Anglian (Eastern) Regional Flood & Coastal Committee

Friday 19 October 2018 at 09.30am

Essex County Council, County Hall, Chelmsford, Essex
We are the Environment Agency. We protect and improve the environment and make it **a better place** for people and wildlife.

We operate at the place where environmental change has its greatest impact on people’s lives. We reduce the risks to people and properties from flooding; make sure there is enough water for people and wildlife; protect and improve air, land and water quality and apply the environmental standards within which industry can operate.

Acting to reduce climate change and helping people and wildlife adapt to its consequences are at the heart of all that we do.

We cannot do this alone. We work closely with a wide range of partners including government, business, local authorities, other agencies, civil society groups and the communities we serve.
## Agenda

**Anglian (Eastern) Regional Flood & Coastal Committee (RFCC)**

**Friday 19 October 2018**

**Venue:** Committee Room, County Hall, Market Road, Chelmsford, CM1 1QH

**Time:** 09:30 to 13:00 (lunch provided)

### Agenda

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### Tea and Coffee

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### General Business

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### Lunch

13:00

## Date of Next Meeting

**Thursday 16 January 2019, Cranworth Room, County Hall, Norfolk County Council, Norwich**

### Information Papers (for noting only)

- Developing the Anglian (Eastern) RFCC Programme 2018/19 (INF/E143)
- Delivering the Anglian (Eastern) RFCC Programme 2018/19 (INF/E144)
- FCERM Program Update 2018/19 Quarter 2 – Current in-year position (INF/E145)
- Incident Response (INF/E146)
- National paper - Modernising Asset Management – ISO55000 Certification update (INF/E147)

### Contact Information

- Mareth Bassett
- mareth.bassett@environment-agency.gov.uk
- Tel: 0203 02 58443
- Fax:
### Attendees

**Members:**
- Paul Hayden (PH) **Chairman**
- Cllr Simon Walsh **Essex County Council**
- Cllr Mark Platt **Essex County Council**
- Cllr John Aldridge **Essex County Council**
- Cllr Mike Steptoe **Essex County Council**
- Cllr Gerard Rice **Thurrock Council**
- Cllr John Lamb **Southend-on-Sea Borough Council**
- Cllr Richard Rout **Suffolk County Council**
- Cllr Keith Patience **Suffolk County Council**
- Cllr Mick Castle **Norfolk County Council**
- Cllr Judy Oliver **Norfolk County Council**
- Angie Fitch-Tillett **Environment Agency Appointee**
- Richard Powell **Environment Agency Appointee (conservation)**
- Tim Beach **Environment Agency Appointee**
- Andy Smith **Environment Agency Appointee (coastal)**
- Graham Underwood **Environment Agency Appointee**
- Rob Wise **Environment Agency Appointee**
- Vacant **Environment Agency Appointee**
- Vacant **Environment Agency Appointee**

**In attendance**

**Environment Agency:**
- Charles Beardall (CB) **Area Manager**
- Peta Denham (PD) **Area Flood Risk Manager**
- Mark Johnson (MJ) **Area Coastal Manager**
- Graham Verrier (GV) **Operations Manager (Norfolk & Suffolk)**
- Dave Knagg (DK) **Operations Manager (Essex)**
- Aaron Dixey (AD) **Programme Team Leader**
- Mareth Bassett (MB) **Eastern RFCC Secretariat**
- Carol Mayston (CM) **Eastern RFCC Engagement Officer**
- Kellie Fisher **Senior Coastal Advisor**
- James Williams **Flood Resilience Team Leader**
- Charlie Fisher **Flood Resilience Technical Advisor**

**LLFAs and Coastal Authorities:**
- Lucy Shepherd **Essex County Council**
- John Meehan **Essex County Council**
- Matt Hullis (MH) **Suffolk County Council**
- Mark Ogden **Norfolk County Council**
- Richard Atkins **Southend Borough Council**
- Navtej Tung **Thurrock Council**
- Rob Goodliffe **EACG, North Norfolk District Council and CPE.**
- Paul Mackie **Suffolk Coastal and Waveney District Council**

If you are experiencing difficulties in getting to the meeting on the day or have to give last minute apologies, please call 07775 008305 and leave a message which will be passed on to the Chairman.
Anglian (Eastern) Regional Flood & Coastal Committee (RFCC)

Minutes of the Anglian Eastern RFCC Meeting held on Friday 20 July 2018 at Suffolk County Council, Landmark House, Ipswich, Suffolk

Present: Paul Hayden Chairman
Cllr Simon Walsh Essex County Council
Cllr Mark Platt Essex County Council
Cllr John Aldridge Essex County Council
Cllr Mike Steptoe Essex County Council
Cllr Gerard Rice Thurrock Council
Cllr John Lamb Southend-on-Sea Borough Council
Cllr Richard Rout Suffolk County Council
Cllr Keith Patience Suffolk County Council
Cllr Mick Castle Norfolk County Council
Angie Fitch-Tillett Environment Agency Appointee
Richard Powell Environment Agency Appointee (conservation)
Tim Beach Environment Agency Appointee
Andy Smith Environment Agency Appointee (coastal)

In attendance
Environment Agency:
Charles Beardall Area Manager
Peta Denham Area Flood Risk Manager
Mark Johnson Area Coastal Manager
Graham Verrier Operations Manager (Norfolk & Suffolk)
Aaron Dixey Programme Team Leader
Mareth Bassett Eastern RFCC Secretariat
Carol Mayston Eastern RFCC Engagement Officer
Nicola China Levy Funded Officer
Matt Butcher Senior Officer Environment Programming
Phil Lee Communications Team Leader
Elliot Furniss Communications Specialist FCRM Lead

LLFAs and Coastal Authorities:
Matt Hullis Suffolk County Council
Mark Ogden Norfolk County Council
Navtej Tung Thurrock Council

Rob Goodliffe EACG, North Norfolk District Council and CPE.

Observers:
Rosie Ryan Environment Agency
Charlie Fisher Environment Agency
Jane Burch Suffolk County Council
Joe Denny North Norfolk District Council
1. Apologies for absence and greetings to visitors

1.1 The Committee received apologies from Cllr Judy Oliver, Dr Graham Underwood and Mr Rob Wise.

2. Declarations of Members' Interests

2.1 None

3. Chairman's announcements

3.1 The Chair opened the meeting by welcoming the visitors and presenters. He welcomed the new members of the Committee; Cllr Rout, Cllr Aldridge and Mr Wise.

3.2 The Chairman continued by informing the Committee about the recent recruitment campaign to advertise six vacancies. There had been eight applicants in total and all were interviewed. Following the interviews the panel decided to appoint four of the candidates; Angie Fitch-Tillett, Graham Underwood, Andy Smith and Rob Wise.

3.3 The Chairman then explained that not only had there been a relatively small number of applicants, but that most applicants came from very similar backgrounds and offered very similar skill sets and experience that was already well represented on the Committee. In discussion with EA colleagues, he had formed the view that simply repeating the same recruitment process would result in the same disappointing level of response. Therefore, the decision had been made to delay advertising and recruiting to the remaining two posts until January 2019. The Chairman proposed using the intervening period to reach out to people from more diverse backgrounds who may currently be unaware of the committee and its important work, in an effort to persuade them to make an application to join the Committee when the vacancies are advertised in the new year.

3.4 In an effort to reach out to a broader range of potential applicants for the committee, the Chairman proposed that we positively engage potential new members and invite them to learn more about the Committee, inviting them as observer members to sit in on meetings, receive committee papers or become involved in discussions at sub committees. As these are public meetings, existing regulations allow us to invite people to take an active part in the Committee’s work, although these “observers” would not have voting rights reserved for full committee members. The intention is to identify and contact potential candidates from a more diverse background and offering experience and skill sets currently under represented don the Committee. They will then be invited to the October and January meetings to see first-hand if the RFCC was something with which they would like to be involved. Then in January 2019 the next open recruitment would commence with all invited to apply. At this point, the most suitable candidates would be appointed, regardless of whether they had taken part in the observer member program.

3.5 The Chairman then asked for the Committee to approve this new approach and invited comments. Mr Smith and Cllr Lamb both agreed that this was a good plan moving forward and both supported the proposal. Cllr Lamb added that this would ensure that we are getting the turn over and input into the Committee in the future.

3.6 Committee members supported the proposals and the Chairman invited the Committee to let people know that we were actively seeking high quality candidates for the Committee and are actively seeking out EA appointed members that better reflected the very broad range of views, interests and backgrounds of the communities we serve.
This would in turn ensure that the Committee continued to make sound decisions into the future.

**Action**

3.7 Committee members should invite and encourage people with different skill sets to come along to the next few RFCC meetings with a view to applying for a position in January 2019 in the next open recruitment round.

3.8 The Chairman reported briefly on the really successful RFCC planning workshop held on 16 May. However, he would not go into much detail as this was for discussion at item eight on the agenda.

3.9 The Chairman reported that Cranfield University, because of the work it had done with us to produce the RFCC Observatory, had been granted an extra science budget to update the tool. This meant the University was looking for our feedback on the tool with ideas and suggestions about what the Committee would like to see in the online tool. He asked members to email him, Carol Mayston and Cranfield University with any amendments, improvements or suggestions for the website.

**Action**

3.10 Officers to send the web link to the Committee members who then should email with suggestions and feedback about the online tool.

3.11 The Chairman had been involved in hosting a workshop in Ipswich for European colleagues and ran an exercise looking at early warning systems. They were impressed with the systems the Environment Agency has in place to warn people. Cllr Rout had also attended the event and had gone to the waterside and viewed the Environment Agency support vehicle. All partners came away from the meeting with some useful learning and ideas. We may benefit from the community support model which would work with the systems we have in place already.

3.12 Cllr Lamb asked where we are working with Europe at the moment; are we going to keep the dialogue open after Brexit? He was particularly interested in information about North Sea surges and ensuring that information is freely passed between us and Europe. Information about the build-up of a surge is useful to ensure that we are prepared and can prevent flooding of people where possible.

3.13 The Chairman could not comment from a political standpoint. He said that collaboration and the sharing of science knowledge and information is international, and he expected it to continue as usual even after Brexit. He also stated that he was not aware of any Brexit risk to our warning systems but would let the Committee know if he heard anything to the contrary.

3.14 Cllr Lamb replied that information such as tidal surge build up would still need to be shared. Officers (CM) added that part of the application they liked is crowd sourcing data, this means when there is an event they pull information from social media so you can get a full picture of what is happening. While the data is unsubstantiated it is still useful. Cllr Lamb agreed that this was useful and it would be good if this could be shared with emergency teams and other responders during an event.

3.15 The Chairman informed the Committee that he had received interesting information at RFCC Chairs meeting in relation to Highways England, who have set aside £78m annual investment for flood defences in highways schemes. They are looking for opportunities to work in collaboration and in partnership with others and he thought that this might be interesting for local authorities.
3.16 The Chairman then went on to explain that he had been on a site visit to the Medway Scheme in Kent as part of the national Chair’s meeting. He thought that there was some learning to take away from that project, which had used Levy funding, community support and volunteers from the community working as Flood Wardens. We have some communities that might benefit from this approach and he had asked EA colleagues to make contact with their opposite numbers in Kent to learn more. They also had a property level protection scheme which has not worked as well, with the contract awarded on the basis of 70% cost and only 30% quality. He shared experience from the Essex Flood Board’s highly successful work in PLP with Kent colleagues, in particular, the Essex approach to quality, involving people in selection of PLP solutions, and making sure that installations had been completed to a high standard and will work. He suggested that Kent colleagues may be in direct contact with counterparts in Essex to learn more.

3.17 The Chairman concluded his update with the news that he had attended a public meeting at Hemsby on the 19 July where the community was presented with all the options available. A Levy funded high level review report had been produced by Great Yarmouth Borough Council and Coastal Partnership East, Rob Goodliffe would tell the Committee more about that later. It was agreed that we needed a different approach which is a sustainable and deliverable way to protect the people in this area.

4. Environment Agency announcements

4.1 Dr Beardall opened by talking about water resource issues and the period of exceptionally dry weather we were experiencing at the time. He went on to explain that most of our rivers were in low or exceptionally low flow for the time of year, with the River Waveney worst affected in our area. This was because we had not had any rain for a couple of months and there was no rain forecast for the weeks after the meeting. This meant that this situation would worsen, increasing the risks of other problems such as low dissolved oxygen, fish kills and damage to the river ecology. To try and reduce these effects the Environment Agency had put mitigation measures in place like pumping ground water into the rivers Deben and Waveney to increase the flow. There were no restrictions on abstractors in the Anglian Eastern RFCC area at that time but the Environment Agency were in discussion with the local agricultural community about that. There were restrictions in the Anglian Central RFCC area already.

4.2 Cllr Lamb asked if there were any plans to carry out ground water discharge into the Rivers Crouch, Roach or Thames to aid with flows at that time. As they were trying to encourage a native oyster fishery on the Rivers Roach and Crouch which had taken many years, it was also the cockle season and did not want these to all be affected. If this was the case then would the discharge have any effect on the fish in the rivers?

4.3 Dr Beardall replied that the freshwater flow into the estuaries was a small proportion of the flow and would not affect the salinity of the water. Also at that time there were no augmentation plans for those rivers. There were some for a number of North Essex rivers.

4.4 Dr Beardall continued that he had some good news for the Committee regarding the Great Yarmouth scheme where we are looking to protect 10,000 properties at risk. There was a funding gap which we were looking to fill and the LEP had allocated £8.2m to put into the scheme, which was good news. There was still a funding gap to fill. The Environment Agency were hoping to get some money from the deprivation fund from the government and had put in a bid for Lowestoft and Great Yarmouth. Dr Beardall went on to say that there would be an announcement before the summer recess on Tuesday 24 July and that one of the bids had been successful.
4.5 Mr Powell asked about the LEP money and if that was from an internal pot of money or from a national pot. Dr Beardall answered that he thought it was from their own internal pot. He added that the new Anglia LEP was good in their support of flood risk schemes and we were building a good relationship with them moving forward.

4.6 Dr Beardall continued by saying that other major schemes were going well like Bacton with the agreement between North Norfolk District Council and the gas terminal. Also Ipswich, which some of the members were going to visit after the meeting, was progressing and he hoped that the members would be pleased and proud of what the RFCC money had delivered there.

4.7 Tilbury, there were still some issues but the scheme was moving forward, this is a really important scheme which protects many thousands of properties.

4.8 Dr Beardall went on to talk about the challenges we were facing at Hemsby, which the Chairman had previously mentioned. Another challenge was trying to protect the site for a new Thames barrier in Purfleet, our objection still stands for the redevelopment scheme as the developer was not considering any alternatives for the one hectare site where we would like to put the barrier. There would be a decision made in September and we hoped to have negotiated an alternative solution which is good as we did not want this application to go to enquiry.

4.9 Dr Beardall then spoke about the de-maining pilots, there was a national programme and our area had a significant contributor to this. We were looking to de-main low consequence rivers, with regard to flood risk, and were looking for partners to take over the maintenance of these stretches of water. He added that good progress had been made in Suffolk. We had completed the consultation and looking for the final agreements to be put in place. Once these were in place then the Environment Agency would announce their decision which will be followed by a six week appeal process. Norfolk has not gone as smoothly and were still having discussions about that area.

4.10 Dr Beardall concluded his update by talking about the target set by Defra for the Environment Agency to better protect 300,000 properties by the end of the 6 year programme. He asserted that this was a very important target for the reputation and the future of the Environment Agency. He mentioned the programme refresh paper 12 in the pack and we needed to continue to push to meet or even better the target we had set.

5. Approval of minutes of the meeting held on 27 April 2018

5.1 The Chairman mentioned that prior to the meeting Officers had received some amendments to the minutes as printed. Mareth Bassett read them out at the meeting and they were as follows:

5.2 Mr Johnson asked that 4.2 be altered to:

4.2 He opened by thanking Cllr Walsh for chairing the workshop to locally reinvigorate the TE2100 Strategy. On further strategic matters Mr Johnson confirmed that the Southend Strategy was ready for technical appraisal.

5.3 Also Cllr Castle asked that 10.7 be altered to:

10.7 Cllr Castle put in a pitch for the Yarmouth Waterfront development sites in Southtown, Cobholm, North Quay and The Conge. These are brownfield sites with a potential for 1000 plus dwellings however, little has been done since the days of EEDA and he would be happy to see a long term defence planned on the River Bure. He added that the area needs to see
a more joined up approach with the Environment Agency, local authorities and the developers working together. That way there could be some synergy with regeneration, new houses and flood defence works. He hoped to be helpful to drive forward the Great Yarmouth project.

5.4 No other amendments were received.

Resolution
5.5 The minutes of 24 April 2018 were approved as a correct record, following the change to the above paragraphs.

5.6 Officers would make the amendments and agreed to share the final version of the minutes before the next meeting.

Action
5.7 Officers to share the final version of the minutes before the next RFCC meeting on 19 October 2018.

6. Matters arising from previous meeting

6.1 All actions from the previous meeting were completed with the exception of those on the table on page 15 of the paper pack which are being progressed as follows:

6.2 Mr Goodliffe agreed to contact Mr Parker to find out if he had been able to circulate the briefing to the Committee.

6.3 The Chairman and Cllr Rice would meet over lunch to find out the agreed next steps from the meetings between Anglian Water, Thurrock Council and Environment Agency Officers. This would then complete that action.

7. Members Slot

7.1 The Chairman invited members at the table to update the Committee on any important meetings they had been to or for information they needed to pass on to the members.

7.2 Mr Goodliffe gave an update from the East Anglian Coastal Group (EACG). He was pleased to see that following from the last RFCC things were moving forward with regard to economic assessments for coastal protection schemes, looking at the wider benefits they bring to areas. He also mentioned an interesting piece of work which was going on between the Environment Agency and Coastal Partnership East using GIS online. This project is about sharing data which would in turn help with asset condition grading among other applications.

7.3 He went on to talk about Shoreline Management Plan (SMP) refresh which was mentioned on Page 90 of the paper pack. On Monday 23 July there was a meeting to discuss this refresh process,

7.4 Mr Goodliffe informed the Committee that Nicki Spurr had attended a workshop on Coastal Landfills which would be a significant issue for the future.

7.5 He had attended the EACG meeting which had received an interesting presentation on Sizewell C from Simon Barlow. If anyone would like any more information on this then they need to contact the power company.

7.6 Mr Goodliffe then spoke about Hemsby. He had a summary report by Jacobs which he handed out to members. The report contained the various options for the coastline.
here, the report had been presented to Great Yarmouth and accepted. He had attended the drop in session on the 19 July, which had been well attended and there had been some heated discussions about this subject. The Coastal Partnership team were then going to look at all the feedback and discuss the next steps for the area. There needed to be realistic alternative coastal methods that could be trusted by professional partners and the local community.

7.7 The Chairman noted that he had attended this meeting and added that we needed to give reassurance and support to the local people who were looking at the possibility of losing their homes. He offered the RFCC support and asked, Mr Goodliffe to let him know if there was anything the Committee could do to help the community.

7.8 Mr Smith asked if they were looking at coastal protection options or a more sustainable way forward.

7.9 The Chairman answered that there was a business need to keep tourism so the area needed a beach, however this needed to be balanced with the fact that people were losing their homes. An “either / or” option was unlikely to be acceptable to local people and this meant that there needed to be a way that of meeting both needs. However, this did not necessarily mean that £20m of stone was the best answer. We also needed to be mindful of the fact that any changes would have an effect up and down the coast. This is a complex issue and there is no single right answer. However, the report should now enable the best solution, or range of solutions, to be identified. Whatever solution was forthcoming, we remain accountable for investing public money in the most appropriate way.

7.10 Mr Smith updated the Committee on his actions since the previous meeting. He had attended the RFCC chairs conference representing the Coastal Group chairs and was pleased to hear some encouraging comments from John Curtin. There had been one paper on the FCRM strategy to 2050 and Mr Smith was on one of the steering groups for this.

7.11 Mr Smith had visited the House of Lords with Bill Parker for the select committee on Coastal Regeneration for towns and communities. It had been an interesting meeting and a huge opportunity but very fast moving, there had been a call out for written evidence in September. The next meeting they would be hosting an event at Westminster on 31 October and they needed to invite council Chief Execs to attend. The group was aiming to produce a report by March 2019 which he hoped would make a difference to coastal towns. Members were invited to contact Mr Smith for more information on this.

7.12 Mr Smith talked about Property Level Protection (PLP) and that people were not happy with this. He said that PLP was something that was being discussed at these meetings and that they were not interested.

7.13 The Chairman answered that PLP, if applied properly and consistently, could be good but if people had not had a good experience then that would tarnish their view of PLP.

7.14 Mr Powell had been invited to visit a scheme in the Broads which had achieved so much and within the 25yr plan. Since it had come to fruition they had seen an increase in wildlife, which had led to a spike in the visitors to the site. He felt that it was a fantastic scheme.
8. Feedback from the Anglian Eastern RFCC Annual Review Event, held on 16 May, including next steps

8.1 See 9 these 2 sections of the agenda were covered together.

9. Update from the Engagement sub-group

9.1 Mr Beach and Carol Mayston gave a presentation to the Committee which included feedback from the Annual Review event of the 16 May and the next steps from that day. The plan was to run three similar and smaller events in 2019 with a focus on the issues raised in 2018. They then went on to talk about the new Engagement Sub-group which had met for the first time on 10 July. The presentation was shared with the Committee following the meeting.

9.2 Mr Beach went through the terms of reference for the sub-group and agreed to share them with the Committee following the meeting

Action
9.3 Mr Beach to share the terms of reference with the Committee members to allow them to make any comments.

9.4 The Chairman invited the members to talk to the group to see what work they had already done so far and encouraged anyone interested to get involved.

9.5 Mr Smith was concerned that the group might be duplicating work and felt that they should be promoting discussion between organisations and groups. There was a danger of duplicating discussions already happening.

9.6 Mr Beach reassured the Committee that the idea was not to duplicate work but to build on what was already being done, look at how other RFCCs were doing this and work with groups/partnerships already in place.

9.7 The Chairman added that the situation on the ground was very different in different parts of the RFCC area. For example, in the Suffolk coastal area there are existing and very effective partnership forums that the RFCC can simply plug into. Essex also had a very good strategic Flood Board that the RFCC can liaise with, although it would be useful to reach out beyond local authorities in Essex. In Norfolk the situation was different again, and Norfolk County Council expected to resurrect their own collaboration forums. He concluded that in the first instance, the sub group was absolutely right to map the structures in place already and would work through those existing groups wherever possible.

9.8 Mrs Mayston handed out a stakeholder mapping form to the Committee and asked that the members complete it. She agreed to email it out after the meeting.

Action
9.9 Officers to email members with a copy of the Engagement Sub-Group Stakeholder Mapping form for them to forward to colleagues, complete and return to Mrs Carol Mayston.

9.10 The Chairman thanked them for their update.

10. Communications service level paper and update (EFCC 18/05)

10.1 Phil Lee and Elliott Furniss gave a presentation to the Committee and introduced the service level paper which the National Communications team had put together to
outline the support which should be provided to the RFCCs. The presentation was shared with the Committee after the meeting.

10.2 The Chairman thanked them and said that their support would be useful for the next year’s engagement events.

10.3 Cllr Lamb asked how and if the team fed into the local authorities to make sure that there is a consistent message.

10.4 Mr Lee reassured Cllr Lamb that they do talk to the councils all the time and share information.

11. Developing the FCERM Strategy (EFCC 18/06)

11.1 Peta Denham introduced the next paper which had been prepared by Alison Baptiste. She explained that the Government’s 25 year plan had prompted a revision of the National FCERM Strategy and that this was being developed then. There had been some workshops specifically aimed at RFCC members and Peta invited Mr Smith to talk to the Committee about his involvement.

11.2 Mr Smith explained that he was a member of the Ambition Working Group as represented in the orange boxes on page 25 of the paper pack. He had missed the initial WebEx and the next meeting he had spoken about in his earlier update. During the meetings in the spring he had been optimistic regarding the proposed new methods and ways of working for FCERM. It was recognised that there was a need to widen the economic value rather than just houses and attract other investment. On the 24 September the groups would meet together with the advisory group. He concluded by saying that if we really wanted the freedom to work proactively then there was work still to be done.

11.3 Ms Denham agreed and added that there was still work to be done and invited members to get involved with the groups. She also invited members to share this with their networks. If anyone wanted to get involved they should email the address at the bottom of page 24 in the paper pack as they were looking for as many people as possible to input into the plan. Mr Smith agreed and encouraged other members to do this as this needed more member input.

11.4 The Chairman explained that he had been involved in other meetings and that Defra were listening and interested in suggestions of alternate methods of funding, investment and how to generate revenue. He reminded the Committee that the government did not want to see barriers for investment and growth and that we needed to think about different ways of getting money.

11.5 Cllr Walsh mentioned that Sir James Bevan had attended the Thames RFCC and that he had agreed with that way of thinking.

11.6 Cllr Lamb added that councils are being told to build houses and some would need to be in flood zones so we needed to think about how we do this and work with the Environment Agency. He suggested that this was something which should be built into the plans.

11.7 The Chairman stressed that was the time to get involved and join one of the working groups so that the members had a chance to shape and influence the plans for the future.
11.8 Mr Beach had not seen any information previous to the meeting but would be interested to join the Communities Working Group and would contact them after the meeting.

11.9 Mrs Fitch-Tillett mentioned that she would like access to the standard pack of engagement information and officers were asked to obtain a copy of the pack and send it to the Committee.

**Action**

11.10 Officers to check and obtain a copy of the pack and email to all the members.

11.11 The Chairman concluded this section by saying this was not a lost opportunity and again encouraged Committee members to get involved in the working groups.

12. **FCRM Capital and Revenue Programme Refresh and Next Long Term Funding Settlement for FCRM. (EFCC 18/07)**

12.1 Aaron Dixey gave a presentation which introduced the Programme Refresh paper to the Committee, this presentation was shared after the meeting. He explained the refresh had been happening since May and the Environment Agency had reported early on this, which had speeded up the process. He highlighted that the work was in line with the spending review SR19 and made the Committee aware of the reduction of £430,000 in revenue maintenance money.

12.2 Cllr Lamb asked about SUDS and surface water flooding schemes as that was important to areas like Southend where heavy rain does not drain away properly and asked if the Environment Agency was doing anything.

12.3 Mr Dixey replied that there was a new levy funded officer who had been employed to work with Southend and Thurrock Councils.

12.4 Cllr Lamb spoke about the Marine Conservation Zones near Southend and asked if there was any funding available for the native oyster beds being developed at present. Mr Dixey said that this was not currently covered by flood risk funding and Mr Johnson added that this was likely to fall under the remit of the EU Shellfish Waters Directive. The Chairman answered that Environment Agency colleagues would find out more information about this for him.

**Action**

12.5 Mr Johnson to find out about funding options available for oyster beds and shellfish waters.

12.6 There was much discussion between Officers and Committee members at this point regarding the revenue maintenance reduction. It was explained that the planned maintenance for this year was fully funded. However, the reactive maintenance money had been reduced as a consequence of the revenue funding reduction. The Committee felt that while they had supported maintenance with Levy money in 2013, where the storm damage created the need for 100 additional projects, they did not feel it was appropriate to use Levy for this purpose year on year. The Committee was concerned that this could set a precedent for future years and did not want the Government to rely on Levy funding to support maintenance expenditure. The Committee was not clear why the money had been reduced. It was agreed that Officers needed to seek clarification and more information for Committee members to be able to discuss this properly. It was also agreed to add this to the Local Choices agenda for further discussion.
12.7 **Action**
Officers to gather information for the Committee to clarify what this would mean and to add it to the agenda to discuss in more detail at the Local Choices meeting in September.

12.8 Mr Smith highlighted that there were a number of sensitive locations, such as Slaughden, where damage was sustained by winter storms with consequential media interest.

12.9 Mr Johnson agreed that this was a good example where some flexibility was required to fund such repairs.

12.10 Cllr Walsh asked for clarification about whether there was any connection between item 2.4 in the information paper INF/E135 and this matter. Officers reassured him that this was a different matter and related to uneconomic assets.

12.11 Mr Goodliffe commented that all the funding across the board was being cut at that time and thought that it was good that Levy funding was able to be used flexibly.

12.12 The Chairman concluded this part of the meeting and suggested that the Local Choices meeting would be the best place to discuss this further.

13. **Natural Flood Management (EFCC 18/08)**

13.1 The Committee received a presentation from Nicki China and Matt Butcher, they also watched a video introducing Natural Flood Management and these were both shared with the members after the meeting.

13.2 Cllr Aldridge stated that this was a really good idea and asked how much we were trying to mitigate flooding caused by the enormous amount of development happening. He was concerned about the run-off from the sites going into the rivers and he wondered who was involved and was the Environment Agency talking to the district council planners.

13.3 Mr Butcher answered that at Spains Hall, one of the sites in the presentation, there was no development upstream and agreed that we need to be using NFM techniques designed within new developments. It was not happening at that time but we needed to influence to make sure this happened in the future.

13.4 Cllr Lamb was very interested in this and asked if Southend, which is a much urbanised area with not a lot of green, could benefit from works upstream. Mr Butcher replied that there were sites which could be used for this purpose and added that we needed to look as far upstream as possible for the maximum benefits.

13.5 Mr Powell added that he was a big fan of this approach and thought it was an innovative way of handling water. He had seen some great schemes in Europe with communities being involved, which was where we need to get better. This could have an economic as well as a conservation value. There had been two major development projects both were committed to catchment management planning and there should be more money available from those, as partners like water companies and Highways England got involved.

13.6 Ms China added that there were some projects and they were trying to link up with them.
13.7 Mrs Mayston added that things have moved on from the video and Chris Uttley now worked for the Environment Agency. The South East Hub Sustainable Places teams had a NFM engagement meeting in September also Thames RFCC had accepted an NFM paper and had set up a working group for this subject. Adding that she would like to see a workshop on this at one of the engagement events.

13.8 Cllr Steptoe asked how you get the landowners on side. Mr Butcher answered that Mr Hullis would cover this in his update as Suffolk County Council had been working on this with their holistic water management strategy.

13.9 The Chairman stated that the feedback from Essex had been positive as the Beavers did not need any permissions to build their structures. Officers added that they did not need Flood Risk Activity Permits but they did need permission from Natural England.

13.10 Cllr Walsh affirmed that this was very close to where he lives, he agreed with how good this idea is and was very supportive of this approach to flood management.

13.11 Ms Denham informed the Committee members that the Environment Agency was looking to organise a site visit for them to look around Spains Hall as the landowner was happy to show people around. This would also be a good time for Essex County Council to showcase some of the work that it was doing, so she was hoping to organise a joint field trip.

13.12 Mrs Burch invited the Committee to the open day for the Debenham scheme on the 20 September. She explained that there was further information on the Suffolk County Council website for anyone interested in coming along.

13.13 Mr Smith pointed out that section 2.3 of the paper on page 36 was interesting and hoped that the FDGIA guidelines were being altered so that it could be used to fund standalone schemes. He also asked about tree planting and what the land would be good for, had it any economic value?

13.14 Mr Butcher answered that it could be valuable as a forestry scheme. In Essex they were planning to plant 18,000 trees in a good part of the catchment. He added that just planting a small number of trees near a watercourse would be beneficial. Cllr Walsh also added that Cricket Bat Willow grows near water and had a good and quick economic return.

13.15 Mr Smith concluded that Suffolk Coastal was planning garden neighbourhoods and would ensure that something about NFM was on their website.

14. **Update from Suffolk County Council**

14.1 Matt Hullis gave a presentation to the Committee about the work that Suffolk County Council was carrying out at the time. He gave some background to the Holistic Water Management Project, work done in Debenham and works on the Felixstowe peninsula. The presentation was shared with members after the meeting.

14.2 He took time to recognise the hard work that Jane Burch had done over the years in these and other projects. He mentioned that she was planning to retire at the end of 2018.

14.3 The Chairman stated that it was good to see that they were looking at ways to better use water as a resource, not just as a problem to be disposed of.
14.4 Mr Smith was interested to see that in Debenham it looked like they were working with the developers but not local district council planners and had achieved this by talking to planners. Mr Hullis reassured the Mr Smith that they are trying to work with both.

14.5 The Chairman added that no matter where we are working, if we are to unlock new funding, we needed to look at development and investment in a holistic, sensitive and sustainable way. He concluded by congratulating Mr Hullis and the Council for their innovative approach with this project.

15. Forward look (EFCC 18/09)

15.1 The Committee looked at the forward look and asked for the following 2 actions.

Action
15.2 Officers to move the Norfolk Broads and Bacton update to the 16 January meeting agenda.

Action
15.3 Officers to add FCERM strategy to the 19 October meeting agenda.

15.4 Mr Verrier mentioned that the I-Storm group would be visiting the Ipswich Barrier on 1-2 October. He wanted to involve members and agreed to send out some further information to them.

Action
15.5 Officers to forward information to members who would then advise if they were willing to help out at this event.

16. Key Items from information papers

16.1 The Committee noted the content of the information papers.

16.2 Mr Smith raised a local issue regarding Sizewell C in section 2.8 of the paper INF/E135. He was concerned at this had been going on for eight years and there were huge implications on coastal processes in this area. It was worrying that EDF were not talking to us and felt that there needed to be some urgency to get them to engage. He was attending a meeting that afternoon to discuss this matter and asked for the support of the Chairman and Dr Beardall to encourage EDF to be more open with the RFCC about their plans.

16.3 The Chairman added that there were similar issues with Bradwell. Dr Beardall agreed to catch up with Mr Smith to discuss this and agreed we needed to be on the front foot with EDF.

16.4 The Chairman then asked for an update on three projects in the table on page 72 of the paper pack namely Heybridge, Lowestoft and Great Yarmouth.

16.5 Ms Denham had reported on the situation at Heybridge at the last meeting. She added that the Environment Agency was now working with the local authority to look at alternative options. They needed to spend some time to find an appropriate solution thinking about different ways of working. When the Environment Agency had the preferred options it would work with the developer, to look at how they might be able to contribute to a general reduction in flood risk to the town at the same time as they deal with the new site’s surface water.
16.6 Mr Johnson updated the Committee on Lowestoft and stated that there had been delivery constraints which had put the cost and delivery time up. Mr Hullis added that things were getting better with the port and they were talking to central government. There is restricted time due to the offshore wind farm and they were looking for extra funding.

16.7 The Chairman asserted that this was an important sea defence project and surface water project. There are solutions and there were still people at flood risk.

16.8 Mr Hullis mentioned that there was an event planned to talk to locals next year.

16.9 It was agreed that it was good news about Great Yarmouth.

17. Any other business

17.1 None.

17.2 The meeting closed at 1pm and was followed by a visit to the Ipswich Tidal Barrier.

Date of next meeting: Friday 19 October 2018 – Committee Room 1, County Hall, Market Road, Chelmsford CM1 1QH
<table>
<thead>
<tr>
<th>Date</th>
<th>Meeting</th>
<th>Action Required</th>
<th>Who by?</th>
<th>Pending/ Why?</th>
<th>Completed</th>
</tr>
</thead>
<tbody>
<tr>
<td>24 November 2017 RFCC Levy Vote/ EU Exit Meeting</td>
<td>4.4 An Overview of EU Exit for FCRM</td>
<td>Bill to circulate the House of Commons library briefing paper to members</td>
<td>Bill Parker</td>
<td>Complete</td>
<td>Completed</td>
</tr>
<tr>
<td>27 April 2018 RFCC Meeting</td>
<td>8.4 Matters arising from previous meetings</td>
<td>Chair to arrange a meeting between himself, Anglian Water, Cllr Rice and Officers to discuss a way forward. With regards to surface water issues in Thurrock where Anglian Water pipework is not adequate to cope with heavy rainfall</td>
<td>Paul Hayden: RFCC Chairman</td>
<td>Complete</td>
<td>Completed</td>
</tr>
<tr>
<td>20 July 2018 RFCC Meeting</td>
<td>3.7 Chairman’s announcements</td>
<td>Committee members should invite and encourage people with different skillsets to come along to the next few RFCC meetings with a view to being more involved and applying for a position in January 2019 in the next open recruitment round.</td>
<td>All</td>
<td>Ongoing</td>
<td>Members to keep encouraging others to apply for positions at the next recruitment drive in January.</td>
</tr>
<tr>
<td>20 July 2018 RFCC Meeting</td>
<td>3.10 Chairman’s announcements</td>
<td>Officers to send the web link of the RFCC Observatory to the Committee members who then should email with suggestions and feedback with the online tool.</td>
<td>Mareth Bassett</td>
<td>Complete</td>
<td>Mareth sent the link on 1 August</td>
</tr>
<tr>
<td>20 July 2018 RFCC Meeting</td>
<td>5.7 Approval of minutes of the meeting held on 27 April 2018.</td>
<td>Officers to share the final version of the minutes before the next RFCC meeting on 19 October 2018.</td>
<td>Mareth Bassett</td>
<td>Complete</td>
<td>Email sent with Sharefile link to files on 23 July</td>
</tr>
<tr>
<td>20 July 2018 RFCC Meeting</td>
<td>9.3 Update from the Engagement Sub-Group</td>
<td>Mr Beach to share the terms of reference of the sub-group with the Committee members to allow them to make any comments.</td>
<td>Tim Beach</td>
<td>Complete</td>
<td>Draft document emailed to the Committee on 28 September.</td>
</tr>
<tr>
<td>20 July 2018 RFCC Meeting</td>
<td>9.9 Update from the Engagement Sub-Group</td>
<td>Officers to email members with a copy of the Engagement Sub-Group Stakeholder Mapping form for them to forward to colleagues, complete and return to her.</td>
<td>Carol Mayston</td>
<td>Complete</td>
<td>Email sent with mapping form attached on 27 July</td>
</tr>
<tr>
<td>11.10 Developing the FCERM Strategy (EFCC 18/06)</td>
<td>Mrs Fitch-Tillett mentioned that she would like access to the standard pack of information and officers were asked to obtain a copy of the pack and send it to the Committee. Officers to check and obtain a copy of the pack and email to all the members.</td>
<td>Mareth Bassett/Carol Mayston</td>
<td>Complete</td>
<td></td>
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<tr>
<td>12.5 FCRM Capital and Revenue Programme Refresh and Next Long Term Funding Settlement for FCRM. (EFCC 18/07)</td>
<td>Cllr Lamb asked if there was any funding available for the native oyster beds being developed at present. Officers to find out about funding options available for oyster beds and shellfish waters.</td>
<td>Mark Johnson</td>
<td>Complete</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12.7 FCRM Capital and Revenue Programme Refresh and Next Long Term Funding Settlement for FCRM. (EFCC 18/07)</td>
<td>There was a discussion between Officers and Committee members regarding the Revenue Maintenance reduction and if this would require Levy money. The Committee were not clear why the money had been reduced. Officers to gather information for the Committee to clarify what this would mean and to add it to the agenda to discuss in more detail at the Local Choices meeting in September.</td>
<td>Aaron Dixey/Mareth Bassett</td>
<td>Complete</td>
<td></td>
<td></td>
</tr>
<tr>
<td>15.2 Forward Look (EFCC 18/09)</td>
<td>Officers to move the Norfolk Broads and Bacton update to the 16 January meeting agenda.</td>
<td>Mareth Bassett</td>
<td>Complete</td>
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<tr>
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<td>Mareth Bassett</td>
<td>Complete</td>
<td></td>
<td></td>
</tr>
<tr>
<td>15.5 Forward Look (EFCC 18/09)</td>
<td>Verrier mentioned that the I-Storm group would be visiting the Ipswich Barrier on 1-2 October. He wanted to involve members and agreed to send out some further information to them. Officers to forward information to members who would then advise if they were willing to help out at this event.</td>
<td>Graham Verrier/Mareth Bassett</td>
<td>Complete</td>
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</tbody>
</table>

FCERM Strategy team emailed on 1 August, they replied on 7 August. Information sent to members on 8 August.

Mark found that the money for Shellfish Waters would come from the WFD and he spoke to Cllr Lamb about this.

Added to the Local Choices agenda 1 August

Added to the Forward Look for the January Meeting 1 August

Added to the October Agenda 1 August

Andy Smith, Cllr Walsh and Paul Hayden invited to attend the event on behalf of the RFCC and give feedback at the October meeting.
The purpose of the meeting was for members to:

A. Note the indicative allocation,
B. Note and comment on the optimisation principles being applied locally
C. Note and advise on new local levy requests
D. Provide strategic steer for any local choices within their programme.

This meeting provides an informal opportunity to influence the final programme and to exercise the local choice along with political steer, local priorities or new opportunities, and to hear the views of LLFAs and Members.

- This meeting was held at a crucial time in the 6 year programme. The group agreed that we need to ensure that the programme is set to deliver as many homes better protected as possible by 2021 to meet the government target. We need to be sure that we will deliver projects on time along with any of the associated benefits to ensure that they will attract the funding.
- The Chairman opened the meeting and gave an overview of the aims as above. He set the scene for the meeting and explained that this was the time to look at the Local Levy and discuss how it could be allocated for the best outcomes.
- No decisions would be made during the Local Choices meeting itself, but the outcome of the meeting and any other subsequent discussion would be taken to the RFCC meeting in October when decisions could be made.
- Aaron Dixey presented the programme as it stood at that time. He explained that it had been prioritised nationally over the summer months. All those schemes already in construction, with H&S implications and ring fenced were funded to maximise the homes better protected by 2021. This means that available GiA funding for the next 2 years was 42% less than we asked for in the summer refresh.
- There was some discussion and it was explained that all projects eligible for GiA would receive the money however some projects had been re-profiled to receive this after 2021. This meant that Local Levy would be needed. However to fulfil the requirements set in the Committee’s guidance for Local Levy, this must be applied fairly and equitably. The job of the Committee is to apply their local knowledge to ensure that Local Levy is spent when and where it is needed and achieves most. It was agreed that the Committee needs to be transparent in the decisions it makes.
- There was some concern expressed that the national GiA criteria is set at houses where there are other important factors which also need to be considered. Examples were given of Lowestoft and Saffron Walden where there are projects which protect relatively few houses but have great economic value. It was agreed that the Committee should have an approach which supports the government target however making sure that there was money available to support local schemes which would not generally attract GiA money in the short term. This was where the Committee needed to be making local choices. It was agreed that we also need to be looking at projects which would deliver multiple benefits. Giles Bloomfield was concerned that if houses protected was the main driver this might
make it difficult for the IDBs as they have a legal obligation to protect habitat and would probably need Local Levy to support their projects. Reference was made to the Committee’s existing Local Levy principles which include the aim to consider the environmental and economic benefits of flood and coastal risk management schemes.

- There was some discussion around the £450k which is safeguarded annually for maintenance, if needed. It was explained that this money is set aside each year but does not accumulate year on year. The Chair reiterated that this provision is for emergency repairs only, which may be required after an unforeseen incident (e.g. tidal surge) or an unexpected failure of an important asset, and where no revenue GiA is available.
- There was some discussion about the year on year Local Levy balances, which can be rolled over into the following year for future spend. This also meant that if there was a major project which required a large amount of Local Levy then this could be saved. It was agreed that we need to make the money we have spread further with a view to looking at investing in projects we can deliver this year and moving those we cannot deliver, to another year. We need to be realistic about what we can deliver in the next 6 years.

**Action – Aaron to share the spreadsheets presented on the day with the RMA officers to assist in follow up local choices discussions taking place during October.**

- It was also agreed that the RMAs all needed to keep working on business cases to make projects shovel ready so that they could benefit from any in year opportunities and bid for any money which could become available.
- The matter of shovel ready projects was discussed with a suggestion that RMAs and Environment Agency could have a list of such schemes. It was noted however that business cases can go out of date quickly, so it can be difficult to keep a complete list all the time. We need to be careful and invest wisely and minimise abortive payments for business cases which is not used.
- There was some discussion on the Levy funded posts and how useful they have been. Mark Johnson read a communique from Cllr Fitch-Tillett, where she commended the work of the EA Officer working with NNDC, where time and money had been saved as a result of collaborative working on a recent request to repair a rock armour at Happisburgh. It was agreed that the Levy funded posts have been instrumental in supporting the programme.
- Giles Bloomfield asked if the IDB could have funding for 2 posts for 3 years to help them with economic appraisals and business plans. It was agreed that this would be taken to the next RFCC full meeting to be voted upon. The IDB would need to clarify what they would need the posts for to inform the RFCC and enable them to make an informed decision.

**Action – request for 2 Levy funded posts for the IDB who need to advise the Committee exactly what these will be needed for.**

- At the end of the discussion Aaron Dixey asked the following questions which the RMAs and Committee members would need to think about and answer before the next RFCC meeting. The Environment Agency would organise meetings with all of the RMAs during October to look at the programme and discuss this all in more detail, prior to sending a final ‘post local choices’ version of the programme back to national colleagues at the end of October.
  1) Are there any additional prime candidate projects we should try to accommodate?
  2) Do you agree with the optimisation principles used?
  3) Do you have any comments on the project totals [Local Levy] provided?

**Action – Mareth Bassett to organise meetings with the RMAs to look at the programme and discuss the details before the next RFCC meeting on the 19 October.**

**Action – The Environment Agency to work with the RMAs to develop a list of projects which are shovel ready so that we are able to capitalise on any in year opportunities as they arise.**
• There were no items of AOB discussed at the meeting.

RECOMMENDATION

The purpose of the meeting was for members to:

A. Note the indicative allocation,
B. Note and comment on the optimisation principles being applied locally
C. Note and advise on new local levy requests
D. Provide strategic steer for any local choices within their programme.

Aaron Dixey
FCRM Programme Senior Team Leader
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RECOMMENDATIONS
The Committee is asked to:

A. Determine the amount of Local Levy to be raised on local authorities in Anglian (Eastern) for 2019-20. *(LLFA Members Only)*
B. Approve that the Environment Agency (Anglian Region) continue to raise General Drainage Charges for the year ending 31 March 2020. *(All Members)*
C. Determine and approve the Precepts on Internal Drainage Boards for the year ending 31 March 2020. *(All Members)*

1. Purpose and Introduction

1.1 The purpose of this report is to assist the Anglian (Eastern) Regional Flood and Coastal Committee to set the Local Levy for 2019-20 in accordance with the Environment Agency (Levies) Regulations 2011.

1.2 The Flood and Coastal Risk Management Programme includes funding from several sources such as
- Flood and Coastal Erosion Risk Management Grant In Aid (GiA)
- Local Levy
- General Drainage Charge
- Internal Drainage Board Precepts
- One-off central funding for Government priorities e.g. deprived communities.
- Private contributions
- Additional local authority contributions
- Local Enterprise Partnership (LEP) funding

1.3 This paper covers Local Levy, General Drainage Charge and Internal Drainage Board Precepts only.

1.4 The Environment Agency raises a levy on upper tier and unitary local authorities each year. The amount payable for each local authority is determined by reference to its approved council tax base. The council tax base changes each year because of the addition of new housing stock and the demolition of older housing stock.

1.5 Grant in Aid for Flood and Coastal Erosion Risk Management (GiA) is allocated according to priorities based on flood and coastal erosion risks and delivery of outcomes determined by Defra.

1.6 GiA can provide significant additional funding towards local projects to reduce flood and coastal erosion risks in communities. However, local funding from all sources will be needed to lever in and secure the GiA for the majority of projects.

1.7 This paper sets out the need for Local Levy funding in 2019-20 and asks the Committee to set the Internal Drainage Board Precepts (IDBP) for 2019-20.
2. The benefits of raising Local Levy

2.1 During the period 2006 to 2018, the Anglian (Eastern) RFCC raised £31m in Local Levy. Over the same period, the amount of GiA allocated by central Government to Eastern RFCC was £473.9m. The GiA income was 15 times the amount raised by Local Levy.

2.2 Levy is also used to support the full range of FCERM activities necessary to deliver the outcomes for communities facing flood and erosion risks, providing the Committee with flexibility and choice in how it prioritises projects. The levy principles adopted by the Committee deliver fairness in the way that levy income is used and ensures maximum benefits can be delivered for every pound raised.

2.3 Local Levy has proven to be a great catalyst for bringing in funding from other sources. In the future levy is helping close the gap but it is not removing the need for private contributions. Levy is making the task more attainable for communities and businesses who want to contribute. Coupled with the tax breaks this sets the scene for all risk management authorities to secure more private contributions.

2.4 Seawick Sea Defence Scheme
Seawick Sea defence scheme will offer protection to a caravan park which provides a wide variety of amenities for the local area and supports a large number of small local independent businesses and is actively engaged in supporting the local community. In addition, the beach is a key influence in bringing in year on year tourism and provides a key attraction for residents and visitors. By maintaining the standard of protection, local businesses, visitors, residents and other nearby caravan parks can continue to enjoy the area and Essex County Council, can continue to see sustained growth and significant tourism benefits that the area brings. Local Levy is one source of finance the project is using.

2.5 Suffolk Holistic Water Management Project – Debenham
The project has benefited from £108,500 of Local Levy for the implementation of 2 large scale natural flood management features. The feature has created a flood storage and wetland area with a combined capacity to hold approximately 13,200 m³ of flood water. The feature will provide flood risk reduction to residential properties and a wider reduction in flood depths supporting the wider Debenham flood risk management project. The project will also...
retain a permanent water feature, providing a new wetland habitat and amenity feature. The feature will also trap sediment and nutrients, thus assist in improving water quality within the upper River Deben.

2.6 Natural Flood Management (NFM) Projects
An allocation of £250,000 of Local Levy per county has encouraged a number of NFM project proposals. Each project is capped at £50k and requires monitoring to be undertaken of the NFM feature in order to demonstrate how the assumptions on flood risk and wider benefits made within the business case will play out in real life. Project delivery is to be undertaken by LLFAs, IDBs, Essex Wildlife Trust, Essex and Suffolk Rivers Trust and Suffolk Wildlife Trust.

This year, two projects have included the use of beavers to create woody dams as part of a wider suite of measures. The Local Levy initiative looks set to lever in significant contributions from partners attracted by the pioneering nature of the projects and the wider benefits provided, including from private consultancy. NFM projects are demonstrating how outcomes for communities and the environment can be achieved side by side, working with a range of partners who historically may not have been involved with FCERM projects.

2.7 Small Scale Drainage Improvement Schemes
Local Levy has enabled Suffolk Highways to deliver two small scale drainage improvement schemes to reduce risk to individual properties at very significant surface water flooding risk. Projects have been completed in Portland Crescent, Woodbridge and Yoxford, to install soakaways and new drainage systems. The projects received a total of £14,371 from Local Levy, £7,881 from GiA and £20,662 from Suffolk Highways.

2.8 Benacre Flood Risk Management Appraisal
Local Levy has been used to progress this complex multi benefit project which has excellent partner support. Further levy funds will be needed for studies to help complete the outline business case, which is being completed by the Water Management Alliance working on behalf of Waveney and Lothingland IDB. The A12 is one of the critical assets at risk.

2.9 Walton on Naze Counterwall
We supported Tendring District Council and the landowner to successfully complete the construction of a clay counterwall which will provide 50 year erosion protection to public open space, a nature reserve, Anglian Water sewerage treatment works and agricultural land. Local Levy was essential to the success of the project, enabling successful partnership funding contributions from Anglian Water, The Naze Protection Society, Tendring District Council and the landowner.

2.10 Bacton Sandscaping Project
The Bacton Sandscaping project is a UK “first of its kind” project to deliver a major mega-nourishment in a fashion similar to the Dutch Sand Engine near The Hague, Netherlands. The project will offer protection to the Bacton gas site infrastructure and additional coast protection benefits will be provided to the villages south of the site. The project is compliant with the strategic intent of the Shoreline Management Plan (SMP) for this section of coast, where protection of individual sites can have significant negative coastal process impacts further down the coast. Local Levy is one of a number of sources of finance that is being used to deliver the project. Two thirds of the circa £20m funds comes from the private sector. The project is being delivered by North Norfolk District Council in partnership with the site operators and the Environment Agency. The project is currently out to tender and expected to be delivered next year (2019).

2.11 Slaughden Shingle Recycling
Work is underway recycling shingle from Sudbourne Beach on Orfordness to Slaughden Beach, south of Aldeburgh, Suffolk. Works this year are wholly funded by Local Levy. The recycling campaign is expected to be complete by late October and will consist of moving 20,000 tonnes of material a distance of 4km northwards and placing it on the rear face of the
shingle ridge at Slaughden where the ridge is at its narrowest. This will make the ridge much more resilient to storm induced erosion and help prevent a breach being formed between the Alde & Ore Estuary and the North Sea. The project is expected to cost £100k and to last 3 to 5 years. The Environment Agency is continuing to work with partners and the local community on longer term options for this frontage through a review of the SMP policy.

2.12 Essex Property Level Protection Project (Phase 2 and South Essex)
We have continued to use Local Levy to support Essex County Council’s Property Level Resilience (PLR) project. This important project was in need of extra funding support this year due to applicant oversubscription. We used Local Levy to ‘top up’ the funding gap which also unlocked GiA. This project is a great example of where we have used Local Levy strategically and effectively to:
- Fill funding gaps
- Release GiA
- Support our partners and local priorities
- Deliver outcome measures (OMs) for the capital investment programme
We have invested £66,412 of Local Levy towards this project which has unlocked £132,588 of GiA. A total of 100 OM2s have been claimed this year.

2.13 Coggeshall, Feering and Kelvedon Flood Alleviation Scheme (FAS)
Support from Local Levy has significantly helped increase local confidence in the delivery of this FAS. It has helped unlock further matched partnership funding contributions and expertise from Blackwater Aggregates, and some external funding from Anglian Water, Essex County Council and the local community. The scheme could also attract further significant contributions from other 3rd parties. This project is a great example of how Local Levy can act as a catalyst for developing and driving projects forward to business case.

Local Levy funded posts
2.14 We have used a vacant levy post to refocus our efforts on Southend Borough Council and Thurrock Borough Council, supporting them through the application, production and delivery of flood risk management projects. All posts work closely with the LLFA's from their offices.

2.15 Marie Coleman in Norfolk, Nicki China in Suffolk, and Dave Orrin and Rosie Ryan in Essex continue to exploit new ways of working and provide risk management authorities with efficient project development opportunities, such as business case packaging.

2.16 The support provided by the posts is enabling LLFAs to secure a healthy pipeline of projects for the 6 year capital investment programme and beyond. Innovative flood risk management solutions, such as Natural Flood Management (NFM) are being explored. Linking the LLFAs with Catchment Partnerships has helped achieve this and is maximising opportunities for partnership funding.

Pipeline of Future Projects
2.17 Local Levy is successfully being used to fund the early stages of project development and is helping to build a healthy pipeline of projects for the 6 year Capital Investment Programme and beyond. Essex County Council has used the Programme Delivery Unit (PDU) services for 21 projects. The early appraisal stages of these were funded using Local Levy and many are now progressing to Outline Business Case (OBC). This approach has also been used by Norfolk County Council and Suffolk County Council.

Norfolk County Council
Norfolk used Local Levy to carry out studies through the “business case package” to assess the benefits their surface water management projects could deliver, and provide confidence in solutions. This has been done for projects in Diss, Harleston, Wymondham, Ormesby and Caistor.

Outputs are expected from the consultant over the next few months. The initial assessments will investigate whether a viable flood protection scheme exists in those areas and for those
that qualify more detailed work will be conducted, hopefully leading to a project. On the

ground.

2.19 Suffolk County Council
Suffolk County Council received Local Levy contributions of £38,804 to produce a package
of Outline Benefit Assessments (OBA) for 14 sites across the county. An OBA is a very high
level assessment to determine whether there are any potential flood risk benefits within a
study area and also justifies continuing study work to a full initial assessment. The outputs of
the reports have enabled the Council to make an informed decision on which sites to take
forward to initial assessment or investigate in-house.

This process has identified a pipeline of projects and proportionate assessment, at relatively
low cost. Four sites are progressing through to an initial assessment, one will undergo a
surface water management plan and another will be investigated for the potential to install
property level resilience or other small scale community schemes.

3. Levy Funding

3.1 Levy will continue to be used strategically to:
• Develop and deliver an ambitious programme of works across the RFCC area,
bringing in more projects, getting them shovel ready and supporting their delivery.
• Ensure we attract the maximum GIA for our RFCC, bringing in more than other
RFCC’s.
• Supplement GIA allocations so that more projects can be delivered quicker than they
would have otherwise been and therefore reducing the risk to communities.
• Bring projects forward to protect communities and reduce the funding gaps to enable
others to contribute.
• Reduce flood risk to smaller communities.
• Support larger schemes that are important to the RFCC. For example Lowestoft,
Great Yarmouth and Chelmsford.

4. Local Levy within the Anglian (Eastern) RFCC Programme

4.1 The FCERM Programme for the Anglian (Eastern) RFCC is essential for managing and
reducing the risks from flooding and coastal erosion. Of the 94,000 properties in areas at risk
of flooding from river and the sea, there are still over 29,000 properties that are not
registered to receive a flood warning from the Environment Agency and as such are at flood
risk. There are also a number of properties at risk from coastal erosion, with 2581 properties
and businesses being protected by projects in the current 6 year programme. In addition
there are over 120,000 properties at risk from surface water flooding in Essex, Norfolk and
Suffolk.

4.2 The population in England will continue to grow, placing a greater strain on environmental
resources and infrastructure. There will be more extremes in the weather with a changing
climate, creating demands in responding to more frequent and more intense flooding and
droughts.

4.3 We met in September (Local Choices meeting) to prioritise and suggest projects that could
receive Levy funding. The extent to which the Committee can support those local priorities
will depend on the decisions it wishes to make in respect of the levy settlement.

4.4 The programme shows the Levy is very tight and some years are unaffordable, the Local
Choices meeting feedback will give a steer as to how best to maximise the programme whilst
making it affordable. This affordability does not include inflation pressures. Indications for
2018 show 2.3 to 2.5% annual growth in building material costs and up to 5% growth in
mechanical and electrical components.
5. Delivering Efficiencies

5.1 Local authorities, along with the Environment Agency, have had to cut their costs significantly in light of the unprecedented pressure on all government and public sector funding.

5.2 The Cabinet Office, via the Government's construction strategy, requires government departments to achieve capital efficiency savings. The Environment Agency has committed to achieve savings of 10% of the capital programme by the end 2020/21. The aim is to deliver better outcomes and increase the number of properties protected through the reinvestment of efficiency savings.

5.3 The target applies to all risk management authorities, it is therefore worth considering efficiencies on all projects. Any efficiencies made will be able to offset risks at a project level. This is particularly key where a project has a partnership funding score around 100% where realised risks could make it unviable. In particular inflation, as this has not been built into the 6 year programme.

5.4 Inflation could have an impact on the programme

6. Local Levy settlement options for 2019-20 and beyond

6.1 Last year the Committee voted to increase the levy by 4% to enable additional funds to be directed toward attracting inward investment and deliver local schemes and priorities.

6.2 Table 1 shows a simple 1%-4% to act as a guide for any variation on options that Members would like to put forward for 2018-19.

Table 1
Simple 1%-4% illustration to enable options to be recommended on the day

<table>
<thead>
<tr>
<th>LLFA</th>
<th>2018-19 (£)</th>
<th>1% Simple Costings (£)</th>
<th>2% Simple Costings (£)</th>
<th>3% Simple Costings (£)</th>
<th>4% Simple Costings (£)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cambridgeshire</td>
<td>2,453</td>
<td>25</td>
<td>49</td>
<td>74</td>
<td>98</td>
</tr>
<tr>
<td>Essex</td>
<td>1,378,792</td>
<td>13,788</td>
<td>27,576</td>
<td>41,364</td>
<td>55,152</td>
</tr>
<tr>
<td>Havering</td>
<td>20,971</td>
<td>210</td>
<td>419</td>
<td>629</td>
<td>839</td>
</tr>
<tr>
<td>Norfolk</td>
<td>720,131</td>
<td>7,201</td>
<td>14,403</td>
<td>21,604</td>
<td>28,805</td>
</tr>
<tr>
<td>Southend</td>
<td>194,768</td>
<td>1,948</td>
<td>3,895</td>
<td>5,843</td>
<td>7,791</td>
</tr>
<tr>
<td>Suffolk</td>
<td>670,456</td>
<td>6,705</td>
<td>13,409</td>
<td>20,114</td>
<td>26,818</td>
</tr>
<tr>
<td>Thurrock</td>
<td>169,052</td>
<td>1,691</td>
<td>3,381</td>
<td>5,072</td>
<td>6,762</td>
</tr>
<tr>
<td>Total</td>
<td>3,156,662</td>
<td>31,567</td>
<td>63,133</td>
<td>94,700</td>
<td>126,266</td>
</tr>
</tbody>
</table>

Table 1 gives figures rounded to the nearest pound and therefore some figures won’t reach the same total.

7. General Drainage Charges (GDC)

7.1 GDC is an important source of local funding that has been used to support essential maintenance. The Anglian RFCC’s are unique in raising this charge and it has enabled far more maintenance to take place in this region. It remains an important source of funding.
7.2 The annual change in the General Drainage Charge is linked to the Local Levy through the Council Tax Base. The principle contained in the Environment Agency (Levies) Regulations 2011 is that the annual change in the GDC rate per hectare should be the same as change experienced by a B and D council tax payer following the adoption of the Local Levy for the year.

7.3 The rate per hectare for the GDC is currently 368.14 pence per hectare for Anglian (Eastern) RFCC area.

7.4 The percentage change in council tax levied on a B and D householder will depend on:

a) The % change, if any, in the total levy for the RFCC
b) Any change in the Council Tax Base from one year to the next.

7.5 The GDC rate and hence annual income cannot be accurately forecast until the Council Tax Base data has been received and processed. However, we have not been made aware of any significant changes for next year.

8. Internal Drainage Board Precepts (IDBP)

8.1 IDBP is an important local source of funding that has been directed to supporting essential maintenance in and around IDB areas.

8.2 The RFCC also consents to funding highland water claims, made by IDBs. Highland water contributions, which are funded from revenue GiA, were £517k in 2017/18 and forecast to be £621k in 2018/19.

8.3 In recent years the increase in IDBP has followed the same increase to the Local Levy based on the importance of river maintenance work within the RFCC area. Table 2 shows a simple 1%-4% increase to act as a guide for any variation on options that Members would like to put forward for 2019-20.

<table>
<thead>
<tr>
<th>Board</th>
<th>2018-19 (£)</th>
<th>1% Simple Costings (£)</th>
<th>2% Simple Costings (£)</th>
<th>3% Simple Costings (£)</th>
<th>4% Simple Costings (£)</th>
</tr>
</thead>
<tbody>
<tr>
<td>East Suffolk</td>
<td>86,311</td>
<td>863</td>
<td>1,726</td>
<td>2,589</td>
<td>3,452</td>
</tr>
<tr>
<td>Waveney Lower Yare and Lowthingland IDB</td>
<td>81,490</td>
<td>815</td>
<td>1,630</td>
<td>2,445</td>
<td>3,260</td>
</tr>
<tr>
<td>Norfolk Rivers</td>
<td>66,657</td>
<td>667</td>
<td>1,333</td>
<td>2,000</td>
<td>2,666</td>
</tr>
<tr>
<td>Broads IDB</td>
<td>165,091</td>
<td>1,651</td>
<td>3,302</td>
<td>4,953</td>
<td>6,604</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>399,549</strong></td>
<td><strong>3,995</strong></td>
<td><strong>7,991</strong></td>
<td><strong>11,986</strong></td>
<td><strong>15,982</strong></td>
</tr>
</tbody>
</table>

8.4 GDC and IDBP help support the revenue maintenance programme and can also be used for capital maintenance of existing assets. Figure 2 shows how GDC and IDBP have been used to support Environment Agency revenue maintenance funding.
9. Conclusions

9.1 The Local Levy is critical to developing and delivering the future FCERM programme for the Eastern RFCC. It remains an investment option for local authorities to attract significant income into local communities and to enable the risk management authorities to work with communities and reduce flood and coastal erosion risks.

9.2 The GDC is an important source of local funding to develop and deliver the future FCERM maintenance programme for the Eastern RFCC.

10. Recommendations

10.1 The Committee is asked to:

A. Determine the amount of Local Levy to be raised on local authorities in Anglian (Eastern) for 2019/20. (LLFA Members Only)

B. Approve that the Environment Agency (Anglian Region) continue to raise General Drainage Charges for the year ending 31 March 2020. (All Members)

C. Determine and approve the Precepts on Internal Drainage Boards for the year ending 31 March 2020. (All Members)

MARK JOHNSON
Area Coastal Manager

PETA DENHAM
Area Flood Risk Manager
RECOMMENDATION

The Committee is asked to:

A. Note the draft indicative allocations for flood and coastal risk management capital and revenue grant in aid funding (appendices 1 and 2).
B. Where relevant, undertake local choices on their capital and revenue programmes.
C. Advise on the management of key risks to the 300,000 homes target, and support the capital programme using RFCC levy balances.
D. Endorse the indicative 5 year revenue maintenance programme.

1. Purpose of the report and introduction

1.1 Headline messages:
• This paper requires committees to discuss and note their capital and revenue indicative allocations, and where appropriate, identify any required changes to the programme (process known as Local Choices).
• Appendix 1 contains all the information on the capital GiA allocation, Appendix 2 contains details of the revenue GiA allocation.
• Local choices decisions must meet the required criteria, as set out in section 7.
• To ensure we meet our 300,000 homes better protected target by 2021 the capital programme has been prioritised again by homes better protected.
• We are on track to deliver our collective 300,000 homes target but this remains a challenging target. All RMAs play a significant role in achieving this target. We need to ensure all projects in the programme use their allocation and deliver the associated homes better protected.
• Securing required partnership funding contributions remains the biggest risk.
• The outstanding £40m of additional funding confirmed as part of the Autumn Budget 2017 has now been announced and included in allocations.
• Please refer to the April 2018 National Allocation paper for an overview of the capital and revenue allocation process.

Background

1.2 This paper sets out the indicative allocation for FCRM Grant in Aid (GiA) capital funding for the final 2 years of the programme. It also sets out the national revenue maintenance programme for the next 5 years. The detail is set out in Appendix 1 (for capital) and Appendix 2 (for revenue).
1.3 The committees are asked to discuss and identify any required changes to their programme as appropriate (to make their Local Choices), and to endorse the draft capital and revenue allocations.

1.4 The annual allocation process is set out in the Appendix of the April 2018 National Allocation paper and should be referred to throughout the year.

2. **Progress to date – capital programme**

2.1 We are now half way through the 6 year capital programme. So far, as at 31 July 2018, we have better protected 144,210 homes, against our target of 300,000 by 2021.

2.2 Following this year’s refresh, our most likely homes forecast figure, taking into account delivery confidence for individual schemes, is 312,000 homes better protected. Our maximum homes forecast is 351,000.

2.3 Overall our most likely forecasts are higher than this time last year. The Environment Agency, both nationally and at the operational level, have put in place a number of successful actions to help build confidence in the programme. Some of these include, implementing Programme Delivery Units (PDUs) to improve the way we work with our supply chain, working more closely with local councils, securing extra funding from the Autumn Budget 2017, and Environment Agency CEO/Chair interventions to help secure partnership funding.

3. **Key risks – capital programme**

3.1 Whilst we currently remain on track with programme delivery, there are a number of key challenges. The RFCCs are asked to advise on the management of these risks.

3.2 We are reliant on all Risk Management Authorities (RMAs) delivering their part of the programme. Local authorities are particularly key to achieving this target, and are responsible for schemes which will deliver a third of the remaining homes needed to meet the 300,000 homes target.

3.3 Over the previous 2 years, there has been significant slippage and underspend on projects that are led by other RMAs. Across financial years 2016/17 and 2017/18 a total funding of £73m that was consented by RFCCs was not spent.

3.4 To help, the Environment Agency has raised assurance thresholds for some schemes, delivered training, and local staff continue to work closely with other RMAs to support them through the development of schemes to full business case. We have worked to ensure our supply chain is more readily available for other RMAs to use.

3.5 Securing all the partnership funding contributions required to achieve the homes better protected target for the 6 year programme is our biggest risk, and is in the range of £630m to £700m, of which £160m to £220m has yet to be secured. To achieve 60,000 of the 351,000 maximum homes, we are dependent on these contributions being secured.

3.6 Considerable work is underway to secure the outstanding partnership funding contributions both nationally and locally, and the Environment Agency has developed a number of initiatives to help support delivery by local authorities. RFCCs are asked to consider opportunities to use local levy balances to support the programme.

3.7 We will have a spike in our assurance and contract award workload over the next 6 months as more projects seek approval for final business case and contracts are awarded to begin
construction. By 31 March 2019 sufficient schemes should have contracts awarded to achieve a maximum of 300,000 homes. Internally, the Environment Agency is planning its resources to manage this increase in workload.

3.8 In quarter 1, 2019/20, our supply chain changes from the current WEM Framework to the Next Generation Supplier Arrangements (NGSA). Any transition between suppliers can present risks to programme delivery. We will have robust plans in place to minimise any disruptions to programme delivery.

3.9 Within the Environment Agency we have made a number of interventions to help with programme delivery. We have a detailed 300,000 Homes Action Plan which is helping us to plan and manage the timings of these, and future interventions, across the business.

4. Progress to date – revenue programme

4.1 The annual revenue maintenance programme was published in spatial map form in March this year. We will be updating the current 5 year maintenance programme during September to show the full 5 year programme in map form. We have also extended the programme to include both frequent and intermittent maintenance needs over the course of the 5 years. This will be a rolling programme and all future 5 year programmes will be updated at the start of the financial year with map based programmes.

4.2 It is hoped that through accessing the programme in map form it will help improve awareness and understanding of maintenance activities and the asset maintenance programme. It is available to view on gov.uk (or by searching for River and Coastal Maintenance Programme) and allows the public and our partners to see in detail when and where we are maintaining assets.

5. Autumn Budget 2017 additional funding

5.1 The £40m additional funding to boost regeneration, which was outlined as part of the Autumn Budget 2017, was announced in July. Therese Coffey MP made the announcement, confirming that 13 flood risk schemes will benefit from the additional funding which will help support economic growth and regeneration in areas which have suffered from flooding in recent years. Further information and a list of the schemes to receive additional funding can be found on gov.uk.

6. FCRM Grant in Aid capital allocation

6.1 This year’s annual refresh of the capital programme is the most important to date as it will ensure we achieve the 300,000 homes better protected target over the remaining 2 years of the programme, and will help to inform Spending Review 2019 and our next long term funding settlement.

6.2 As set out in the allocation process (detailed in the April 2018 paper), the October committee meeting is the opportunity for RFCCs to review the indicative capital allocation and make their local choices.

6.3 Following the July round of RFCC meetings, the national Portfolio Management Office (PMO), the Environment Agency’s National Programme Team, reviewed all Area returns against available funding and homes better protected. The refreshed programme has been prioritised by homes better protected within available funding. This is the same approach used for 2018/19, except for one minor change. The cut-off date for projects in construction was set at 1 October 2018 rather than 31 March 2019.
6.4 Not all requested changes from Areas could be accommodated in the programme. The cost of doing so would have taken funding away from schemes that will achieve approximately 18,000 homes towards the 300,000 homes better protected target.

6.5 Prioritising the draft indicative capital programme by homes better protected maximises the likelihood of achieving the target within the current allocation. It has been prioritised using the following approach:

- Projects in construction by 1 October 2018 and statutory and legal ‘must do’s’
- Projects better protecting homes by 2021, then
- Projects better protecting homes beyond 2021, prioritised by their partnership funding score

The programme is then profiled to meet the available capital budget.

6.6 In building the indicative allocations, the allocation principles (see Appendix 1) and Defra’s Partnership Funding Policy have been applied. RFCCs were consulted on these principles and they were approved by the Environment Agency Board in February 2018. They remain unchanged from last year.

6.7 In the current programme we can afford a maximum of 346,000 homes better protected, and some investment in schemes that start in the 6 year programme but complete after it. In the refreshed programme we can afford 351,000 homes, mostly from the same schemes that are in the current programme, but due to increased scheme costs or project slippages we can no longer afford to begin construction on as many schemes that start in the 6 year programme but complete after it, as these do not contribute to the 300,000 target.

6.8 This means that some schemes that would have been expecting funding based on previous years indicative allocations will no longer have funding within this programme. There are also approximately 300 smaller schemes that would have contributed homes to the 300,000 target that we can no longer fund from within the £2.6bn allocation.

6.9 In addition, there are a number of schemes that did not initially receive an allocation in the first draft of the programme that Areas identified may create local issues. Some of these have now been resolved where they can be accommodated within the prioritisation set out in section 6.5. A list of the schemes Areas identified which may create local issues that do not have an allocation can be found in Appendix 1.

6.10 Our focus remains on achieving our fixed 300,000 homes target by end March 2021. This focus on a shorter term goal means that our programme is in essence now a 2 year programme. Ideally we would see our programme consist of a blend of projects at different stages of development to manage flood and coastal erosion risk into the future. With the current pressure on our budgets, we are funding less projects that will feed our programme beyond March 2021.

6.11 Areas will be asked to over-programme in 2019/20. This means they will be able to keep more projects going should funding become available from slippage elsewhere. Recognising that if funding does not become available we may need to slow or stop some.

6.12 In line with our settlement condition for the 6 year programme we would expect to see 10% efficiency savings on the £490m allocation for 2019/20. If half this £49m were cash releasing, this would free up £25m to reinvest in schemes in the over-programme with no funding allocation.
Appendix 1 sets out all the detail for the indicative FCRM capital GiA allocation.

7. Local Choices

7.1 At the October committee meetings, RFCCs are being asked to review their indicative capital allocations and identify any required changes to the programme. We refer to this as the ‘local choices’ process. Local choices are important to ensure local issues can be taken into consideration and we get the best possible outcomes from the programme both locally and nationally.

7.2 Any changes must ensure that the Committee’s programme:

- Remains within budget and on target to spend its indicative allocated budget for the final 2 years of the programme
- Secures, or improves the number of homes better protected

7.3 If additional contributions are identified, from third parties or Local Levy, RFCCs may be able to increase their programme and deliver more projects and more homes better protected.

7.4 Following the committees’ returns, the national Portfolio Management Office will review these, and as long as they meet the required criteria and are within budget they will be included in the production of the final draft allocation. RFCCs will see the draft final allocation again in January for review and consent.

8. FCRM Grant in Aid revenue maintenance allocation

8.1 We have used the Asset Information Management System (AIMS) to inform the indicative 5 year maintenance allocation for 2019/20 onwards.

8.2 The system takes the maintenance needs of all our assets across the country and uses flood risk information, cost benefit ratios and the type of work required to prioritise all activities. We then allocate the funding available across this prioritised programme, which informs the allocations for each RFCC.

8.3 We check the activities in the draft programme, and working with National FCRM and Operations teams, ensure that the cost and activities in the programme are a true reflection of on the ground costs and works required.

8.4 As part of our Spending Review 2015 (SR15) settlement HMT set a condition that we achieve 10% efficiency in asset management by end of SR15 and that we should reinvest all savings into ‘maintaining defences’. As part of this reinvestment we have included a reinvestment of £6m which increases the allocation from £104m (2018/19 pre-cut) to £110m in 2019/20.

8.5 We are applying the same agreement as for the 2018/19 allocation, that any reduction from previous years will be limited to 10% per year. For 2019/20 all RFCCs will receive at least what we indicated their indicative allocation would be as part of the 2018/19 allocation process. Where an RFCC is above its indicative allocation for 2019/20 we have sufficient money to fund increases up to 4%. For 2020/21 onwards we have used the indicative allocations from AIMS Planning, this assumes flat funding in the next spending review period.

8.6 The revenue allocation for 2019/20, set out in Appendix 2, is split into scheduled allocation (maintenance activities which Areas have to bid for), unscheduled allocation (used to make local choices and to allow Areas to react to unforeseen maintenance work that arises
during the year), and asset management revenue projects allocation (which contribute to the asset management programme, but do not relate to 1 specific asset).

8.7 To comply with the government funding settlement a 10% efficiency has been applied to the 2019/20 allocation. This has been achieved by giving each RFCC a programme which is bigger than their allocation, with the expectation that this will be delivered more efficiently over the course of the year. This approach does not reduce the total amount of money invested in maintenance activities but means we can deliver more than we could previously for the same cost.

8.8 Where appropriate, local choices should be undertaken on the revenue allocation where additional local funding opportunities exist (such as through Local Levy, General Drainage Charges and Internal Drainage Board Precepts). The final revenue maintenance allocations will be presented to RFCCs in January for their consent.

8.9 Appendix 2 sets out the detail for the indicative revenue maintenance Grant-in-Aid funding.

9. 5 year asset maintenance programme

9.1 In the March Budget 2016, the government announced an extra £40m per year for asset management. This long term revenue settlement supports our previous commitments to operate a 5 year maintenance programme. The funding profile is set out in Appendix 2.

9.2 Indicative allocations for years 2020/21 to 2023/24 are based on the average allocation an RFCC has received over the last 3 years. This gives an indication of the future level of funding required. All future years allocations are for information only and will be prioritised in detail in the preceding year. Inflation protection will need to be added to the allocations in future years to ensure the programme remains affordable. RFCCs are asked to endorse the 5 year maintenance programme (set out in Appendix 2).

10. Recommendations

10.1 The RFCCs are asked to:

A. Note the draft indicative allocations for flood and coastal risk management capital and revenue grant in aid funding (Appendices 1 and 2).
B. Where relevant, undertake local choices on their capital and revenue programmes.
C. Advise on the management of key risks to the 300,000 homes target, and support the capital programme using RFCC levy balances.
D. Endorse the indicative 5 year revenue maintenance programme.

Author: John Russon, Deputy Director, Allocation and National Programme Management
Sponsor: Ken Allison, Director, Allocation and Asset Management
Date: 24 September 2018

Appendix 1: FCRM GiA indicative capital allocation
Appendix 2: FCRM GiA indicative revenue allocation
Appendix 1 – FCRM GiA indicative capital allocation

This Appendix provides all information required in relation to the indicative capital allocation.

1.0 FCRM GiA capital allocation – funding profile

Table 1: FCRM GiA capital allocation – funding profile (£m)

<table>
<thead>
<tr>
<th></th>
<th>Year 4 2018/19</th>
<th>Year 5 2019/20</th>
<th>Year 6 2020/21</th>
<th>Year 5 &amp; 6 Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-Autumn Budget 2017</td>
<td>470</td>
<td>382</td>
<td>438</td>
<td>820</td>
</tr>
<tr>
<td>Change to profile</td>
<td></td>
<td>-40</td>
<td>70</td>
<td>70</td>
</tr>
<tr>
<td>Additional funding to</td>
<td>10</td>
<td>18</td>
<td>8</td>
<td>26</td>
</tr>
<tr>
<td>accelerate schemes</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Additional funding for</td>
<td>10</td>
<td>20</td>
<td>10</td>
<td>30</td>
</tr>
<tr>
<td>deprived communities</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Revised profile</strong></td>
<td><strong>450</strong></td>
<td><strong>490</strong></td>
<td><strong>456</strong></td>
<td><strong>946</strong></td>
</tr>
</tbody>
</table>

1. Includes £30m moved from 2017/18 to 2019/20

2.0 Unfunded schemes

Table 2: Unfunded schemes

<table>
<thead>
<tr>
<th>Project Name</th>
<th>RFCC</th>
<th>GIA 201920 and 2020/21 £k</th>
<th>Further contributions required 2019/20 and 2020/21 £k</th>
<th>Homes 2019/20 and 2020/21</th>
</tr>
</thead>
<tbody>
<tr>
<td>Snape Improvements</td>
<td>Anglian Eastern</td>
<td>380</td>
<td>0</td>
<td>40</td>
</tr>
<tr>
<td>Aldeburgh Marsh Improvements</td>
<td>Anglian Eastern</td>
<td>1,000</td>
<td>0</td>
<td>38</td>
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### 3.0 FCRM GiA indicative capital allocation for 2019/20 – schemes only (pre Local Choices).

#### Table 3: 2019/20

<table>
<thead>
<tr>
<th>RFCC</th>
<th>Current programme allocation approved by EA Board</th>
<th>Current programme indicative allocation for 2019/20</th>
<th>Refresh bid for 2019/20²</th>
<th>Refresh indicative allocation for 2019/20</th>
<th>Difference refresh vs indicative allocation for 2019/20</th>
<th>Refresh programme forecast 2019/20⁴</th>
<th>'Most likely homes' taking project confidence into account</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>£m</td>
<td>Max homes</td>
<td>£m</td>
<td>Max homes</td>
<td>£m</td>
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<td>3,899</td>
<td>46.7</td>
<td>4,168</td>
<td>37.3</td>
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</table>

1. Indicative allocation for 2019/20 given as part of the 2018/19 allocation process
2. Bids from Areas in July 2018 as part of the refresh for 2019/20
3. Uncertainty remains regarding the OMs forecast for TEAM2100 in light of the reduced allocation.
4. NOTE: whilst the allocation is fixed, the homes protected is subject to change as part of the Local Choices process.

### 4.0 FCRM GiA indicative capital allocation for 2019/20 and 2020/21 – schemes only (pre local choices)

#### Table 4: 2019/20 and 2020/21

<table>
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<td></td>
<td>£m</td>
<td>Max homes</td>
<td>£m</td>
<td>Max homes</td>
<td>£m</td>
<td>Max homes</td>
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<td>84</td>
<td>7219</td>
<td>49.2</td>
<td>6,534</td>
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</table>

1. Indicative allocation for 2019/20 given as part of the 2018/19 allocation process
2. Bids from Areas in July 2018 as part of the refresh for 2019/20
3. Uncertainty remains regarding the OMs forecast for TEAM2100 in light of the reduced allocation.
4. NOTE: whilst the allocation is fixed, the homes protected is subject to change as part of the Local Choices process.
5.0 FCRM allocation principles

Protect people and homes

- Deliver the £2.5bn six year capital programme
- Increased protection for at least 300,000 homes between 2015/16 and 2020/21
- Protect maintenance funding in real terms through this Parliament and re-invest 10% efficiency savings by 2019/20
- Take a risk-based approach to securing the condition of existing assets including channel conveyance
- Maintain our ability to warn people and respond to incidents so as to save lives and property
- Support the provision of property scale resistance and resilience measures

Working in partnership

- Provide positive contributions to the recently announced Government-led reviews into flood risk management
- Achieve third party, including private, investment in line with the Defra partnership funding and contributions policy
- Support community-based solutions that are innovative, cost-effective and affordable
- Achieve balanced programmes in collaboration with RFCCs
- Promoting an integrated approach to managing flood risk working with other Risk Management Authorities
- We will take a catchment based approach
- Improve our understanding with partners of all flood and coastal erosion risk data and support the government’s ‘Open Data’ commitment making our data and information easily accessible to all who want it

Way we work

- Maintain skills and a pipeline of studies for medium and long-term investment needs
- Maximise efficiency savings and value for money
- Continue to promote schemes that meet statutory environmental requirements
- Promote sustainable development that reduces flood risk
- Provide appropriate funding toward the essential support services that enable delivery of flood and coastal risk outcomes
- We will work collaboratively across the Environment Agency and with external partners to realise multiple benefits
Appendix 2 – FCRM GiA indicative revenue allocation

This Appendix provides all additional information required in relation to the indicative revenue allocation.

1.0 FCRM GiA revenue allocation – funding profile

Table 1: FCRM GiA asset management funding profile (£m) (excluding any cuts)

<table>
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<tr>
<th></th>
<th>2016/17</th>
<th>2017/18</th>
<th>2018/19</th>
<th>2019/20</th>
<th>Total</th>
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<tr>
<td>SR15 baseline¹</td>
<td>174</td>
<td>177</td>
<td>180</td>
<td>184</td>
<td>715</td>
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<td>Budget 2016</td>
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<td>40</td>
<td>40</td>
<td>40</td>
<td>160</td>
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<tr>
<td><strong>Total asset management revenue</strong></td>
<td><strong>214</strong></td>
<td><strong>217</strong></td>
<td><strong>220</strong></td>
<td><strong>224</strong></td>
<td><strong>875</strong></td>
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¹. Annual increase is due to ‘real terms’ protection for asset management and reinvestment of asset management efficiency savings.

2.0 FCRM GiA indicative revenue allocation for 2019/20

Table 2: FCRM GiA indicative revenue maintenance allocation for 2019/20 (£k)

<table>
<thead>
<tr>
<th>RFCC</th>
<th>Indicative Scheduled Allocation (£k)</th>
<th>Indicative Unscheduled Allocation (£k)</th>
<th>Indicative Revenue Projects Allocation (£k)</th>
<th>Total Indicative Allocation (£k)</th>
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<td>Anglian Central</td>
<td>3,927</td>
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<td>375</td>
<td>4,770</td>
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<tr>
<td>Anglian Eastern</td>
<td>7,970</td>
<td>728</td>
<td>-</td>
<td>8,698</td>
</tr>
<tr>
<td>Anglian Northern</td>
<td>9,630</td>
<td>357</td>
<td>300</td>
<td>10,287</td>
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<tr>
<td>North West</td>
<td>9,387</td>
<td>1,109</td>
<td>149</td>
<td>10,645</td>
</tr>
<tr>
<td>Northumbria</td>
<td>2,355</td>
<td>120</td>
<td>-</td>
<td>2,475</td>
</tr>
<tr>
<td>Severn &amp; Wye</td>
<td>3,896</td>
<td>937</td>
<td>-</td>
<td>4,833</td>
</tr>
<tr>
<td>South West</td>
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<td>517</td>
<td>-</td>
<td>5,119</td>
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<tr>
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<td>9,327</td>
<td>1,918</td>
<td>31</td>
<td>11,276</td>
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<tr>
<td>Thames</td>
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<td>250</td>
<td>19,399</td>
</tr>
<tr>
<td>Trent</td>
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<td>1,822</td>
<td>-</td>
<td>12,335</td>
</tr>
<tr>
<td>Wessex</td>
<td>7,184</td>
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<tr>
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<td>1,302</td>
<td>-</td>
<td>12,434</td>
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<tr>
<td><strong>Total</strong></td>
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<td><strong>13,822</strong></td>
<td><strong>1,105</strong></td>
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### 3.0 FCRM GiA indicative revenue allocations for 2019/20 to 2023/24

Table 3: FCRM GiA indicative revenue maintenance allocations to 2023/24 (£k)

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</thead>
<tbody>
<tr>
<td>Anglian Central</td>
<td>4,270</td>
<td>4,770^2</td>
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<td>4,168</td>
<td>4,168</td>
<td>4,168</td>
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<tr>
<td>Anglian Eastern</td>
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<td>Anglian Northern</td>
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<td>North West</td>
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<tr>
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<tr>
<td>Severn &amp; Wye</td>
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<td>Yorkshire</td>
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</table>

1. Reduction for Operational Areas capped at 10% for 2019/20
2. Commitment to Indicative Allocation in February 2018 RFCC paper for 2019/20
3. Increase for Operational Areas capped at 4% for 2019/20
4. Thames Allocation includes an increase for Thames Tidal Defences
### 4.0 FCRM GiA indicative revenue programme for 2019/20 to 2023/24

#### Table 4: FCRM GiA indicative revenue programme to 2023/24 (£k)

<table>
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<tr>
<th>RFCC</th>
<th>Year</th>
<th>System Risk</th>
<th>Dredging</th>
<th>Maintain Conveyance</th>
<th>Maintain Raised Defences</th>
<th>Maintain Structures</th>
<th>MEiCA</th>
<th>Operation</th>
<th>Other</th>
<th>Survey/Inspection</th>
<th>Statutory Inspection</th>
<th>Channel Repairs</th>
<th>Coastal Repairs</th>
<th>Raised Defence Repairs</th>
<th>Structure Repairs</th>
<th>Unscheduled</th>
<th>Total</th>
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* 20/21 is an indicative allocation and excludes AM Revenue Projects
† 21/22-23/24 are indicative allocations and include AM Revenue Projects
The Committee is asked to:

A. Note and support the progress of the Local Flood Risk Management Strategy.

1. Background

1.1. Essex County Council has been discussing our Local Flood Risk Management Strategy (LFRMS) refresh with the Essex Flood Partnership Board throughout its development.

1.2. In the latest update to the Board (July) we shared the draft of the LFRMS document for partner consultation. The Boards approved the approach being taken, and the refreshed content of the draft document.

1.3. Following the closure of our partner consultation period (31 August 2018) we are now in the position to make final update and publish the refresh.

2. Reasons behind the LFRMS refresh

2.1. Following the Flood and Water Management Act 2010, Lead Local Flood Authorities were under pressure to respond to their new responsibilities and start delivering their statutory role in partnership with others.

2.2. The first iteration of our LFRMS (2012) followed national guidelines and focussed heavily on describing new processes and legislation. This was helpful for the purposes of supporting a new service and establishing clear ways of working.

2.3. Following a review by internal teams, including strategy and communications experts. It was agreed that the LFRMS no longer met ECC principles for strategy structure, presentation or language. The LFRMS also includes outdated information and replicates a lot of content found elsewhere within flood and coastal erosion risk management documents.

2.4. Since its publication, only a handful of ‘downloads’ and requests have been made for our LFRMS. However, we do not currently widely publicise the LFRMS due to it being outdated and unsuitable for the general public as an audience.

3. Why the new public audience?

3.1. In our view the LFRMS in its current format no longer serves any audience. We feel that our internal and external processes and relationships are now well established and that there are many other existing strategies and technical documents to serve professionals within
the field. However, there lacks a strategic document that focuses entirely on the public audience.

3.2. Essex is a trusted, innovative and leading LLFA. We have already established a number of ‘resilience’ initiatives to assist our residents to help themselves. A refreshed public facing strategy would help us to communicate flood risk and the possible self/community response to that risk even further.

3.3. In times where resources and processes are being streamlined within local government, we see this as a good time to be clear about what we can do to help communities. In parallel with what communities can do to help themselves.

4. Governance

4.1. Following this consultation, and pending any changes, the LRFMS will become live once signed off by Chief Officer Action (COA). The legal view is that this does not require another public consultation, as the fundamental objectives of our LFRMS are not changing.

4.2. The content of other associated strategies, such as the Flood Risk Management Plans, will not be affected by the changes within our LFRMS. Our new refresh is intentionally broad enough that it will not become outdated or contradict any of our previously reported activities.

4.3. The required Strategic Environmental Assessment (SEA) and Habitat Regulations Assessment (HRA) screenings are being conducted and will be published with the final documents Appendices.

5. Format and content

5.1. The refreshed format of the LFRMS is modern and visual. Plain English is used throughout and the section headers logically set out our approach.

5.2. Jargon and legislative terms such as ‘asset register’ and ‘capital flood programme’ have been rephrased so that they have real-world meaning.

5.3. Throughout the document we have used case studies to illustrate the fantastic partnership working that is happening in Essex. A focus on how ‘you’ can be involved as the homeowner/resident/community is also prevalent.

6. Consultation

6.1. A copy of the draft document was emailed to the Flood Board.

6.2. We sought views on the approach we have taken via an online form consultation.

6.3. We intend to launch social media campaigns in partnership with our Sustainability and Resilience colleagues following the LFRMS being signed off. These will target different sub-groups of the public such as those in a high risk area of who have already been affected by flooding.

7. Recommendation

7.1 The Committee is asked to:

A. Note and support the progress of the Local Flood Risk Management Strategy.

Report by: Lucy Shepherd, Lead Local Flood Authority Manager
Head of Service: John Meehan Head of Planning and Environment
### Forward look (EFCC18/14)

All meetings starting at 9.30am and finish at 1pm (unless otherwise agreed).

<table>
<thead>
<tr>
<th>16 January 2019 at Norfolk County Council</th>
<th>12 April 2019 at Suffolk County Council</th>
<th>19 July 2019 at Essex County Council</th>
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<tbody>
<tr>
<td><strong>Main Business Items</strong></td>
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<tr>
<td>Future Maintenance in Broadland options</td>
<td>AP Risk register</td>
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<tr>
<td>Growth &amp; Flood Risk – The Opportunities / Challenges – Abigail Singleton/Keith Moore</td>
<td>Update from Engagement Sub-Group</td>
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<td>Norfolk Broads and Bacton Update</td>
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<td>Anglian Coastal Monitoring Programme – Becky Stanley</td>
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<td>Adaptation to Coastal Changes – Kellie Fisher</td>
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<tr>
<td>Update from Norfolk County Council – Mark Ogden</td>
<td>Update from Suffolk County Council – Matt Hullis</td>
<td>Update from Suffolk County Council – Matt Hullis</td>
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<td><strong>Information Items</strong></td>
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<td>Incident Management Paper</td>
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### Other Meeting dates for 2018/2019

- Friday 18 October 2019 – Norfolk County Council
- Monday 16 September 2019 – Local Choices, Environment Agency Office, Ipswich
List of Information Papers

Anglian (Eastern) Regional Flood & Coastal Committee (RFCC)

Friday 19 October 2018

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<tbody>
<tr>
<td>1.</td>
<td>Developing the Anglian (Eastern) RFCC Programme 2018/19 (INF/E143)</td>
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<td>2.</td>
<td>Delivering the Anglian (Eastern) RFCC Programme 2018/19 (INF/E144)</td>
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<td>3.</td>
<td>FCERM Program Update 2018/19 Quarter 2 – Current in-year position (INF/E145)</td>
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<td>4.</td>
<td>Incident Response (INF/E146)</td>
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<td>6.</td>
<td>National paper - Asset Management Savings and Efficiencies (INF/E148)</td>
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</table>
RECOMMENDATION

The Committee is asked to:

A. Note and support the progress with the appraisal stages of existing projects
B. Note and support the engagement work being undertaken in order to develop the programme.
C. Share this information and promote the work we’re doing in the Anglian Eastern RFCC area.

1. Purpose of the report and introduction

1.1 This paper provides a progress update for projects in the consented programme which are at the business case development stage.

1.2 It’s an update for the Committee on progress or change, to make Members aware of any new or emerging investment requirements.

1.3 During the last quarter (Q2) we’ve been supporting our partners in the delivery of their projects, reviewing outputs from a number of modelling projects and commenting on nationally significant infrastructure projects. This is in addition to progressing our own projects on the programme, some of which are detailed later in this paper.

1.4 This next quarter (Q3) we will be focussing on:
   - Supporting Lowestoft and Great Yarmouth projects through the assurance process.
   - Planning the next steps for these projects; we are expecting an Initial Assessment to be delivered in the next few weeks.
   - Updating the flood zones on gov.uk for our all our coastal flood zones.
   - Scoping new modelling projects;
   - Monitoring progress on the Defra Natural Flood Management (NFM) interventions as work starts out on site.
   - Progressing the demainment of watercourses in Norfolk and Suffolk.

1.5 We will continue to explore the best design option for the Coggeshall, Feering and Kelvedon flood alleviation scheme.

1.6 We will also be looking at how we can resource the major planning proposals in South Essex.
2. Norfolk

2.1 The map below shows the projects in Norfolk County.

Contact details

<table>
<thead>
<tr>
<th>Name</th>
<th>Email address</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kate Lindsay – PSO Team Leader Norfolk &amp; Suffolk</td>
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<tr>
<td>Gary Watson – Coastal Engineer</td>
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<tr>
<td>James Fullam – IDB project advisor</td>
<td><a href="mailto:james.fullam@environment-agency.gov.uk">james.fullam@environment-agency.gov.uk</a></td>
</tr>
</tbody>
</table>
2.2 Projects or activities of note

**Great Yarmouth tidal defences (Epoch 2)**

We have secured £8.2m from New Anglia LEP and £5.4m from the Defra Economic Growth and Regeneration fund.

We are still talking to quayside owners and operators about further contributions. Currently we have potential offers of around £500k of in-kind and cash contributions.

We are working closely with the team at Norfolk County Council, which is developing the third river crossing, to explore efficiencies and savings where possible.

We are alert to any opportunities to link the project with future development aspirations.

We have informed Great Yarmouth Borough Council that our planning advice will be changing to reflect the fact that for a number of flood compartments we will only be repairing and not raising the flood defences.

The full business case will be submitted for assurance in November 2018.

We are waiting for final costs and then construction is planned for 2019 and 2020.
PDU 4 Initial Assessments

The PDU (Programme Delivery Unit) is progressing Initial Assessments at Mundesley, Beccles, Norwich, Corpusty & Saxthorpe, Horning and Aylsham.

These will tell us the potential flood risk solutions for these communities, the costs and benefits and which ones can be developed into business cases.

Horning Flood Risk Management Project

This summer the Environment Agency collected individual property surveys in Horning.

The purpose of the surveys was to establish the floor levels and construction of the buildings in and around the flood risk area.

We will use this survey information as part of the Initial Assessment to identify properties at risk and potential flood risk solutions.

The information will also enable owners/occupiers of the homes and businesses to better understand their flood risk. We will organise a public event later this year to let the local community know what the survey results are telling us.

Rationalising the Main River Network

We are working towards demaining 3 sections of the River Tud, Waxham Cut and Tunstall Dyke.

We are going out to public consultation so proposals can be adapted and improved.

We have withdrawn maintenance from Berry’s Bridge structures, which are privately owned, non-flood risk management assets on the River Tud. This is all part of the ultimate aim to demain this part of the River Tud.
2.3 Lead Local Flood Authorities, Internal Drainage Board and District Authorities Projects

**Initial Assessments – Norfolk County Council**

Norfolk County Council is currently progressing five Initial Assessments for Wymondham, Diss, Ormesby, Harleston and Caister through Jacobs.

We are expecting to receive outputs from the consultant over the next few months. The Initial Assessments will investigate whether viable flood protection schemes exist in those areas and for those that qualify more detailed work will be carried out, hopefully leading to implementation of a scheme.

**Interreg North Sea Region Water Sensitive Cities (CATCH) Project – Norfolk County Council**

A CATCH Project Officer started in post in July 2018 and has started meeting residents and key stakeholders. A meeting took place on the 27 July to discuss the objectives and to identify project risks and community engagement.

**Interreg North Sea Region Flood Resilient Areas by Multi-layered Safety (FRAMES) Project - Norfolk County Council**

The first phase of installation consists of small scale water storage features. This will start in autumn 2018. The first phase will showcase the benefits and opportunities associated with this type of scheme and will aid the expansion across the target catchments.
3. **Suffolk**

3.1 The map below shows the projects in Suffolk County

![Map of Suffolk projects](image)

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<tr>
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3.2 Projects or activities of note

**Needham Market flood risk management project**

We are preparing a business case for the raising of the Crown Street flood wall, installation of property level projection and installation of a surface water pump in Crown Street.

Suffolk County Council Highways has agreed to adopt the proposed Crown Street surface water pump.

We are planning construction for 2019.

**PDU 4 Initial Assessments**

The PDU is progressing Initial Assessments at Stowmarket, Halesworth, Wrentham and Bures.

These will tell us the potential flood risk solutions for these communities, the costs and benefits and which ones can be developed into business cases.

3.3 Lead Local Flood Authorities’, Internal Drainage Boards’ and District Authorities’ Projects

**Sudbury and Great Cornard Surface Water Management Plan (SWMP) – Suffolk County Council**

The SWMP is now completed, producing a fully integrated urban drainage model

127 residential properties are at risk from surface water in the 3.33% AEP and 278 for the 1% AEP. Critical Drainage Areas (CDAs) have been identified across the two towns

Outline option for Aubrey Drive (CDA 2) consists of two attenuation basins. This option has the potential to reduce risk to 29 residential properties with an estimated cost of £422,340

Outline option for Great Cornard Recreation Ground (CDA 4) proposes the creation of 0.4m high bund to contain 2,560m³. This option has the potential to reduce risk to 7 residential properties with an estimated cost of £240,015

Flood depth changes for CDA 4 with green area showing reduction in flood depths.

Flood depth changes for CDA 2 with green area showing reduction in flood depths.
Lowestoft FRMP – Waveney District Council and Suffolk County Council

The first draft of the Outline Business Case is currently under review by the project steering group.

Launch of Watertight Words student engagement programme is now complete, engaging over 1000 local students.

On 31 August there was a Property Level Resilience engagement event for residents at significant pluvial flood risk. A property survey was carried out between 17 and 28 September 2018.

On 19 September individual home owners had a site meeting for the fluvial flood wall and community engagement event.

The planning application for the fluvial flood wall, tidal barrier and tidal wall is due for submission in November 2018.
4. Essex

4.1 The map below shows the projects in Essex County.

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<td><a href="mailto:NeilHoskins@southend.gov.uk">NeilHoskins@southend.gov.uk</a></td>
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<tr>
<td>Nav Tung – Thurrock Council</td>
<td><a href="mailto:NTung@thurrock.gov.uk">NTung@thurrock.gov.uk</a></td>
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</table>
4.2 Projects or activities of note

**Coggeshall, Feering and Kelvedon Flood Alleviation Scheme**

The Scheme has recently been approved by the Large Project Review Group (LPRG) to update the business case.

We are working with the PDU to develop a scheme that will store flood water both on and offline behind a clay embankment upstream of Coggeshall.

The off line flood storage will be created in partnership with a local aggregates company as part of an excavation site proposed for mineral extraction.

The design and environmental assessments are currently being progressed ready for the submission of a planning application to Essex County Council in November 2019.

**Tilbury Dual Function Lock Gate**

We continue to work with the Port of Tilbury on this joint project

The tender period has now closed and we are reviewing submissions

Work on updating the legal agreement continues.

**Heybridge**

We will continue to work closely with Maldon District Council and other partners to reassess the options that are available to improve flood protection for Heybridge and to see if there is a viable option that will attract the necessary funding.
4.3 Thames Estuary 2100 Plan Delivery

Local Council Objectives & Tailored Briefings
The Thames Estuary 2100 team finished updating the Implementation plan for 2018/19, in line with focus group feedback, which was rolled out to councils at the beginning of September. This has been sent to planning policy departments who will need to cascade the information onwards internally and we have offered to meet councils to explain their role in the Thames Estuary 2100 Plan, their objectives and the process for reporting on progress against the objectives. Thames Estuary 2100 Plan tailored council briefings are also expected to be revised by the autumn.

Tilbury Port 2
The Development Consent Order examination ended on 20 August 2018. We responded to 7 formal deadlines, two sets of additional questions from the inspectors and attended the two oral examinations. At the end of the examination process, Protective Provisions were agreed between ourselves and the Port of London Tilbury. A statement of common ground was prepared with the applicant and reflects the areas of agreement. The Statement of Common Ground contains a commitment to continue dialogue with the applicant in regards to a future barrier dependant on developments in this area.

Safeguarding land for a future Thames Barrier
Our East Anglia area teams, working with the Thames Estuary 2100 team, continue to engage with key stakeholders relating to safeguarding land for a future Thames Barrier.

We are currently exploring whether there is a suitable legal agreement that could achieve an agreeable solution. We anticipate the next meeting with the Council and developers in September to continue discussions. Whilst we remain committed to trying to resolve this issue with the Council/developers within the context of the planning application, time to try and find a solution is reducing, with the potential for a decision at planning committee from as early as September/October.

For the outline application we have now removed our objection over the adequacy of the Flood Risk Assessment and Water Framework Directive. However, in addition to our future Thames Barrier objection, we also have outstanding objections on flood defence design and ecology.

With regards to the reserved maters application for zone 1A of the Purfleet development, we have now removed our objection to the Flood Risk Assessment, but still have an objection on flood defences.
4.4 Thames Estuary Asset Management (TEAM) 2100 Programme Development

The following map shows the location and type of assets being looked at as part of the TEAM2100 programme

---

**Purfleet, Grays & Tilbury Sheet Pile and Anchor Testing**

We are beginning to undertake desk-based analysis of the ground anchors, which are currently 'tensioned', to see if they can work as 'passive' instead; physical testing of these anchors will follow in the coming months.

We finished testing the thickness of the sheet piles using ultrasonic technology, the data from which we can use as a baseline to determine asset lifecycle, deterioration rates and design for replacement etc.

---

**Essex Outfalls**

We have recently undertaken a long list of options workshop for five outfalls in the Essex area, including at West Thurrock, Grays and Mucking.

We are now looking at the resulting short list of options in closer detail as part of the appraisal process to identify a preferred option for delivery on site.
<table>
<thead>
<tr>
<th><strong>Tilbury Docks</strong></th>
<th><img src="Tilbury_Docks.jpg" alt="Image" /></th>
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<tbody>
<tr>
<td>We are drafting an engineering investigation report on our site-based engineering inspections, which includes an assessment on the stability of the walls.</td>
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<table>
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<tr>
<th><strong>Tilbury Cruise Terminal</strong></th>
<th><img src="Tilbury_Cruise_Terminal.jpg" alt="Image" /></th>
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<tbody>
<tr>
<td>We are currently consulting stakeholders on a preferred option for reconfiguring the defence alignment around the building.</td>
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<tr>
<td>We have specifically engaged with the Cruise Terminal to look at how the defences can be moved without damaging the fabric of the building.</td>
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<table>
<thead>
<tr>
<th><strong>World’s End Pumping Station</strong></th>
<th><img src="World%E2%80%99s_End_Pumping_Station.jpg" alt="Image" /></th>
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<tbody>
<tr>
<td>We are looking to carry out refurbishment works at the World’s End Pumping Station and Sluice as soon as possible. We need to replace flap valves to prevent tidal water passing through the outfall to the landward side.</td>
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<tr>
<td>Planning ahead, we are currently engaging with the Port of Tilbury regarding land requirements for the preferred option for a replacement pumping station.</td>
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<table>
<thead>
<tr>
<th><strong>Tilbury Fort to Gobions Sluice</strong></th>
<th><img src="Tilbury_Fort_to_Gobions_Sluice.jpg" alt="Image" /></th>
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<tbody>
<tr>
<td>We have finalised the structural and geotechnical stability analysis of the Tilbury Fort frontage to understand the current structural condition of the asset under a range of tidal and structural loading conditions.</td>
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<tr>
<td>We are currently finalising the planning for ground investigation works, which will provide us with information to begin our design stage.</td>
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<thead>
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<tbody>
<tr>
<td>This project is appraising options to replace the defences along the southern amenity shoreline on Canvey Island.</td>
<td></td>
</tr>
<tr>
<td>We are consulting with the Castle Point Borough Council Regeneration Partnership on the preferred option to rectify existing and ongoing revetment defects.</td>
<td></td>
</tr>
</tbody>
</table>
Canvey Flood Barriers and Associated Defences

- We recently began appraising Benfleet, Fobbing and Easthaven barriers and tidal defences along Easthaven, Fobbing and Vange Creeks to explore a range of future management options.
- The first stage of this appraisal involved carrying out topographic surveys and site inspections over the summer, expected to be completed by mid-September.

Partnership Funding

We are looking to work in partnership with beneficiaries throughout the Thames Estuary, to explore potential contribution options to deliver the TEAM2100 programme.

We met with representatives of Environmental, Legal and Estates representative of London Gateway Port on 23 August 2018 to reintroduce the TE2100 Plan, introduce the TEAM2100 programme and outline potential collaborative opportunities demonstrating the benefits of the TE2100 Plan to the LGP business. This was an encouraging meeting with positive messages of support received and welcoming further discussion once refined costs are established.

We met with South East Local Enterprise Partnership’s (SELEP) Housing & Development sub-group on 12 September to introduce the TE2100 Plan, introduce the TEAM2100 programme and outline potential collaborative opportunities linked to SELEP’s Strategic Economic Plan ambitions for the Thames Gateway Area.

We will be meeting representatives from RWE’s Tilbury Energy Centre on 13 September to introduce the TE2100 Plan, introduce the TEAM2100 programme and outline potential collaborative opportunities around works programme alignments along the former Tilbury power station frontage.

We will be meeting Network Rail’s Weather Resilience and Climate Change Adaptation Strategy Manager on 12 October to introduce the TE2100 Plan, introduce the TEAM2100 programme and outline the significance of TE2100 aspiration delivery to Network Rail infrastructure.
4.5  Lead Local Flood Authorities’ and District Authorities’ Projects

Programme Delivery Unit (PDU) 6 Outline Business Case

We have six potential schemes at outline business case (OBC) which are to be completed using the PDU arrangement. Following review of the arrangement with our current suppliers we have agreed a new proportionate approach to delivering the OBC’s. The flexibility of the PDU has allowed us to access resources that are better equipped to deliver the OBC’s more efficiently. We continue to have strong relationships with the PDU and look forward to continuing to work with them.

The proposed OBC’s are strengthening the pipeline capital programme. We are hopeful they will progress and deliver outcome measures.

<table>
<thead>
<tr>
<th>Scheme Name/ Outline Business Case</th>
<th>Potential OM2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bowers Gifford Surface Water Flood Alleviation Scheme (Basildon)</td>
<td>30</td>
</tr>
<tr>
<td>Pilgrims Hatch Surface Water Flood Alleviation Scheme (Brentwood)</td>
<td>34</td>
</tr>
<tr>
<td>Ingatestone High Street Surface Water Flood Alleviation Scheme (Brentwood)</td>
<td>23</td>
</tr>
<tr>
<td>Hutton Surface Water Flood Alleviation Scheme (Brentwood)</td>
<td>11</td>
</tr>
<tr>
<td>Thrift Green, Brentwood Surface Water Flood Alleviation Scheme</td>
<td>16</td>
</tr>
<tr>
<td>Heybridge, Ingatestone Surface Water Flood Alleviation Scheme (Brentwood)</td>
<td></td>
</tr>
</tbody>
</table>

Braintree, Bradford Street Surface Water Flood Alleviation Scheme

The scheme is currently in the planning stage and we expect a decision to be made by the end of September. The tender process is under way and land owner agreements are in place.

The project aims to reduce surface water flood risk to 39 residential properties; this will be achieved by creating a flood storage area and bund to capture and store surface water run-off.

We have been working closely with the Environment Agency to develop a robust and proportionate outline business case (OBC).

Following the planning decision we intend to submit the OBC for the approval of £60k of Local Levy and £158k of FDGiA towards the capital costs of the scheme.

This important investment will ensure we can protect people and property from flooding. Delivery is still on target for the 2018/19 financial year.
5. Recommendation

5.1 The Committee is asked to:

A. Note and support the progress with the appraisal stages of existing projects.
B. Note and support the engagement work being undertaken in order to develop the programme.
C. Share this information and promote the work we’re doing in the Anglian Eastern RFCC area.

Peta Denham                  Mark Johnson
FCERM Manager                Coastal Manager
RECOMMENDATION

The Committee is asked to:

A. Note the progress on the delivery of the Anglian (Eastern) programme of works.

1. Purpose of the report and introduction

1.1 This paper is to update the Committee on our progress delivering projects within the Revenue and Capital programmes.

1.2 The paper will focus on Revenue and Capital funded activities completed in each County.

1.3 This quarter from July to September we have focussed on the following work.

1.4 Norfolk

We have completed a number of weed cuts across the Rivers Bure, Yare, Wensum and Glaven. Given the ongoing dry weather, we continually monitored dissolved oxygen levels to make sure it was environmentally safe and no work was stopped or delayed. We are working at several locations on the North Norfolk Coast to improve safe public access and footpaths. Key locations include Cley and Sea Palling. We have continued to focus on maintaining our public safety measures across all sites, with particular attention to those used by the public in peak summer months.

In Broadland, Broadland Environmental Services Limited (BESL) have been continuing with their annual maintenance activities. This includes flood embankment maintenance across the project area, pile repairs at Acle Bridge, concrete wall joint replacement at Potter Heigham and various works arising from public safety risk assessments. A length of redundant flood defence piling has been driven into the ground beneath the river bed level in Oulton Boat Dyke. This is an alternative to removing the piles and avoids having to transport them for disposal. The presence of these piles in the ground also provides additional resistance to slip failure of the river bank in the future.

Suffolk

1.5 We have undertaken several cuts across Suffolk, along with some asset repair works on Felixstowe town wall. Site set up at Slaughden for the Slaughen Shingle Recycle project (450m bank repair work) has been completed and we are now undertaking repair works to the access routes to enable plant movement.

Essex

1.6 During quarter 2 Essex Operations have delivered six projects throughout the patch and have started the main period of grass cutting on the seawalls. We have also dealt with significant fish kill incidents due to low oxygen levels resulting from the hot
weather. Operational checks and asset inspections have continued throughout as usual. In addition the Asset Performance teams within Essex Operations have been working up projects for delivery, gaining the necessary permissions and designing solutions to keep our asset in the required condition grades. A number of new starters have joined the teams during the quarter to increase capacity to deliver intermittent and frequent maintenance works in future.

1.7 Next quarter from October to November we will be focussing on the following work.

**Norfolk**

1.8 Grass cutting is scheduled for the North Norfolk coastal banks and we will be completing our weed cutting programme, focusing on the Waveney. We will be starting construction on the Natural Flood Management (NFM) scheme at Marlingford Mill as part of the National DEFRA NFM pilot project. Work should take about 6 weeks to complete.

In Broadland, BESL will be starting their programme of cut and clear works on the fluvial watercourses in the project area. A length of redundant flood defence piling has recently failed near to the mouth of the River Chet and plans are in hand to remove it and re-grade the river bank in October. Other pile replacement works have also been planned for the winter period.

**Suffolk**

1.9 Next quarter we will be undertaking several weed cuts using the weed boat as we were unable to complete this when originally programmed due to low water levels. Many annual channel clearances will also be completed in the next quarter. Repair works to Easton Bavents toe piling will take place in October and the replacement of 4 navigation markers at Slaughden will be completed by the start of October. We will also be undertaking some repair works to the Gipping FSR following the section 10 and 12 reports. Repairs include replacing the seal on the gate and topping up areas of the bank along with re-seeding.

**Essex**

1.10 During quarter 3 we will see the completion of the bulk of 2018-19’s grass cutting and also the bulk of the weed cutting programme. Intermittent projects are due to start at eight locations around the coast where seawall or outfall repairs are required.

**Summary**

1.11 In this quarter across Essex, Norfolk and Suffolk we have completed approximately:

- 2011 asset inspections
- 193km of flood embankment grass cutting
- 111km of watercourse maintenance

1.12 Any questions about specific projects please contact the appropriate catchment lead on the county page or a team leader from the following table:

<table>
<thead>
<tr>
<th>Catchment</th>
<th>Contact Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Norfolk Asset Performance</td>
<td>Rachael Storr - <a href="mailto:rachael.storr@environment-agency.gov.uk">rachael.storr@environment-agency.gov.uk</a></td>
</tr>
<tr>
<td>Suffolk Asset Performance</td>
<td>David White - <a href="mailto:David.C.White@environment-agency.gov.uk">David.C.White@environment-agency.gov.uk</a></td>
</tr>
<tr>
<td>North Essex Asset Performance</td>
<td>Mark Ennew - <a href="mailto:mark.ennew@environment-agency.gov.uk">mark.ennew@environment-agency.gov.uk</a></td>
</tr>
<tr>
<td>South Essex Asset Performance</td>
<td>Keith Grimwood - <a href="mailto:Keith.Grimwood@environment-agency.gov.uk">Keith.Grimwood@environment-agency.gov.uk</a></td>
</tr>
</tbody>
</table>
2. Essex

2.1 The map below shows the catchments contained in Essex County and the works completed here this quarter.

2.2 The map below shows the location and type of assets being looked at as part of the TEAM2100 programme:
Catchment Leads

<table>
<thead>
<tr>
<th>Name</th>
<th>Catchment</th>
<th>Contact Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kerry Bentley</td>
<td>Stour (Tidal)</td>
<td><a href="mailto:kerry.bentley@environment-agency.gov.uk">kerry.bentley@environment-agency.gov.uk</a></td>
</tr>
<tr>
<td>Gbemi Akin-Oriola</td>
<td>Stour (Fluvial)</td>
<td><a href="mailto:Gbemi.Akin-Oriola@environment-agency.gov.uk">Gbemi.Akin-Oriola@environment-agency.gov.uk</a></td>
</tr>
<tr>
<td>Natasha King</td>
<td>Colne</td>
<td><a href="mailto:Natasha.King@environment-agency.gov.uk">Natasha.King@environment-agency.gov.uk</a></td>
</tr>
<tr>
<td>Laurence Ralph</td>
<td>Blackwater</td>
<td><a href="mailto:Laurence.Ralph@environment-agency.gov.uk">Laurence.Ralph@environment-agency.gov.uk</a></td>
</tr>
<tr>
<td>Tim Butt</td>
<td>Thameside</td>
<td><a href="mailto:Tim.Butt@environment-agency.gov.uk">Tim.Butt@environment-agency.gov.uk</a></td>
</tr>
</tbody>
</table>

TEAM2100 contacts. To get in touch with any of the team, please send an email to:

**EAEssexOperations@environment-agency.gov.uk**

<table>
<thead>
<tr>
<th>Programme</th>
<th>Contact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Funding &amp; Engagement</td>
<td>Phillip Spearman - <a href="mailto:phillip.spearman@environment-agency.gov.uk">phillip.spearman@environment-agency.gov.uk</a></td>
</tr>
<tr>
<td>Asset Performance</td>
<td>Tom Wallace - <a href="mailto:thomas.wallace@environment-agency.gov.uk">thomas.wallace@environment-agency.gov.uk</a></td>
</tr>
</tbody>
</table>

2.3 Projects or activities of note

**Prykes Drive Embankment Project, Chelmsford**  
**Blackwater Catchment, South Essex**

The embankment was re-profiled and raised in order to be at the correct flood protection level.

**Decommissioning of Tilting Gate, Flatford**  
**Stour Catchment, North Essex**

In line with the withdrawal of maintenance protocol, the autogate at Flatford was decommissioned; its control units were removed without dewatering the lock.

In addition, repairs were carried out to the access footpath.

The works improved all-year access to the lock for the public and for navigation whilst securing financial efficiencies for the catchment.
Pennywort Removal on Ramsey River, Harwich
Stour Catchment, North Essex.

A 3km stretch of Ramsey river was cleared of invasive pennywort species which had formed a green mat obstructing water flow, blocking the weedscreen and posing a risk to fish and other aquatic animals.

A combination of methods including handpicking, excavation, use of weed boat and spraying was used depending on extent of growth and access to the location.

Subsequently monthly visits are undertaken to control new growths.

The works were carried out in consultation with the Fisheries and Conservation Teams to minimise environmental impacts.

South Benfleet Flood Storage Area Embankment Works

Works commenced in August to raise sections of embankment which have suffered settlement due to their foundation on historic tidal marshland, now reclaimed. A new engineered spillway will ensure the on-line reservoir performs during storms up to and including the 10,000 year event. The scheme is schedule for completion at the end of October 2018.
2.4 TEAM2100 Projects of note

**Parkeston Culvert Refurbishment**

Works commenced in June to refurbish the culverts beneath the Harwich International to Dovercourt railway line. This highly constrained site has required careful planning and liaison with Network Rail to enable works to progress without the need for a track possession.

Works include pipe lining, culvert repairs and replacement flap valves. Works are scheduled for completion at end of September 2018.

---

**Maylons to Highlands Embankment Refurbishment**

A borrow pit has been excavated to provide source of material to raise and re-profile a 415m section of flood embankment on the Crouch Estuary.

New toe erosion protection, in the form of rock rolls and brushwood faggots, will be installed providing an economical sustainable solution.

---

**Essex Phase 4 Floodgates**

In August we completed work on 22 floodgates across Purfleet, Grays and Tilbury, which included:

- Floodgate decommissioning
- Floodgate replacement
- Floodgate refurbishment
2.5 Lead Local Flood Authorities, Internal Drainage Board and District Authorities Projects

**Hadleigh Marshes**

Earlier this year we completed non-intrusive geophysical investigations

We then carried out intrusive testing this summer, which included cone penetration tests (as photographed)

The results of these tests will both inform future maintenance activities and enhance our understanding of asset performance

**Coryton Drop boards**

This project is concerned with the minor refurbishment works to a series of access-crossing drop boards in the crest of the tidal defences at Coryton

We now have a preferred option and are beginning site works in September, with a view to complete by end of the month

**Colchester, The Hythe Surface Water Flood Alleviation Scheme**

The scheme was completed in August.

The project consisted of removing large amounts of concrete which was blocking an existing culvert, installing a new man hole and chamber and relining the existing failing culvert.

The scheme has reduced surface water flood risk to 12 properties in The Hythe area of Colchester.

Partnership funding contributions were secured from Colchester Borough Council (50k), Environment Agency (35k Local Levy, 27.4k FDGiA) and Anglian Water.
3. Suffolk

3.1 The map below shows the catchments contained in Suffolk County and the works completed here this quarter.

<table>
<thead>
<tr>
<th>Name</th>
<th>Catchment</th>
<th>Contact Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jonny Ackroyd</td>
<td>Gipping</td>
<td><a href="mailto:Jonny.Ackroyd@environment-agency.gov.uk">Jonny.Ackroyd@environment-agency.gov.uk</a></td>
</tr>
<tr>
<td>Emmett Klipalo</td>
<td>Deben</td>
<td><a href="mailto:Emmett.Klipalo@environment-agency.gov.uk">Emmett.Klipalo@environment-agency.gov.uk</a></td>
</tr>
<tr>
<td>Stephen Quinn</td>
<td>Alde &amp; Ore</td>
<td><a href="mailto:Stephen.Quinn@environment-agency.gov.uk">Stephen.Quinn@environment-agency.gov.uk</a></td>
</tr>
<tr>
<td>Madeline Fallon</td>
<td>Blyth</td>
<td><a href="mailto:madeline.fallon@environment-agency.gov.uk">madeline.fallon@environment-agency.gov.uk</a></td>
</tr>
</tbody>
</table>
3.2  Projects or activities of note

**Rattlesden FSR improvement works**

Following the Section 12 inspection report, a septic tank overflow pipe was removed from the embankment. A low spot around the abutment of the embankment was also infilled.

---

**Snape Sluice to Black Heath Marsh Grass Cutting**

Grass cutting works were carried out in July along this stretch. This was a fairly major cut as was the first one to have taken place for a couple of years. We put out notice boards with information prior to the works as this is a very popular and busy location.

---

**Invasive Non-Native Species treatment**

Himalayan Balsam removal works were undertaken around 15 EA structures.
Ipswich flood Barrier

Over the past few months the main focus has been on the closing off of the old navigation channel and infilling the new cell with the treated, dredged material. This has also involved the removal of the old flood wall in readiness for the final landscaping works.

In the coming months, works will focus on the completion and site acceptance testing of the control building and the main rising sector gate, construction and testing of the new rail gate and construction of the final section for wall completing the new defence. Completion is still programmed for the end of this year.

Slaughden shingle recycling

Works have started to repair approx. 550m of damaged shingle bank at Slaughden by using shingle extracted from Sudbourne beach. The shingle bank in the damaged area will be widened to 8 metres. Plant access routes are now complete and the bank is now being raised to tie in to the surrounding level.
4. Norfolk

4.1 The map for Norfolk is currently being developed and will be updated for the next paper pack.

### Catchment Leads

<table>
<thead>
<tr>
<th>Name</th>
<th>Catchment</th>
<th>Contact Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hannah Borrett</td>
<td>North Norfolk Coast</td>
<td><a href="mailto:hannah.borrett@environment-agency.gov.uk">hannah.borrett@environment-agency.gov.uk</a></td>
</tr>
<tr>
<td>Mark Frary</td>
<td>Happisburgh to Winterton &amp; Great Yarmouth</td>
<td><a href="mailto:mark.frary@environment-agency.gov.uk">mark.frary@environment-agency.gov.uk</a></td>
</tr>
<tr>
<td>Ben Rushmer</td>
<td>Wensum &amp; Bure</td>
<td><a href="mailto:ben.rushmer@environment-agency.gov.uk">ben.rushmer@environment-agency.gov.uk</a></td>
</tr>
<tr>
<td>Rich Caplin</td>
<td>Yare, Mun and Dilham Canal</td>
<td><a href="mailto:Rich.Caplin@environment-agency.gov.uk">Rich.Caplin@environment-agency.gov.uk</a></td>
</tr>
<tr>
<td>Louise Brown</td>
<td>Waveney</td>
<td><a href="mailto:Louise.Brown@environment-agency.gov.uk">Louise.Brown@environment-agency.gov.uk</a></td>
</tr>
</tbody>
</table>

4.2 Projects or activities of note

#### Tackling Giant Hogweed in Norfolk

Multiple reports of Giant Hogweed along our rivers. We coordinated a programme of treatment with the landowners throughout the summer. Work focused on the Mun and Tas,

#### Sea Palling Access improvements

New boardwalks and steps installed a three locations in Sea Palling to improve public access to and from the beach and reduce dune erosion.
New Mills Sluice, Norwich

Using specialist confined spaces contractors large number of trees and debris were removed from two of the culverts upstream of the city centre. This will allow for surveys and condition assessments to be completed.

Eccles-On-Sea Groyne Refurbishment / Happisburgh to Winterton Beach Frontage

Works to replace missing boards on groynes E4 and E5 were completed in July 2018. Recycled Greenhart timber has been obtained from refurbishment works to Yarmouth Pier in the Isle of Wight.

River Wensum Restoration Costessey / Lower Wensum

The North Norfolk Field Team completed a restoration scheme delivering 1.2km of Outcome Measure 4c (designated rivers protected under EU Habitats Directive improved to meet Water Framework Directive).

The works were undertaken on the River Wensum at Place Farm, Costessey, adjacent to Costessey Pits.

The works included installing gravel glides; cattle drinks; woody material; lateral shelves creating a two-stage channel and creating fry bay refuge areas. Tree planting will take place in the autumn.

The works have provided enhanced habitat for a range of species, including fish and invertebrates.
4.3 Lead Local Flood Authorities, Internal Drainage Board and District Authorities Projects

**Broads IDB**

**Halvergate Marshes – High level water carrier**

The second setback bank is complete and erosion matting has been installed on the newly excavated dyke.

3.5km of embankment have been constructed so far this year, only 400m remain.

The water control structures will be installed soon.

---

**Broads IDB**

**Horsey culvert repair**

Works to maintain the footpath are complete, this will remain closed until 3 September.

The temporary pontoon moorings have been installed.

Clay deliveries have started for the main works with BESL setting up site.

Temporary works are ongoing to allow diversion of water from the south of the Horsey Catchment to Somerton North Pump.
5. **Recommendation**

5.1 The Committee is asked to:

A. Note the progress on the delivery of the Anglian (Eastern) program of works.

**Graham Verrier**  
Norfolk and Suffolk Operations Manager

**Dave Knagg**  
Essex Operations Manager
RECOMMENDATIONS

The Committee is asked to note:
A. The Quarter 2 2018/19 capital and revenue programming and budget position
B. The RFCC contribution to the overall national targets and programme performance to date

1. Managing the programme

1.1 To ensure we are able to manage the programme effectively it is recommended that at each meeting RFCCs will:
   - Note the programme, including the projects consented within the programme
   - Confirm the programme remains deliverable and there is confidence in achieving the outcomes
   - Consider requests made for local funding

1.2 This paper assists the Committee in the above by providing the last in-year update and capital and revenue programme position for financial year 2018/19. It contains the latest financial information as of 17 September 2018.

1.3 Please refer to the ‘Glossary of terms used in FCRM programming and financial management’ that is included in the members handbook.


<table>
<thead>
<tr>
<th>Element</th>
<th>Report Section</th>
<th>Current Position</th>
<th>Mitigation</th>
<th>Level of Concern (LMH)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grant-in-Aid Position</td>
<td>3</td>
<td>The current GiA capital forecast (all RMAs) is £29.6m, against a budget allocation of £21m i.e. an increase of £8.6m since the start of the year. We are yet to gain confirmation from our national office that the additional £8.6m over-programme will be accepted in all cases – this confirmation is expected in October. Revenue maintenance forecast is approximately £1m above the agreed budget</td>
<td>We have opportunity to pull forward the use of Local Levy if needed for projects that have an allocation from both sources of funding. Some capital projects may need to be slowed down for the current financial year – TBC. Work is underway to identify revenue maintenance projects that we can choose not to progress in Q3 and Q4 if needed.</td>
<td>M</td>
</tr>
<tr>
<td>Local Funding Position</td>
<td>4</td>
<td>GDC and IDBP is expected to be fully used. A small amount of Local Levy is being used to support</td>
<td>N/A</td>
<td>L</td>
</tr>
</tbody>
</table>
Changes to project forecasts  5
Forecast for GiA capital has increased by £4.8m since the last RFCC paper (June figures).
Increases in project forecast are arising mainly from many smaller projects, coupled with some large increases for Ouse Fen land purchase (£0.8m), PDU Business case package (£0.6m) and Broadland PPP (£0.5m).

Efficiency Savings  6(a)
Agreed efficiency claims since April total around £1.0m. This leaves approximately £1.9m additional efficiencies before year end.

Financial Risk  6(b)
There is approximately £1.8m risk for additional spend forecast before year end.

New projects  7
There have been two new projects forecasting spend this financial year greater than £500k (since 19th June 2018).

Partnership contributions  8
The non GiA contributions to the 2018/19 capital programme, including local levy, are currently forecast at £3.1m.

Outcome Measures  9
The outcome measure forecast for 2018/19 is 1179 (OM2 + 3), which is 119 higher than the start of year target of 1060.

KPI 962 (% of assets at required condition)  10
KPI 962 (assets at target condition) forecast is currently 96.4% against a target of 96.18%. Failure rates are still particularly high for this part of the country and the situation is closely monitored.

See comments in section 3 regarding the over-programme.

All RMAs need to remember to submit efficiency claims to the Environment Agency.

Keep monitoring the situation and having regular conversations with the EA's national programming team. Risk forecasts should reduce as the year progresses.

See comments in section 3 regarding the over-programme.

New projects are more likely to receive an allocation if properties will be protected in the current financial year.

Although the partnership funding risk is low for the current year, identification of contributions for use in future years remains of paramount importance for the success of the programme.

Considerable thought and training of officers is taking place to identify beneficiaries and understand how to gain partnership funding.

We continue to review projects to ensure that every outcome that can be claimed, is being claimed.

Opportunity projects are being introduced into the programme as soon as we have good confidence that delivery will take place this financial year (see section 7 above).

We are mindful that the current good performance could easily be undermined by a flood event, as failure rates remain particularly high in this part of the country.
3. **Grant-in-Aid Position**

3.1 In Anglian Eastern RFCC area the capital GiA budget **across all RMAs** is £21.0m. The latest forecast reported on 17 September 2018 shows an increase of £8.6m.

3.2 The largest component of the GiA budget reported in 3.1 above is for Environment Agency (EA) projects. For EA GiA the current budget is £18.2m against which the latest EA forecast for spending is £24.4m. This represents a forecast of £6.2m higher than the start of year allocation.

3.3 For EA GiA revenue maintenance the budget is £7.9m. The September 2018 forecast for revenue maintenance activities is £1.0m above the allocation. It is usual for forecasts to start to drop off in the second half of the year, but as a precaution in case this does not happen, work is underway to identify revenue maintenance projects that we can choose not to progress in Q3 and Q4, if needed.

Please note that revenue maintenance expenditure undertaken by RMAs other than the EA is **not** reported on in this paper.

![Figure 3.1: 2018/19 Environment Agency expenditure position](image)

3.4 The Internal Drainage Board (IDB) and Local Authority (LA) capital programmes for Anglian (Eastern) RFCC are represented below in Figure 3.2.

3.5 The IDB capital programme is forecasting £3.2m which is £3.0m greater than the start of year budget. The LA capital programme is forecasting £2.0m which is £0.6m below the start of year budget.

![Figure 3.2: 2018/19 Other Risk Management Authorities Capital expenditure position](image)
4. Local Funding Position

4.1 Local Levy for 2018/19 is made up of the start of year balance transferred from 2017/18 plus the income expected for 2018/19, which together gave an affordable budget of £8.7m.

4.2 The RFCC has agreed to retain flexibility around the use of Local Levy for revenue maintenance activities and set aside £450k per year for use on revenue maintenance, if needed, for additional maintenance activities that did not receive an allocation at the start of the year.

4.3 Forecast for Local Levy expenditure for 2018/19 is £1.9m of capital expenditure and £0.18m of revenue expenditure - this represents an overall reduction in Local Levy forecast of £0.5m since the start of the year.

4.4 General Drainage Charges (GDC) and IDB Precept budgets are forecast to be fully used during 2018/19.

5. Changes to project forecasts

5.1 Project forecasts vary throughout the year as opportunities and risks materialise. The table below lists the largest project variances when compared to the start of year allocation. Please note these are total values across all funding sources.

<table>
<thead>
<tr>
<th>Project Title</th>
<th>Change to forecast since start of year. Total funding from all sources (£)</th>
<th>Reasons for change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ouse Fen Reedbed Creation Project</td>
<td>812</td>
<td>Increased forecast to include all of the outstanding payment commitment to the RSPB.</td>
</tr>
<tr>
<td>Team 2100 Programme IDT Services (Anglian Eastern)</td>
<td>308</td>
<td>The £308k increase is due to the need for Ground Investigation works at Hadleigh Marsh and along the Tilbury frontage to inform the appraisal process. These works were not originally allowed for in Annual Plan 4 (2018/19) and hence the increased cost.</td>
</tr>
<tr>
<td>Essex, Norfolk and Suffolk Area Recondition Package</td>
<td>285</td>
<td>In year adjustments to the works programme, which will return failing, or near failing assets back to target condition.</td>
</tr>
<tr>
<td>River Wensum River Restoration</td>
<td>153</td>
<td>Additional opportunities were identified in this scheme to re-align the channel and increase the Natural Flood Management including floodplain reconnection.</td>
</tr>
</tbody>
</table>

Figure 5.1: Key Project variances since 19 June 2018.

6. Efficiencies and Risks

6.1 Accepted claims to date for Q2 2018/19 total £1.0m. Our aim is to achieve efficiencies equating to 10% of the GiA spend each year and to hit this target we would need another £1.9m of accepted submissions during the year.

6.2 A project risk can be defined as an event which could negatively impact upon the scheme’s delivery. Some risks have the potential to affect the benefits of the scheme; whereas others can impact upon spend. Risk in the programme is managed throughout the year and, where realised, reported each quarter as significant change to project forecast (known as a programme variance) – see section 5.

6.3 Risk of underspend or overspend is monitored closely throughout the year – the ‘risk’ allowance for each project has been reduced throughout the year as confidence is gained around what can be achieved before year end.
6.4 The current forecast for financial risk (17 September) is for around £1.8m additional spend should the risks materialise. This is being carefully monitored and considered against the funding picture nationally.

7. Additional Projects within the Programme and other expenditure opportunities

7.1 The projects listed below are new forecasts since the last RFCC paper in July. Braintree Bradford Street (Essex County Council) is a brand new project set to achieve 39 homes better protected before the end of March 2019.

<table>
<thead>
<tr>
<th>Project Title</th>
<th>Lead RMA</th>
<th>New forecast since start of year /£k (All funding sources)</th>
<th>Reasons for change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Braintree Bradford Street Flood Alleviation</td>
<td>Essex CC</td>
<td>580</td>
<td>In year opportunity to better protect 39 homes.</td>
</tr>
<tr>
<td>Broadland Public, Private, Partnership Project</td>
<td>EA</td>
<td>500</td>
<td>Difficulties with a landowner has been overcome at Pete’s Marsh and we are now able to complete much delayed project works.</td>
</tr>
</tbody>
</table>

*Figure 7.1: New Projects since 19 June 2018.*

8. Partnership funding

8.1 One of the 6 year capital programme settlement conditions was to secure more than 15% of partnership funding contributions. The non GiA contributions forecast for projects during 2018/19 are listed in table 8.1 below.

<table>
<thead>
<tr>
<th>Project title</th>
<th>Partnership funding forecast for 2018/19 £k</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Public &amp; Private income</td>
</tr>
<tr>
<td>Lowestoft Flood Risk Management Project</td>
<td>764</td>
</tr>
<tr>
<td>Braintree Bradford Street Flood Alleviation Study</td>
<td>362</td>
</tr>
<tr>
<td>Manningtree, South Street Pilling</td>
<td>100</td>
</tr>
<tr>
<td>NFMA-Debenham Mill Green</td>
<td>10</td>
</tr>
<tr>
<td>PDU4 Coggeshall and Kelvedon community flood alleviation</td>
<td>529</td>
</tr>
<tr>
<td>Rain gauge project - Anglian (Eastern) contribution to Anglian (Central)</td>
<td>80</td>
</tr>
<tr>
<td>PDU4 Needham Market Flood Risk Management Project</td>
<td>68</td>
</tr>
<tr>
<td>Community Coastal Partnership Support Funding</td>
<td>35</td>
</tr>
<tr>
<td>Burnham on Crouch Station Road Flood Alleviation</td>
<td>20</td>
</tr>
<tr>
<td>Bowers Gifford Basildon Study</td>
<td>20</td>
</tr>
<tr>
<td>Chelmer Village Chelmsford Study</td>
<td>20</td>
</tr>
<tr>
<td>Hutton Brentwood Study</td>
<td>20</td>
</tr>
<tr>
<td>Pilgrims Hatch Brentwood Study</td>
<td>20</td>
</tr>
<tr>
<td>Thrift Green Brentwood Study</td>
<td>20</td>
</tr>
<tr>
<td>South Essex: Bromfords Flood Alleviation Scheme</td>
<td>20</td>
</tr>
<tr>
<td>Ormesby Flood Risk Mitigation project</td>
<td>17</td>
</tr>
<tr>
<td>Diss Flood alleviation scheme</td>
<td>17</td>
</tr>
<tr>
<td>Harleston Flood Alleviation Scheme</td>
<td>17</td>
</tr>
<tr>
<td>Wymondham Flood Risk Mitigation Scheme</td>
<td>17</td>
</tr>
<tr>
<td>Caister on Sea Flood Risk Mitigation Project</td>
<td>17</td>
</tr>
<tr>
<td>Lowestoft temporary tidal flood barriers</td>
<td>15</td>
</tr>
<tr>
<td>RMA project support</td>
<td>12</td>
</tr>
<tr>
<td>Surge - Maldon Wall (the Granaries) UR1461</td>
<td>3</td>
</tr>
<tr>
<td>Corn NFM – Northey Island Saltmarsh Regeneration</td>
<td>3</td>
</tr>
<tr>
<td>Steeple Bumpstead Flood Risk Reduction</td>
<td>3</td>
</tr>
<tr>
<td>Debenham Flood Alleviation Scheme</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1,236</strong></td>
</tr>
<tr>
<td><strong>Grand Total</strong></td>
<td><strong>3,093</strong></td>
</tr>
</tbody>
</table>

*Figure 8.1: Partnership contributions spent on projects during 2018/19*
8.2 RFCC should note the number of studies for future projects that are currently being funded from Local Levy. Use of Levy in this way is extremely valuable in identifying a future pipeline of projects and protecting homes more quickly than they otherwise would be possible.

9. **RFCC contribution to national Outcome Measure delivery**

9.1 The suite of Outcome Measures (OMs) defined in the ‘Glossary of terms used in FCRM programming and financial management’ is included in the members handbook. Outcomes are used to highlight the benefits achieved by carrying out capital projects. Nationally, the commitment to government is that we reduce flood or coastal erosion risk to 300,000 households between April 2015 and 2021. This Comprehensive Spending Review (CSR) period is the key target for all Risk Management Authorities and to provide confidence in achieving this target - figures are split down into individual years and RFCCs.

9.2 Figure 9.1 shows the OMs expected to be achieved in 2018/19. Current forecast is for 1179 OM 2+3, which is 119 greater than our target of 1060.

<table>
<thead>
<tr>
<th>Project Title</th>
<th>Start of year target</th>
<th>OM2 Forecast</th>
<th>OM3 Forecast</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ipswich Flood Defence Main Stage Tidal Barrier</td>
<td>1010</td>
<td>1010</td>
<td></td>
</tr>
<tr>
<td>TEAM2100 Programme - Anglian Delivery</td>
<td>50</td>
<td>121</td>
<td></td>
</tr>
<tr>
<td>Braintree Bradford Street Flood Alleviation Study</td>
<td>0</td>
<td>39</td>
<td></td>
</tr>
<tr>
<td>Debenham Flood Alleviation Scheme</td>
<td>0</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>NFM-Debenham: Mill Green</td>
<td>0</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1060</strong></td>
<td><strong>1179</strong></td>
<td><strong>0</strong></td>
</tr>
<tr>
<td><strong>Grand Total</strong></td>
<td></td>
<td></td>
<td><strong>1179</strong></td>
</tr>
</tbody>
</table>

*Figure 9.1: Outcome Measures forecast for delivery in 2018/19*

10. **Asset Condition Performance**

10.1 The revenue maintenance programme helps to prevent assets from falling below their target condition; whilst our capital recondition programme restores assets to their target condition. This is measured as KPI 962 (see Glossary of terms used in FCRM programming and financial management).

10.2 KPI delivery remains challenging due to failure rates and availability of staff in the Asset Performance teams. However, the forecast for KPI 962 is currently 96.4% against a target of 96.18%.

11. **Recommendations**

11.1 The Committee is asked to note:

A. The Quarter 2 2018/19 capital and revenue programming and budget position

B. The RFCC contribution to the overall national targets and programme performance to date

Aaron Dixey  
FCRM Programme Senior Team Leader
ENVIRONMENT AGENCY – ESSEX NORFOLK SUFFOLK AREA

Item No: 4  Report No: INF/E146

Meeting: ANGLIAN (EASTERN) REGIONAL FLOOD AND COASTAL COMMITTEE (RFCC)  

Subject: INCIDENT RESPONSE

Date 19 OCTOBER 2018  

Officer Responsible: Peta Denham (Area Flood Risk Manager)  
Graham Verrier (Norfolk & Suffolk Operations Manager)  
David Knagg (Essex Operations Manager)

RECOMMENDATION

The Committee is asked to:

A. Note and support the ongoing work of the local officers with our multi-agency partners across Essex, Norfolk and Suffolk  
B. Note and support the community engagement work we undertake to improve community resilience  
C. Note and support ongoing efforts to technically improve the warning service and make it more effective and accessible for the public and partners

1. Purpose of the report and introduction

1.1 This paper is to make the Committee aware of the ongoing work of local teams to build relationships with our partner organisations, to ensure efficient and effective multi-agency responses to flooding; improve awareness and resilience in our communities at risk and to maintain and improve the technical capabilities of the flood warning service in Essex Norfolk and Suffolk.

2. Incident Response

2.1 We have had an extremely busy summer where our incident teams have responded to a record number of seasonal and dry weather related incidents alongside the threat and our response to thunderstorms, waste fire and pollution incidents. Fish kill incidents have topped the list with teams responding to an unprecedented number in July and August. These featured widely across the media and on BBC Look East in July. The area also moved back into Prolonged Dry Weather status in August which involved teams managing restrictions to abstraction licensing supported by staff monitoring and managing the enforcement of those restrictions on the ground.

2.2 There were twice as many environmental incidents reported across East Anglia in July as there were in June with six times the number of reported fish kills in this period. By the 18 September we had been responding to incidents for 79 consecutive days. In support of this prolonged activity and to manage duty staff welfare we have been training extra people and stopping or slowing other lower priority.

3. Community Engagement Activity

3.1 Our stand at the Ipswich Summer Mela was a great success and we enjoyed talking to members of the community about the risks of flooding. We also attended the Maldon and Tendring District show where we focussed on sharing the government’s 25 year
Environmental Plan and the Environment Agency’s role in implementing it, as well as more light hearted engagement through crafts with children which allowed for conversations with parents.

3.2 We also promoted our flood service at the Clacton Air Show. This generated much interest and was particularly useful to reach out to people from the nearby Jaywick and seawick communities.

3.3 Our staff will provide a 10 minute presentation teaching children about flood risk and what they should do in the event of a flood at ‘Crucial Crew’ in Great Yarmouth in early November. Crucial Crew is organised by Norfolk Fire and Rescue for year 6 primary school pupils and runs over 5 days with up to 1500 pupils attending.

4. Training and exercising

Training with Partners

4.1 We supported Exercise Dolphin on 25 July in Great Yarmouth which tested Great Yarmouth 6th form college as a new location for the town’s incident response centre. Helping to design the content for the day, we participated alongside the Borough Council, the Fire and Rescue Service and Norfolk Police to test the facility as a new strategic equipment holding zone and command point for a flood event. The college proved to be a good location as it has plenty of meeting rooms and a large car park to serve as the equipment holding area.

Environment Agency Internal Training

4.2 We have increased the number of staff in training this quarter ready to join our incident rosters in January 2019. Flood warning trainees will be shadowing more experienced staff in the lead up to Christmas making sure they feel confident and capable to undertake their role.

4.2 Existing flood warning officers have also been in training to check their approach aligns to new national standard. Our area has played a leading role in developing this standard, which is not a huge change from our existing practice. Implementation of this harmonisation for the roles across the Environment Agency will mean that we will be more interoperable, which means that staff who support us from neighbouring areas will be up to speed immediately with our working practices.

4.2 East Anglian field teams have introduced a dedicated training day, once a month, which means that they will have the benefit of regular consistent training to maintain the high standards of capability to deal with all environmental incidents. Changing themes each month, the training focusses on seasonal priorities, where possible. Recent training (shown below) earlier this quarter was aimed at the deployment of aeration equipment. This proved very timely as staff then had to deal with the real thing, when we had to respond to 30 different fish in distress incidents in one weekend in July! With the sessions proving a success, additional duty roles will be invited to live-play their incident role alongside field staff.
5. **RECOMMENDATION**

5.1 The Committee is asked to:

A. Note and support the ongoing work of the local officers with our multi-agency partners across Essex, Norfolk and Suffolk.

B. Note and support the community engagement work we undertake to improve community resilience

C. Note and support ongoing efforts to technically improve the warning service and make it more effective and accessible for the public and partners

**Peta Denham**  
/Area Flood Risk Manager/

**Graham Verrier**  
/Norfolk & Suffolk Operations Manager/

**David Knagg**  
/Essex Operations Manager/
RECOMMENDATION

The Committee is asked to:

A. Note the findings from the ISO55000 Stage 1 audit report.
B. Continue to support the Modernising AM agenda and ISO certification process.

1. Purpose of the report and introduction

Background

1.1 The Environment Agency manages around £26 billion\(^1\) of flood and coastal risk management assets. We also have an oversight role on a further £17 billion of assets managed by others. Modernising Asset Management (AM) is one of the Environment Agency’s top priorities for improving the efficiency and effectiveness of investment in the assets we operate and maintain. Our vision is to develop FCRM AM to be at the forefront internationally and to be recognised as a leading AM organisation.

1.2 An important step in achieving our objectives is to adopt a system-wide approach to managing assets and to gain certification in 2018/19 in accordance with the ISO55000 standard. This will not only improve our delivery of maintenance and capital works, it will also improve how we work with and support other risk management authorities.

1.3 ISO certification will provide independent reinforcement of our competence as a modern AM organisation. This will support our justification for future investment as part of the Spending Review 2019. We committed to achieve ISO certification as part of our response to the HMT sponsored ‘Worsfold’ Review of our performance.

1.4 We are very grateful to David Jenkins and Anne Wheeler who have supported our preparatory work. This paper provides a progress update on the ISO certification process; an outline of what we have achieved and what we have planned.

2. ISO Certification

2.1 The certification is carried out in 2 stages;

- **Stage 1** confirms that ‘the management system has been planned to conform to the audit standard and is designed to achieve the organisation’s policy objectives; and to evaluate the ability of the system to ensure compliance with statutory, regulatory and contractual requirements.’

- **Stage 2** tests the application of our management processes to the AM system and seeks evidence of compliance with ISO55000.

2.2 The Stage 1 audit was successfully completed in June. The Executive Summary from the auditor’s report is included as Appendix A for information.

\(^1\) Valuation of capital replacement value of assets 2017.
2.3 The auditor positively noted that the 'level of commitment and engagement with the audit process was good. Local AM Leads and Area FCRM personnel presented comprehensive information in a structured way and were able to answer questions openly and confidently, with good awareness of the AM system as it applied in their area of responsibility.'

2.4 The auditor also reported that 'no critical items were identified', i.e. no major non-conformities. Several minor non-conformities were identified including:

- A need to clarify the role of top management leadership and capture evidence of their engagement in specific activities, e.g. decision-making.
- Aligning long-term strategies (up to 100 years) and short-term plans (current spending period) to avoid compromising future decisions.

2.5 For Stage 2 we will need to demonstrate clear compliance with our AM system or, where activities don’t align, to be able to demonstrate good control of activities and to have associated improvement plans. The auditor has not asked for RFCC chairs to be involved in the audits however if this changes we will speak to individuals directly.

3. ISO Certification Next Steps

3.1 Preparing for the Stage 2 audit includes the following work areas;

- Training staff about how their role fits into the AM system using the newly development e-learning modules.
- Supporting Asset Management Leads (AMLs) who are implementing and embedding the AM system in Areas.
- Increasing engagement with key groups.
- Assuring components of the AM system to identify improvement opportunities and ensure compliance.

3.2 The 3 Areas taking part in the Stage 2 audit are; Greater Manchester Merseyside and Cheshire, West Midlands and Wessex. Three more Areas will be confirmed as reserves. The Stage 2 audit will take place over 3 weeks starting 26th Nov 2018.

3.3 Although East Anglia will not be involved in the Stage 2 audit we will continue to develop our ways of working to ensure we comply with the activities within the AM system. Details of the activities we are looking to develop further are outlined in our Area Transition Plan. The current focus is on:

- Roles and responsibilities, improving clarity and confidence around the roles of Site Responsible Officer and Senior User.
- Better integration between the systems used by Field and Supra Area MEICA and Asset Performance teams to ensure issues around asset condition are identified as early as possible so that a robust revenue maintenance programme is in place and a strong capital programme pipeline is developed.
- Production of Asset Data Improvement plans and associated data improvements.

4. Recommendations

4.1 The Committee is asked to:

A. Note the findings from the ISO55000 Stage 1 audit report.
B. Continue to support the Modernising AM agenda and ISO certification process.

Author: Ian Miller, Project Executive, ISO Certification
Sponsor: Ken Allison, Director of Allocation & Asset Management
Date: 3 September 2018

Appendix 1 – Executive Summary, ISO55000 Stage 1 Audit
Executive Summary – Findings at Stage 1 are based on information presented about asset management systems and processes but not necessarily supported by evaluation of objective evidence. As such, they do not indicate conformity or nonconformity. This section provides a brief overview of the auditor’s conclusion of whether the management system has been planned to conform with all the requirements of the audit standard, is designed to achieve the organisation’s policy objectives and the ability of the management system to ensure compliance with statutory, regulatory and contractual requirements. More detailed information about Findings is documented in the subsequent sections.

1 The Environment Agency FCRM organisational context is complex and dynamic. It includes several internal and external issues including uncertainty in future climate scenarios, complex interacting flood risk factors, with demanding strategic and planning issues covering multiple catchments, areas and asset systems. The asset management system includes a national policy, strategy and planning framework, with aligned Area asset management strategy and planning processes including catchment and shoreline level plans.

2 The FCRM asset management system framework identifies how it shall be aligned with the Environment Agency (EA) Corporate Plan, the EA FCRM Strategy and related EA Strategies. These strategic documents, including the significant FCRM Long Term Investment Scenarios provide important information about issues that are relevant to FCRM purpose and that affect its ability to achieve the intended outcomes of its asset management system. A finding of this audit is that the suite of documents that represent the FCRM Strategic Asset Management Plan (SAMP) must address the long-term issues and wider EA strategies. The FCRM Strategy contains several long-term issues, as well as strategic intents, for example communities and partner engagement, maintenance efficiency, flood detection, forecasting and warning, natural flood management. Many of these are well described in the FCRM AM Strategy as areas that will be developed, with a range of specific plans that are referenced as part of the SAMP and those described in the AM System Definition and the AM Strategy documents. This includes an Asset Management Delivery Plan. However this strategic and planning framework represents an audit trail that will be followed during the Stage 2 audit.

3 Asset management objectives, included in the strategic asset management plan (SAMP), must be aligned to, and consistent with, the organisational objectives. The current FCRM asset management objectives cover the period 2017-2021 and, while these are aligned to the current funding period, it may be that additional longer-term strategy, objectives and plans will be required to ensure that short-term decisions do not compromise the ability of FCRM to accommodate the potential longer-term scenarios that have been identified. The planning frameworks seen in the areas visited included long-term strategic considerations (up to 100 years) in local Catchment Flood Management Plans and Shoreline Management Plans; it will be an audit trail to verify how these are aligned to and integrated with National strategies to ensure an optimised portfolio of programmes and projects.
4 The asset management objectives operate within a strategic framework that is aligned to high-level strategies (e.g., FCERM Strategy) and the Outcomes matrix shown in the AM System Definition. These are then aligned to the Delivery Outcomes and Measures of Success table in the AM Strategy. Some of the strategic intents either do not figure in the objectives framework or may be included but do not currently have measurable targets. KPIs are also used as internal operational scorecard measures. One KPI (number of assets that are at required condition in High Consequence systems) is reported externally to Defra as part of EA FCERM corporate scorecard. All the objectives and targets are lagging measures. It is not a requirement to have leading measures but it is good practice to use these for timely planning processes, including risk/cost and whole-life cost/benefit modelling. It was noted that you intend to develop data and information capability, including for asset maintenance optimisation.

5 The asset management (AM) framework, the AM system model, and the AM process mapping chart appear to provide a logical and useful description of the strategy and planning, governance, processes and sub-processes in the system. These are well documented in the Asset Management Manual. These had been cascaded out to the 4 areas visited, where the level of understanding of the logical framework and local alignment appeared to be well established. Area AM Plans were largely in process and at draft stage but these appeared to demonstrate how the national frameworks would be integrated at Area level.

6 The audit covered every clause of the Standard, with sampling of all major AM processes at National and Area level. Several findings and observations were reported at the end of each day. These Findings were consolidated and re-appraised and they are documented in the next section. Several areas of the asset management system were in process of development or implementation. During the Stage 2 audit, the auditor will need to see evidence of the key processes and will verify that the plans being implemented and assured in a controlled process. The auditor will follow audit trails to evaluate asset management processes, including understanding and conformity to the processes by all FCERM personnel, governance and assurance arrangements.

7 The level of commitment and engagement with the audit process in National and in the Areas visited was good. Local AM Leads and Area FCERM personnel presented comprehensive information in a structured way and were able to answer questions openly and confidently, with good awareness of the AM system as it applied in their area of responsibility.

8 The audit programme was very comprehensive, with a large number of topics to cover and a large number of contributors. The Asset System Manager and the Area AM Leads co-ordinated and facilitated the audit process effectively to allow an efficient assessment process.
RECOMMENDATION

The Committee is asked to:

A. Note the intention to meet HM Treasury capital and revenue efficiency targets, the challenge these create and the progress to date.
B. Support the Environment Agency in its work to drive the efficiency agenda.
C. Note the progress to develop plans for efficiency savings in SR19.

1. Purpose of the report and introduction

1.1 The Environment Agency is continually seeking to improve efficiency and deliver value for money for the public. The Spending Review 2015 (SR15) settlement with HM Treasury (HMT) provided the Environment Agency long term allocations in both capital and revenue FCERM grant-in-aid (FCERM GIA). The settlement came with a number of conditions, including the need to realise a 10% increased level of efficiency in both capital and revenue FCERM GIA.

1.2 This paper is to inform RFCCs of the HMT settlement conditions for capital and revenue FCERM GIA, the challenges to be faced, progress made to date against our SR15 capital and revenue efficiency targets, and our thinking for SR19.

2. HMT settlement condition

2.1 Capital FCERM GIA

The 6-year capital settlement provided the Environment Agency with £370m FCERM GIA in 2015/16, and then the same in real terms each year until 2020/21\(^1\). This included the allocation given to the Environment Agency on behalf of other RMA partners, including local authorities and internal drainage boards. Collectively, we are required to achieve a 10% level of annual efficiency compared to a 2015/16 baseline, exclusive of any partnership funding, with a target across the Environment Agency and RMAs over the 6 years of £236m. The efficiency requirement is factored into the 300,000 household target so the households target is only achievable if we deliver and reinvest the efficiencies. The efficiency funding condition is linked to the size of capital FCERM GIA allocation, meaning that growth in the capital programme since the outset of SR15 has led to an increase in the efficiency target.

\(^1\) Source: Defra letter to EA Director of FCRM, 24 July 2013.
2.2 Revenue FCERM GIA
The SR15 settlement condition was in part based on the HMT peer review of our asset maintenance work undertaken for HMT in 2014 by the Infrastructure and Projects Authority (IPA). The review was led on behalf of IPA by the then OFWAT Chief Engineer Mark Worsfold. This review concluded we should become 15% more efficient by the end of 2020/21.

The actual SR15 settlement condition requires us to make 10% efficiency in our annual revenue maintenance programme by the end of the 4-year SR15 period (years 2 to 5 of the 6-year Worsfold efficiency programme). In addition, we need to demonstrate all released savings are reinvested in maintaining defences, i.e. to ‘on the ground’ maintenance activities. We will need to meet the HMT settlement condition by the end of the SR15 period on 31 March 2020.

The revenue efficiency target is therefore £22.4m (10% of the £224m 2019/20 allocation) of savings for reinvestment. In 2018/19 we have managed in-year cuts in support of the wider Defra group funding challenges. These cuts include approximately £5m from asset management. Our planning assumption for 2019/20 is that we will receive our full indicative allocation for asset management of £224m. If we do need to again help contribute to budget pressures in Defra group in 2019/20 we may have to reconsider the way we reinvest savings into ‘maintaining defences’.

2.3 Reporting to Cabinet Office
We work with HMT’s IPA, who review our capability and report to HMT on our delivery of the SR15 conditions. As a result we monitor efficiency progress on a quarterly basis. Being able to demonstrate to the IPA, and therefore HMT, that we have made the required efficiencies and reinvestment in SR15 should help our SR19 submission.

3. Progress so far (to 31 March 2018) and SR19 planning
3.1 Capital FCERM GIA
At 31 March 2018, halfway through the 6-year capital schemes programme, the Environment Agency and its partners have achieved £134m of capital efficiency savings across the full capital programme. From a national perspective, and set against a milestone at this stage of £120m, we are marginally ahead of profile, however a considerable challenge remains. A summary of capital efficiency savings by RFCC is given in Appendix A. Approximately half of the savings have been used to cover individual project cost increases (using available risk contingencies); however over £60m of ‘cash releasing’ efficiencies have been reinvested back into the capital programme over the first 3 years, allowing more projects to be delivered with a focus towards ‘on the ground’ activities.

3.2 Revenue FCERM GIA
At 31 March 2018, halfway through the 4-year SR15 period and the 6-year Worsfold efficiency programme, the Environment Agency and its partners have achieved £7.6m of annual revenue efficiency savings against a milestone at this stage of £7.7m. Some examples of revenue efficiency savings made to date are shown in Appendix B.
As part of the HMT SR15 settlement we have agreed to reinvest a portion of the efficiency savings to achieving additional asset maintenance outcomes. In 2016/17 we made savings of £1.8m for reinvestment in 2017/18. This gave
£1.8m of additional funding for areas in 2017/18. £0.8m was directed to scheduled maintenance activities from our planned maintenance programme that did not receive funding in the initial indicative allocation. The remaining £1.0m was allocated to areas' unscheduled maintenance allowance. The £7.7m savings for reinvestment in 2018/19 have been partly used to fund the £5m reduction in FCERM GIA funding, with the remainder being reinvested.

3.3 Overall
In summary, progress to date on capital and revenue efficiency is good. Early indications are that we are on track to meet both capital and revenue efficiency targets, however the SR15 targets remain challenging, requiring full support from partners, strong leadership and management scrutiny.

3.4 SR19 planning
As part of our preparation for SR19 we and our partners need to factor into our analysis our planned efficiency beyond 2021. We anticipate HMT will again provide an efficiency condition on the SR19 settlement.

3.5 Within the Eastern RFCC boundary the Environment Agency has a target to find revenue efficiencies worth 9% of its total revenue allocation in 2018-19, this equates to £718,000. This will increase in 2019-20 to enable us to meet the national target for the end of the SR15 period. Achievement of revenue efficiencies is reviewed quarterly by a national peer review group who vet the quality and volume of the claims. Each efficiency claimed must provide detail about the change in working practice and how this has led to savings along with calculations of those savings. At the end of quarter 1 savings worth 7.1% of the revenue allocation had been found within the Eastern RFCC boundary. Some of these are due to ongoing savings from changes to working practices made earlier in the SR15 period. This makes us the leading Area in England in terms of achieving revenue efficiencies for re-investment into additional asset maintenance.

4.0 Recommendations
The Committee is asked to:
A. Note the intention to meet HM Treasury capital and revenue efficiency targets, the challenge these create and the progress to date.
B. Support the Environment Agency in its work to drive the efficiency agenda.
C. Note the progress to develop plans for efficiency savings in SR19.

Author: Nick Roseveare
Job title: FCRM Efficiency Team Leader
Sponsor: Ken Allison, Director of Allocation and Asset Management
Date: 11 September 2018

APPENDIX 1 - Capital efficiency savings by RFCC – first three years of 6-Year Capital Schemes Programme

APPENDIX 2 - Examples of revenue efficiency savings made to date
APPENDIX 1
Capital efficiency savings by RFCC – first three years of 6-Year Capital Schemes Programme

Note: These figures based upon FCRM1 Capital Schemes Programme data

<table>
<thead>
<tr>
<th>RFCC</th>
<th>6-Year Defra Target (10% of GIA allocation) to be achieved by 31/3/21</th>
<th>Approved efficiency savings to date (1/4/16 to 31/3/18)</th>
<th>% of Defra target achieved to date (31/3/18)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anglian Central</td>
<td>£4,017,143</td>
<td>£4,303,166</td>
<td>107.1%</td>
</tr>
<tr>
<td>Anglian Eastern</td>
<td>£18,918,588</td>
<td>£8,189,995</td>
<td>43.3%</td>
</tr>
<tr>
<td>Anglian Northern</td>
<td>£20,592,767</td>
<td>£14,251,794</td>
<td>69.2%</td>
</tr>
<tr>
<td>Severn and Wye</td>
<td>£2,813,950</td>
<td>£3,797,240</td>
<td>134.7%</td>
</tr>
<tr>
<td>North West</td>
<td>£29,300,489</td>
<td>£13,016,219</td>
<td>44.4%</td>
</tr>
<tr>
<td>Northumbria</td>
<td>£8,170,249</td>
<td>£4,425,640</td>
<td>54.6%</td>
</tr>
<tr>
<td>South West</td>
<td>£13,903,389</td>
<td>£8,050,164</td>
<td>57.9%</td>
</tr>
<tr>
<td>Southern</td>
<td>£33,474,871</td>
<td>£18,224,418</td>
<td>54.4%</td>
</tr>
<tr>
<td>Thames</td>
<td>£25,833,140</td>
<td>£27,352,370</td>
<td>105.9%</td>
</tr>
<tr>
<td>Trent</td>
<td>£19,700,482</td>
<td>£11,444,518</td>
<td>58.1%</td>
</tr>
<tr>
<td>Wessex</td>
<td>£9,644,955</td>
<td>£4,388,266</td>
<td>45.5%</td>
</tr>
<tr>
<td>Yorkshire</td>
<td>£49,080,878</td>
<td>£16,846,100</td>
<td>34.3%</td>
</tr>
<tr>
<td>National</td>
<td>£943,407</td>
<td>£220,404</td>
<td>23.4%</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>£236,399,329</strong></td>
<td><strong>£134,504,294</strong></td>
<td><strong>56.9%</strong></td>
</tr>
</tbody>
</table>

![Efficiency Performance by RFCC](image-url)
APPENDIX 2
Examples of revenue efficiency savings made to date

<table>
<thead>
<tr>
<th>Principle</th>
<th>What was done?</th>
<th>Efficiency Saving</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disposal of silt on site (Lincs &amp; N)</td>
<td>The original requirement was to remove silt from Tetney Haven in the Lincs &amp; Northants Area as the site is within a SSSI. Early involvement with Natural England allowed the silt to remain on site saving disposal costs.</td>
<td>£139,230</td>
</tr>
<tr>
<td>Public Sector Co-operation (KSL)</td>
<td>A Public Sector Co-operation Agreement was used with the local IDB carried out channel maintenance work, including weed cutting, rather than using the Minor Works framework supplier.</td>
<td>£130,704</td>
</tr>
<tr>
<td>Packaging (North East)</td>
<td>The Intermittent Maintenance programme was packaged into 3 packages of work for Contractors. This meant that 48 projects were delivered through just 3 tender processes. The Contractor also provided packaging efficiency savings.</td>
<td>£129,165</td>
</tr>
<tr>
<td>Installation of Webcams (SSD)</td>
<td>Webcams have been installed at trash screen sites across the Area, reducing the need for operations staff to visit the remote structures to routinely check for blockages. This efficiency has been replicated across the country.</td>
<td>£114,840</td>
</tr>
<tr>
<td>Transfer of ownership (L&amp;N)</td>
<td>At Yarwell Mill the EA carried out inspection and maintenance to the sluice, four bridges, two weirs and mill culverts. A Section 30 Agreement was made transferring ownership and liability.</td>
<td>£100,000</td>
</tr>
<tr>
<td>Revised Method of Working (East Mids)</td>
<td>A Method of Work had been agreed for the repainting of the IBeams on Colwick Sluice. The works were completed in a far shorter time by increasing the plant and machinery. The duration reduced from 110 days to 38 days. Although the cost of plant and machinery were the same, efficiencies were made in the overheads.</td>
<td>£82,324</td>
</tr>
<tr>
<td>Review of Pump operation (L&amp;N)</td>
<td>At Chapel St Leonards Pump Station, operational parameters required pumping to start at set retention level. After pump refurbishment, reducing tidal ingress, the agreed retention level in the fluvial watercourse was increased by 100mm without increase in flood risk</td>
<td>£78,240</td>
</tr>
<tr>
<td>Purchase of plant (Devon &amp; Cornwall)</td>
<td>Spider mowers were on hire for grass cutting over difficult terrain. Six Spider mowers have been purchased and will make efficiency savings over their six year lifespan. This efficiency has been replicated across the country.</td>
<td>£70,100</td>
</tr>
<tr>
<td>MEICA framework contracts (West Mids)</td>
<td>A MEICA framework contract in a number of Areas was in place whereby each call-out was paid for on a time and costs basis. A new framework contract arranged through competitive tendering that pays a fixed fee for each call out.</td>
<td>£67,000</td>
</tr>
<tr>
<td>Supplier negotiation (Yorkshire)</td>
<td>Under the culvert inspection CCTV framework the suppliers charged a walkover fee for each culvert inspection. Working with the procurement team, the team negotiated with the suppliers to waive the walkover fees.</td>
<td>£60,000</td>
</tr>
<tr>
<td>Herbicide spraying (Herts &amp; N London)</td>
<td>Significant reed growth adversely affects the conveyance of the channel in many locations in Herts and North London. Previously this may have been handled through dredging to remove reeds and root mats. Herbicide spraying has a lower cost per linear metre.</td>
<td>£59,080</td>
</tr>
<tr>
<td>Partnership working (Devon &amp; Cornwall)</td>
<td>Tanhouse Stream, Lostwithiel, is an urban watercourse with a range of culverts owned by a range of landowners, which was substantially silted up. A large proportion of the culvert system is located beneath highway. Historically we would have cleared the EA section of culvert and notified other organisations of their responsibilities. Working with Cornwall Council we combined resources to enable the entire length of culvert to be cleansed rather than through separate projects.</td>
<td>£55,000</td>
</tr>
</tbody>
</table>

Other examples include over 40 instances where Area teams have applied the Effectiveness Initiative to decommission FCRM assets; the implementation of joint T98 Asset inspections and their recording on iPads (saving over £0.5m per annum); through Procurement teams the roll out of new frameworks to make better use of the supply chain; and through National Fleet Services the Fleetshare system to make more efficient utilisation of plant.

Further instances of ‘enabling’ efficiencies are being captured during Q2 which will demonstrate further revenue savings, in particular better data sharing and access, and the provision of in-house legal services.
1. Introduction

1.1 This paper provides the October 2018 Flood and Coastal Erosion Risk Management news and updates across government and the Environment Agency as presented to the Chairs. The full FCERM update paper will be sent out in November.

2. General Update, Key Articles to note

2.1 In this paper:

Working with water and sewerage companies – Drainage and Wastewater Management Plans

2.2 Improving drainage planning has been a theme since the 2007 floods. The drainage and sewer network is struggling to cope now. With climate change and more growth we can expect pollution and flooding to increase, unless it is managed more strategically.

2.3 The Government’s 25 Year Environment Plan and Defra’s Surface Water Management Action Plan have recently called for greater transparency and engagement on drainage planning.

2.4 Water UK’s 21st Century Drainage Programme has prepared a framework for the long term planning of drainage and wastewater services: Drainage and Wastewater Management Plans (DWMPs). The framework was commissioned by Water UK in collaboration with Defra, Welsh Government, Ofwat, Environment Agency, Natural Resources Wales, Consumer Council for Water, ADEPT and Blueprint for Water.

2.5 Water and wastewater companies in England and Wales will produce DWMPs using the framework by the end of 2022, to support their business plans for Ofwat’s price review in 2024. DWMPs will:
  - provide a consistent basis for drainage and wastewater planning across the water sector, enabling companies to target investment on drainage and wastewater more effectively and provide customers with better information about these services.
  - help water and sewerage companies manage their assets over the long term and ensure that they are resilient to climate change.
  - improve engagement and involvement of other Risk Management Authorities, facilitating a more joined approach and integrated solutions, such as sustainable drainage and natural flood management.
2.6 The framework is available here: [www.water.org.uk/policy/improving-resilience/21st-century-drainage/long-term-planning](http://www.water.org.uk/policy/improving-resilience/21st-century-drainage/long-term-planning)  The main report is supported by six technical appendices, including collaborative drainage planning, case studies and example contents.

2.7 Water and sewerage companies are starting to engage now with Regional Flood and Coastal Committees and partners on how best to produce DWMPs, so they meet partners’ expectations to develop optimal solutions for communities and the environment.

2.8 We welcome the framework as it will strengthen the overall strategic planning landscape alongside flood risk management plans and lead local flood authorities’ local flood risk management strategies.

Contact: jonathan.hunter@environment-agency.gov.uk

**Rationalising the main river network – de-maining pilots**

2.9 We have completed the consultation on the pilots in South Forty Foot (Lincolnshire), Stour Marshes (Kent), Suffolk (East Anglia) and Isle of Axholme (North Nottinghamshire). The consultation response documents have now all been published on GOV.UK. There was a mixture of comments but the responses did not include any significant new evidence or grounds for us not to progress the de-mainments once we have received the full agreement from partners.

2.10 Once we have agreement from partners we will seek John Curtin’s decision on each of the pilots (on behalf of the Environment Agency Board) and formally publish a decision notice. This is then followed by a 6 week appeals process to the Secretary of State. Providing there are no appeals, de-maining would then take place and the watercourses would be removed from the statutory main river map. Stour Marshes Internal Drainage Board has requested that de-maining and the transfer of assets takes place in April 2019.

More detail on the timelines is available in the following table:

<table>
<thead>
<tr>
<th>Location</th>
<th>Decision note published and start of appeal period</th>
<th>Watercourse transfer and removal from the main river map</th>
</tr>
</thead>
<tbody>
<tr>
<td>South Forty Foot (Lincolnshire)</td>
<td>early October</td>
<td>November</td>
</tr>
<tr>
<td>Stour Marshes (Kent)</td>
<td>early November</td>
<td>April 2019</td>
</tr>
<tr>
<td>Suffolk (East Anglia)</td>
<td>Early November</td>
<td>April 2019</td>
</tr>
<tr>
<td>Isle of Axholme (North Nottinghamshire)</td>
<td>early October</td>
<td>November</td>
</tr>
</tbody>
</table>

2.11 The number of watercourses proposed for demainment in Norfolk and Suffolk has been reduced from 14 to 4 (of which 3 are in Norfolk and 1 in Suffolk). This is due to the lack of local authority byelaws to afford the necessary environmental protection to the watercourses following demainment. The local authorities have not been willing to progress the creation of new byelaws due to resource pressures and the timescales of the pilots. We are continuing to work with partners on the 4 remaining watercourses that do not require byelaws to be in place. As Suffolk watercourses have already been to consultation, we are finalising details of legal agreements with partners for the one remaining watercourse in the Suffolk part of the pilot. We are planning to go to consultation on the 3 remaining Norfolk watercourses in November.

2.12 We will produce an interim evaluation report by the end of the year focussing on lessons learned so far, successes and challenges. This will be used to fulfil our commitment to the Minister and to inform business decisions on next steps. We will complete a final evaluation report by the end of March 2019.

Contact: lucy.roberts@environment-agency.gov.uk or rachael.hill@environment-agency.gov.uk
Shoreline Management Plan Refresh

2.13 During 2017, Coastal Groups, RFCC Coastal Leads and Defra organisations agreed to a technical review of English (including those bordering Wales) Shoreline Management Plans (SMPs), to take account of new information and to improve their accessibility. However it was also agreed that this was not a full scale review – the term ‘refresh’ was preferred by most. The SMPs will continue to be based on current planning horizons and policy descriptors and will not require public consultation or formal re-approval by local councils. Following the refresh, however, there may be changes made to SMPs that would require such measures.

2.14 The Environment Agency is funding and co-ordinating the work between 2018 and 2021 with the support of a project board composed from Environment Agency, local authorities, Defra and Natural England, plus a wider technical advisory group.

2.15 Between June and August 2018, Coastal Groups discussed the aims and objectives of the work, key tasks and the approach to procurement and phasing of work between now and 2021. The outcomes of these discussions are being used to develop a work specification for approval by the project board in September 2018. The contract will go out to tender in autumn and work will begin in 2019.

The objectives of the SMP Refresh are to:

- Provide consistent guidelines for Risk Management Authorities on how key developments such as partnership funding and Coastal Change Management Areas should be considered whilst refreshing the SMPs (year 1 -2019);
- Assess the implications of new information - such as coastal monitoring data, coastal strategies, results from R&D and UKCP18 – on SMP content and management intent, as well as on requirements under Habitats and Water Framework legislation (high-level national-regional review year 1 - 2019, SMP-level reviews years 2 & 3 - 2020-21);
- Assess where more clarity, quality and consistency is required across SMPs to make them easier to understand and use among different audiences (years 1 & 2 - 2019-20);
- Update the content of SMPs and Action Plans in particular ( years 2 & 3 - 2020-21);
- Audit the influence of SMPs on investment and planning decisions; and make recommendations for improving this (year 2 - 2020);
- Develop options for having a more user-friendly digital format for SMPs (years 2 & 3 - 2019-20).
- Transfer updated SMP content on to a new digital platform. Depending on the results of digital discovery work and cost implications, this element may extend beyond the scope of the Refresh (years 2 & 3 - 2020-21).

2.16 Once the works specification has been agreed by the project board in September we will be in a better position to share a more detailed project timetable for the refresh. We are happy to provide future updates after September and to discuss how best to involve RFCC chairs in the process.

Contact: nick.hardiman@environment-agency.gov.uk

3. FCERM Communications update

Flood Action Campaign

3.1 This year’s campaign will again target the 18-34 age group. Research shows that they are least likely to perceive flood risk to their area, know how to protect their properties or where to go for information. The campaign will be ready to go from 1 October – but will be a flexibly deployable campaign, to run when rain and flooding are on the news agenda. Evidence has shown that this is when people are most receptive to receiving messages about flooding and flood risk, and therefore more likely to take action.

3.2 We’ll be asking people in that 18-34 age group to look at and keep our flood plan – Prepare Act Survive – so that they know what to do in a flood. The campaign will predominantly be
delivered through social media advertising and traditional media activity. National and local communications teams will be asking partners, vloggers, and the public on social media to tell us #justonething that they would save from a flood – be that a favourite lipstick or a childhood toy.

Boosting Flood Awareness during Incidents

3.3 During a flood incident we are now able to ‘boost’ our social media warning and informing messages to increase the numbers of people who take appropriate action before and during a flood (Facebook only).

3.4 ‘Boosting’ means we can directly contact people in at risk areas – sending posts straight into their newsfeeds (they do not need to follow/friend the Environment Agency) – and we can target people based on their location – a town, city, county or within a certain radius.

Engagement pilot

3.5 In addition to the flood action campaign we plan to pilot a joint local communications and engagement ‘behaviour change’ campaign in Middlesbrough, a traditionally hard to engage community, to understand if a more locally-specific approach will help lead to more action and awareness of flood risk.

3.6 We asked local engagement and communications colleagues to put forward possible locations for the pilot campaign and Middlesbrough was the best fit because it:

- is one of the top 10 deprived communities in England and has barriers we need to address; language, poverty, culture
- is a high-risk location that has had significant capital investment
- has a dedicated Environment Agency Officer who has struggled to make in-roads with the community using our traditional engagement methods

3.7 If the pilot is successful, and we see an increase in flood awareness and the number of people taking action to reduce their flood risk, the approach could be extended to other hard to reach communities across the country.

3.8 The project team and steering groups will include national and local Environment Agency communications and engagement staff, social sciences and market research, as well as partners including RFCCs, Red Cross, National Flood Forum, local community groups and other members from the LRF, such as the police and the fire and rescue service.

Flood warnings - know what to do?
4. **RECOMMENDATION**

   The Regional Flood and Coastal Committee is asked to:

   A. Note the October 2018 Flood and Coastal Erosion Risk Management news and updates.

ALISON BAPTISTE  
Director of Strategy and Investment  
October 2018
# Anglian (Eastern) Regional Flood & Coastal Committee (RFCC)

**Friday 19 October 2018**

**Venue:** Committee Room, County Hall, Market Road, Chelmsford, CM1 1QH

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## Agenda

<table>
<thead>
<tr>
<th>Lead</th>
<th>Page</th>
<th>Timing</th>
</tr>
</thead>
<tbody>
<tr>
<td>PH</td>
<td>-</td>
<td>09:30</td>
</tr>
<tr>
<td>All</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>PH</td>
<td>-</td>
<td>09:35</td>
</tr>
<tr>
<td>CB</td>
<td>-</td>
<td>09:45</td>
</tr>
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<td>All</td>
<td>1</td>
<td>09:55</td>
</tr>
<tr>
<td>All</td>
<td>15</td>
<td>10:00</td>
</tr>
<tr>
<td>All</td>
<td>-</td>
<td>10:10</td>
</tr>
</tbody>
</table>

## Lead

### 1. Apologies for absence and greetings to visitors

**PH** - 09:30

### 2. Declarations of members’ interests

**All**

### 3. Chairman’s announcements

**PH**

### 4. Environment Agency announcements

**CB**

### 5. Approval of minutes of the meeting held on 20 July 2018

**All**

### 6. Matters arising from previous meeting

**All**

### 7. Members’ slot

**All**

## Main Items

### 8. Actions and feedback from Local Choices meeting 20 September (EFCC 18/10)

**PH**

### 9. Local Levy, General Drainage Charge and IDB Precept for 2019/20 (EFCC 18/11)

**All**

### 10. Review of 2019/20 FCRM Grant in Aid (GiA) indicative allocation for capital and revenue funding (EFCC 18/12)

**PD**

## Tea and Coffee

**11:20**

## General Business

### 11. FCERM Winter Readiness Training

**JW/CF**

### 12. FCERM Strategy

**All**

### 13. Update from Essex County Council. Local Flood Risk Management Strategy (EFCC 18/13)

**LS**

## Lunch

**13:00**

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### Date of Next Meeting

**Thursday 16 January 2019, Cranworth Room, County Hall, Norfolk County Council, Norwich**

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### Information Papers (for noting only)

- Developing the Anglian (Eastern) RFCC Programme 2018/19 (INF/E143)
- Delivering the Anglian (Eastern) RFCC Programme 2018/19 (INF/E144)
- FCERM Program Update 2018/19 Quarter 2 – Current in-year position (INF/E145)
- Incident Response (INF/E146)
- National paper - Modernising Asset Management – ISO55000 Certification update (INF/E147)
- National paper - Asset Management Savings and Efficiencies (INF/E148)
- National paper – Flood and Coastal Erosion Risk Management Update, October 2018 (INF/E149)
Glossary of terms used in FCRM programming and financial management

This glossary is intended as reference tool for Members to be used in conjunction with the papers on the RFCC programme.

It is a living document and will be updated periodically. If you have any feedback on it or would like additional clarification to support your role or learning & development then please contact vicky.eade@environment-agency.gov.uk
Accrual
Work done or a service received which has not been invoiced or paid for by the end of the accounting period. You allow for it to show a true figure of your financial position.

Allocation
The funding aligned to projects and programmes prior to Budgets being set; see Indicative Allocation and Final Allocation. It should be noted that receiving a funding allocation does not obviate the need to gain Approval.

Appraisal
The process of; defining the problem; setting objectives; examining options, assessing outcome benefit (inc benefit:cost ratio); weighing up costs, impacts (positive and negative) risks and uncertainties in order to make a decision. This is the period between Gateways 0 and 1. The appraisal follows a short Initial Assessment and culminates in a Business Case. The appraisal phase provides greatest scope for RFCC Members to get involved and support project development, eg as part of the associated community engagement.

Approval
This refers to a project’s Financial Scheme of Delegation (FSoD) approval following Technical Review or the Environment Agency Board approval to the programme.

Area Flood & Coastal Risk Manager (AFCRM)
Our Area Flood & (or) Coastal Risk Managers (AFCRMs) lead the delivery of the National FCERM strategy and our strategic overview role locally. A key part of our strategic overview role is the bringing together of evidence and working with communities, potential funders and partners, especially other Risk Management Authorities, to develop complementary approaches to managing flood and coastal erosion risk.

AFCRMs promote candidates and once they are in the programme they sponsor Environment Agency led capital projects through the scheme appraisal stage to the approval of the Business Case. This includes associated engagement, partnership funding activity and the programming relationship with other Risk Management Authorities. It is at this stage of project development that the committee have the greatest opportunity to help shape the delivery of measures within their area.

They also have a role to work with regards to in-year monitoring of projects being delivered by other Risk Management Authorities; this includes signing-off project Business Justification and Business Case documentation prior to submission for Technical Review.

The majority of their programme accountabilities are delivered through their Partnerships & Strategic Overview (PSO) teams.

Asset
Within flood risk these are usually categorised as either structures (eg sluices, pumping stations etc) or defences (eg channels, walls, embankments etc), but equally the term applies to data, models and other tangible products.

Asset Performance (AP) team
See Operations Manager

Asset Systems
An asset system is a collection of individual assets that work together to provide flood risk protection to properties in a geographical area. They are defined for Environment Agency systems (main river and sea defence) and have a System Consequence rating associated with them. They do not relate to Coastal Erosion assets as these are not the responsibilities of the Environment Agency.

Baselining
In January the RFCC issue their consent to the programme. The financial allocation to deliver that programme is based on forecast project costs at a snapshot in time. As forecasts vary month on month, baselining is the process for making final budget adjustments before the start of the financial year.

**Benefits**
The positive quantifiable and unquantifiable changes that a project is expected to produce.

**Budget**
This is the amount of money given to a project or available to a programme within the accounting system. Project and programme budgets are set based on needs identified at a snapshot in time and are reviewed and re-set at appropriate milestones in the financial year (see Baselining).

**Business Case**
Following approval for a project’s Business Justification, a project’s business case summarises and presents the project appraisal for Technical Review and FSoD approval. For most projects the business case is presented within a Project Appraisal Report (PAR), completed proportionately to a national template for consistency; for low risk/cost projects the business case can be presented within a Form A.

**Business Justification**
A project’s business justification is reviewed following Initial Assessment to determine whether there is a case to progress to full project appraisal; this includes the development and presentation of the project’s Business Case. The justification is presented for Technical Review and FSoD approval through a Form A template for Environment Agency projects or FCERM7 for other Risk Management Authorities.

**Candidate**
A candidate is a problem or need that has been identified and a Risk Management Authority believes there is a requirement for financial investment. It is in effect a potential project that is most often identified and submitted as part of the annual Investment Needs round. A candidate is identified in a Project Mandate form. A Pre-Gateway 0 analysis is undertaken to determine if the need is valid and suitable for submission for funding. Once funding has been allocated the Project Mandate is authorised and the candidate becomes a project.

**Capital funding**
Capital funding is the money spent on the construction, creation, purchase and improvement or replacement of assets.

**Capital Programme**
The list of projects from all Risk Management Authorities, which are funded by FCRM GiA and or Local Levy along with third party contributions where applicable. The programme is prioritised by Partnership Funding Score, and delivery of statutory requirements, and is allocated through the Investment Needs process. This is usually spent on building new assets, or extending the life of existing assets (Capital Reconditioning).

**Capital Reconditioning (REC)**
A sub-set of the capital programme, the purpose is to repair/recondition or refurbish assets that are below their Target Condition (or forecast to fall below within a reasonable timeframe) to sustain the assets’ standard of service. In Anglian Region we package these works together for more efficient approval, procurement and delivery (called Reconditioning or RECON package). Works are sometimes also referred to as Capital Maintenance.

Before

After
**Catchment Engineer**

See Operations Manager. The Catchment Engineer also has a role to sign-off project Business Cases on behalf of the Senior User prior to their submission for Technical Review.

**Comprehensive Spending Review (CSR)**

The Spending Review is a Treasury-led process to allocate resources across all government departments, according to the Government’s priorities. These allocations span across a number of years with the current spending review period running from April 2011 to March 2015 (called CSR10).

**Consent**

The Flood and Water Management Act 2010 (section 23) requires the Environment Agency to:

- obtain the RFCC’s consent before the EA can implement its regional programme for the Committee’s region (s23(2)).
- obtain the consent of the RFCC before the Agency can issue a levy under Section 17 of the Act (s23(3)).
- obtain the consent of the Committee to the spending of revenue under Section 118 of the Water Resources Act in the region where the revenue is raised (s23(4)).

Consent is sought in January as part of presentation of the Final Allocation. Approval by the Environment Agency Board follows RFCC consent in February. The RFCC are asked to consent to the projects, activities and outcomes of the proposed programmes.

**Contributions**

This is funding from sources other than FCRM GiA as part of Partnership Funding projects.

**Cost Benefit Analysis (CBA)**

This measures the costs and benefits of a project in a common currency (preferably £s) over its lifespan, and assesses the balance between the two. Costs and benefits that cannot be monetised should still be considered. Whilst any project with a >1:1 ratio is viable, we should be looking for a greater return (1:5 as a minimum and 1:8 is quoted as the average return for FCRM investments).

**Current Magazine**

This is produced by our Framework partners and gives some great examples of programme and project delivery across the Environment Agency. Well worth a read.


**D**

**Delivery**

Scheme delivery follows Gateway 1 and concludes with Gateway 6.

**Do minimum option**

This option is where the minimum amount of action necessary is taken to manage an asset eg maintenance.

**Do nothing option**

This option is used in appraisal to act as a baseline against which all other options are tested. It assumes no action whatsoever is taken. In the case of existing works, it assumes for the purpose of appraisal that operating authorities cease all maintenance, repairs and other activities immediately. In the case of new works, it assumes that there is no intervention, and natural and other external processes are allowed to take their course.

**Do something option**

Any option other than do-nothing.

**E**

**Efficiency targets**
The Cabinet Office, via the Government’s construction strategy, require government departments to achieve capital efficiency savings. As part of Defra's business plan, the Environment Agency nationally has a corporate target to achieve savings of 15% of the FCRM GiA allocation to the Environment Agency delivered elements of the capital programme by the end of this CSR period (2014/15). The aim is to deliver better outcomes and increase the number of properties protected through the reinvestment of efficiency savings.

To achieve this, the annual targets increase year on year and the national target has been split and allocated to each Environment Agency region. Targets have not been allocated or split down to RFCC or Environment Agency Area level. 2011/12 provides the baseline by which efficiencies are measured. Effectively there are two categories of efficiency.

- At Programme level; we build efficiencies into our GiA submission (ie ask for less budget upfront), this means there is more GiA available to allocate elsewhere at the start of the year.
- In-year project level: cash released by efficiencies made on projects after we have received a budget that can be reinvested

**Exception**

If a measurable element of a project changes (eg financial forecast or benefit delivery) beyond a certain limit then we call this an exception. Tolerances for such limits can be set at both an individual project, programme or corporate level. Exceptions are then escalated to the appropriate governance body. This may include the RFCC depending upon if, and what tolerances, have been agreed.

**F**

**Final Allocation**

The proposed final amount of capital and revenue funding allocated for the forthcoming financial year from the Investment Needs submission and following review of the Indicative Allocation. It is usually made in late November/December for RFCC review and consent in January. It is then signed off by the Environment Agency Board in February prior to Ministerial announcement. The word ‘proposed’ is used as the allocation is not confirmed until the Board have agreed it.

**Financial Mandate (FM)**

The Financial Mandate (FM) set by Defra contains the rules on Financial, Resource and Corporate Strategy and Performance matters through which Defra as lead sponsor administers control over the Environment Agency. These rules include limits on authority for expenditure and details where prior approval from Defra is required.

**Financial Scheme of Delegation (FSoD)**

The FSoD, as approved by the Environment Agency Board, prescribes the limits to the powers and duties that have been delegated to the Management and Officers of the Environment Agency within the terms of the Financial Mandate. Authority is delegated downwards from HM Treasury to our Government sponsors (Defra/WG) and then throughout the Environment Agency to the Board; Chief Executive (CE) and Directors; Regional Directors (RD) and other grades and specific posts. Capital project expenditure requires FSoD approval at Business Justification and Business Case stage (along with any Supplementary Expenditure) following Technical Review.

It should be noted that even if a project has received a funding allocation there are separate rules within the FSoD that govern and approve how that funding is spent; ie Allocation does not automatically mean Approval to spend.

**Flood and Coastal Erosion Risk Management Appraisal Guidance (FCERM-AG)**

The FCERM-AG has been produced by the Environment Agency. It provides best practice implementation guidance on appraisal and supports the Defra Policy Statement on Appraisal (June 2009). The previous Defra Flood and Coastal Defence Project Appraisal Guidance (FCDPAG) was published between 1999 and 2001. Since that time, the approach has changed from one focused on flood defences and coast protection to the management of risk.
The guidance was launched in June 2010 and its use is a requirement for all publicly funded Flood and Coastal Erosion Risk Management strategies and projects developed by Risk Management Authorities. The guidance aims to help users undertake efficient appraisals and encourages experience and knowledge to be applied at all stages. It has been designed based on key principles to reduce flood risk, enhance the environment, promote partnership working and to be proportional to the project being appraised.

**Flood & Coastal Risk Management Grant-in-Aid (FCRM GiA)**

The Government, through Defra, provides the majority of funding for flood and coastal erosion risk management activities for England in the form of Grant in Aid (GiA) administered by the Environment Agency. It is often still known and referred to as Flood Defence Grant-in-Aid (FDGiA). FCRM GiA is either Capital or Revenue. Capital is used for new assets, or extending the life, and is available to all Risk Management Authorities. Revenue is used for ‘day to day’ Environment Agency activities and maintenance activities.

**Flood Risk Categories**

There are four flood risk categories associated with Outcome Measures, they are:

- Low - 0.5% (200 to 1) chance of flooding each year or less.
- Moderate - Between 0.5% (200 to 1) and 1.3% (75 to 1) chance of flooding each year.
- Significant - 1.3% (75 to 1) chance of flooding each year or greater
- Very Significant – 5% (1 in 20) chance of flooding each year or greater

**Forecast**

This is an assessment by the project team of the most likely outcome of the project, including financial forecast, risk forecasts and outcome (benefit) forecasts. They are reviewed and updated on a monthly basis for the year end position, and also look at the total project forecast (ie when it is complete potentially on a future financial year). Project forecasts then inform a Programme level forecast position.

**Form A/FCERM7**

A template used for presentation of a project’s Business Justification. A Form A is used for Environment Agency projects and a FCERM7 is the form for other Risk Management Authorities (RMAs) and can cover the whole business case for studies. A Form A can also be used for presentation of a Business Case for low risk projects.

**Form G/FCERM4**

The form (G for Environment Agency and FCERM4 for other RMAs) used when the forecast project costs exceeds the project’s FS0D approval, or there is a change to the scope of the project work. It presents the case for Supplementary Expenditure.

**Framework**

An approved list of external suppliers including contractors and consultants experienced in delivery of flood and coastal risk schemes. The frameworks are tendered for and allocated on a five year basis. The new framework WEM (Water and Environment Management) is due to begin in April 2013 and will be available for use by all Risk Management Authorities.

**Frequent Maintenance**

Revenue activities within the Revenue Maintenance programme carried out by the Environment Agency which prevents deterioration of an asset below Target Condition. This is an annual or recurring planned activity undertaken every 5 years or less, to keep assets at their Standard of Service. eg 2-yearly channel de-silting, bushing, grass cutting etc.
Gateways
The Office of Government Commerce promoted gateways as best practice. They are points during the project lifetime, when reviews are undertaken. They provide an opportunity for independent review of project progress and ensure we review business justification regularly. This enables us to stop projects that are not viable, or will not deliver the required outcome, as soon as possible.

Applying the gateway review process provides:
- Consistency and streamlining;
- A clear audit trail;
- Opportunities for effective risk management and forward planning;
- A framework for supporting performance management and sharing knowledge;
- Ultimately, better value for money.

Pre Gateway 0
The desk top analysis of a Candidate to assess them to ensure they have the potential to be a viable project. This includes the production of a Project Mandate to set out the background and need for the project, and an analysis of the potential benefits of the project.

Gateway 0
Is the review and authorisation of a Project Mandate by the Programme Manager on behalf of the Programme Board. It authorises inclusion within the programme and once funding is confirmed it can progress as a project to Gateway 1 first via an Initial Assessment.

Gateway 1
This is when a project’s Business Case received FSoD approval.

Gateway 2
This gateway checks that the project design has been carried out in accordance with the approved business case.

Gateway 3
This gateway checks that everything necessary is in place to ensure that the organisation will receive value for money, and we can award the construction contract.

Gateway 4
At this gateway construction work has been completed to our satisfaction, the contract project manager has prepared a completion certificate, and it is ready to be issued. Outcome Measures can be claimed at this point.

Gateway 5
At this gateway the contractor has corrected all the defects listed in the defects schedule and we have issued the defects correction certificate.

Gateway 6
At this gateway the project is complete and the project is closed.

Gateway 7
The project sponsor identifies the need for and arranges a post-project appraisal.

General Drainage Charge (GDC)
A local income, General Drainage Charge is raised for additional maintenance of Environment Agency flood risk management assets and is raised from landowners whose land is greater than 4ha and is not within an IDB Boundary. Anglian Region is unique in raising this charge. The charge rate is linked to the % change in Local Levy contribution by a Council Tax Band D property within the region and it has to be spent in the financial year it is raised.

Governance
Usually governance relates to consistent management, cohesive policies, guidance, processes and decision-rights for a given area of responsibility. For flood risk the term is mostly associated with the control of a project or programme via clear roles, a Project Board or the Programme Board.

**H**

**Highland Water Charge**
Charge made by IDBs to the Environment Agency for additional operating costs within their districts due to the need to convey water through IDB systems that originates from higher ground outside our their district.

**I**

**IDB Precept (IDBP)**
A local income raised from Internal Drainage Boards, with the rate generally set locally at RFCC level. It must be spent in the financial year it is raised and contributes towards Environment Agency FCRM activities within the river catchment.

**Identified Needs**
A term applied to elements of work within the Revenue Maintenance programme. It comprises all the Frequent and Intermittent Maintenance needs within an Asset System (over and above the Minimum Needs) to maintain the performance of that system of assets.

**Indicative Allocation**
This is the initial financial allocation (capital and revenue) for the forthcoming financial year, following the submission of the Investment Needs bid, and national prioritisation. It is presented to the RFCC at the October meeting for review / amendment. The RFCC are able to allocate local income to projects or activities as part of this process. Any changes made by the RFCC are then submitted for the final allocation, subject to them being affordable nationally, and delivering the same or more outcomes.

**Initial Assessment**
Once a candidate has passed Gateway 0, the Risk Management Authority will need to investigate the project further to develop the Business Justification. This is the initial assessment which gathers more specific data (ie surveys) than the desktop review as a candidate. It is a review to ensure that the project is worthy of full appraisal. The RFCC could use the outputs of this stage to make a more informed decision about the use of Local Income on a project.

**Intermittent Maintenance**
These revenue funded activities form part of the Environment Agency Revenue Maintenance programme. It comprises a suite of works that prevents deterioration of assets below their Target Condition. This is usually a one off activity or an activity undertaken at greater than 5 yearly intervals (ie bushing works or re-grouting of sea walls)

**Investment Needs Submission**
The needs based bid for FCRM capital GiA funding for all RMAs for the next five years. Its aim is to deliver specific outcomes or benefits (ie numbers of properties protected, number of assets at or above target condition, number of Ha of habitat created / protected). The process starts in April, and the submission is made in July following RFCC agreement.
Key Performance Indicator (KPI)
These are the Environment Agency’s corporate performance measures against which targets are set and agreed with Regions. They reflect our progress towards achieving our environmental outcomes and are one of the ways we demonstrate we are meeting our commitment to deliver. In programming, we report our position to the RFCCs on the key FCRM KPIs (962 and 965).

Key Performance Indicator 962 (KPI962)
KPI 962 reports the percentage of assets that are at or above their target asset condition, known as ‘passing assets’. The Environment Agency reports on all Flood Risk Management assets on Main River, regardless of who owns or manages them. The national target is split by Region and, in Anglian, by the three RFCCs.

Key Performance Indicator 965 (KPI965)
KPI 965 quantifies the number of households that are at increased flood risk from assets that are not at their target flood defence condition (‘failing’ assets). In an ideal world all assets would be at condition and, hence, the additional households at risk would equal zero.

Large Projects Review Group (LPRG)
Previously known as National Review Group (NRG), it has the same Technical Review and assurance function as the Project Assurance Board (PAB) but recommends technical and financial approval for large and/or complex projects over the value of £10 million. It meets on a monthly basis, and reviews projects from all Risk Management Authorities across England & Wales.

Local income
A collective term for Local Levy, General Drainage Charge and IDB Precept income.

Local Levy
A local income raised by each RFCC to fund FCERM activities within the region that are a local priority and to support Partnership Funding projects by attracting FCRM GiA. The Local Levy required is discussed by the RFCC annually in January and voted on by Local Authority members only. The total agreed levy needed is raised from all LLFAs within the RFCC boundary and is proportioned across them based on the equivalent number of band D council tax properties that each LLFA has in the RFCC’s area. This means that where Local Authority boundaries cross RFCC boundaries they may pay different rates of levy to different RFCCs. Local Levies do not have to be spent in the year they are raised as balances can be carried forward.

Long Term Investment Strategy (LTIS)
This sets out the scale of the investment needed nationally to meet the FCRM challenges over the next 25 years. The current LTIS was published in 2009 and was called ‘Investing for the Future’ (it is currently being updated). It sets out:

- the present scale of flood and coastal erosion risk, and the achievements in managing it so far;
- an analysis of the investment needed to adapt to climate change and manage the potential increased risk over the period 2010-2035;
- ways to manage flood and coastal erosion risk more efficiently;
- an analysis of the benefits of investment, and the potential to broaden the sources of investment.


Maintenance Protocol
Our asset maintenance protocol sets out our approach to maintaining flood and coastal risk management assets in England. It describes how we decide which assets we maintain and how we work with those affected by our decisions.

The National Flood and Coastal Erosion Risk Management (FCERM) Strategy for England describes the strategic approach to maintaining our flood and coastal risk management (FCRM) assets. The asset maintenance protocol for England is an important part of the FCERM strategy and will support its implementation. It will help us apply a consistent approach to identifying which low risk assets should no longer be maintained and how we will work with those affected by our decisions. Reducing our investment in low risk assets will allow us to focus our maintenance in higher risk locations.


**Medium Term Plan (MTP)**
The Medium Term Plan (MTP) is the spreadsheet that captures the capital Environment Agency, Internal Drainage Board and Local Authority candidates and projects over the next 20 years.

**MEICA (Mechanical, Electrical, Instrumentation, Control and Automation)**
The acronym for the regional team (that reports to an Operations Manager) and the type of assets that they look after. MEICA assets are typically pumping stations and other major assets with complex operational arrangements. The team also develops and manages the carbon reduction work.

**Minimum Needs**
A term applied to elements of work within the Revenue Maintenance programme. It is the lowest unavoidable cost to maintain statutory compliance and continue operation in an Asset System over the next year. We capture this figure (and all Identified Needs) in System Asset Management Plans (SAMPs). In undertaking the minimum maintenance required, asset condition may decline as a result. Typically this will mean that we ensure our assets meet Health and Safety standards for staff operating them, the public, and that we ensure our environmental obligations are met (eg WFD compliance).

**Moderation**
Not all capital Candidates contribute towards Outcome Measures targets, however, there is a clear and demonstrable need for them, eg for statutory or legal reasons, emergency works, health and safety, or time dependant works. In these cases there will be moderation evidence with the Project Mandate. Candidates with moderation are screened nationally as part of the Investment Needs submission to ensure the case is clear and robust, prior to the allocation of any funding.

**National Allocation & Programming Team**
Within the FCRM Directorate at Head Office, this team develops a set of key principles for the allocation of FCRM GiA to the Environment Agency and other Risk Management Authorities. The team are responsible for translating the Spending Review funding levels into national and regional budgets for all Flood and Coastal Risk Management (FCRM) and corporate activities funded by FCRM GiA.

**National Capital Programme Management Service (ncpms)**
A national Operations team, the National Capital Programme Management Service (ncpms) project manages schemes on behalf of Area teams. In Anglian Region they manage approximately 80%-90% of the Environment Agency delivered capital programme and their services can also be used by other Risk Management Authorities.

**National Environmental Assessment Service (NEAS)**
The National Environmental Assessment Service (NEAS) is responsible for managing the environmental impact of capital and revenue programmes to ensure projects are compliant with environmental legislation, have minimal environmental impact, uphold high standards in environmental design and contribute to national and regional environmental targets.
**Operations Manager**

Our Operations Managers lead on our asset management work to deliver professional asset creation, maintenance and operational services for local communities. This includes sponsoring Environment Agency led capital projects through their Delivery phases and the associated budget management. They are also accountable for the identification of need, prioritisation and delivery of the Revenue Maintenance programme.

Their programme accountabilities are delivered through their Asset Performance teams and Catchment Engineers.

**Opportunities**

This is a term that is used for candidates that can be brought forward within a financial year to make the most of any available budget, or indeed existing projects that can be accelerated.

**Outcome Measures (OMs)**

A suite of performance measures specifically related to managing flood and erosion risk. They replaced the priority score system and are used to assess the benefits of projects. They help prioritise the programme of works from all Risk Management Authorities and OM1 to OM4 are used as part of the Partnership Funding score to calculate the FCRM GiA available to a project. Flood and Coastal Erosion Risk Management have targets set for each OM. They are listed below:

- **OM1** - The ratio of benefits to costs that a project delivers. To ensure consistency in all schemes this is calculated over the whole life of the project (ie including the design, build, operation, maintenance and expected refurbishments). To mitigate for inflation, these figures are discounted to ‘today’s’ price. This is applied to both costs and benefits and called Present Value whole life. A simple way to think about it, if we had all the money up front, how much would we need in the bank, allowing for interest on the account, so that we had a balance of £0 when the asset reached the end of its life. At a national programme level we aim for a minimum of 5:1, however, for the last CSR period we achieved a programme ratio of 8:1.

- **OM2** - The number of households moved out of any flood probability category to a lower probability category (see flood risk categories).

- **OM2b** - The number of households moved from the very significant or significant probability category to the moderate or low probability category (see flood risk categories). In this case the 1:75 year (1.33% probability of flooding in any particular year) is the threshold.

- **OM2c** - The number of households in the 20% most deprived areas moved out of the significant or very significant probability categories to the moderate or low probability category (OM2b). Therefore they are less likely to experience difficulties in arranging mortgages or insurance.

- **OM3** - The number of households with reduced risk of coastal erosion. Therefore they are less likely to experience difficulties in arranging mortgages or insurance.

- **OM3b** - The number of households protected against loss in 20 years from coastal erosion. Therefore they are less likely to experience difficulties in arranging mortgages or insurance.

- **OM3c** - The number of households in the 20% most deprived areas protected against loss in 20 years from coastal erosion. Therefore they are less likely to experience difficulties in arranging mortgages or insurance.

- **OM4a** - Hectares of water dependent habitat created or improved to help meet the objectives of Water Framework Directive. Remedies to improve condition of Sites of Special Scientific Interest and measures needed for water bodies to achieve good ecological status/potential, meeting our statutory obligations under both the Countryside and Rights of Way Act and WFD.
**OM4b** - Hectares of intertidal habitat created to help meet the objectives of the Water Framework Directive for areas protected under the EU Habitats / Birds Directive. New habitat is created to offset habitat being lost to coastal squeeze.

**OM4c** - Kilometres of rivers protected under the EU Habitats/Birds Directive improved to help meet the objectives of the Water Framework Directive. FCRM actions to restore rivers designated as special areas of conservation.

**Over-programme**
This is a programme management technique to enable a programme to deliver to budget. Effectively you start a financial year progressing more projects than can be afforded on the basis that not all project risk budgets with be fully utilised, efficiencies will be made on projects, some projects will suffer a delay and a few may be found not to be viable.

**P**

**Packaging**
The combining of a number of projects which are similar in either nature or in geographic location. It is usually applied to lower value projects to make them more efficient by only having to let one contract, thus saving time and money on the procurement process. Packaging also provides for continuity of work for suppliers that enables specialist delivery teams to be formed resulting in greater delivery efficiency.

**Partnership & Strategic Overview (PSO) teams**
See Area Flood & Coastal Risk Managers

**Partnership Funding**
Flood and Coastal Erosion Resilience Partnership Funding is Defra’s current policy. It provides a system of funding which applies to all Flood & Coastal Erosion Risk Management (FCERM) projects seeking FCRM GIA Capital funding in England. It is a way of increasing overall investment in flood and coastal erosion risk management by encouraging external contributions as a means to unlock GIA. GIA is capped based on the number of outcome measures a project will deliver, with each project having a Partnership Funding score as a means of prioritisation. The RFCC has a key role in working with partners and communities to maximise contributions and also raise and allocate local levy which can also be used as an external contribution.

**Partnership Funding score (PF Score)**
Based on the outcomes a project is expected to deliver, a maximum amount of FCRM GIA is calculated. The score is calculated based on the outcome measures benefit divide by funding, expressed as a percentage.

A project needs a minimum score of 100% to be considered for FCRM GIA. However, in many cases the raw score (base purely on its outcomes) will be below this threshold. In these cases the project will either need to increase the outcomes it delivers so that FCRM GIA could fund the whole scheme, reduce the costs of the scheme (ie a cheaper way of delivering) or increase contributions from other sources. This will then give an adjusted score, called the Partnership Funding Score. That is also used to prioritise both nationally and locally by RFCCs. A score of 100% will not guarantee funding of a scheme as there is a finite amount of GIA available, but the higher the score the more likely it is to secure GIA. The RFCC can use Local levy as a contribution to schemes and therefore improve the PF score.

**PRINCE2**
PRINCE2 (an acronym for PRojects IN Controlled Environments) is a de facto process-based method for effective project management. It is used extensively by the UK Government, PRINCE2 is also widely recognised and used in the private sector, both in the UK and internationally.

**Programme**
It its purest form programming is about organisational transformation. However, we use the term programme to describe a collection/dossier/portfolio of similar activities or projects.
Programme Board
In terms of programme governance each Region of the Environment Agency has a Programme Board and there is also a National Programme Board. In Anglian Region the Board is managed through monthly FCRM Business Group meetings where Flood & Coastal Risk Managers, Finance, ncpms and others meet to review by exception in-year performance, programme opportunities, risks as well as future programmes of investment. The Programme Team report performance to the Board following detailed monthly financial and programme monitoring review at an Area/RFCC level. The Programme Board take decisions and mitigating actions and escalate issues to the Regional Director and his leadership team as appropriate.

Programme Level Risks
Are risks that have the potential to affect the overall outcomes of the Programme. These may be in terms of external factors (budgets, extra funding from government, new legislation, PF Scores), significant project risks (ie a project being delayed by planning consent) or the accumulation of smaller risks (ie the aggregation of small individual risks across a number of projects).

Programme Management
The term programme management refers to the co-ordinated organisation, direction and implementation of a portfolio of projects and activities. Programme management aims to achieve results and realise benefits that are of strategic importance.

Programme Manager
Led by the FCRM Programme Manager, programming and monitoring of all Environment Agency supported FCERM delivery is done once at region. This includes developing and implementing RFCC programmes of work and assuring the outcomes of these programmes.

Programme Team
Reporting to the Programme Manager, the Programme Team leads FCRM programming for Anglian Region and monitors associated delivery. Business Partner aligned to each Environment Agency Area/RFCC. This team provides a clear link to the National Allocation and Programme team and works very closely with Area teams, Finance and ncpms.

Project
When a candidate passes through Gateway 0 it becomes a project. A collection of projects form part of a programme. An FCRM project is set up to scope, appraise and deliver tangible products to meet the needs identified and recorded in the Project Mandate. For FCRM capital projects, there are five types of project: they are Sustain; Simple Change; Supported Change, Legal Compliance and Complex Change (See Project Type)

Project Appraisal Report (PAR)
The project appraisal report (PAR) describes the appraisal that has been carried out on an FCRM project and provides the business case to support the recommendations proposed. It is used to gain formal approval under the Environment Agency Financial scheme of delegation (FSoD) and where appropriate approval from Defra, Welsh Assembly Government (WAG) and HM Treasury.

Project Assurance Board (PAB)
The purpose of PAB is to provide Technical Review and assurance of projects (up to the value of £10 million) throughout their entire lifecycle. PAB makes recommendations to project teams so they can improve their business case and once satisfied that issues have been appropriately resolved will recommend approval to the FSoD delegated officer.

Each Region has a PAB which meets on a monthly basis. Projects from all RMAs are reviewed for the following:
- are projects supported by a robust case for change that provides strategic fit – the ‘strategic case’
- do projects optimise value for money – the ‘economic case’
- are projects commercially viable – the ‘commercial case’
- are projects financially affordable – the ‘financial case’
- are projects achievable – the ‘management case’.
Membership of PAB is made up of managers and specialists from across the business.

**Project Board**
A small group of people (normally only the Project Executive, Senior User and, if in place, the Senior Supplier) who collectively monitor and control a project’s overall progress. This group concentrates almost entirely on the process of project management and:
- acts as a quality assurance mechanism for a project’s deliverables;
- provides an escalation and resolution route (to the Programme Board) for a project’s risks and issues.

**Project development costs**
Activity and expenditure between Gateway 0 and Gateway 3 is defined as project development.

**Project Executive**
See Project Roles

**Project Manager**
See Project Roles

**Project Mandate**
This is the form where the outline need for investment is recorded and supports the submission of a candidate into the programme, recording Gateway 0.

**Project risk**
All projects have risk built up from potential occurrences that may affect the delivery of a project to time, cost, quality or outcome. Risks are explored as part of project development and monitored/managed routinely throughout a project. Project budgets (and FSoD approval) include for the costs of managing a project’s identified risks (but not all of them) should they arise. The cumulative effect of this is that at a programme level a significant amount of budget is aligned to project risk that may or may not materialise and therefore require use of that budget. The over-programming approach is a means to manage this issue.

**Project roles**
Having clear and defined roles on a project is crucial to good governance. The key roles on a project are:

**Project Executive:**
Ultimately accountable for the project’s delivery, they should be independent from the User and Supplier.

**Project Sponsor:**
Identifies a need within the organisation; acts as the ultimate ‘client’ for any project that is set up; and is the major driving force of the project shaping the benefits to be delivered. For Environment Agency FCRM capital projects this is the Area Flood & Coastal Risk Manager up to Gateway 1 and then the Operations Manager to Gateway 6. For high risk projects or packages of work the Area Manager may perform this role.

**Senior User:**
The senior user is responsible to the end users for ensuring that the products delivered by the project are fit for purpose. Their input continues throughout the life cycle of the project. The senior user:
- helps shape project deliverables;
- communicates the end users’ needs and aspirations throughout the life of the project;
- provides a link to all the internal functions/teams during the life of the project;
- is the principal point of contact in FCRM for all project matters;
- leads on engagement with the community, partners and stakeholders;
• signs off the product descriptions for products to be delivered as part of the project board;
• accepts the completed project from the project executive.

For Environment Agency FCRM capital projects the Senior User is from within Operations Management, usually senior Asset Performance staff or the Catchment Engineer. They can be supported by a team and for most projects will draw upon the skills and resources from within our Partnership & Strategic Overview teams (eg regarding funding packages with partners), Flood Resilience teams (who coordinate community engagement) and Modelling & Hydrology teams.

**Senior Supplier:**
The senior supplier represents the interests of those designing, developing, facilitating, procuring, implementing, and possibly operating and maintaining the project products; they are also accountable for the quality of products delivered by the supplier(s) and they must have the authority to commit or acquire supplier resources required.

This role is most appropriate for high risk or key delivery projects or major packages of work. It would ordinarily be performed by a senior manager from within a Framework supplier.

**Project Manager:**
Appointed by the Project Executive, they have the authority and responsibility to manage a project day-to-day. This person must deliver the required products, within the tolerances agreed with the Project Board.

**Project Type – Complex Change**
A complex change project is a project that examines options at the strategic level or implements a strategic solution but where there is no agreed strategy in place. Complex change projects require a strategic approach to be developed to address the extent, integration or interconnection of different areas. A full cost:benefit appraisal is required.

**Project Type – Simple Change (aka Standalone project)**
A Simple Change Project is one where the problems to be addressed, potential solutions and effective decision-making can be taken independently of the wider catchment/coastal zone or framed so as to not constrain future long term management. A strategic context is still required for a Simple Change Project to support the decision-making process. This type of project is the most common in the programme.

A Simple Change Project is appropriate when:
• a change to the standard of service (SoS) is proposed
• justification to sustain the current SoS is not clear or beyond the control thresholds
• a strategy plan is not required

A full Benefit:Cost analysis is required for appraisal of these projects.

**Project Type – Supported Change**
A project to deliver the recommendation(s) of an approved (FSoD) strategy. As such the scope of this project is typically limited to assessing the specific needs to implement the strategy in the project location. The overall option and new SoS will already have been determined. This project will draw heavily upon information in and gained for the strategy which will minimise the time and effort required for this project.

**Project Type – Sustain (standard of service (SoS))**
A Sustain SoS project is one that delivers activities needed to continue the agreed standard of service of an existing asset or group of assets. Typically projects might include the refurbishment of assets or replacement of components of larger assets, which have reached their design life.

In addition, projects classified as Sustain must fall within Control Thresholds to ensure that the investment in them is justifiable and does not impede on any potential future strategic plans (ie we wouldn’t replace an asset if we plan to build something else in 5 year which will negate the need for
that asset). If the project is not within the thresholds then the project should be classified as a Simple Change. Sustain projects are appraised using a cost effectiveness analysis.

**Project Type – Legal Compliance**
Projects that are required to fulfil legal obligations can typically be divided into:
- **legal requirements that drive the need for a project**: there are two types of legislation here:
  - legislation with ‘general’ application, such as the Habitats and Birds Directives or Water Framework Directive; and
  - specific legislation, including local legal agreements, such as navigation acts for specific rivers.
- **legal requirements that place duties or obligations on the project**: these can be sub-divided into:
  - duties that stem from legislation such as Health & Safety or Town and Country Planning; and
  - obligations that arise from contractual agreements, such as contracts between an operating authority and a water company to provide adequate water levels for abstraction by pumps.

Defra policy also requires that the benefits of meeting the legal requirements are identified, described and, where possible and appropriate, quantified and valued in monetary terms. Information on the benefits will be used to help understand who is gaining or losing from the programme of work, and to help demonstrate that the programme provides good value for money. It is also important to consider whether there may be efficiency gains from providing wider benefits beyond those linked to the minimum legal requirements. The costs and benefits of providing the wider benefits would need to be appraised. This means that any incremental increases in investment

**Project Sponsor**
See Project Roles

**Revenue funding**
FCRM GiA Revenue funding is the money spent by the Environment Agency on day to day activities. These include salary costs of most staff, revenue projects (ie typically inspections, maintaining our hydrometric and telemetry network and quality assurance of flood modelling) and Revenue Maintenance (ie preventing assets falling below target condition). Revenue also pays for our incident response to flooding.

**Revenue programme**
The revenue programme is the programme funded by FCRM GiA Revenue Funding and supported by Local Income.

**Revenue projects**
A subset of the Revenue programme, these are projects generally funded by FCRM GiA Revenue. These support Environment Agency day to day activities where we have to procure specialist resource, eg diver inspections of assets. They also include work on ensuring our mapping and modelling as at the required industry standard, biodiversity is preserved, and we maintain our operational capability for flood forecasting and incident management thought exercises and maintaining our telemetry systems.

**Revenue maintenance**
This is a subset of the Revenue programme and includes the maintenance activities the Environment Agency undertake to ensure that assets do not fall below their target condition. They are a combination of Frequent Maintenance and Intermittent Maintenance. The programme includes routine inspections of assets and correcting minor issues, and is captured in the System Asset Management Plans (SAMPS).
Senior User
See Project Roles

Standard of Protection
The probability of flooding expressed as either a return period (ie 1 in 75 years or 1:75 years) or as a percentage (1.33%) chance per year. The calculation is 1 divided by the return period multiplied by 100 (1/75*100=1.33%). If we maintain the Standard of Service then we accept that the standard of protection will reduce in time as the affects of climate change take hold.

Standard of Service
A measurable and objective description of an asset; for example the crest level of a wall or pumping capacity and a minimum condition grade. Not to be confused with the term Standard of Protection.

Senior Supplier
See Project Roles

Supplementary Expenditure
Extra funding that is required on a project, over and above what has already been allocated to it. This will also require further Technical Review and FSoD approval. It is captured on a Form G (Environment Agency) or FCERM4 (other RMAs) that needs to demonstrate that the business justification/case for the project is still robust.

System Asset Management Plans (SAMPs)
These are long-term plans for each Asset System. They include information on the benefit of the system (ie what the system protects) and what the expected maintenance costs are for the assets in that system. We use SAMPs to hold the information on our revenue maintenance programme. Data from SAMPs is used by the National Allocation and Programme team to make an indicative and final allocation of FCRM GIA Revenue to each RFCC. Information in SAMPs is updated regularly by Operations teams.

System consequence
This provides an indication of potential impacts of flooding for an Asset System. Each system is defined as High, Medium or Low using a matrix that broadly compares the impact on people against the impact on property and land.

Target Condition
We use a condition grading system (1 – 5) for our assets and each asset has a target grade against which we monitor (through asset inspections), report (through KPIs) and improve (via asset recondition/refurbishment).

Technical Review
The project assurance role undertaken by PAB and LPRG.

Tolerance
Tolerances can be set at a project and programme level. They enable project/programme outcomes (eg cost, time, scope, quality and benefits) to vary up to set limits (positive or negative) and to be managed in the best possible way. Once the tolerance levels are forecast to be exceeded, they are considered an exception, and are flagged for discussion/agreement at the appropriate governance level (eg Project Board, Programme Board). The in-year programme papers for the RFCC now concentrate on projects which have exceeded their tolerances, and are now in exception. The RFCC could apply tolerances for their allocation of Local Levy.
Variance is a measured from the previous month’s forecast or the start of year position called the baseline. We track the variances of financial, outcome and risk forecasts. This data allows us to make decisions on bringing in opportunities in to the programme.

Virement
The Programme Board is able to make some adjustments to in-year project budgets and bring projects forward from future years. However, if these changes are above the threshold (eg a significant change >£500k) a formal application of the budget change is required via Head Office and Directors. If approved then a transfer of budget into or out of the RFCC takes place.

Whole Life Cost
The net present cost of a project, or the asset provided by the project, to deliver defined outputs that includes the running and maintenance costs over an extended period. The period can include the replacement of the asset, and is not fixed. The period is usually taken as that where the discounted future costs are material to the net present cost.
### Glossary of Acronyms

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<tr>
<th>Acronym</th>
<th>Abbreviation</th>
<th>Description</th>
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<tbody>
<tr>
<td>ABCs</td>
<td>Area Base Controllers</td>
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<tr>
<td>ABD</td>
<td>Areas that Benefit from Defences</td>
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<tr>
<td>ABI</td>
<td>Association of British Insurers</td>
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<tr>
<td>ADA</td>
<td>Association of Drainage Authorities</td>
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<tr>
<td>AFFS</td>
<td>Anglian Flood Forecasting System</td>
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<tr>
<td>AIP</td>
<td>Asset, Investment and Planning</td>
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<tr>
<td>ASM</td>
<td>Asset Systems Management</td>
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<td>ASP</td>
<td>Asset Safety Process</td>
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<td>BAG</td>
<td>Biodiversity Action Group</td>
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<td>BAP</td>
<td>Biodiversity Action Plan</td>
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<tr>
<td>CFMPs</td>
<td>Catchment Flood Management Plans</td>
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<td>CGiA</td>
<td>Capital Grant in Aid</td>
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<td>CHaMP</td>
<td>Coastal Habitat Management Plan</td>
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<td>CIL</td>
<td>Community Infrastructure Levy</td>
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<tr>
<td>CLG</td>
<td>(Department for) Communities and Local Government</td>
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<tr>
<td>COBR</td>
<td>Cabinet Office Briefing Room</td>
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<td>CRFCC</td>
<td>Central Regional Flood &amp; Coastal Committee</td>
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<td>CSR</td>
<td>Comprehensive Spending Review</td>
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<tr>
<td>DEFRA</td>
<td>Department for Environment, Food and Rural Affairs</td>
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<td>EA</td>
<td>Environment Agency</td>
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<td>East of England Local Government Association</td>
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<td>Eastern Regional Flood &amp; Coastal Committee</td>
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<td>EFRA</td>
<td>Environment, Food and Rural Affairs select committee</td>
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<td>Elected Members Forum</td>
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<td>East Riding of Yorkshire Council</td>
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<td>Flood Alleviation Scheme</td>
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<td>Flood Risk and Coastal Erosion Risk Management</td>
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<td>Flood and Coastal Resilience Partnership Funding</td>
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<td>Flood Defence Grant in Aid</td>
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<td>Flood Incident Duty Officer</td>
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<td>Flood Risk Mapping and Data Management</td>
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<td>Acronym</td>
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<td>IFCA</td>
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<td>Imperative Reasons of Overriding Public Interest</td>
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<td>OM</td>
<td>Outcome Measure</td>
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<td>Project Appraisal Report</td>
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<td>Preliminary Flood Risk Assessment</td>
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<td>Planning Liaison</td>
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<td>PPS25</td>
<td>Planning Policy Statement 25 - development and flood risk</td>
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<td>River Basin District</td>
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<td>RFC</td>
<td>Regional Flood and Coastal Committee</td>
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<tr>
<td>RFERAC</td>
<td>Regional Fisheries, Ecology &amp; Recreation Advisory Committee</td>
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<td>Risk Management Authorities</td>
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<td>SAB</td>
<td>SUDS Approving Body</td>
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<tr>
<td>SAC</td>
<td>Special Area of Conservation</td>
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<tr>
<td>SAMP</td>
<td>System Asset Management Plan</td>
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<tr>
<td>SCAR</td>
<td>Suffolk Coast Against Retreat</td>
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<tr>
<td>SCG</td>
<td>Strategic Coordinating Group</td>
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</tbody>
</table>
**Glossary of Acronyms**

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Definition</th>
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<tbody>
<tr>
<td>SEA</td>
<td>Strategic Environmental Assessment</td>
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<tr>
<td>SFW</td>
<td>Severe Flood Warning</td>
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<tr>
<td>SFRA</td>
<td>Strategic Flood Risk Assessment</td>
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<tr>
<td>SMP</td>
<td>Shoreline Management Plan</td>
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<tr>
<td>SPA</td>
<td>Special Protection Areas</td>
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<tr>
<td>SR</td>
<td>Spending Review (eg SR10 = Spending Review 2010)</td>
</tr>
<tr>
<td>SRO</td>
<td>Surface water Run Off</td>
</tr>
<tr>
<td>SSSI</td>
<td>Sites of Special Scientific Interest</td>
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<tr>
<td>STP</td>
<td>Short Term Plan</td>
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<tr>
<td>SUDS</td>
<td>Sustainable Drainage Systems</td>
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<td>SWMP</td>
<td>Surface Water Management Plan</td>
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<tr>
<td>TCG</td>
<td>Tactical Control Group</td>
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<td>TES</td>
<td>Training and Exercise System</td>
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<td>UA</td>
<td>Unitary Authority</td>
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<td>WAG</td>
<td>Welsh Assembly Government</td>
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<td>WFD</td>
<td>Water Framework Directive</td>
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<tr>
<td>WLMP</td>
<td>Water Level Management Plan</td>
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