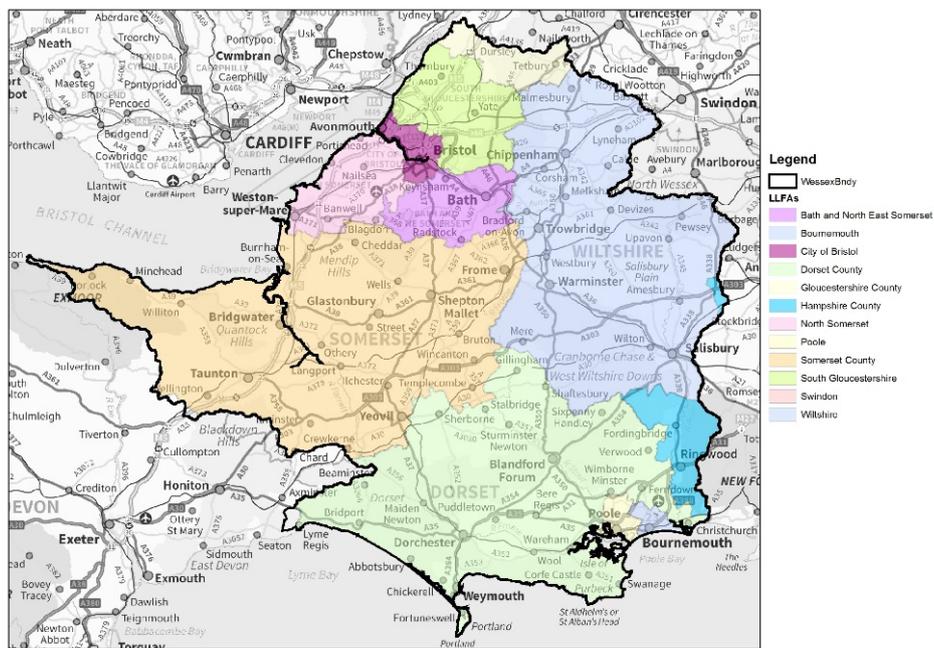


Wessex Regional Flood and Coastal Committee Strategy for 2017-2021 and beyond



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Foreword

Flooding and coastal erosion can have a devastating effect on people, communities, and our environment. Managing the risks is everyone's business.

The Wessex Regional Flood and Coastal Committee brings together representatives of each of the county and unitary councils in our area and also members with special and relevant experience appointed by the Environment Agency, to work together to reduce the risk of flooding to people in Wessex and to protect our very special coastline.

This strategy sets out for the first time in one place our understanding of the nature of flood and coastal erosion risks in Wessex, and how we intend to address them.

We will undoubtedly learn with experience, and the Committee intend to review the strategy every two years.

We are most grateful for the commitment and contributions of all members of the Committee, and of officers of the Environment Agency and of local authorities, in putting the strategy together. We regard it as a very important document to guide the Committee's work. We hope that others will find it useful too.

David Jenkins
Chair Wessex Regional Flood
and Coastal Committee

Nick Gupta
Wessex Area Director
Environment Agency

1.0 Introduction

In 2013/14 Wessex experienced a major flooding event that resulted in long-lasting flooding on the Somerset Levels and Moors, extensive damage to coastal defences along the Dorset coast and more than 1000 properties suffering groundwater flooding across Dorset and Wiltshire.

This and other recent major incidents across the country including the 2015/16 floods across Cumbria and Yorkshire and the East Coast surge in 2013 show the devastating impact flooding and coastal erosion can have on communities.

This Strategy provides a framework for all those who have an interest in flood and coastal erosion risk management to work together to do all that we can to reduce flood risk as much as possible.

This Strategy describes:

- The nature of flood and coastal erosion risk across Wessex;
- Who is responsible for managing flood risk;
- The role of the Wessex Regional Flood and Coastal Committee (RFCC);
- The Committee's Strategy for managing the risk;
- How the Committee plan to deliver the strategy.

It is, however, impossible to prevent all flooding. The extreme events of recent years and predictions of more intense rain and storminess associated with climate change mean that in some locations flood risk will increase.

An important part of the Strategy is therefore to ensure that homeowners and businesses take responsibility for understanding their flood and coastal erosion risk and take action to make themselves more resilient to flooding. Community engagement and flood warning will therefore be important components of the Strategy.

2.0 Wessex RFCC Area context

Wessex is a very diverse geographical area which forms the eastern part of the South West Peninsula. Its coastlines are very different and its wide range of drainage basins and rivers mean that it is subject to coastal, fluvial, surface water and groundwater flooding. Multiple causes of flooding affect many locations in both urban and rural areas.

Some of the notable features of the coast include:

- The Dorset part of the Dorset and East Devon World Heritage site (known as the "Jurassic Coast") between Lyme Regis and Studland. The site has an outstanding combination of globally significant geological and geomorphological features, including rock formations which display 185 million years of the Earth's history, globally significant fossil sites and textbook examples of more recent coastal landforms and processes, including Black Ven landslide, Chesil Beach, Durdle Door and Lulworth Cove. Although the coast has a low tidal range, erosion is active along most of its length. Many of

its pebble and sand beaches act as important natural flood and erosion defences, as well as a range of engineered defences;

- Poole Harbour and Christchurch Harbour to the east of the Jurassic Coast;
- In complete contrast the north coast has a very large tidal range of 13 metres, which is the second highest tidal range in the world. There is also a tidal funnelling effect as the tide progresses up the Bristol Channel and Severn Estuary. There is a lowland coastal ridge protecting much of lowland Somerset along with an extensive network of engineered defences along the length of the north coast.

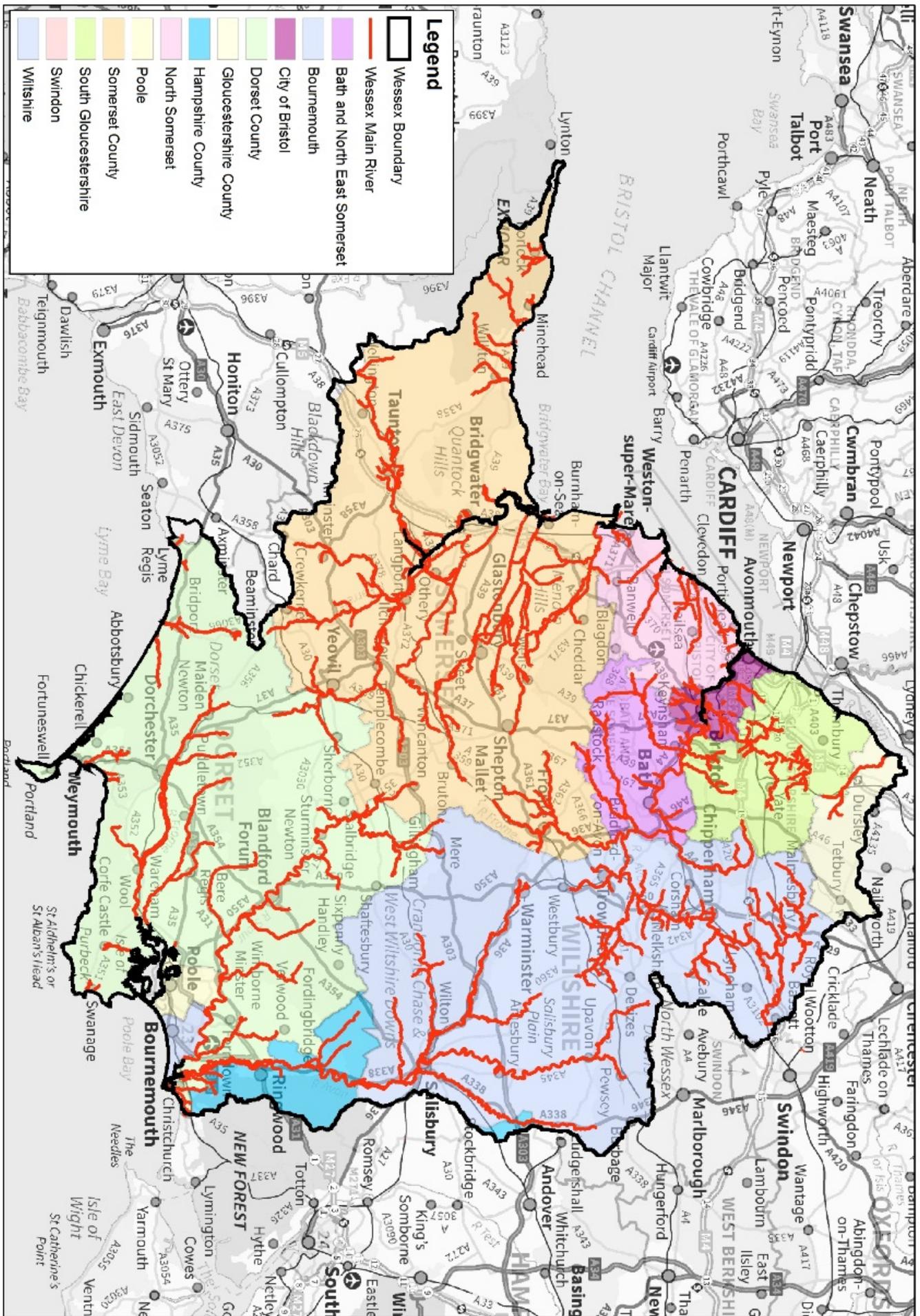
Some of the notable inland features include:

- Chalk Rivers in Dorset and Wiltshire which are predominantly fed by groundwater from underlying aquifers. This results in a unique hydrology whereby rivers don't respond rapidly to rainfall, but after prolonged periods of rain when the aquifers are fully charged long duration flooding can result. Chalk Rivers provide a unique habitat for many species and some rivers including the Hampshire Avon and River Frome (Dorset) are designated for their nature conservation importance;
- In contrast there are a number of small steep-sided catchments where the rivers are very 'flashy' and respond rapidly to intense rainfall. Once the rain stops, flood levels and flows subside equally quickly. Steep-sided urban catchments also behave in a similar way;
- Other larger river systems including the Bristol Avon and River Stour (Dorset) are surface fed rivers that respond to rainfall in a more 'textbook fashion'
- The Somerset Levels and Moors is a lowland area where much of the land is below sea level and within the flood plains of the Rivers Parrett, Brue and Axe. There are complex arrangements in place for water management including the drainage of land for agriculture and removing flood water by pumping it back into the rivers (once there is capacity to do so). The rivers are also influenced by high tides and if these coincide with high river flows then 'tide locking' can occur. This is a phenomenon where high tide levels prevent the river flows discharging into Bridgwater Bay.

The natural environment in Wessex is very special with a diverse range of habitats supporting a varied biodiversity. There are many sites that are designated locally, nationally (including 489 Sites of Special Scientific Interest (SSSIs) covering 8% of Wessex) and internationally (37 Special Areas of Conservation (SACs) and 10 Special Protection Areas (SPAs)).

The marine environment is equally special and 28% (approximately 300 km²) of its coastal waters are in marine protected areas (Marine Conservation Zone, SAC, SPA or SSSI).

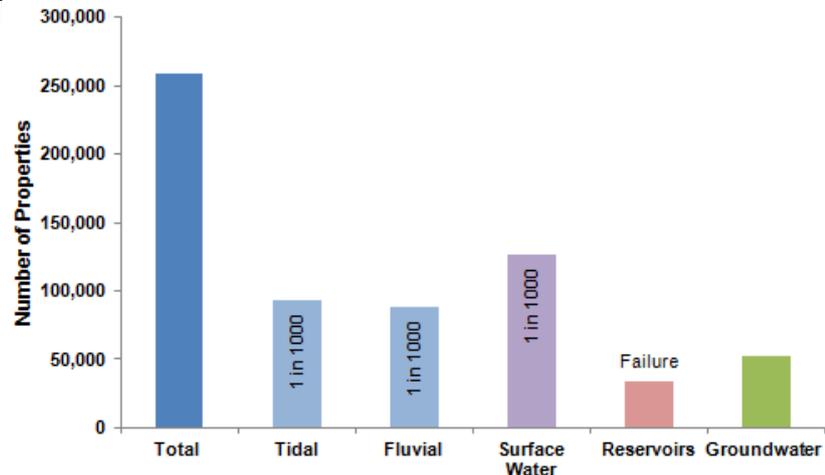
Those undertaking work to reduce or manage flood and erosion risk need to be mindful of not damaging the environment and seeking to improve it wherever possible.



3.0 Flood and Coastal Erosion Risk in Wessex

3.1 Flood Risk

There are a number of national data sets and mapping tools which are used to map the risk of flooding from rivers, sea, surface water and groundwater sources. These show that there are approximately 250,000 properties at risk of flooding in Wessex from a variety of sources. The diagram below provides a breakdown of properties at risk by source of flooding



Tidal and Fluvial stats (NaFRA 2013) 1000 year. Surface water (urmsw) 1000 year. Reservoirs (Reservoir Risk Mapping) 2010: Groundwater (Vulnerability / LiDAR) 2014.

There is also flood risk to important infrastructure including major roads, rail lines, water and sewage pumping stations/ treatment works, gas, electricity and communication services.

There are currently 284 Flood Warning Areas in Wessex providing warnings to 80% of properties at risk. The current level of public take up of this service is 65%. By 2020 the aim is to increase coverage to all properties in Flood Zone 2.

3.2 Coastal Erosion Risk in Wessex

[The National Coastal Erosion Mapping \(NCERM\) maps](#) have been developed for the coastline of England and were first published in 2011. Taking account of 2009 UK climate projections on climate change (including sea level rise) the erosion risk maps predict where the coastline will be in the next 20, 50 and 100 years. These time intervals match with those in Shoreline Management Plans (SMPs) and are used by Local Planning Authorities to assist in decision making on the coast.

The NCERM data indicates that without further investment

- 9100 properties on the Dorset coast would be lost to erosion by 2110 (compared to 4400 properties at coastal flood risk)
- 170 properties on the North Wessex Coast would be lost to erosion by 2110 (compared to 74,000 properties at coastal flood risk).

4.0 Climate Change

Climate change is one of the greatest threats to people and the environment. It will have far-reaching effects on economies and societies and will have major impacts on people, habitats and species. We have major responsibilities for limiting and

adapting to climate change. We will use our existing mapping products to inform our decision making. As a result of climate change we expect:

- Inland flood risk to increase throughout the century as climate change influences rainfall patterns;
- Significantly more rain to fall in winter and more of it to fall in short and heavy bursts. Heavier downpours are also likely in the summer;
- Sea level rise and increased storminess to increase coastal flooding and erosion, and changes in rainfall to have an impact on cliff stability;
- Increased flooding and coastal erosion to affect people, properties, infrastructure and the environment.



River Frome: Woodsford River Restoration Project (Dec 2009)

In adapting to climate change we will:

- Take a flexible approach in the development of flood risk management approaches including new defences and the maintenance of existing ones to help us address uncertainties about the effects of climate change;
- Use the latest set of climate projections to inform new modelling to understand how river flows may change and to improve our understanding of the processes that influence coastal erosion and coastal flooding;
- Continue to advise against inappropriate developments in areas at risk of flooding now and in the future (the National Planning Policy Framework sets out a strong policy to protect people and property from flooding and it is important that this is robustly implemented);
- Help our professional partners understand their risks of flooding and coastal erosion, using Flood Risk Management Plans and Shoreline Management Plans to coordinate the plans they are developing;
- Invest to reduce increased flood and coastal erosion risk and where it is not cost effective to do so develop plans to manage residual flood and coastal erosion risk;

- Continue to work with natural processes to tackle flood and coastal erosion risk where it is appropriate and cost effective to do so;
- Create new coastal habitats to compensate for those lost as a result of sea level rise associated with man-made structures.



5.0 Managing the risks: who does what?

The Department for Environment, Food and Rural Affairs (Defra) has overall national responsibility for policy on flood and coastal erosion risk management. It provides Grant in Aid (GiA) funding (administered by the Environment Agency) for risk management authorities including the Environment Agency, local authorities and internal drainage boards.

The term “flood risk management” is used to describe the work of flood risk management authorities (RMAs) such as the Environment Agency, Local Authorities, Internal Drainage Boards (IDBs) and Water and Sewerage Companies. They aim to reduce the likelihood of flooding by:

- Managing flood risk from all sources including river and coastal systems, surface runoff and groundwater;
- Constructing and managing defences, where appropriate
- Maintaining watercourses and flood defences where appropriate.

They work together to reduce the impacts of floods through:

- Influencing what is built where through land use planning;
- Regulating works carried out in rivers;
- Better flood warning
- Faster emergency response.

Under the [Flood and Water Management Act 2010](#), all RMAs have a duty to co-operate with each other and to share information.

Public Sector Co-operation Agreements (PSCAs) are a good example of RMAs working together. They exist between public authorities for the delivery of public tasks of mutual benefit, and therefore are not subject to the regulations that require work to be tendered. PSCAs provide flexible arrangements for an IDB or other RMAs and the Environment Agency to deliver maintenance works and incident response.

The Department of Communities and Local Government (DCLG) and Local Planning Authorities have a key role to ensure flood risk is appropriately taken into account in the planning process. The policy on how to take flood risk into account can be found in the [National Planning Policy Framework](#). DCLG are also responsible for Building Regulations.

The responsibilities of RMAs and others are summarised below.

5.1 The Environment Agency

The Environment Agency is responsible for taking a strategic overview of the management of all sources of flooding and coastal erosion.

As part of its strategic overview role, the Environment Agency has published a National Flood and Coastal Erosion Risk Management Strategy for England. The Strategy describes what is required to be done by all risk management authorities to reduce the risk of flooding and coastal erosion and to manage its consequences.

The Environment Agency also has operational responsibility for managing the risk of flooding from main rivers, reservoirs, estuaries and the sea, as well as being a coastal erosion risk management authority.

5.2 Lead Local Flood Authorities (LLFAs)

Lead Local Flood Authorities (unitary authorities and county councils) are responsible for developing, maintaining and applying strategies for local flood risk management in their areas and for maintaining registers of their flood risk assets. They also have an operational role as the lead authorities with responsibility for managing the risk of flooding from surface water, groundwater and ordinary watercourses.

From 6 April 2015 LLFAs have taken over the role of statutory consultee for all major planning applications with surface water implications in all flood zones.

5.3 District Councils

District Councils are key partners in planning local flood risk management and can carry out flood risk management works on ordinary watercourses, working with Lead Local Flood Authorities and others in their area to ensure that risks are effectively managed.

District Councils are also local planning authorities and have a key role to ensure that flood risk is appropriately taken into account when making decisions on planning applications.

District and Unitary Councils in coastal areas are also the coastal erosion risk management authorities (Maritime Districts under the Coast Protection Act 1949).

5.4 Internal Drainage Boards

Internal Drainage Boards (IDBs) are an integral part of water level management, for flood risk, land drainage and the environment in the UK. Each IDB is a local independent public authority established in areas of special drainage need in England and Wales.

They have operational responsibilities and play an important role in the areas they cover (approximately 10% of England at present), working in partnership with other authorities to undertake works to manage water levels to meet local needs. They have permissive powers to manage water levels within their respective drainage districts.

5.5 Highway Authorities

Highway Authorities are responsible for providing and managing highway drainage and must ensure that road projects do not increase flood risk.

5.6 Water and Sewerage Companies

Water and Sewerage Companies (WaSCs) are responsible for managing the risks of flooding from water and foul or combined sewer systems and providing drainage from buildings and yards.

5.7 Somerset Rivers Authority

Somerset Rivers Authority (SRA) is a partnership between 11 of Somerset's existing organisations with a role in flood risk management. It includes Somerset County Council, 5 District Councils, the Axe Brue and Parrett IDBs, the Environment Agency, Natural England and Wessex RFCC.

The SRA's purpose is to provide a higher standard of flood risk management than is affordable from the individual budgets of RMAs. The SRA raises extra money to deliver extra work. Schemes are prioritised for SRA funding on the basis of Somerset's 20 Year Flood Action Plan, which was developed in response to the floods of winter 2013/14.

The SRA also provides information to the public and across the partnership, about all flood risk management in Somerset.

5.8 Riparian owners

Flooding to homes and business can occur even when all the RMAs have met their obligations. It is also the responsibility of the householder or business to look after their property including protecting it from flooding whilst not increasing flood risk elsewhere.

Furthermore if a householder or business has a watercourse within, under or bordering their property curtilage they are deemed a riparian owner and subject to further responsibilities. These are described in [Living on the Edge – A guide to your rights and responsibilities of river ownership](#).

6.0 Purpose of Wessex RFCC

Wessex Regional Flood and Coastal Committee (RFCC) is one of 12 committees nationally that help to deliver the Government's commitment to reduce the risk of flooding and where relevant to protect the coastline from coastal erosion across England.

The RFCCs were established by the Environment Agency under the Flood and Water Management Act 2010. They bring together a majority of members appointed by Lead Local Flood Authorities (LLFAs) and members appointed by the Environment Agency including at least one member with environmental expertise and at least one with coastal expertise. Local democratic input is provided by the majority of members representing LLFAs.

The Wessex RFCC has 21 members comprising a Chair appointed by the Secretary of State, 11 members representing the LLFAs in Wessex and 9 members appointed by the Environment Agency. A list of current members is included at Appendix 3

The role of RFCCs is fully described in the Regional Flood and Coastal Committees Members' Handbook. The main purposes of the Committee are:

- 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 decisions in flood and coastal erosion risk management that optimise value for money and benefits for local communities;
- To provide a link between the Environment Agency, LLFAs, other RMAs and other relevant bodies to engender mutual understanding of flood and coastal erosion risks in its area.

The RFCC advises on and gives consent to the Environment Agency's flood and coastal erosion risk management (FCERM) investment programmes making sure that investment is coordinated and takes account of local priorities and climate change impacts. The committee also supports the raising of Local Levies and uses them to promote flood and coastal erosion risk management activities in their Area.

The RFCC has an important role to support the delivery of the Government's flood and coastal erosion risk management policy and the [National FCERM Strategy](#), taking into account Defra and Environment Agency guidance.

Managing flood risk involves partnership working. All RMAs have arrangements in place that bring interested parties and local communities together and RFCC members play a key role in working with and supporting these partnerships. A good example of partnership working is the Somerset Rivers Authority (SRA).

6.1 Developing the Wessex RFCC's Strategy

During the last 12-18 months it has become clear that a Strategy that sets out what the Wessex RFCC wants to achieve over the next few years would provide a framework for all interested parties to work together on a common set of objectives. A Strategy will provide clarity and focus and assist with the targeting of resources.

All members of the Wessex RFCC have been involved in the development of the Strategy through a series of discussions and workshops.

7.0 The Strategy

Vision Increasing the resilience of people, property, infrastructure and businesses in Wessex to the risks of flooding and coastal erosion working ideally with an integrated and sustainable approach.

The Strategy Objectives are:

1. That all those with a responsibility for, or interest in, flooding and coastal erosion risk in Wessex have a clear understanding of the current and future flood and coastal erosion risks and how they may be managed now and into the future.
2. That there is current understandable robust evidence supporting the evaluation of the flood and coast erosion risk.
3. That Risk Management Authorities have appropriate and up-to-date plans in place to address the risk (including incident response) that are part of their corporate plans.
4. That there are ambitious investment plans with a strong pipeline of projects to reduce the flood and coast erosion risk that seek to maximise any funding and partnership opportunities.
5. That opportunities are used to improve the environment and use natural processes to reduce flood and coast erosion risk where appropriate.
6. That communities and businesses are fully engaged by all Risk Management Authorities in understanding their flood risk and take action to reduce or manage the risk.

7.1 Delivering the Strategy

For each of the objectives a working group involving Environment Agency officers and Committee members has identified the work necessary to deliver each objective and are included in Appendix 1.

The successful delivery of the Strategy is underpinned by two cross-cutting objectives (objectives 2 and 6) relating to evidence and engagement. The achievement of all elements of the Strategy will only be possible if the Committee and RMAs have access to the right information at the right time. Having the right information will count for nothing however unless we share it with the many and varied audiences in a meaningful and engaging way.

The overall vision will only be achieved if everyone understands the flood and coastal erosion risk across Wessex and works in partnership to address shared priorities.

The successful delivery of the Strategy will require:

- The effective targeting and prioritisation of available resources and funding. This is being achieved by identifying Priority Places where there is significant risk to large numbers of properties. These have been identified by considering a combination of existing and future flood risk, political and community interest and the potential opportunity to address the issue (often linked to regeneration) and are detailed in the Table below

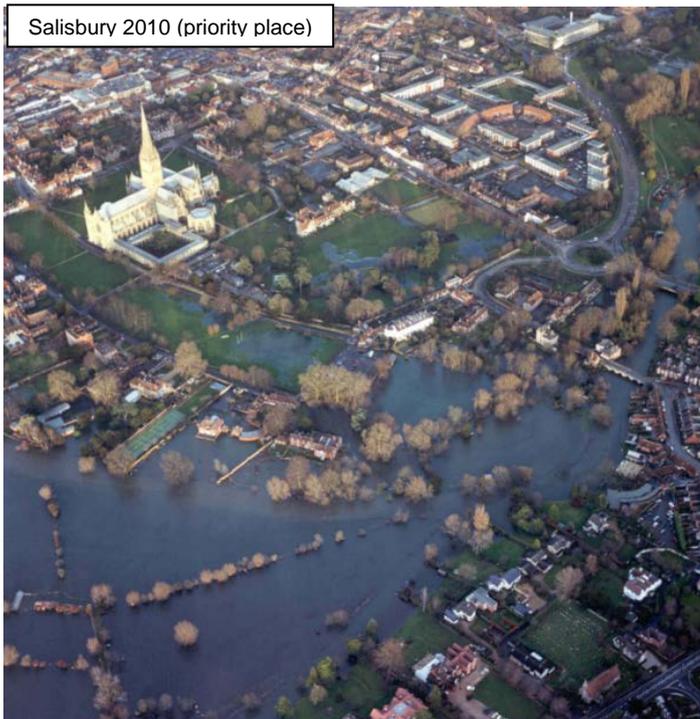
Location	Properties currently at risk (see note 1)	Is there a viable scheme? (see note 2)	Is the funding in place?	Overall Delivery Risk (see note 3)
Avonmouth/Severnside	3600	Yes	Partly	Amber
Bath	1100	No	Partly	Red
Bournemouth	5800	Yes	Yes	Green
Bridgwater	8400	Yes	Partly	Amber
Bristol	2700	Being developed	No	Red
Cannington	100	Yes	Yes	Green
Congresbury Yeo Tidal Banks	4100	Yes	Yes	Complete
Lyme Regis	700	Yes	Yes	Complete
Salisbury	600	Modelling started	No	Red
Taunton	1100	Yes	Partly	Red
Parrett Estuary (Cannington Bends)	500	Yes	Yes	Green
Poole	2600	Being developed	No	Amber
Warminster	20 fluvial approx.	To be Developed	TBC	Red
Weymouth	5000	No	No	Red

Note 1: based on do nothing scenario rounded to the nearest 100 (not including climate change figures)

Note 2: Assessment of delivery risk including cost/outcomes estimates, constraints and technical viability)

Note 3 Description of Red/Amber/Green Status

Red = Project is not currently viable, significant elements require further immediate action. Amber = Project may be at risk if issues are not addressed Green = Project is on track to meet its outcomes.



- Readiness to adapt to deal with pressures such as climate change, deterioration in the condition of risk management assets, new development and changes in land use. These can increase the probability and consequences of flooding and coastal erosion and will require future capital investment;
- Finding the partnership funding necessary to make schemes financially viable. This is becoming increasingly challenging.

Many communities are already protected by schemes and those that remain are either in rural locations where low numbers of houses are at risk, or there are multiple sources of flooding and environmental constraints making schemes technically challenging. These factors mean the costs of schemes in Wessex can often be high relative to the benefits. As a result, these schemes don't attract high levels of Flood Defence Grant-in-Aid funding and therefore need proportionately more local funding to make them viable. Making use of the Local Levy and other sources of funding including Local Enterprise Partnership funding will therefore be essential to reduce flood and coastal erosion risk in Wessex;

- The RFCC to target Local Levy funding to deliver the Capital Investment Programme (CIP) and its wider Strategy objectives. Appendix 2 sets out the RFCC's Local Levy investment strategy;
- Exploring other options to make communities resilient in locations where a scheme is not viable including flood warnings, community and individual flood action plans, property level resilience measures and plans for responding to flooding.
- Developing approaches to flood and coastal erosion risk management that work with natural processes and are sustainable. Any measures taken to reduce risk provide an opportunity to improve the natural, rural and built environment. This will help shape places that provide a better environment for people and business whilst at the same time protecting and improving habitats and species. Where possible, we will invest in risk reduction measures that generate multiple benefits.
- Plans for dealing with flooding in defended and undefended locations to be developed. In locations that are protected defences can be damaged, not operate as designed (e.g. pumping station breakdown) or be over-topped by a

flood of greater magnitude than the scheme is designed for. Recent flooding incidents across the country has shown that these events are foreseeable and RMA's are expected to have robust plans in place for managing these situations.

- Engagement with communities so that they are able to respond to flood forecasts, warnings and advice.

7.2 Asset Management

In 2013 the government made a 6 year commitment to FCRM capital investment of £2.3bn in projects to reduce the risks of flooding or coastal erosion to 300,000 houses across in England. As part of this programme, 15,000 houses will be better protected in Wessex.

In 2016 the Government increased the investment in the maintenance of Environment Agency FCRM assets by £40 million a year resulting in a total spend of approximately £1bn by the end of 2020/21.

In response the Environment Agency will deliver a step change in asset management resulting in more resilient and reliable assets.

Asset Management will also become more efficient. We have a target to deliver 10% efficiency savings in our capital programme and to reinvest the savings to protect more people and properties. We will also deliver and reinvest a 10% efficiency in asset maintenance.

7.3 Incident Management

We expect inland flood risk to increase as climate change influences rainfall patterns. At the same time we expect sea level rise and increased storminess to increase flood and coastal erosion risk.

It will therefore be essential for all RMA's to be better prepared to deal with major inland flooding and coastal incidents. This will need RMA's to understand the increasing risk and to have plans in place to respond.

7.4 Monitoring the delivery of the Strategy objectives

The successful delivery of the Strategy's objectives will require the RFCC and RMA's to commit resources (finance and manpower) to reducing flood and coastal erosion risk in priority places and other locations across Wessex.

The RFCC will receive periodic reports on progress against Strategy objectives and will formally review the Strategy every 2 years. We will develop a dashboard to measure progress.

Objective 1: Flood Risk Awareness & Management

That all of those with a responsibility for, or interest in, flooding and coastal erosion risk in Wessex have a clear understanding of the current and future flood and coastal erosion risks and how they may be managed now and into the future.



Our ambition

All those with a responsibility for, or an interest in, flooding and coastal erosion in Wessex Area have an improved awareness of the risks; what and where they are located, how they may change, and how they may be managed now and in to the future.

Our aims

The flood & coastal erosion risk across the Wessex Area is clearly described for all sources of risk.

There is a wider appreciation and better understanding of the flood and coastal erosion risks across Wessex amongst the following groups;

The Wessex Regional Flood & Coastal Committee
Flood Risk Management Authorities
Local Planning Authorities
Politicians
Public Communities at risk
Landowners
Stakeholders

Future climate change impacts on existing risks are understood and accepted in light of the latest scientific evidence on global warming.

There is a clear understanding of how Local flood and coastal erosion risks are managed within Wessex, and how our actions align with National and Local strategies for flood and coastal erosion risk management.

Key outputs

Professional partners have a clear understanding of the risks and have an agreed, co-ordinated partnership approach to their management.

Better informed communities have a greater understanding of how to manage their own flood risk, who to liaise with about any improvements, and become generally more resilient to the impacts of flooding and coastal erosion.

Better strategic prioritisation of flood and coastal erosion risk reduction in Wessex Area.

Our approach

Provide a clearer depiction of the evidence and facts relating to current flood and coastal erosion risks from all sources in Wessex.

Use the latest National climate change guidance and data to describe better the likely future influence on relevant flood and coastal erosion risks across Wessex.

Develop a communications plan to inform partners and stakeholders.

Provide a clear description of the responsibilities of each risk management authority (RMA) and riparian landowner.

Work in partnership with RMA's and communities at risk to share more effectively information on flooding and coastal erosion risk. Enabling communities to help themselves where possible.

Lead Officer: Paul King

Committee Members: Anne Fraser, Peter Finney

Objective 2: Evidence

That there is current understandable robust evidence supporting the evaluation of the flood and coast erosion risk



Our ambition

Our flood and coastal erosion risk evidence is fit for the purposes of our internal and external customers, in a format that is clear and understandable.

Our aims

We all better understand our current flood and coastal erosion risk

We understand how climate change will impact Wessex communities in the future

We communicate flood risk to our communities in an understandable way

Our approach

Improved data standards and data integrity, with better systems and capabilities that make our data visible, accessible and shareable

Identify a risk-based six year modelling and forecasting programme to update and add to our evidence base; and provide a forecasting-led flood warning service

Work with others to collate and synthesise scientific research and data analysis to inform future decisions

Understand the needs of RMAs and partners and work together to achieve shared goals

Use infographics and visualisation tools to explain complex data and evidence

Key outputs

Improved mapping, modelling data, digital services and systems to all customers

Better informed communities and partners with a greater understanding of how to manage their own flood risk

Identify potential new capital projects and include on the six year programme

Objective 3: Risk Management Plans

That there are appropriate up-to-date Risk Management Authority plans in place to address the risk (including incident response) that are part of their corporate plans



Our ambition

For Wessex Risk Management Authorities (RMA) to have ambitious Risk Management Plans in place that integrated and embedded within relevant partner organisations to achieve the common goals of working together to reduce the risk and impact of flooding and coastal erosion

Our aims

RMA plans are in place and shared amongst partners

Actions from RMA plans are embedded in partners' plans

RMA priorities are included within planning authority SFRA's and consider financial contributions from developments

Greater resilience to incidents by contingency and emergency plans for before, during and after RMA priority areas

RMA's plans detail a finance strategy to address priority areas, local issues and maintenance

Our approach

Review existing plans.
Share findings from the review to identify best practices.

Review progress of actions within existing plans.
Collaborative working opportunities / partnerships progressed where strategic and local priorities align.

Evidence demonstrates that the framework / partnerships are in place to integrate strategic and local risk management priorities with Strategic Plans.

Ensure evidence is available to demonstrate that the framework / partnerships are in place to integrate strategic and local risk management priorities with resilience, emergency and contingency plans

Strong programme of works on the CIP relating to strategic and local priority areas.
Pipeline projects being developed for next 6 years.
Partnership opportunities are identified and explored.

Key outputs

RMA's have appropriate plans which clearly define priority risk areas

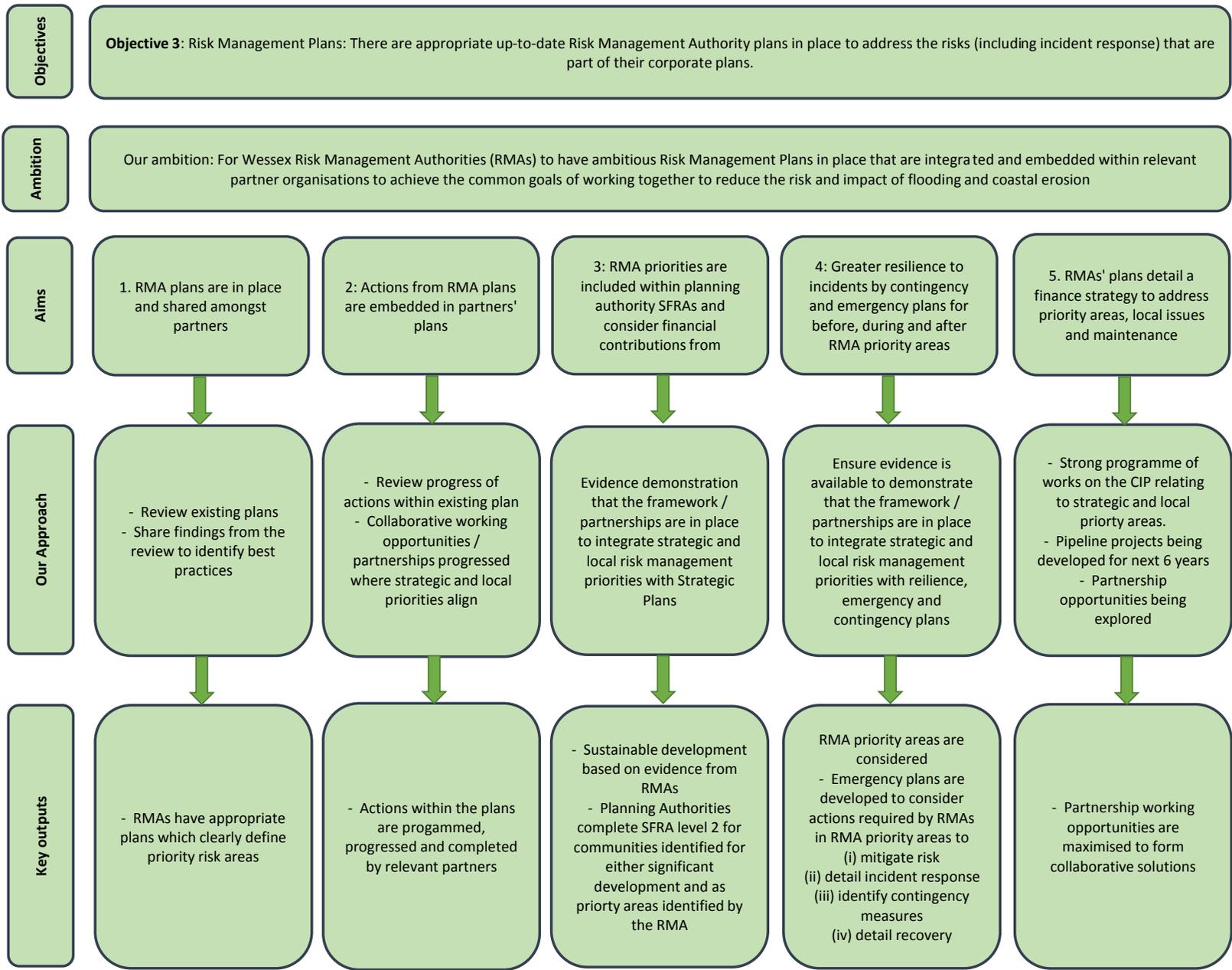
Actions within the plans are programmed, progressed and completed by relevant partners

Sustainable development based on evidence from RMA's.

Planning Authorities complete SFRA level 2 for communities identified for either significant development and as priority areas identified by the RMA.

Emergency plans are developed to consider actions required by RMA's in RMA priority areas to: (i) mitigate risk; (ii) detail incident response; (iii) identify contingency measures and (iv) detail recovery.

Partnership working opportunities are maximised to form collaborative solutions.



Objective 4: Investment

That there are ambitious investment plans with a strong pipeline of projects to reduce the flood and coast erosion risk that seek to maximize any funding and partnership opportunities.



Our ambition

For Wessex to have ambitious investment plans that seek to maximise any funding and partnership opportunities with a strong pipeline of projects to reduce the flood and coast erosion risk.

Our aims

- Wessex better protected against flooding & coastal erosion
- Greater resilience to climate change for both businesses and individuals with a balance of responsibilities between government, communities and business
- To support, enable and promote growth throughout Wessex with integrated investment plans
- To enhance and protect the unique and special Wessex environment through investment that seeks a range of physical and ecological benefits

Key outputs

- 15,000 homes across Wessex better protected from flooding and coastal erosion (FY15/16 - 20/21)
- EA Wessex FCRM assets, minimum 97% maintained at target condition
- 'Assets inspected and risks assessed' within the EA asset inspection program
- Minimum 10% efficiency cost saving and 15% partnership funding contributions to the Wessex six-year capital investment programme (FY15/16 - 20/21)

Our approach

- Publish annually and performance manage & monitor a comprehensive six year capital investment programme (FY15/16 - FY20/21) inclusive of Local Levy
- Publish annually and performance manage the revenue maintenance and capital recondition investment programmes prioritising high consequence systems
- Develop, promote and deliver a robust Local Levy programme that achieves maximum leverage of national Grant-in-aid funding
- Optimised and efficient delivery, achieving a minimum 10% efficiency saving against a robust cost baseline
- Work with, and lead where appropriate, our partners (RMA and others) to develop, promote and deliver coordinated, multiple benefit schemes
- Maximise funding opportunities with all potential contributors to secure robust partnership funding
- Focussed development of strong pipeline of candidate schemes looking beyond the six-year horizon
- Inspection of existing assets to identify at the earliest opportunity areas of risk to inform the plan for future EA asset investment need
- Commitment to asset maintenance

Lead Officers: Ben Murray, Sarah Caseley, Melvin Wood
Committee Members: John Harris

Objective 5: Environment and FCERM

That opportunities are used to improve the environment and use natural processes to reduce flood and coast erosion risk where appropriate.

Aims

- **Wessex FCERM capital and revenue programmes will achieve multiple outcomes for the environment.**
- **Wessex will adopt Natural Flood Management (NFM) solutions where these will contribute to reduced flood & coastal erosion risk and environmental gain, adopting the integrated Catchment Based Approach.**
- **The people of Wessex will benefit socially, economically and environmentally from this sustainable approach.**

Outcomes

- Kilometres of WFD waterbody enhanced through FCRM
- Kilometres water body opened up to fish / eel passage through FCRM
- Kilometres of river habitat (including SSSI) enhanced through FCRM
- Hectares of other habitats (including SSSI) enhanced through FCRM
- Hectares of any new priority habitat (freshwater / intertidal / other) created through FCRM
- Increase in the number of integrated FCERM schemes year-on-year achieving environmental outcomes.
- Enhanced ecosystem services at a catchment level e.g. improved water quality, social, cultural services
- Expertise developed in Wessex in the use of NFM and the ecosystem services approach, including the gathering of evidence to inform programme development, and contribute to collective learning.
- People and businesses are empowered to contribute to enhancing the environment and managing flood risk, through increased awareness, participation and leadership
- Wessex continues to deliver the most environmental outcomes in the country.

Approach (how we do it)

- We will follow the Defra steer on FCRM & Environmental Outcomes to ensure an integrated approach to achieving multiple benefits for the environment.
- We will use existing FCERM tools and processes, including the FDGiA partnership funding calculator, which already incorporate strong environmental outcome appraisal techniques such as ecosystem services, and develop new approaches and evidence in relation to NFM
- We will better promote the achievement of wider environmental outcomes, building on what has been achieved in the past and looking to a more integrated catchment based approach in future.
- We will continue to seize opportunities to conserve, enhance and restore biodiversity in accordance with the EA FCRM & Biodiversity position statement, working closely with Natural England.
- We will develop local expertise in ecosystem services and NFM approaches, and influence national networks.
- We will understand how and where it works best, what the risks are and how to manage them.
- Support and develop the Wessex Natural Flood Management local levy mandate to:
 - Identify opportunities for NFM and multiple outcomes in Wessex that can be delivered through the Capital Investment Programme, which will complement existing and future schemes, and help reduce flood risk as well as bring wider benefits.
 - Develop a set of criteria against which to assess worthiness and a business case.
- Work in partnership with key stakeholder groups, including current multiple benefit initiatives such as Hills to Levels and Hampshire Avon, supporting such groups with EA resources where this will help achieve the environmental objectives EA is seeking to deliver.
- Explore Payments for Ecosystem Services (PES) opportunities to identify potential partnered funding, particularly for the ongoing upkeep of schemes such as is being explored at Holnicote.

Objective 6: Engagement

That communities and businesses are fully engaged by all Risk Management Authorities in understanding their flood risk and take action to reduce or manage the risk.



Our ambition

For Wessex to deliver maximum Flood and Coastal Risk Management (FCRM) benefits through effective engagement with communities and businesses.

Our aims

Communities feel engaged and where possible can influence FCRM outcomes, being part of the decision making process.

To utilise existing networks to enhance the resilience of individuals, communities and businesses to flooding.

Customers, businesses and partners understand both their current flood risk and future impacts of climate change.

To increase the visibility of the Wessex Regional Flood and Coastal Committee and the work they do.

Key outputs

Improved partnerships between all Risk Management Authorities to deliver joined up, efficient engagement

Communities take ownership and responsibility for flood risk and understand the appropriate action to take before, during and after a flood

Our approach

Understand and align the priorities of all Risk Management Authorities to plan and prioritise engagement to ensure maximum benefits.

Coordinate engagement to ensure customers and partners receive consistent messages before, during and after flooding

Provide the most up-to-date data and information to improve understanding of flooding and thus empower customers and partners to make informed decisions.

Promote community awareness of resilience networks to enhance capability for flood preparedness and warning communication.

Lead Officers: Rose Lloyd Committee
Members: Liz Richardson

Appendix 2: Local Levy and IDB Precept Investment Strategy

1.0 Background

The Government has committed £2.5Bn to FCRM Capital Investment over a 6 year period (2015/16-2020/21) to reduce the risks of flooding to 300,000 houses across England. As part of this programme approximately 15,000 houses in Wessex will be better protected.

In 2012 a new system was introduced for allocating national capital funding to risk management projects. This is known as Partnership Funding and is designed to better protect more communities, deliver more local benefits and help avoid the deprivation caused by flooding and coastal erosion by:

- Encouraging total investment to increase the levels of investment beyond levels affordable by central Government alone;
- Enabling more local choice, and encouraging innovative, cost effective options to come forward in which civil society may play a greater role;
- Introducing more certainty over Government funding for each community that will encourage additional investment to come forward.

The national allocation scheme is underpinned by a number of guiding principles including:

- 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 they deliver. Projects that deliver sufficient benefits may be 100% funded by national Government. Projects that deliver relatively less will be offered an amount of funding based on the benefits they achieve, as long as other funding can be found to bridge the gap. The local levy is one source of funding that can be used to bridge the gap for projects in Wessex;
- Greater local input and decision making should not come at the expense of a stable long-term pipeline of projects necessary to exploit economies of scale and efficiencies in delivery. The increased certainty over Government funding therefore needs to be matched by an increased certainty in local levy funding;
- The general taxpayer should not pay to protect new development in areas at risk of flooding or coastal change, now or in the future.

2.0 What is Local Levy Funding?

The local levy is an additional, locally raised, source of income for flood and coastal erosion risk management projects to supplement national funding (Flood Defence Grant in Aid - FDGiA). Wessex RFCC raise a local levy on County Councils and Unitary Authorities within its boundary. The local levy is used to secure national funding (as part of the partnership funding mechanism) to invest in projects that are designed to reduce flood and coastal erosion risk for local communities.

The local levy is also used to support locally important projects that are not funded nationally by Flood Defence Grant in Aid (FDGiA), so reducing the risk to the Wessex RFCC Area.

The local levy is set by the RFCC (who need to recommend a level of Local Levy to the Environment Agency Board) and only Local Authority members representing Lead local Flood Authorities (LLFAs) are able to vote. The local levy vote takes place in October every year at the same time as budget setting discussions are taking place within LLFAs.

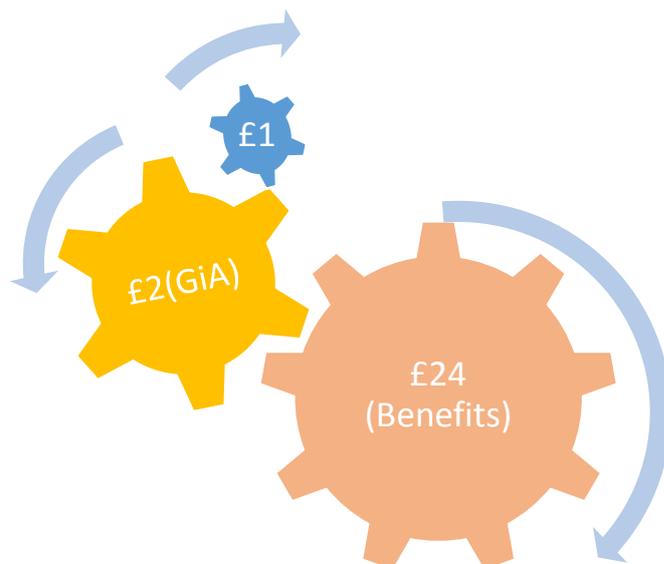
3.0 What does Local Levy fund in Wessex

In the latest Capital Investment Programme over the period 2015/16-2020/21 £18m of local levy is being used to reduce the risk of flooding and coastal erosion to more than 6,000 properties.

By committing £18m of local levy to these projects, the Wessex RFCC secures more than £40m of central government funding for these projects through the Partnership Funding mechanism.

Put simply every £1 of local levy invested secures a further £2 in national funding. Nationally it has been determined that every £1 of capital investment in flood and coastal erosion risk management provides an average long term benefit in reduced damage of approximately £8.

Therefore every £1 of local levy invested by the Wessex RFCC results in approximately £24 of long term benefit for the people who live and work in Wessex.



Local Levy Gearing

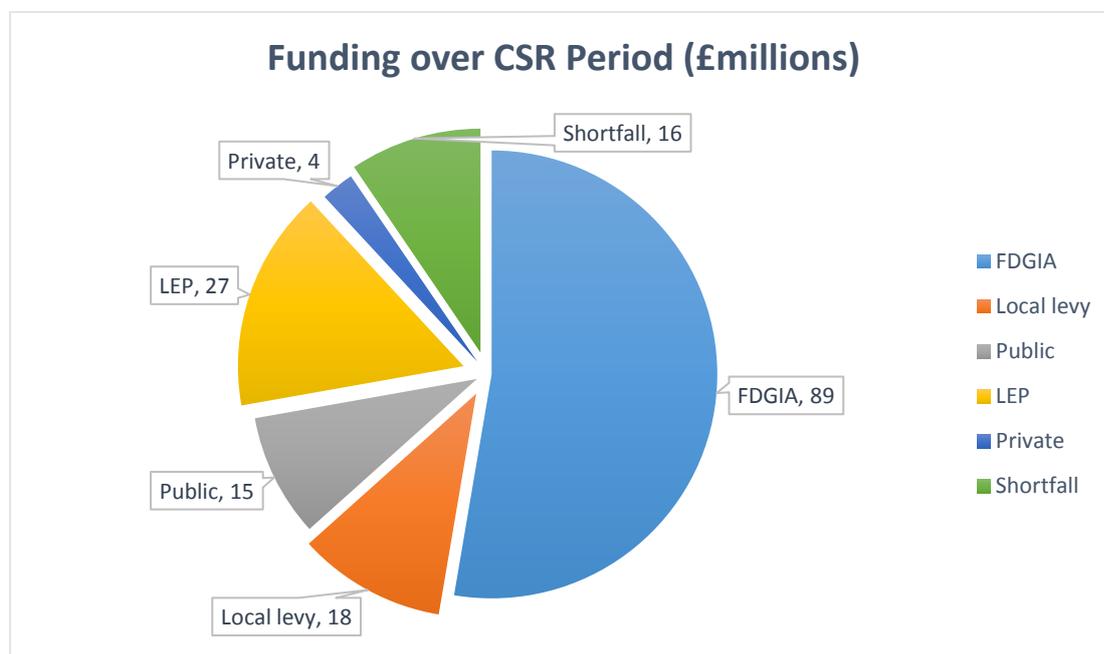
In addition the local levy funds other local priority projects which are not a priority for national funding.

4.0 Local Levy funding need from 2017/18 to 2020/21

Local levy funding will provide:

- £13m of funding needed as partnership funding to deliver the capital programme over the remainder of the 6 year programme;
- Funding for other local priority projects;
- Funding needed to develop a project pipeline beyond 2021/22.

We also need to find a further £16m in partnership funding to deliver the Wessex capital investment programme. We will explore a number of funding sources to close this gap. It is however open to the RFCC to commit more local levy funding to these projects, if they believe that is a good investment of local levy and LLFA members on the committee support this through the annual vote on the local levy.



Capital Investment Plan funding (until 2021/22)

5.0 Wessex RFCC Local Levy funding strategy 2017/18-2021/22

We now have a six year national capital investment settlement. This provides certainty and enables a longer term approach to planning and delivery of the capital investment programme. To make the most of this certainty, it will assist to have a similar level of certainty with respect to local levy funding.

Whilst the actual levy set will always be the subject of an annual vote by LLFA committee members it will make for more effective planning if this is set in the context of the overall need of the 6 year programme.

A medium term local levy investment plan could be based on a number of scenarios which will result in the capital programme reducing, being maintained at its current level or growing. The table below outlines possible funding scenarios. It should be noted that efficiency savings are included in all scenarios.

Proposed annual % increase	Impact on the Capital Investment Programme
0	Current investment plans could not be maintained and there would need to be cuts in the programme
2	Current investment programme maintained
4	These increases would enable an increased level of partnership funding contribution to schemes and the progression of more local priority projects
6	

The local levy is an extremely important source of partnership funding and enables the Committee to maximise national capital funding available to fund schemes in Wessex.

At the present time given the severe financial constraints Local Authorities are under, the RFCC have agreed, for planning purposes to set a levy that maintains the current investment programme (2% annual increase).

This funding strategy has been agreed by the RFCC as a planning assumption. It will be for local authority members each year to decide on the levy actually to be set for the following year in the light of their views on their authorities' then financial circumstances and the actual need for expenditure on flood risk management.

6.0 IDB Precept

IDBs pay a precept charge to the Environment Agency in respect of water that enters the main river network from IDB managed watercourses. The precept is used to extend the maintenance funded through FDGiA and includes weedcutting, vegetation works and the operation of structures.

In recent years the Environment Agency and IDB (and more recently the SRA as well) have discussed and agreed the programme of maintenance work for Somerset.

In 2016/17 the Government increased the investment in the maintenance of the Environment Agency's FCRM assets by £40m per year until 2019/20. The Spending Review (SR15) settlement protects maintenance funding in real terms over the lifetime of the current parliament.

As part of the funding settlement the Environment Agency is developing a 5 year maintenance programme. As with local levy funding it will be beneficial for planning purposes for the RFCC to agree a medium term plan for setting the IDB precept.

Historically the IDB precept increase has been set at the same level as the Local levy increase. To align with the national increase in maintenance funding the RFCC have agreed that the IDB precept should also increased by 2% per annum. The Environment Agency will then have certainty for planning purposes and will be able to deliver a jointly agreed maintenance programme and appropriate operation of assets to manage water levels.

This will also be subject to an annual vote where RFCC members could agree to support a 2% increase or a greater or lesser increase depending on the circumstances at that time.

Appendix 3: Members of Wessex RFCC (July 2017)

Chair

David Jenkins DL

Independent Members

Anthony Bradford	General issues
Rosie Dilke	General issues
Anne Fraser MBE	General issues
John Harris	Inland flooding issues
Paul Heathcote	Inland flooding issues
David Martin	Water and utility companies
Professor Vincent May	Coastal processes
Sarah Nason	Nature, conservation
Janette Ward	Nature, conservation

Lead Local Flood Authority Members

Cllr Bob Goodman	Bath and North East Somerset
Cllr Philip Stanley-Watts	Bournemouth
Cllr Fi Hance	Bristol
Cllr Cherry Brooks	Dorset
Cllr Phillip Awford	Gloucestershire
Cllr Ray Bolton	Hampshire
Cllr Peter Burden	North Somerset
Cllr John Rampton	Poole
Cllr David Hall	Somerset
Cllr Matthew Riddle	South Gloucestershire
Cllr Mike Hewitt	Wiltshire

Contacts for Wessex RFCC Partners

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Wessex RFCC:

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