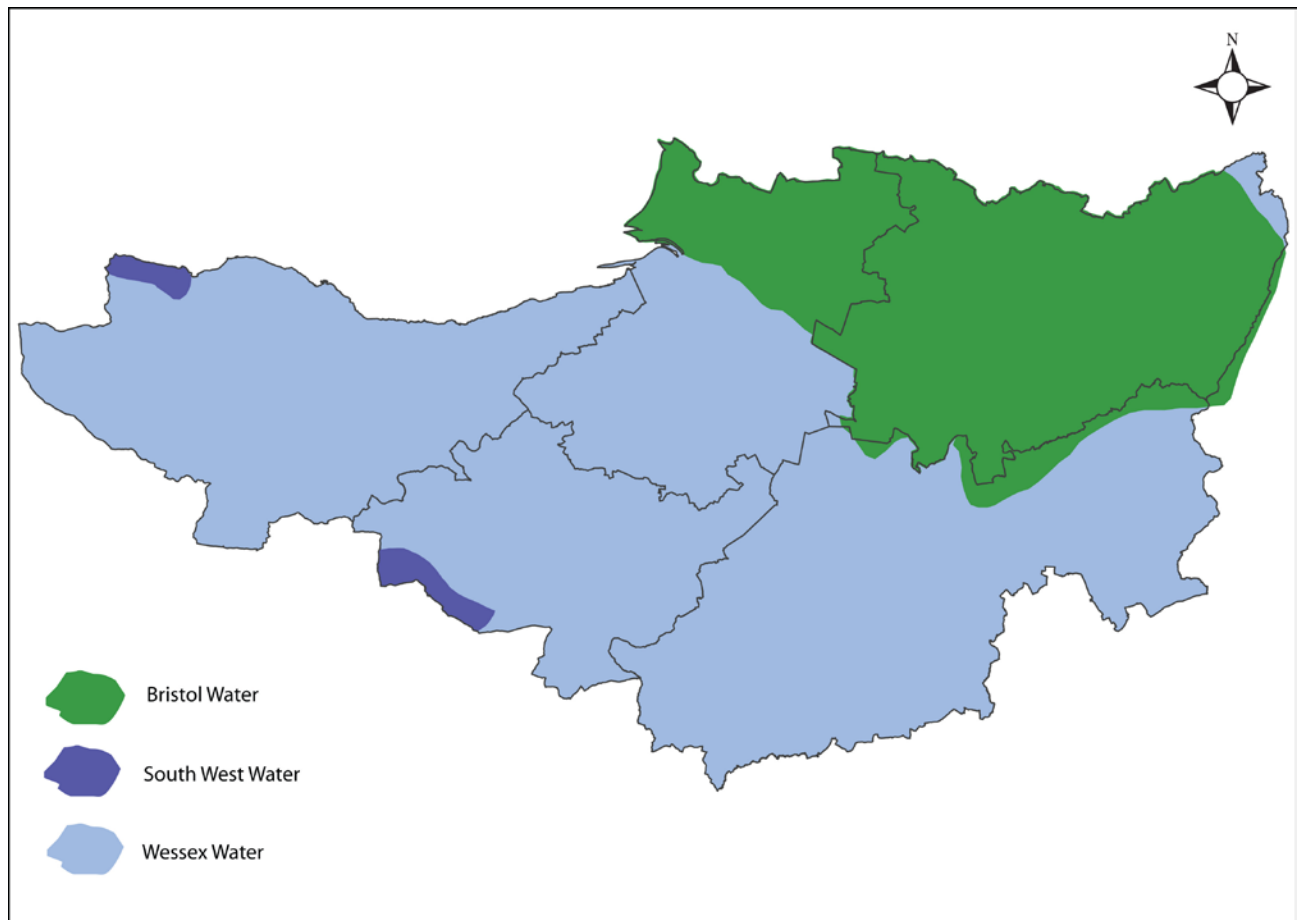


Figure 2-4 Water Supply Companies in Somerset

A2.8.2 Water and Sewerage Companies

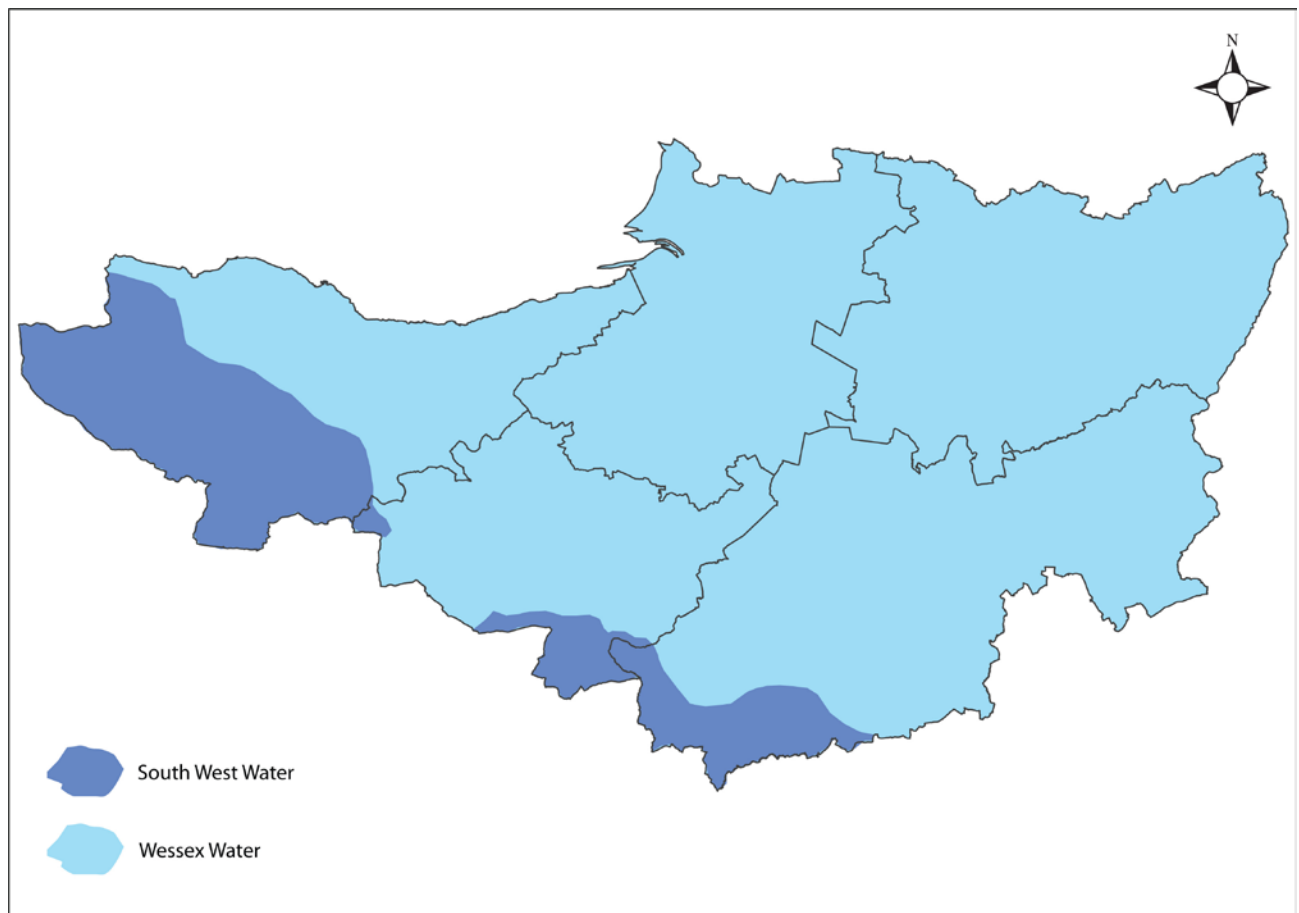


Figure 2-5 Sewerage Company Areas in Somerset

The water industry is highly regulated and the quality of customer service and the prices they are able to charge their customers are regulated by Ofwat, the Water Services Regulation Authority. The water industry operates on five-yearly cycles called Asset Management Plan (AMP) periods. Prices are set by Ofwat at the beginning of each period, following submissions from each company about what it will cost to deliver their business plans.

A2.8.3 Flood Risk Management

Water and sewage companies have the following responsibilities around flood risk management:

- Respond to flooding incidents involving their assets.
- Produce reports of the flood incidents.
- Maintenance of a register of properties at risk of flooding due to a hydraulic overload in the sewerage network (DG5 register).
- Undertake capacity improvements to alleviate sewer flooding problems on the DG5 register.
- Provide, maintain and operate systems of public sewers and works for the purpose of effectually draining an area.

- Have a duty to co-operate with other relevant authorities in the exercise of their flood and coastal erosion risk management functions.
- Must have a regard to national and local flood and coastal erosion risk management strategies.
- May be subject to scrutiny from local flood authorities' democratic processes.
- Have a duty for the adoption of private sewers.
- Statutory consultee to the SAB when the drainage system is proposed to communicate with the public sewer.

A2.8.4 Reducing sewer flooding

Water and Sewerage Companies are responsible for flooding from their foul and surface water sewers, and from burst water mains.

Incidents of sewer flooding are recorded on the DG5 Register. The DG5 register is a register of properties and areas that have suffered or are likely to suffer flooding from public foul, combined or surface water sewers due to overloading of the sewerage system. Investment in the alleviation of sewer flooding is closely allied to the DG5 register. Priority is given to frequent internal flooding problems where a cost beneficial and sustainable solution is available.

A2.8.5 System of public sewers and works

An essential flood risk management duty is defined under Section 94 of the Water Industry Act 1991, which states that Water and Sewerage Companies have a duty to provide, maintain and operate systems of public sewers and works for the purpose of effectually draining our area. They also have a duty under the same Act relating to premises for 'domestic sewerage purposes'. In terms of wastewater this is taken to mean the ordinary contents of lavatories and water which has been used for bathing, washing and cooking purposes and for surface water the removal from yards and roofs.

Once the relevant section of the Flood and Water Management Act is commenced, a connection to a public sewer will be permitted only after the drainage strategy associated with a new development is approved by the SuDS Approving Body (to which the Water and Sewerage Company will be a statutory consultee). Water and Sewerage Companies will also have to accept any surface water from publicly maintained road. This will only apply to surface water; the 'right to connect' will still apply to foul water.

A2.9 Other Flood Risk Stakeholders

A2.9.1 Utility and Infrastructure Providers

Utility and infrastructure providers such as Network Rail, energy companies and telecommunication companies are not risk management authorities. However they have a crucial role to play in flood risk management as their assets can be important consideration in planning for flooding. Moreover they may have assets such as culverts, information about which needs to be

shared with flood risk management authorities. They already maintain plans for the future development and maintenance of the services they provide and it is important that they factor in flood risk management issues into this planning process.

This will ensure that their assets and systems are resilient to flood and coastal risks and that the required level of service can be maintained in the event of an incident. Utility and infrastructure providers may wish to invest time and resources into developing and delivering the local flood risk management strategy, to realise the significant benefits for them and their customers that follow from flood risks being effectively managed.

A2.9.2 Riparian Owners

Landowners, householders and businesses whose property is adjacent to a river or stream or ditch are likely to be riparian owners with responsibilities. If a property backs out onto a river or stream then the property owner is likely to be a riparian owner, owning the land up to the centre of the watercourse. The Land Registry details should confirm this.

Landowners, householders and businesses who have surface water culverts or private surface water sewers within their land have a responsibility to maintain these structures and carry the water arriving at their boundary across their land without hindrance. Culverts and sewers have to be maintained free of obstructions at all times

Riparian owners have a right to protect their property from flooding and erosion but in most case will need to discuss the method of doing this with the Environment Agency. They also have responsibility for maintaining the bed and banks of the watercourse and ensuring there is no obstruction, diversion or pollution to the flow of the watercourse. Full details can be found in the EA document '[Living on the edge](#)'

<http://publications.environment-agency.gov.uk/dispay.php?name=GEHO0407BMFL-E-E>

A2.9.3 Parish and Town Councils and Communities

Flooding events can affect whole communities with households which do not suffer from internal flooding still potentially being trapped as roads are blocked or having to help support and provide shelter to neighbours who have suffered from flooding.

Communities know better than anyone the level of flood risk that they face and can make important contributions to helping manage the levels of flood risk.

District and County Councillors have a key role in helping the Parish Councils and communities understand their role and ensuring affected communities are properly represented in discussions about local activities.

A2.9.3.1 Reporting flood incidents

Officers from risk management authorities are not in a position to know about every flooding incident that occurs, particularly those which do not lead to flooding within properties. However, records of flooding incidents which

affected roads or entered the curtilage of people's properties are important to record. They can indicate that there has been extensive flooding in relatively regular rainfall events which would warn that the properties are at risk in more extreme rainfall events. This information is crucial in building up cases for flood defence and flood resilience schemes which will require strong evidence of the flood risk to properties.

Parish Councils and community groups in areas which suffer from local flooding (i.e. surface runoff, groundwater and ordinary watercourses) should contact the County Council to discuss how best they should record and report flooding incidents when they occur. Incidents can be reported via flooding@somerset.gov.uk. Flooding incidents caused by main rivers or the coast should be reported to the Environment Agency through their emergency floodline 0800 807060.

A2.9.3.2 Parish Council Emergency Self-Help Plans

If a parish is at risk from flooding it is advisable to create an Emergency Plan which details who can be contacted to lead and assist in an emergency, what equipment is available and the location of premises that can be used as emergency accommodation. Assistance is available from the Environment Agency or CCU.

A2.9.3.3 Raising funding and skills for flood resilience and flood defence measures

As is explained in greater detail in Chapter 6 on funding, most flood defence and flood resilience projects, particularly in small communities, will require some local funding to supplement that provided by national government and the Lead Local Flood Authority if the project is to go ahead.

Parish Councils can look to raise funds through council tax precept or through other local commitments to raise the funds. They can also look to see in what way local residents can contribute to ensure that the price of work is kept low, and hence residents have to pay less. This could be done by enlisting residents who have specialist skills or landowners/residents with the equipment to do some of the work, such as clearing ditches. Parish Councils will be invited to become involved in any local flood risk management activity as appropriate.

A2.9.4 Property Owners and Residents

It is the responsibility of householders and businesses to look after their property, including protecting it from flooding. While in some circumstances other organisations or property owners may be liable due to neglect of their own responsibilities, there will be many occasions when flooding occurs despite all parties meeting their responsibilities. Consequently it is important that householders, whose homes are at risk of flooding, take steps to ensure that their house is protected.

These steps include to:

- check whether their household is at risk from flooding from the river, coast or local flood sources
- ensure that preparations have been made in case of a flood

- take measures to ensure that their house is protected from flooding, either through permanent measures such as sealants in the wall or temporary measures such as flood guards
- take measures to make sure the house is resilient to flooding so that if it does occur it does not cause too much damage
- where possible, take out flood insurance.

Information on whether households are at risk can be provided by the Environment Agency and Somerset County Council.

All households in Flood Zones 2 and 3 (areas at risk from coastal or main river flooding) should have been contacted notifying them of this and, unless they have chosen to opt-out, will receive flood warnings from the Environment Agency when the risk of river or coastal flooding is high. Information can also be found on the Environment Agency website: <http://www.environment-agency.gov.uk/homeandleisure/floods/31650.aspx>.

Information about surface water flood risk is not yet publicly available and is much harder to map but some information can be found in the Somerset Preliminary Flood Risk Assessment. If there are concerns, residents can contact the Flood Risk Management team flooding@somerset.gov.uk who can advise on what information there is.

The Environment Agency provides information on what to do to prepare a household for emergencies. This includes how to make a flood plan which will help you decide what practical actions to take before and after a flood.

See <http://www.environment-agency.gov.uk/homeandleisure/floods/38329.aspx>

The Environment Agency has also developed a pamphlet which provides advice on how to make your house more resilient.

See <http://www.environment-agency.gov.uk/homeandleisure/floods/31644.aspx>

Another valuable document for householders to refer to is The National Flood Forum's Blue Pages Directory which provides information and advice on what products are available to help protect homes or businesses against flooding.

A3 Funding

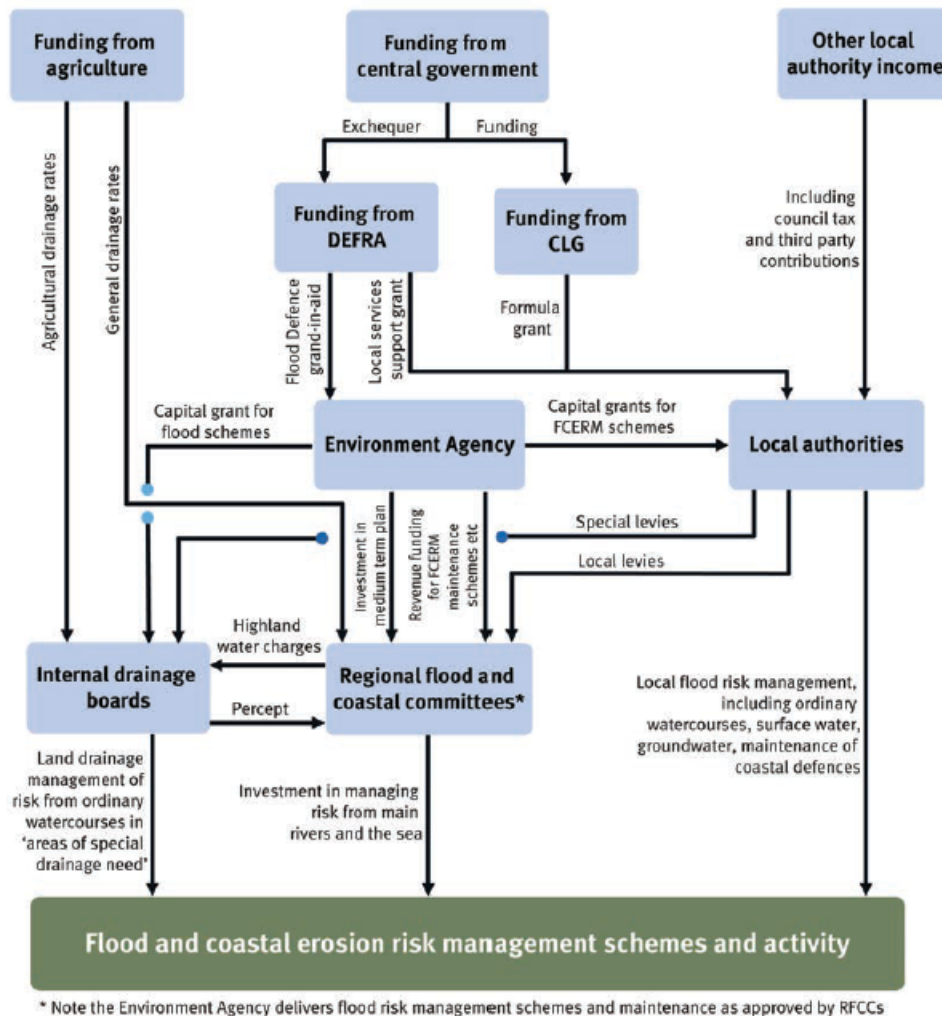
Effective practical implementation of flood policy objectives requires adequate resources both for the management and response activities of lead local flood authorities as well as for capital projects. The following chapter provides a summary of available forms of funding that will be considered and the most appropriate option selected on a case by case basis.

Somerset County Council will take the lead partner role for surface/local flood risk and will:

- Identify and plan projects;
- Establish funds required;
- Outline responsibilities; and
- Present to Regional Flood Defence Committee.

Working through the Somerset Strategic Flood Management Partnership the partners will endeavour to ensure a balanced programme of flood and coastal risk management projects covering all sources of flooding and coastal erosion. The partnerships will also need to work closely to seek and deliver external sources of funding.

The figure below illustrates the funding streams available for the delivery of flood and coastal erosion risk management activity



A3.1 Public Funding

Government, through national taxation, is the primary funder of risk management activity, with the majority of funds within the system provided by Defra to the Environment Agency as Flood Defence Grant-in-Aid. The benefits and costs of managing risks are appraised using guidelines based on the HM Treasury Green Book. Government funding and resources are prioritised to achieve the greatest reduction in risk possible, either as a result of direct investment or by facilitating wider sources of funding.

A3.1.1 Flood Defence Grant-in-Aid

From April 2012 there has been a transition towards a new system of allocating national capital funding to risk management projects. The arrangements aim to achieve the objectives below, and are designed in accordance with the general principles that follow. The reforms aim to better protect more communities, deliver more benefits, and help avoid deprivation caused by flooding and coastal erosion, by:

- encouraging total investment to increase beyond levels affordable to central Government alone. Additional investment will help offset the

twin long-term challenges of climate change and asset deterioration, whilst moving funding arrangements onto a more sustainable footing.

- enabling more local choice, and encouraging innovative, cost-effective options to come forward in which civil society may play a greater role. Those that live or have an interest in the areas at risk should have a bigger say in what gets done, in return for greater local and private contributions towards the benefits delivered.
- increasing levels of certainty and transparency over the national funding for individual projects whilst prioritising action for those most at risk and least able to protect or insure themselves.

The guiding principles for the national capital allocation system are as follows:

Principle	Rationale and implications
Rather than some projects being fully paid for and others not at all at least some national funding will be on offer to all potential projects over time based on the outcomes and benefits each would deliver	To give every potential project the opportunity of at least some funding support from central Government. Projects that deliver sufficient benefits may be 100% funded by central Government. Projects that deliver less will be offered an amount of funding based on the benefits they achieve, as long as other funding or cost savings can be found to bridge the gap.
Funds from central Government should prioritise protecting those most at risk and least able to help themselves	National funding will always be limited and therefore needs to focus on areas where it can have the greatest impact, including in terms of alleviating the knock-on consequences of flooding such as financial deprivation.
All flood management projects should be treated equally based on the benefits being delivered and damages avoided, regardless of the type of risk or the risk management authority involved	So that all sources of flood risk are valued fairly and given common access to funding from central Government funding levels will be based on a project's relative benefits, allowing trade-offs to be made between tackling different sources of risk, and between community level and property level approaches. This does not change the funding arrangements for work to address sewer flooding and drainage works that water companies are responsible for.
The general taxpayer should not pay to protect new development in areas at risk of flooding, now or in the future	New properties completed, or existing buildings converted into housing, after 1 January 2012 will not have an influence on the allocation of national funding projects. As a result, local responsibilities are reinforced for decisions taken over the nature and location of development.

Greater local input and decision making should not come at the expense of creating a stable, long-term pipeline of projects necessary to exploit potential economies of scale and efficiencies of delivery	Long-term investment planning and creating sufficient certainty of work several years in advance allows risk management authorities and their contractors to deliver projects more cheaply and efficiently. There is a risk that increased local discretion, with some decisions being potentially taken or reviewed annually, may lead to a stop-start project pipeline. Therefore once decisions have been taken at the appropriate local level there should be limited ability to change them.
All investment should be made within a nationally consistent framework, to take account of policies and findings within CFMPs and SMPs, with options adequately appraised in line with HM Treasury guidance	So that approaches being taken are technically sound and sustainable, do not have unforeseen adverse consequences on other areas, and work with natural processes where possible.

Payment for outcomes puts a strong emphasis on the need for external contributions. Somerset County Council will continue to work with key stakeholders including:

- Defra and the Environment Agency;
- District and Borough Councils;
- Water Companies and OFWAT;
- Internal Drainage Boards;
- NGOs;
- Private sector developers;
- Highways Agency; and
- Other infrastructure providers

A3.1.2 Local Levy Funding

Regional Flood and Coastal Committees raise funds by a levy collected through the council tax. The amount of the levy is set each year by the committee and is used to fund a programme of work. Under changes brought about by the Flood and Water management Act, the local levy can now be used to fund surface water and coastal erosion risk management work.

A3.1.3 Community Infrastructure Levy

The Community Infrastructure Levy (CIL) came into force in April 2010 and provides Somerset's councils with an alternative source of potential funding for flood defence schemes. It allows local authorities to raise funds from new development in their area in order to pay for the impact that the development

has on local infrastructure. The levy is based on the concept that almost all development has some impact on infrastructure and services, so it is fair that development should contribute towards the cost of maintaining or upgrading local infrastructure.

Local authorities can use this funding for infrastructure needed to support the development; it can be used to construct new infrastructure, increase the capacity of existing infrastructure or repair failing existing infrastructure. The Planning Act 2008 includes a broad definition of the infrastructure that can be covered by this scheme including transport, flood defences, schools, hospitals and parks.

A3.2 Private funding

A3.2.1 Section 106 funding – Developer Contributions

Section 106 of the Town and Country Planning Act 1990 allows a local planning authority to enter into an agreement with a landowner or developer in association with the granting of planning permission. A Section 106 agreement is used to address issues that are necessary to make a development acceptable, such as supporting the provision of services and infrastructure.

One of the recommendations of 'Making Space for Water' was that local planning authorities should make more use of Section 106 agreements to ensure that there is a strong planning policy to manage flood risk. This means that any flood risk which is caused by, or increased by, new development should be resolved and funded by the developer.

However, after 2014, the regulations restrict the local use of planning obligations for pooled contributions towards items that may be funded via the CIL. The CIL being the government's preferred vehicle for the collection of pooled contributions.

A3.2.2 Local fundraising

In addition to contributions from developers, another important funding mechanism will come from local fundraising from the local communities and businesses who benefit from the proposed flood defence schemes.

Where FDGiA, local levy, developer contributions and the promoting authority's own funds are insufficient to fund flood risk management work, contributions will be sought from the local community.

A3.3 Other possible sources of funding

All possible sources of funding will be pursued as they become available, including European funding. SCC has been successful in bidding for European funding for projects and two recent examples relating to flood risk management are the WAVE project, working with partners to address the challenge of climate change and water management in the county and Flood Aware, looking at effective ways of raising the public's awareness of their flood risk and increasing their preparedness for flooding.

A4 Property-Level Flood Protection

Even with the collective efforts of the flood partnership it will never be possible to prevent flooding entirely. The availability of funding, technical constraints and the increased likelihood of flooding due to climate change mean that building defences to protect every property is not feasible. However, the effects of flooding can be mitigated and the resilience of individuals and communities can be improved through measures that minimise damage and reduce the time taken to recover after an event.

Property Level Flood Protection measures are one way in which resilience can be increased by minimising the water that is able to enter homes and business premises. This approach uses a variety of products designed to prevent the ingress of water to buildings.

The types of measures that can be used include:

- Flood resistant barriers for doors and windows
- Air brick covers
- Non-return valves on pipes
- Pump and sump systems to extract flood water
- Raising of thresholds
- Low bunds and walls
- Outside wall renders and water resistant facing
- Raising electrical sockets and white goods out of flood levels

The market for these products is expanding and the range of products available is increasing. Many of these products have been awarded accreditation against the British Standard for flood protection. Consequently these measures offer significant value for money for the level of investment required, providing many times their worth in flood protection.

The Pitt Review on lessons learned from the 2007 floods has recommended that the Government do more to promote these measures, both for new build and existing properties in flood risk areas. The flood risk management partnership for Somerset considers these products to be of particular use to homeowners whose properties flood on a regular basis and have traditionally relied on measures such as sandbags to minimise damage.

Experience has shown that there is some resistance to the installation of these types of measures, even where there is no cost to the homeowner. These concerns often stem from fears of being branded as living in a flood risk area and the associated adverse effects on property sales and insurance. One of the challenges to encourage uptake of these schemes is to demonstrate the benefits of increased flood awareness and preparation.

Where property protection products are to be installed a specialist survey of the property is required to identify all potential routes that water may enter the

building during a flood so that a suitable package of products can be developed to cover all entry points.

Some of these measures require deployment when flooding may be expected to occur (temporary flood barriers, air brick covers, etc) while others are passive and self activating with rising water levels (automatic flood barriers, non-return valves, etc). The types of products selected will vary according to individual circumstance and preference.

Many communities have established flood action groups and the deployment of property protection measures can be included in their local flood action plan. Because many of the products are temporary there needs to be a clear framework in place to determine a trigger for their deployment and by whom. While this will generally be the homeowner it is important that periods when the home is unoccupied are also covered (for example holidays) or where the homeowner is elderly or disabled and cannot install the measures themselves.

A list of candidate schemes is being developed and maintained by the Environment Agency and Flood Risk Management team of the County Council. Information on suitable locations and supporting evidence is being collated to investigate funding possibilities for these schemes.

Communities interested in pursuing schemes in their areas are encouraged to contact the Lead Local Flood Authority to discuss what help may be available and for further information on the work programme.

Objectives

- We will promote property protection measures as a tool in flood risk management.
- We will assist individuals and communities in flood risk areas to develop their own property protection schemes. This includes offering advice on establishing flood action groups and flood plans to ensure best use of the protection products.
- We will work with our flood risk management partners to identify sources of funding for high priority schemes.
- Working with our partners, we will be involved in the delivery of high priority schemes.
- We will contribute to the national debate with flood insurers for these products to be fully recognised when offering flood insurance and determining premiums.

Case study

Between 2009 and 2011 Defra offered funding through a property level flood protection grant scheme to promote the use of property flood protection products. By the close of the two year programme £5 million had been allocated to local authorities who delivered property-level flood protection to over 1,000 households in over 60 communities across England. Somerset

County Council secured funding to deliver two schemes, including for the parish of Pitcombe.

Pitcombe is a small village approximately 1 mile from Bruton in the southern district of Somerset. Pitcombe has experienced a number of flood events, most notably in December 2008 when a number of properties in Pitcombe and Cole were flooded.

To raise local awareness of the flood risk in Pitcombe residents have established a very proactive Community Flood Action Group (CFAG). Through the CFAG residents have undertaken a number of projects including;

- the development of a website (<http://www.cafg.org.uk/>);
- local river clearance days, and;
- the funding of a consultant to produce a hydraulic model and report on the river from Pitcombe Bridge to Cole Bridge. This sets out the flood risk and suggests measures of varying scale to alleviate the impacts.

Against this backdrop Somerset County Council offered its assistance to prepare and manage a bid for property-level flood protection measures.

Defra funding was awarded through a competitive bidding process to provide property level flood protection products to 10 homes in Pitcombe and Cole, Somerset. The scheme involved:

- With the property owners' agreement, conducting a specialist survey to identify the best solutions for improving each property's resilience to flooding.
- Once agreed, works were then carried out including, for example, the installation of specially designed air bricks, flood protection for doors & windows, fitting non return valves on drains and pipes, and other improvements to reduce the impact of flooding.
- Engagement both with individual homeowners and the community was one of the fundamental principles behind the scheme.

Feedback following completion of the works was extremely positive with 100% of residents surveyed rating the management and delivery of the scheme as Good or Excellent and 100% being Satisfied or Very Satisfied with the completed scheme.

"This project has been a long-running success and has seen a great deal of co-operation across the public sector and from the villagers themselves. We now have a complete package of protection and preventative works in place in Pitcombe which will reduce the likelihood of flooding of these homes."

David Hall Cabinet Member responsible for flood protection

"The Council, as far as I am concerned, can be congratulated on the way they responded to our Community Action Flood Group"

"An organised group has a much better chance of success for funding than individual response. Being prepared to be proactive as a group (eg river maintenance) and having workable ideas for flood mitigation will also improve chance of success"

Flood Action Group Spokesperson

