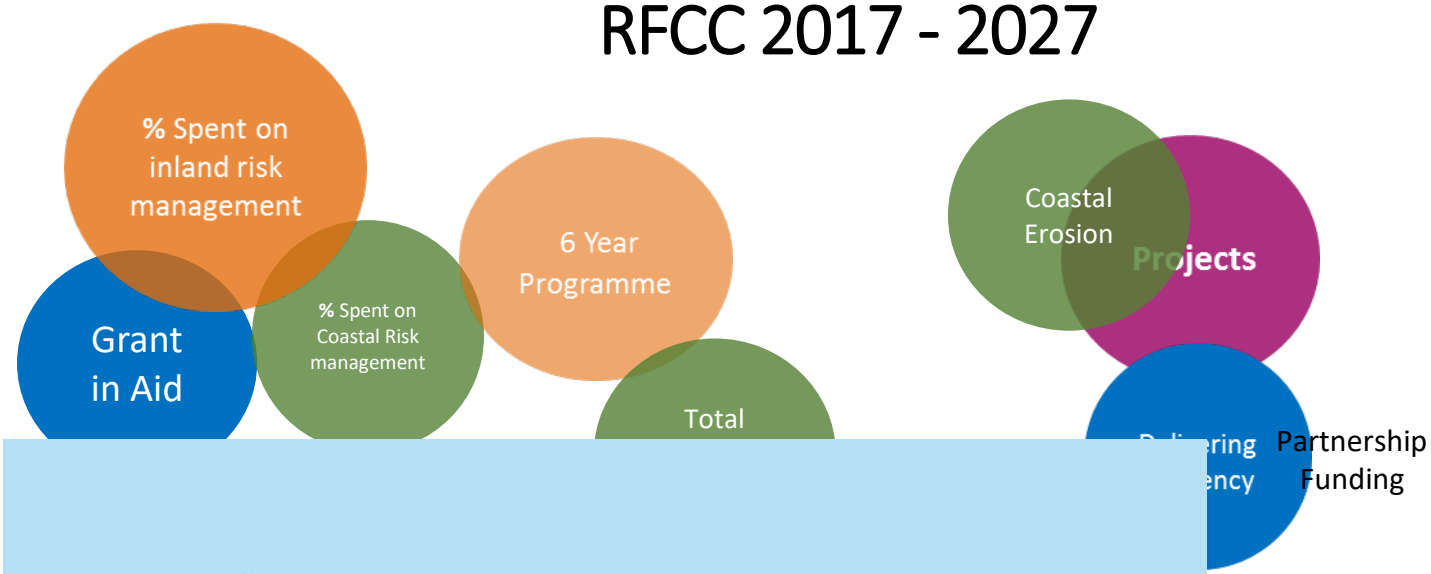
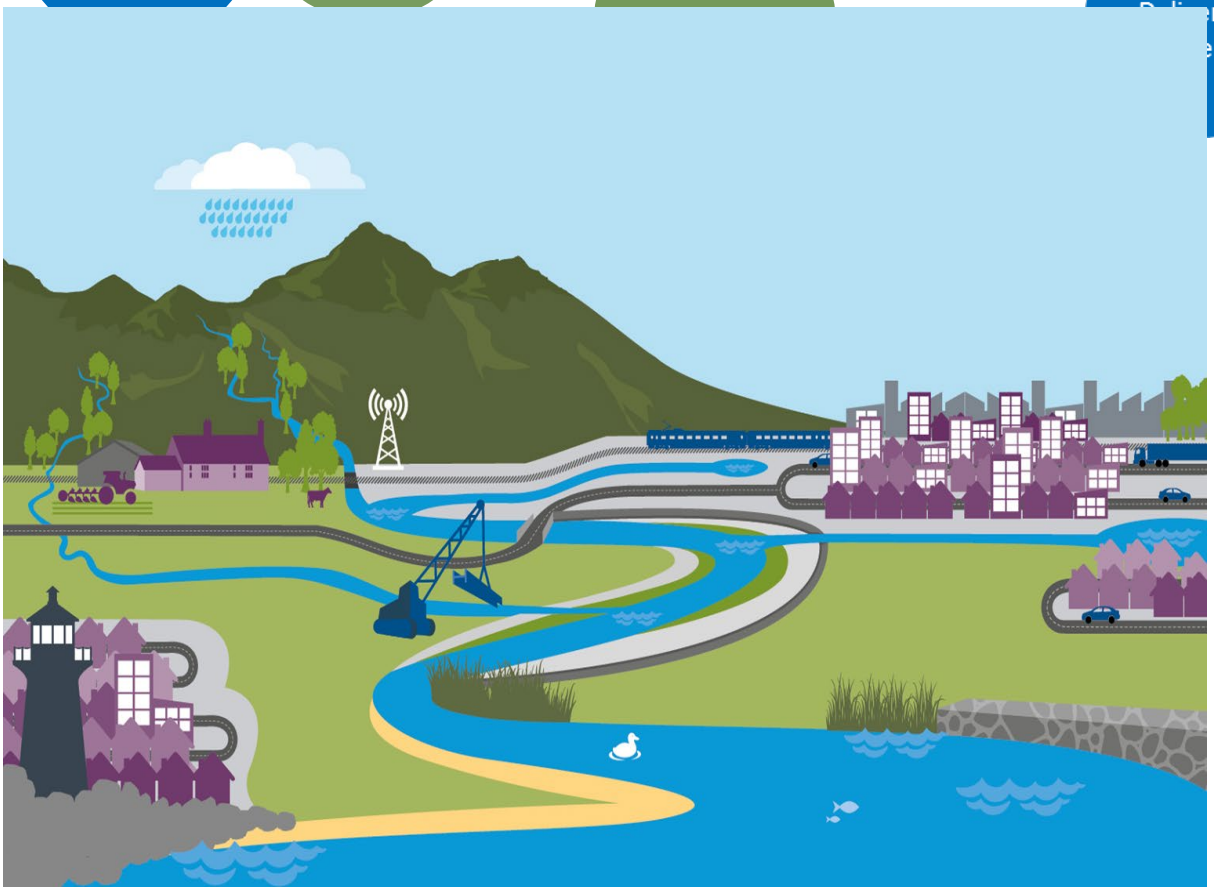
10 Year Forward Look for the Anglian Eastern RFCC 2017 - 2027





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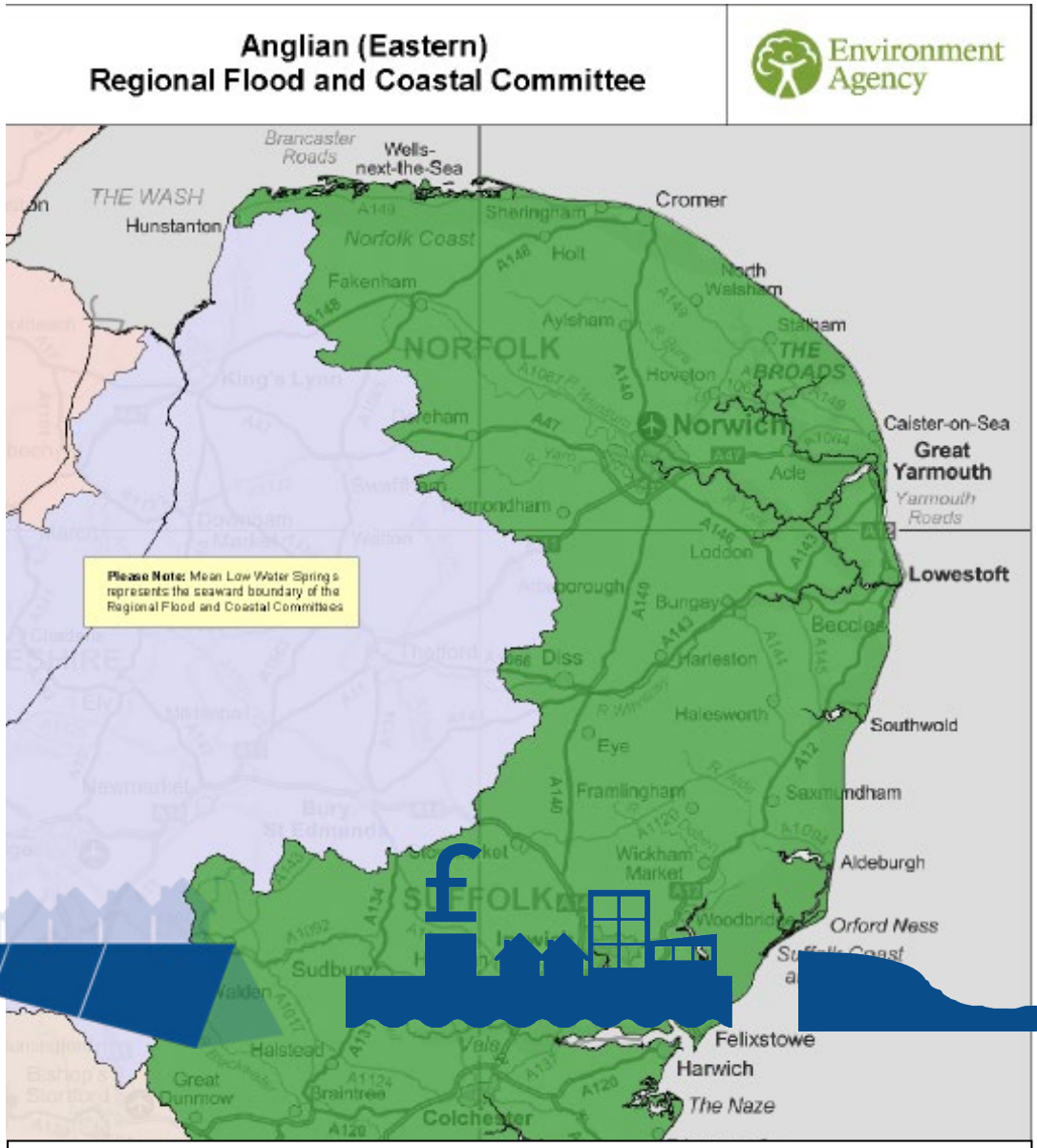

The Anglian Eastern Regional Flood & Coastal Committee (RFCC) is responsible for overseeing the management of flood and coastal erosion risk management in an area of over 9,000km2 from the north bankc sof the Thames Estuary to Hunstanton on the North Norfolk Coast, and as far inland as Fakenham. The characteristics of the area, including the relationship between tidal and coastal processes and the large expanses of low lying land, present considerable flood risk management challenges. In addition to the propoeties at risk of fluvial and tidal flooding, there are 122,700 properties which are vulnerable to surface water flooding.

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Forward

In 2016, the Anglian (Eastern) Regional Flood and Coastal Committee reviewed the strategic planning processes in place for addressing flood and coastal risk. This review identified opportunities for plans across different agencies and risk management authorities to be better aligned in order to deliver improved outcomes for communities and to maximise opportunities for cost saving and innovation. Following consultations with partner organisations and stakeholders, the RFCC identified two primary barriers to more efficient, targeted and risk-based investment.

Firstly, the challenges arising from the different objectives, funding and governance arrangements across different organisations. This can make it difficult to align priorities and disparate funding streams.

Secondly, although partners across the region have a good understanding of their own area and planned works, supported by significant data sets, it can be difficult for them to share that information and to get the full strategic overview necessary for long term strategic planning.

To address challenges in aligning priorities, planning and funding cycles across partner organisations, the RFCC committed to the development of a 10-year, rolling, forward look program. This provides a formal structure for sharing knowledge and information between partners at a very early stage, and is designed to improve the pipeline of schemes and projects coming forward for funding consideration. This revised planning process has been built into an annual cycle of consultations and activities for the RFCC, its partners and stakeholders.

This overview sets out some background information about the Anglia (Eastern) RFCC, including the area it is responsible for, its constitution, membership and meeting dates, and an overview of its planning and decision making process. The accompanying annexes set out more information on flood and coastal risks for each Lead Local Flood Authority across the Anglia (Eastern) area, and the structures and plans they have put in place to mitigate them.

I hope you will find the documents useful, and that you will join us in working to reduce flood and coastal risks and improve the environment across the Anglian Eastern area.

Paul Hayden
Chair, Anglian (Eastern) Regional Flood and Costal Committee

RFCC Working for you

Many different public and private bodies are involved in flood and coastal erosion risk management. This will always be the case, as flooding has impacts for many aspects of daily life (property, business, health, transport, utilities, environment and more). Following major flooding in 2007, and the subsequent review by Sir Michael Pitt, **Regional Flood and Coastal Committees** were created to ensure that the various statutory bodies and stakeholders work together effectively.

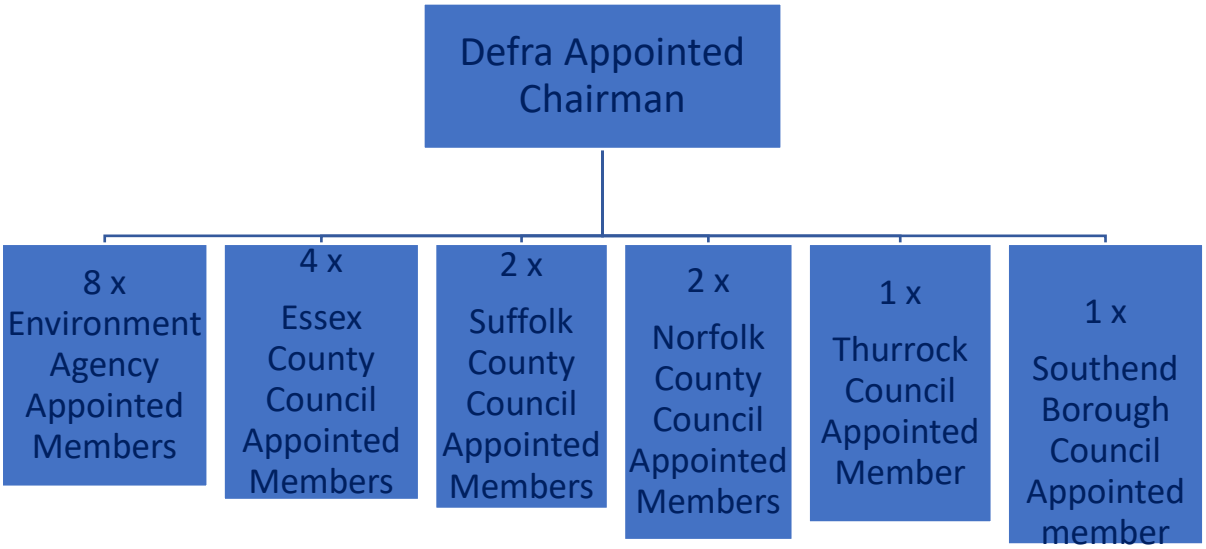
Water does not respect administrative boundaries, so RFCC boundaries were created to reflect major river catchments or coastal cells. RFCC's. There are XX RFCC across the regions.

- **Guide** flood and coastal risk management (FCRM) activities within catchments and along the coast and taking into account the likely future impacts of climate change, advising on and giving consent to programmes of work for their areas and investment programmes;
- **Consent** to the Environment Agency program of works and plans for raising local levy's;
- **Hold to account** the Environment Agency and other Risk Management Authorities (RMAs) on behalf of the communities they represent.

The Anglia (Eastern) Regional Flood and Coastal Committee (RFCC) was formally constituted by the Parliamentary Under Secretary of State for the Department of Environment, Food and Rural Affairs on 25th September 2011.

Anglia (Eastern) RFCC's constitution and membership.

Members appointed by a Constituent Lead Local Flood Authority	10
Independent Members Appointed by the Environment Agency	8
Independent Chair Appointed by the Minister	1



The RFCC's primary responsibilities

1. **Ensure there are coherent plans for identifying, communicating and managing flood and coastal erosion risks across catchments and shorelines;**
2. **Promote efficient, targeted and risk-based investment in flood and coastal erosion risk management that optimises value for money and benefits for local communities;**
3. **Provide a link between the Environment Agency, LLFAs, other risk management authorities, and other relevant bodies to engender mutual understanding**

Delivering Flood and Coastal Improvements across Anglia Eastern 2017 – 2027

There are multiple risk management authorities and stakeholders involved in flood and coastal risk reduction and management activities across the Anglia (Eastern) area. The primary role of the RFCC is to review and give consent to Environment Agency plans, and to assist in effective coordination between all authorities and stakeholders, encouraging them to work together where appropriate to deliver improved outcomes for the communities we serve.

Under the Flood and Water Management Act 2010 all risk management authorities have a duty to co-operate with each other and to share information. This underpins better outcomes are achieved, and at a lower cost, when Risk Management Authorities work together in close partnerships. Ensuring that all types of flood and coastal erosion risk are considered in an integrated way facilitates a greater sense of local ownership and community involvement. It also enables partners to learn from each other and to promote innovation and improve effectiveness.

Public Sector Co-operation Agreements (PSCAs) are a good example of RMAs working together to achieve common objectives. PCSAs can be established between public authorities for the delivery of public tasks of mutual benefit, and therefore are not subject to procurement regulations that require work to be tendered. For example, PSCAs provide flexible arrangements for an IDB or other RMAs and the Environment Agency to work together in delivery of maintenance works and incident response. Key benefits include more efficient use of resources, building up of local skills, and delivery of additional maintenance works for the same cost.

RFCC Process

In order to fulfil its statutory obligations, the Environment Agency consults the RFCC about the way in which it proposes to carry out its flood and coastal erosion risk management functions in the committee's region, and is obliged to take into account representations made. The Environment Agency also requires the consent of the RFCC before it can implement its regional programme for the committee's region or issue a levy for flood and associated works. The RFCC is consulted by other Risk Management Authorities on their plans, and assists with liaison between a range of flood and coastal stakeholders. Given the complex nature of flood and costal risks, a strategic, long term, and multi-agency approach to planning is essential.

The Anglain East RFCC undertook a review of current practice in 2016/17, and after engagment with the Environment Agency and key partners to identify opportunities for improvement, common problems for all stakeholders were highlighted in aligning their objectives, investment plans and internal budget processes with those of their partners. The review also identified a wealth of risk and project data held by different organisations, but that there was no single repository for that data across organisations, making it more difficult to identify opportunities for partnership working and cost savings.

The objective was to improved the process to;

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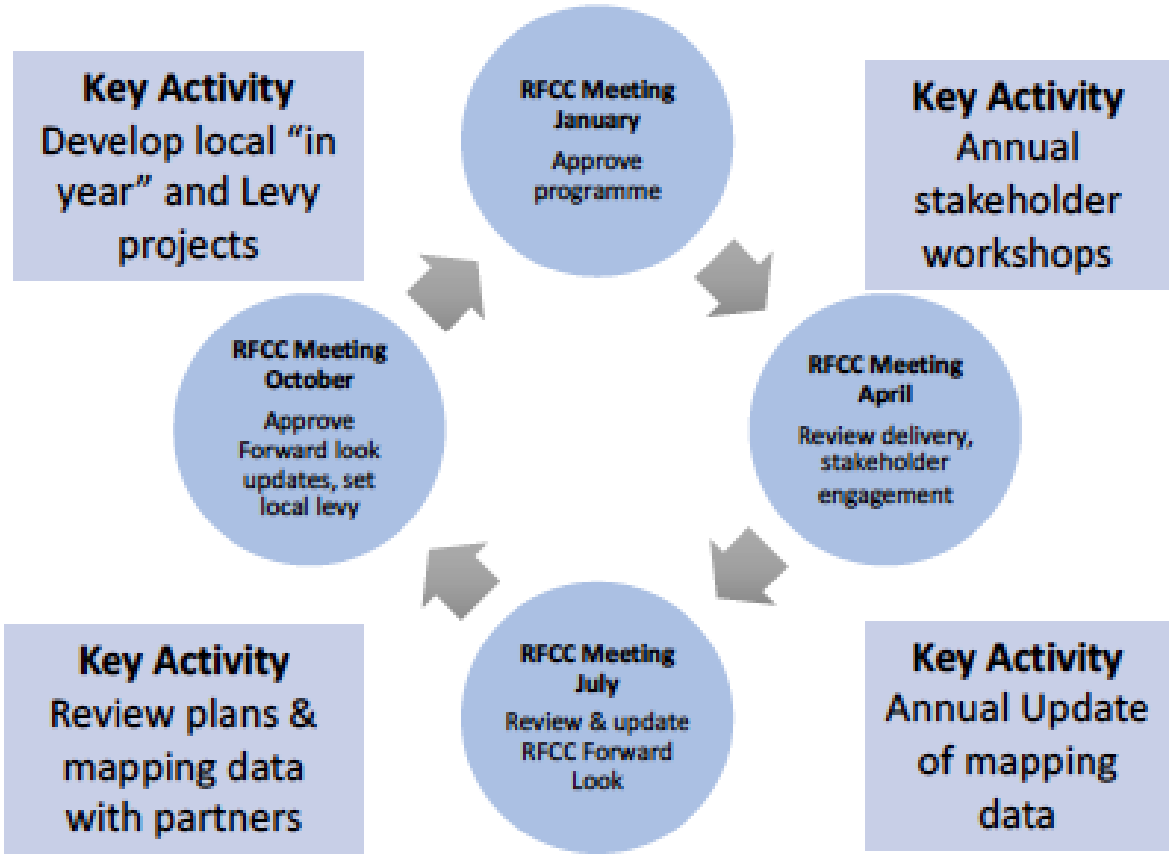
- **Ensure that there are coherent plans in place across all risk types and stakeholders**
- **Ensure that investment is efficient, targeted and risk-based**
- **Promoting strong links between the Environment Agency, LLFAs, other risk management authorities, and other relevant bodies to engender mutual trust, support and understanding**

To address this gap, the RFCC have invested in a data visualisation tool to enable information from different agencies to be viewed and synergies and opportunities for partnerships identified. The tool places risk data and project information from various agencies onto a single mapping tool that can then be interrogated by users. The data visualisation tool supports a new ten year "foreword look" planning process that maps out key issues identified by partners within the RFCC's Region, and provides a focus for prioritising long term strategic plans for investment taking account of all partner's needs. This revised planning process also provides transparent links between RFCC, partners and communities to ensure clarity about how plans are made and funding is allocated. This is a good example of how Levy money can fund improvements.

The RFCC planning process consists of a detailed annual cycle of budget allocation and project management, and a constantly rolling 10-year foreword look, where the focus is on building a pipeline of future projects by identifying communities at risk, and the potential partners who might come together to address those risks.

The Annual cycle has a decision making and formal review element matched to the cycle of formal RFCC meetings held once each quarter. It also has a cycle of key activities happening in between those meetings, primarily related to engagement with statutory partners and public stakeholders.



Forward Look 10 Year Cycle

The 10-year cycle is aligned to existing strategic planning processes and funding allocations used by the Environment Agency to establish a **six-year capital investment program**. However, in recognition of the need to constantly scan the horizon for new risks and opportunities, and to ensure a well-researched pipeline of projects that can be brought forward for funding, the RFCC forward look scans out beyond the 6-year capital program and out to 10 years, reviewed annually on a rolling basis.

To avoid duplication of effort and minimise costs and burdens, this is not intended to become an additional planning process in itself. Rather it is a mechanism by which the various partners can share information from their own internal planning processes and consider opportunities for delivering them through partnership. The outcome of the process will be the early identification of potential partnership projects so that any necessary preparatory works and data gathering can be initiated. Ultimately, this process will lead to an improvement in the pipeline of projects that will be considered for funding and delivery.

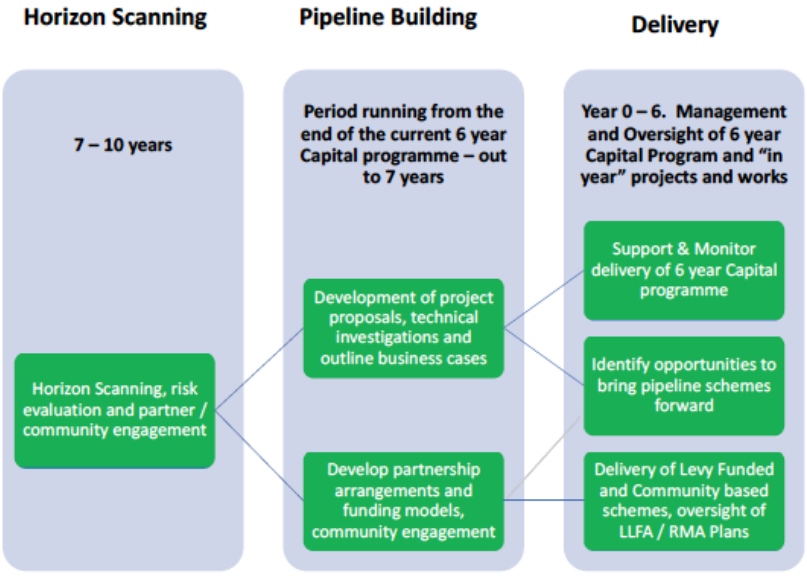
The 10 year forward look process has **three key phases** for planning.

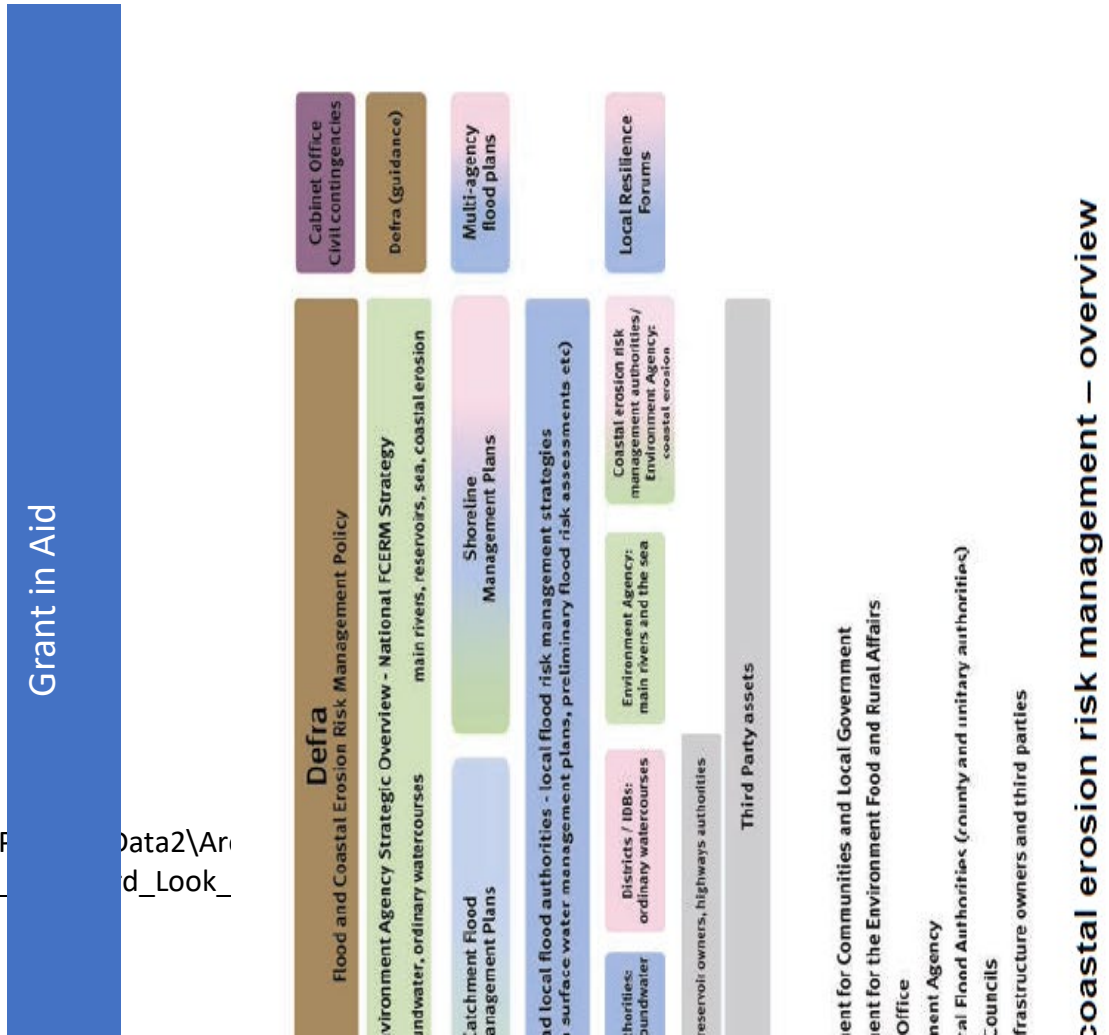
1. **The horizon scanning phase**, where the RFCC and its partners and stakeholders can identify potential risks or challenges that may require action. These risks or challenges could include issues that are anticipated but may not yet have materialised, for example as a result of climate change or planned development. Equally, they could include long term challenges where the potential solutions, partners or funding streams are not immediately clear. The purpose of identifying potential challenges at an early stage and putting down a place marker in the foreword look is that it brings the issue to the attention of all partners, stakeholders and communities and helps them to consider potential solutions and partnership opportunities. Following further review, and as more detailed information becomes available, issues in this category will either develop through the pipeline building phase into a formal project proposal, or may be removed from the forward look if the anticipated risks do not materialise.

2. **The Pipeline building phase,** where relevant stakeholders consider the risks or challenges identified, potential solutions, and any potential partners for delivery. During this phase, opportunities to link partners, agendas and funding streams can be explored between partners. For example, if a Local Authority identifies a need to undertake significant works to address surface water issues in an area where a water company was also considering works to improve drainage, opportunities for partnership working and efficiencies can be explored at an early stage. During this phase, project scope and proposals are developed and initial works such as public engagement, modelling or options appraisal carried out. The output of this phase is to have “shovel ready” projects ready to be brought forward for funding consideration when opportunities arise.

3. **The Delivery Phase -** For large capital schemes requiring Flood Defence Grant in Aid funding, pipeline projects will either be considered for inclusion in the next 6-year program of works, or maybe prioritised by the RFCC and brought forward for funding in the current

program should an opportunity arise. Projects funded by RFCC Levy will be identified and funding approved as part of the annual planning process. Small schemes may be approved in year by EA Officers in line with Levy Principles and the Scheme of Delegations that have been established. Projects that are funded by other risk management authorities and partners will be progressed in line with their own internal funding and planning processes.





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Guiding Principles for Local Levy

A. Local levy will be used to support projects and other activities where clear flood and coastal erosion risk management outcomes will be delivered (by reducing the risks from river, coastal, groundwater, surface water and/or reservoir flooding, or coastal erosion);

B. Priority will be given to partnership projects that tackle multiple forms of flooding / erosion, target households and businesses in areas of significant risk, or where there are opportunities to secure multiple / wider social, environmental or economic benefits (including improving the resilience of critical infrastructure), and/or funding for the community to provide an even greater return on local taxpayers money;

C. Local Levy will be utilised to support Risk Management Authorities progress the early stages of project development (i.e. to outline business case) to enable the Committee to develop the future programme and maximise Grant in Aid (GiA) income for local communities

D. A proportion of the levy will remain unallocated each year for emergency works, or to enable new projects to be put forward by Risk Management Authorities and commenced within year, or to manage the uncertainties of funding;

E. Local Levy will be used (in exceptions) to help secure GiA for large, strategically important schemes where many properties are at risk and the local authority needs support and time to secure additional local funding;

F. The Committee supports the use of Local Levy for maintenance and replacement of flood risk and coastal erosion assets and systems to ensure the continued

effectiveness of previous RFCC investments in flood alleviation schemes and coast protection. Where Local Levy is used, the Committee would expect the EA to identify the most cost effective way of achieving outcomes through partners, in house maintenance provision or procurement frameworks;

G. Over the medium to longer term (say minimum of a 5 year period) there will be a correlation between levy raised and levy invested in each Lead Local Flood Authority area (this may need to be 10+ years for Southend and Thurrock given the size of annual contribution and significant investment needed to maintain and improve their coastal defences/protection);
At their June 2013 Meeting the RFCC agreed to two additional principles

H. Levy can be allocated to capital projects in order to maintain their momentum throughproject development and delivery by ensuring the Partnership Funding score and funding package remains robust.

I. The Committee agree to allocate Local Levy to 'invest to save' initiatives to reduce future revenue dependency and to help enable others to take on maintenance activities. This will also make GDC and IDB Precept funding go further. Investments will need to be assessed on their individual merits and benefit to the RFCC, but themes would include:

a. Implementing the Minister's (agriculture) 'red tape' challenge and enabling other to take on maintenance or adopt assets
b. Implementing the Maintenance Protocol for uneconomic assets
c. Demainment activities
d. Invest to save adaptation of assets (eg automation)

Evidence Based Decision Making

Effective strategic planning relies on sound data and evidence to underpin investment decisions. Key information in respect of risks and planned projects is set out in the RFCC's interactive data visualisation tool. Whilst the system is under development in 2017/18, access to the visualisation tool is restricted to authorised users, although the intention is to develop a public version on line. The development version of the data visualisation tool allows RFCC Members and officers from the EA and partner organisations to interrogate interactive maps to look at specific geographical areas, selecting from a range of hazard, project and investment data from drop down menus.

In addition to showing current and planned projects, the data visualisation tool graphically shows areas where risks or challenges have been identified, but where there are no current plans in place to resolve them. This information will support partners horizon scanning activities, helping them to identify challenges, potential partners and solutions.

Surface water management plans

- A **surface water management plan** (SWMP) outlines the preferred surface water management strategy in a given location. Surface water flooding describes flooding from sewers, drains, groundwater, and runoff from land, small water courses and ditches that occurs as a result of heavy rainfall.

- A SWMP will establish a long-term action plan to manage surface water in an area and should influence future capital investment, drainage maintenance, public engagement and understanding, land-use planning, emergency planning and future developments.

- A SWMP contributes to fulfilling the requirements of the Water Framework Directive and helps meets the requirements of the Flood Risk Regulations to understand local flood risk from surface water we have produced a number of Surface Water Management Plans (SWMPs) in urban areas identified as high risk. SWMPs are produced with the involvement of key partners such as Anglian Water, Environment Agency, Thames Water and local councils. A SWMP will help:

- People understand their local flood risk
- Develop schemes to reduce flood risk
- Aid emergency plans
- Local Plan development
- Inform future development
- Feed into drainage maintenance strategies
- Encourage better land-use planning

They will look at problems such as:-

- The internal flooding of a property on more than one occasion OR
- The internal flooding of five properties during a single flood incident AND
- If the source of the incident or who is responsible is unknown

Shoreline Management Plans exist around all of the coastline of England and Wales. This work is led by the Environment Agency. Take a look at how the Environment Agency and local councils are developing shoreline management plans to manage the threat of coastal change on the **GOV.UK** website, where you can access all SMPs in England and Wales.

Shoreline Management Plans (SMPs) are non-statutory plans for coastal defence management planning. The aim of an SMP is to provide a strategy for managing flood and erosion risk for a particular stretch of coastline The SMPs provide estimates of how the coast is likely to change over the next 100 years, taking into account the future implementation of coastal policies, geology, likely impacts of climate change and the existing condition of the coast including coastal defences.

Four Shoreline Management Plans are active along the north Norfolk and Suffolk coastal frontage:

- **SMP5 which incorporates the coast to the west of Kelling Hard**
- **SMP6 which incorporates the coast to the east of Kelling Hard to Lowestoft Ness**
- **SMP7 covers Lowestoft Ness to Landguard Point**
- **SMP8 then covers south of Landguard Point to Two Tree Island**

The low-lying land that makes up much of the Norfolk and Suffolk landscape means that we have estuaries meandering through the countryside. This results in habitats such as saltmarsh, and mudflats, which support a variety of species. The communities value this, and work to ensure

residents and visitors work to live sustainably with their environment. Many of the areas are specially designated and legally protected. Coastal Partnership East supports the valuable work of these groups, which is so intrinsically linked with the coast.

Too see the plans for these locations take a look at the links below.

Broads Authority

Blyth Estuary Group

Alde and Ore Estuary Partnership

Bawdsey Coastal Partnership

Deben Estuary Partnership

Stour and Orwell Estuaries Management Group

The Department for Environment, Food and Rural Affairs (Defra)

DEFRA has overall national responsibility for policy on flood and coastal erosion risk management, and provides funding for risk management authorities including local authorities and internal drainage boards through grant in aid funding that the Environment Agency administers.

The Environment Agency

The Environment Agency has two complementary roles in relation to flood risk and coastal erosion management.

The Environment Agency takes a strategic overview of the management of all sources of flooding and coastal erosion. This includes, for example, setting the direction for managing the risks through the National Flood and Coastal Erosion Risk Management Strategy for England and through plans (including Shoreline Management Plans, Catchment Flood Management Plans and Flood Risk Management Plans); carrying out surveys and mapping; reporting to the minister about flood and coastal erosion risk and how the national and local strategies are being applied by all of the authorities involved; providing evidence and advice to inform government policy and support others; and supporting the development of risk management skills and capacity.

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

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 Y:\GP_RFCC\Data2\ArcGIS Server\WebApp\Operational\downloads\2017_2018_RFCC_10-year_Foreward_Look_FINAL_130219.docx

be done by all risk management authorities to reduce the risk of flooding and coastal erosion and to manage its consequences.

Lead Local Flood Authorities

Lead Local Flood Authorities (unitary authorities or county councils) are responsible for developing, maintaining and applying a strategy for local flood risk management in their areas and for maintaining a register 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.

The LLFA for Essex Norfolk & Suffolk come under the Flood & Water Management Act 2010. Part of their role requires them to investigate significant local flooding incidents and publish the results of such investigations. LLFAs have a duty to determine which RMA has relevant powers to investigate flood incidents to help understand how they happened, and whether those authorities have, or intend to, exercise their powers. LLFAs work in partnership with communities and flood RMA's to maximise knowledge of flood risk to all involved.

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, including through taking decisions on development in their area which ensure that risks are effectively managed. District and unitary councils in coastal areas are also the coastal erosion Risk Management Authorities and have permissive powers to carry out works under the Coast Protection Act 1949 and the Flood and Water Management Act 2010. These organisations perform a significant amount of work relating to flood and erosion risk management including carrying out repairs and maintenance to coastal assets and constructing coastal capital schemes as well as providing advice to communities.

Internal Drainage Boards

An Internal Drainage Board (IDB) is a type of local public authority that manages water levels in England where there is a special need for drainage. IDBs undertake works to reduce flood risk to people, property and infrastructure, and manage water levels for agricultural and environmental needs. Each IDB has permissive powers to manage water levels within their drainage district, carefully maintaining rivers, drainage channels, culverts, sluices, weirs, embankments and pumping stations. They have operational responsibilities and play an important role in the areas they cover (approximately 10% of England), manage and maintain over 500 pumping stations, 22,000 km of watercourse and numerous sluices and weirs for people and wildlife

They also play an important regulatory role, using powers to keep watercourses clear of obstructions. They set byelaws to ensure the watercourse network works efficiently, and they scrutinise planning and development in their area to mitigate its impact on the water environment and flood risk. They have statutory duties with regard to the environment and recreation when exercising their functions.

IDBs are defined as a Risk Management Authority within the Flood & Water Management Act 2010 working alongside the Environment Agency, local authorities and water companies to actively manage and reduce the risk of flooding. Their activities and responsibilities are principally governed by the Land Drainage Act 1991 as amended by subsequent legislation.

In East Anglia IDBs are managed by the Water Management Alliance, a consortium of 5 drainage boards (Broads IDB, East Suffolk IDB, Kings Lynn IDB, Norfolk River IDB & South Holland IDB) The Waveney, Lower Yare and Lake Lothingland IDB is a stand-alone IDB but frequently works in partnership with the WMA.

Highway Authorities

Highway Authorities are responsible for providing and managing highway drainage and roadside ditches, and must ensure that road projects do not increase flood risk, under the Highways Act 1980. The owners of land adjoining a highway also have a common-law duty to maintain ditches to prevent them causing a nuisance to road users. These organisations are classed as RMA's

Flood risk is managed through the Making Space for Water process,? which involves the cooperation and regular meeting of the Environment Agency, United Utilities, District/Borough Councils and Highway's and LFRM Teams to develop processes and schemes to minimise flood risk.

Where minor works or quick win schemes can be identified, these will be prioritised and subject to available funding and resources will be carried out as soon as possible. Any major works requiring capital investment will be considered through the Environment Agency's Medium Term Plan process or a partners own capital investment process.

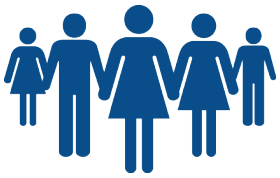
Flood Action Groups are usually formed by local residents who wish to work together to resolve flooding in their area. The FAGs are often supported by either Local Authpority or the EA and provide a useful mechanism for residents to forward information to the MSfWG.

Water and Sewerage Companies

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

They are also responsible for risk to others from the failure of their infrastructure. They make sure their systems have the appropriate level of resilience to flooding and where frequent and severe flooding occurs they are required to address this through their capital investment plans. It should also be noted that following the Transfer of Private Sewers Regulations 2011 water and sewerage companies are responsible for a larger number of sewers than prior to the regulation. These organisations are classed as RMA's

Duty to co-operate



Under the Flood and Water Management Act 2010 all risk management authorities mentioned above have a duty to co-operate with each other and to share information.

This reflects and underpins the well established finding that better outcomes are achieved when Risk Management Authorities work together in close partnerships. This ensures all types of flood and coastal erosion risk are considered in an integrated way and facilitates community involvement and a greater sense of local ownership. It also enables partners to learn from each other to promote innovation and improve effectiveness.

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 using the resources they agree. Key benefits include more efficient use of local skills and resources, and more maintenance works being delivered for the money the IDBs and other authorities put into these arrangements.

The table below summarises the relevant Risk Management Authority and details the various local source of flooding that they will take a lead on.

Flood Source	Environment	Lead Local	District	Water	Highway

	Agency	Flood Authority	Council	Company	Authority
RIVERS					
Main river					
Ordinary watercourse					
SURFACE RUNOFF					
Surface water					
Surface water on the highway					
Coastal erosion					
Sewer flooding					
The sea					
Groundwater					
Reservoirs					